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Education Bureau
Government Secretariat, Government of the Hong Kong Special Administrative Region
The People's Republic of China

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10 January 2019

Mr Anthony CHU
Clerk to Public Accounts Committee
Legislative Council Complex
1 Legislative Council Road
Central, Hong Kong

Dear Mr CHU,

Public Accounts Committee
Consideration of Chapter 7 of the Director of Audit's Report No. 71
Education Bureau's efforts in harnessing information technology
to facilitate learning and teaching

I refer to your letters of 17 and 31 December 2018 on the captioned subject. Please find attached our responses/information requested (in both Chinese and English) in the Appendix.

Yours sincerely,

(Ms Jenny CHAN)
for Secretary for Education

c.c. Secretary for Financial Services and the Treasury (Fax: 2147 5239)
    Director of Audit (Fax: 2583 9063)

Public Accounts Committee
Consideration of Chapter 7 of the Director of Audit's Report No. 71
Education Bureau's efforts in harnessing information technology
to facilitate learning and teaching

The Administration's Response to
Issues Raised in Letter of 17 December 2018

Part 2: Provision of resources to schools

1) As referred to in paragraphs 2.5, 2.7 to 2.10, 887 schools participated in the WiFi-900 Scheme, of which 334 (38%) were provided with conditional funding to enhance their readiness in implementing e-learning.

   (a) How did the Education Bureau ("EDB") assess the readiness on the five aspects mentioned in paragraphs 2.7(a) to 2.7(e)? Did EDB reject any applications; if yes, please provide the number of application(s) rejected and reasons for rejecting the application(s)?

   (b) With reference to paragraphs 2.19(a) and 2.20, what measures has EDB taken to keep track of how schools fulfill the commitment they made in seeking funding for enhancing their WiFi infrastructure and provide assistance to them to improve their readiness in implementing e-learning? What is the current progress of the Scheme? Did EDB review the reasons for only 67% of participating schools being able to enhance the WiFi infrastructure as at the end of 2016-2017 school year?

   (c) Does EDB agree that it should have regularly checked whether the schools had fulfilled their commitments as stated in the Expression of Interest ("EOI") or written confirmation; if yes, when will EDB implement the measure?

   (d) Have the participating schools complied with the schedule for using e-textbooks and e-learning resources stated in EOIs?

Response/Information:

   (a) The EDB decided to establish a robust WiFi infrastructure to cover all classrooms of the school premises in view of the prevalence of mobile computing devices and their increased use for learning. In order to facilitate the smooth operation of the large-scale exercise and for resource management of WiFi-900 Scheme, in February 2015, the EDB

required the schools which intended to participate in the WiFi-900 Scheme to submit an Expression of Interest (EOI) to indicate their tentative e-learning implementation plan and their preference of the time to complete the WiFi enhancement among the three school years before the 2017/18 school year. Based on the relevant information provided in the EOIs and that available on schools' homepages, the EDB reviewed the readiness of the schools in implementing e-learning in terms of the five aspects in order to estimate the numbers of schools joining the WiFi-900 Scheme in different years and prioritise schools' participation in the Scheme, in particular for funding requirement projection. Since all public sector schools were eligible to participate in the WiFi-900 Scheme and the EO1 exercise was only to prioritise the implementation rather than to screen out the applications, no schools have been rejected.

(b) to (d):

The EOI exercise was a one-off snap-shot exercise to help the EDB prioritise schools' participation in the WiFi 900 Scheme with reference to schools' own preference and school circumstances. What the schools set out in the EOI exercise to the EDB were indicative plans of how they would implement e-learning and their pace. These indicative plans had not been taken as commitments of the schools or conditions under which the funds for WiFi enhancement were provided. Furthermore, a school's plan or readiness was subject to changes due to factors beyond the school's control, e.g. departure of personnel key to implementing the plan, change in the degree of buy-in of parents, formulation of new strategies or emergence of and procurement of new IT devices to take forward e-learning. The indicative plans were bound to be subject to modification to suit changing school contexts and dynamic IT applications in learning and teaching.

Instead of checking regularly whether a specific group of schools had made improvements as indicated in the EOI, the EDB has been keeping track of the progress of IT in education development in schools through various means, including school visits, on-site support visits, focus group meetings, case studies and proformas returned from schools, apart from the annual school survey mentioned in paragraph 2.11 of the Audit Report in order to capture qualitative and quantitative information. In the annual school survey, information such as schools' personnel composition in setting up the core team for the development of ITE and parents' involvement was collected[1]. For the 2018/19 school year, about 30 school visits covering different backgrounds and finance types have already been scheduled with a

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[1] Regarding Audit's observation that information about stakeholder's engagement work was not collected in the annual school survey, it was because the information provided by schools to any question in this regard would be too general for data analysis.

view to gauging schools' progress. These are schools which regarded their own progress as lagging behind, reviewed as less ready in teacher development and/or stakeholder engagement or those not responding to our annual survey.

Various forms of ongoing support are also provided to the schools to assist them to implement e-learning, e.g. on-site support services by the IT in Education Centre of Excellence (CoE) Scheme, professional development programmes (PDPs), online resources as well as technical support services. Under the CoE Scheme, seconded teachers are selected from experienced frontline school leaders and teachers to provide training and on-site support services to schools for sharing of good practices and successful experiences on IT in education. Besides, to better equip school leaders and teachers with the necessary knowledge and skills on the latest practice of e-learning, five categories of PDPs are organised including e-leadership, e-safety, pedagogical series, subject-related and technological series. Various online resources such as resource pack on developing e-learning and good practices in schools are provided to facilitate schools to implement e-learning. Apart from organising briefing seminars for each batch of schools joining WiFi-900 Scheme, technical support services are also provided to schools through on-site support visits, a telephone enquiry hotline and school visits. The EDB has also provided an information kit on e-learning for reference by schools in undertaking relevant parent education, and has been organising seminars for parents to help develop proper attitude of their children in using information technology.

All the schools joining the Scheme could complete the WiFi infrastructure enhancement according to their preferred time, including 67% of the 334 schools (i.e. 224) mentioned in paragraph 2.11 of the Audit Report which are considered "less ready" in some areas to implement e-learning. These 224 schools opted in their EOI forms to complete their WiFi infrastructure enhancement in the 2015/16 or the 2016/17 school years. The remaining 110 schools opted to complete their WiFi infrastructure enhancement in or after the 2017/18 school year. As regards the current progress of the WiFi-900 Scheme, the WiFi infrastructure enhancement works of the participating schools have been basically completed by the 2017/18 school year. As at December 2018, 983 (99.4%) had completed the WiFi infrastructure enhancement at their premises. Among the remaining 6 schools, 4 opted to join the WiFi-900 Scheme in the 2018/19 school year and 2 will join in the 2019/20 school year due to special circumstances, including relocation / redevelopment of school premises and commencement of school operation in or after the 2017/18 school year.

2) According to paragraphs 2.12 to 2.14, the usage rates of e-textbooks and e-learning resources on class-level basis were lower than the adoption rates on school basis.

(a) Why did EDB collect data relating to class level in the annual school surveys if EDB only took the adoption rates of e-textbooks and e-learning resources on school basis instead of class-level basis?

(b) With reference to paragraphs 2.19(b), 2.19(c) and 2.20, what measures have been/will be taken by EDB to encourage the adoption of e-textbooks and e-learning resources in schools and promote the usage of e-learning resources?

(c) Did EDB communicate with schools and study their difficulties in adopting e-textbooks/e-learning resources?

(d) The Fourth Strategy on IT in Education ("ITE4") expended $99.5 million as at 31 March 2018, and one of the main initiatives under ITE4 was enabling schools to acquire mobile computing devices to tie in with WiFi services (paragraph 1.6 refers). What is the expected result on the usage of e-textbooks and e-learning resources before the implementation of ITE4?

Response/Information:

(a) To cater for learner diversity, schools have all along been exercising flexibility to use learning resources and it is necessary that schools do so. When considering whole school planning and practical pedagogical application of IT, schools are encouraged to use the right technology at the right time for the right task instead of across subjects and levels. It is also worth noting that schools are advised to, and do, adopt a new series of textbooks / e-textbooks by progression and not at all year levels at any one time. The EDB therefore takes the adoption rates of e-textbooks and e-learning resources on a school basis instead of class-level. That said, questions at class level have been included in the annual surveys in order to understand the concerns and consideration of schools in adopting e-textbooks and e-learning resources for different subjects at different class levels so as to facilitate data analysis and the consideration of adopting appropriate measures to support schools in practising e-learning. Indeed, the annual survey is only one of the various means that the EDB collects information from schools. Other means include focus group meetings and school visits, etc.

(b) Schools' adoption of e-textbooks and e-learning resources depends on various factors such as school infrastructure, teachers' readiness, quality

of the e-resources, individual school contexts and whether the subject, the level and the learning task in hand are suited to using e-textbooks and e-learning resources. To continue to improve the technical and functional design of the e-textbooks, a Task Group on e-Textbook Development was set up in June 2018 with representatives from textbook publisher associations and Hong Kong Education City Limited (HKECL). In addition, a Focus Group under the CoE Scheme was also set up in the 2018/19 school year. The teacher members of the Focus Group would try out some e-textbooks materials, especially those with updated technical and functional design proposed by the Task Group, in their teaching and share the pedagogical practices among themselves with a view to enhancing the quality of learning and teaching through electronic means as well as exploring the usage of e-textbooks in various subjects. The good practices and experiences gained from the tryouts would be shared with the publishers and other schools. On top of the above, the EDB will continue to strengthen teacher's professional capabilities on effective use of e-textbooks and other e-learning resources through various means such as professional development programmes, teachers' learning communities and school visits. Nonetheless, it should be noted that, first, e-textbooks and e-learning resources are not necessarily more conducive to learning and teaching than their conventional counterparts and teachers' professional judgment in selecting the right resources is important and, secondly, easy access to abundant information on the Internet or e-resources in the digital learning era may cast doubt on the need for a "textbook" in the teaching and learning process in the long run.

(c) All along, the EDB conducts school visits, surveys and focus group meetings to understand the concerns and consideration of schools and teachers in adopting e-textbooks. Subject-specific professional development programmes to strengthen teachers' e-pedagogies are tailor-made to suit their needs. Adoption rate does not necessarily reflect if schools or teachers have difficulties in using e-textbooks but rather reflects schools' professional decisions on whether to adopt e-textbooks or other free e-resources based on schools' specific contexts and student needs.

(d) ITE4 has laid down the basic provisions in terms of hardware and resources to facilitate the practice of e-learning in schools. With the basic provisions, schools are able to devise their own plan having regard to their school circumstances and development needs. In view of the evolving and diversified nature of e-learning, there is no best practice or standard towards which schools should comply with, not to mention that e-learning measures are not necessarily more effective than conventional measures in every case. Hence, the EDB did not set a target on the

usage of e-textbooks or e-learning resources at schools before the implementation of ITE4. Schools have the professional autonomy in selecting appropriate resources, including e-textbooks and other e-resources, for learning and teaching to suit students' needs and school contexts. In fact, learning is not confined to the classroom with the teaching of academic subjects using conventional or e-textbooks. Learning also takes place in various types of life-wide learning activities outside the classroom or even outside school context. For instance, with the support of IT devices and infrastructure, students may pursue e-learning in the form of project work on an individual or collaborative basis outside formal lessons. The IT devices and infrastructure also open up new possibilities for extra-curricular activities which offer other learning experiences to students.

3) According to paragraphs 2.16 to 2.18, EDB suggested schools build the WiFi network completely separate from schools' existing networks with separate broadband line for avoiding potential risk. However, as it is not a mandatory requirement, 11 (22%) participating schools under the WiFi-900 Scheme had integrated the WiFi network with their existing networks.

(a) Will EDB consider making the above suggestion a mandatory requirement?

(b) Has EDB provided any extra resources for these 11 schools to further protect their WiFi network?

Response/Information:

(a) There are various technical solutions available in the market for protecting the schools' networks. The EDB suggests schools building the WiFi network completely separated from schools' existing networks with separate broadband line as it is a less technically difficult practice and is easier to manage. The recommended practice is not a mandatory requirement that schools were obliged to observe. Under the principle of school-based management, schools were responsible for taking appropriate IT security measures to protect the IT systems and data of their schools, and they may determine their own requirements to adopt the practice applicable to their own environment and operational needs. Some schools might have decided not to follow the related recommended practice for various reasons, e.g. physical constraints in implementing two broadband lines. As such, they would adopt other technical solutions to protect their networks.

(b) The EDB plays a supporting and advisory role in facilitating schools to implement IT security measures in accordance with their own school-based needs. Apart from the "Information Security in Schools - Recommended Practice" document, the EDB has been providing various IT security-related supports to schools, including technical advisory services, IT security alerts, professional development programmes, online resources and funding for procurement of Internet security services in Composite Information Technology Grant (CITG), etc. The relevant part of the above document will be reinforced and the updated document will be uploaded to EDB webpage by January 2019. All public sector schools have been invited to attend the relevant briefing seminar which will be organised in January 2019 to further promote the recommended practice. Besides, the EDB also works in collaboration with different partners, including Government departments (Office of the Government Chief Information Officer and Hong Kong Police Force), Hong Kong Computer Emergency Response Team Coordination Centre, teachers associations, and the IT industry, etc., to promote IT Security.

4) According to paragraphs 2.21, 2.23, 2.24 and 2.26, the Composite Information Technology Grant ("CITG") provided $352 million to 907 schools in financial year 2016-2017, and schools were required to relate the schools' IT budget to the annual School Development Plans. The Audit Commission ("Audit") examined the annual School Development Plans of 40 schools and discovered that six schools (15%) did not make such a correlation. Audit also discovered that some schools did not fully utilize CITG allocation to develop IT in education, and as at 31 July 2018, 8 aided schools of the 904 schools that received CITG in all the years over the five-year period of 2012-2013 to 2016-2017 had not submitted their audited accounts for school year 2016-2017 to EDB.

(a) Who is responsible for reviewing School Development Plans & CITG allocation in EDB?

(b) Apart from submitting audited accounts to EDB, are there any other measures for schools to report their usage of CITG allocation? If yes, please provide the details.

(c) When was the deadline for schools to submit their audited accounts to EDB for the previous school year? Whether any sanctions will be imposed on the schools for late submission of audited accounts; if yes, the details.

(d) What follow-up actions have been/will be taken by EDB to ensure timely submission of audited accounts from schools?

(e) With reference to paragraphs 2.29(b) and 2.30, what measures have been taken by EDB to encourage schools to monitor the utilization of CITG and put into effective use the resources allocated to them for the development of IT in education? Are these measures effective? What is the latest position of the utilization of CITG?

Response/Information:

(a) and (b):
All aided schools are required to establish Incorporated Management Committee (IMCs) for the purpose of managing schools through participatory governance by key stakeholders. With greater autonomy given to IMC schools under the principle of school-based management and to recognize student learning needs specific to school contexts, schools can set their own development priorities in the School Development Plan (SDP) which should be submitted to the School Management Committee (SMC) or the IMC for reviewing and endorsement before uploading onto the schools' homepages for stakeholder's and public information. Most schools would accord priorities for major new initiatives in their SDPs. The EDB has been playing a supporting role in facilitating schools to devise their own SDP, including organising professional development programmes, conducting school visits and providing online resources as well as conducting external evaluation of the school development planning in external school reviews.

In tandem, schools are given greater financial flexibility in the deployment of the various grants provided to schools, a majority of which, including a recurrent CITG, are merged as constituent grants under the Block Grant. Schools are allowed to deploy the funding flexibly and retain a surplus balance of the Block Grant as a whole up to its 12 months' provision to meet the operational needs of schools. The SMC / IMC of schools is held accountable for ensuring effective use of government funds as well as the compliance of schools with relevant regulations and guidelines issued by the EDB from time to time. In respect of financial management, the annual school budget should be approved by the SMC / IMC. Schools are advised to give due regard to enhancing the accountability and transparency of their operations, which includes relating the school budget to the annual school plan and publishing the audited financial statement in the annual report. However, the articulation of the IT budget with the annual SDP is not a mandatory requirement. In this regard, as explained to Audit (reflected

in paragraph 2.24 of the Audit Report), the use of the word "required" in EDB Circular Memorandum No.103/2008 was not appropriate. The EDB will amend the circular as soon as possible. It would in fact render the drawing up of the SDP a tedious process and the document lengthy and not reader-friendly if relating the IT budget to the SDP is made mandatory because the expenditure on IT in a school varies each year and there may not be major initiatives in a year but only consolidation of previous years' efforts. The principle for schools to follow is to articulate the IT budget with the SDP in years when there is / are major initiative(s) in e-learning to be implemented and / or there is particularly high level of expenditure in the IT area.

For accounting and auditing purposes, schools should keep a separate ledger account to reflect all incomes and expenditures chargeable to the CITG. However, it should be noted that the CITG is a constituent grant in the Block Grant provided for schools to be used for a wide range of purposes. While the EDB recognises the need for all public sector schools to be provided with a certain level of CITG to meet their operational needs for implementing IT in education each year, schools are not required to spend the entire amount of the CITG each year or spend a similar amount every year. The spending should tie in with the school's e-learning implementation strategy. Hence, there is no need to determine year by year (i) whether the CITG should be provided or not; and (ii) the level of the CITG to be provided. The amount of CITG provided to each school is determined by the school type and the number of classes, and adjusted annually in accordance with the movement of the Composite Consumer Price Index.

(c) According to the EDB's guidelines, aided schools and schools under Direct Subsidy Scheme (DSS) are required to submit the audited financial statements together with the report of the auditor to the EDB by end of February and end of March every year respectively. Efforts have been made by the EDB to follow up the late submissions as mentioned in 4(d) below, and the situation has improved. Out of the 8 aided schools not yet submit their 2016/17 audited accounts as mentioned paragraph 2.26 of the Audit Report, 7 of them have already submitted their audited accounts by end October 2018 and the remaining one plans to submit the accounts by January 2019. If a school fails to submit its annual audited accounts, the EDB may temporarily withhold payment of grants to the school.

(d) In case of late submission of audited accounts by aided and DSS schools, the EDB will issue reminders to the schools concerned within 1.5 months after the submission deadline and the responsible EDB's Regional Education Offices will take follow-up actions. If the school's

annual audited accounts have been overdue for more than ten months, the EDB will approach the sponsoring body of the school to request for immediate submission. Government schools, on the other hand are part of the EDB and are managed and controlled under different mechanism. Their spending including operational expenses and individual grants are reflected as part of the expenditure of the EDB.

(e) Under the current mechanism of Block Grant, schools can flexibly deploy their resources obtained under the CITG to meet their operational needs on e-learning. The EDB has an established mechanism in place to monitor the schools' spending on their Block Grant. The EDB will issue advisory letters to schools with high level of cumulative surplus of the Block Grant and request them to submit improvement plans. The EDB will continue to further encourage schools to make more effective use of CITG to promote the development of IT in education by updating the relevant online resources and promulgating the message in relevant professional development programmes and enhancing the monitoring during our regular contacts with schools and school visits. While information on the utilisation of CITG by schools for the year 2017/18 is not yet available, overall speaking, after the launch of ITE4 in the 2015/16 school year, the total expenditure on CITG was about the same as the total allocation. For instance, in the 2015/16 and 2016/17 school years, the total expenditure of aided schools exceeded the total allocation by 0.7% and 1.1% respectively.

Part 3: Development of e-textbooks and procurement of e-learning resources

5) According to paragraphs 3.6, 3.13(a) and 3.14, there was a need to step up efforts to facilitate the development of e-textbooks, and EDB agreed to, in consultation with the Steering Committee on Strategic Development of Information Technology in Education, determine the way forward and consider ways to facilitate the future development of e-textbooks. Has the Steering Committee been consulted? What are the outcomes? Does EDB have any plans to launch new initiatives to facilitate the future development of e-textbooks?

Response/Information:

The Steering Committee on Strategic Development of Information Technology in Education is to advise the EDB, among others, on the strategic direction, implementation and evaluation of integrating information technology into education and the implementation of e-learning in schools. The Committee has been keeping track of the development of

ITE4, including enhancing the quality of e-learning resources and e-textbooks which is one of the six major actions under ITE4. In the coming meeting of the Committee scheduled in January 2019, members' views will be sought on the issues related to the latest development of e-textbooks as part of the progress on implementation of ITE4.

6) According to paragraphs 3.8 and 3.9, the percentages of primary schools and secondary schools that adopted e-textbooks not on the Recommended Textbook List for e-textbooks ("eRTL") ranged from 28% to 34% and 45% to 48% in 2016-2017 school year respectively.

(a) What were the criteria when selecting books for eRTL?

(b) Did EDB investigate why eRTL was not adopted by schools?

(c) With reference to paragraph 3.10, please provide the percentages of primary schools and secondary schools that adopted textbooks on the Recommended Textbook List for printed textbooks in 2016-2017 school year?

(d) With reference to paragraphs 3.13(c) and 3.14, what actions have been taken by EDB to promote eRTL as a quality vetting and assurance mechanism for e-textbooks among e-textbook developers and schools, and encourage e-textbook developers to submit e-textbooks for review? Has the situation been improved? What are the latest percentages of schools that adopted e-textbooks not on eRTL?

Response/Information:

(a) The EDB provides Recommended e-Textbook List (eRTL) for schools' reference in selecting e-textbooks that have passed the vetting criteria in terms of its teaching and learning contents and related tasks / activities, structure and organisation of the contents, accuracy in language use, the pedagogical use of e-features as well as the technical and functional requirements. The details about the vetting criteria, "Guiding Principles for Quality Textbooks" have been made available on the Textbook Page of the EDB website: http://www.edb.gov.hk/textbook. If publishers wish to include their e-textbooks on the eRTL, they have to submit their e-textbooks for review. To facilitate schools in selecting e-textbooks, on top of the eRTL, guidelines, such as "Guiding Principles for Quality Textbooks" and "e-Textbook Selection Criteria" are made available by the EDB for schools' reference (For details, please visit the Textbook Page of the EDB website: http://www.edb.gov.hk/textbook).

(b) The EDB implements e-learning with a view to encouraging schools to make good use of information technology to enhance learning and teaching effectiveness and e-textbook is one of the many learning resources that could facilitate e-learning. e-Textbooks are not the unique resources that could facilitate schools to achieve this goal.   With access to the abundance of e-learning resources on the web, teachers can exercise their professional judgement in preparing and choosing resources flexibly, including those outside the eRTL according to their school contexts, students' needs and school infrastructure, etc.   The EDB has been constantly reviewing the measures to facilitate the development of e-resources and e-textbooks in supporting learning and teaching.   From school visits and tryout programmes, it was observed that in this transitional period, many schools tended to use the e-textbooks from the same publishers to replace or complement the currently used printed textbooks, regardless of whether those e-textbooks were on the eRTL or not, while many publishers of popular printed textbooks did not plan to submit the electronic version of the textbooks for review at the initial stage because of their business considerations[2]. As the result of the EDB's efforts and as the market grows, there is a growing number of publishers who show interest and have planned to submit more e-textbooks of various subjects, especially for the revised curricula, for review in the years ahead.   In the long run, whether there is still a need for "textbooks", printed or digital, in learning and teaching is questionable in this fast-changing IT driven era.

(c) The EDB does not have the statistics on the adoption of printed textbooks on the RTL in the 2016/17 school year.   Schools have the professional autonomy in selecting learning materials for their students based on students' needs and abilities and school specific contexts.   Schools could also decide whether to adopt textbooks on the RTL or not. They could even design their own school-based learning materials or use any other suitable learning resources without using any printed textbooks or e-textbooks.   Our observation through our regular contacts with schools in school visits, professional development programmes and focus group meetings that schools tend to select printed textbooks on the RTL.

(d) The EDB has been promoting the eRTL as a quality vetting and assurance mechanism for e-textbooks among e-textbook developers and schools through various means, including the setting up of a Task Group on e-textbook development with publisher associations, organising meetings and briefings for publishers and e-textbook developers,

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[2] Such business considerations, as we understand, include the uncertainty of teachers' readiness to use e-textbooks, schools' technical support capacity and possibility of any revision of curricula in the following years.

conducting annual textbook seminars for teachers and schools' sponsoring bodies on selection of quality learning and teaching resources, organising focus groups and tryouts on the use of e-textbooks on the eRTL in schools, arranging school visits, issuing circular memorandum to schools and the dissemination of publicity materials such as promotional videos and newspaper articles. The latest annual school survey results have revealed that about 33% of the primary schools and 31% of the secondary schools adopting e-textbooks in the 2017/18 school year selected to use e-textbooks not on the eRTL. When compared with the figures in the 2016/17 school year shown in the Audit Report, though the percentage is about the same in the primary schools, there is on average around 16% decrease in the secondary schools. Moreover, the number of e-textbook sets included on the eRTL have also increased from 49 sets in April 2018 to 52 sets as at December 2018. There is also a growing number of publishers who show interest and have planned to submit more e-textbooks of various subjects, especially for the revised curricula, for review in the years ahead. But we have to note that the textbook market is also driven by commercial interest. Publishers' willingness to invest in textbook production, be it printed or digital, is based on their assessment of the cost involvement in production and perceived market demand. As mentioned before, the abundant existence of other e-learning resources shared on the web has been adding to the commercial risk of investing in e-textbooks production.

Table: Percentage of schools that adopted e-textbooks not on eRTL (source: Annual School Survey for the 2017/18 school year)

	No. of primary schools			No. of secondary schools		
	Adopted e-textbooks	Adopted e-textbooks not on eRTL	Percentage	Adopted e-textbooks	Adopted e-textbooks not on eRTL	Percentage
Chinese Language	98	30	31%	42	16	38%
English Language	116	43	37%	46	15	33%
Mathe-matics	115	36	31%	39	9	23%

7) According to paragraphs 3.15 to 3.22, $10 million was granted to the Hong Kong Education City Limited for the e-Resource Acquisition Project ("eREAP"). The e-learning resources procured under eREAP covered subjects including English Language, Mathematics and Liberal Studies, but it did not cover Chinese Language, while 39% of the teachers from the 66 participating schools of eREAP suggested that Chinese Language should be covered. While 46 out of 205 schools (22%) that joined eREAP in the first

year did not participate in the second year one of the main withdrawal reasons were the suitability of the e-learning resources to the schools and the schools' different priorities in learning and teaching.

(a) What were the reasons for not including Chinese Language in eREAP?

(b) Did EDB consult schools and teachers before selecting the subjects to be covered by eREAP's?

(c) Did EDB communicate with schools which had withdrawn from eREAP to understand their difficulties?

(d) According to paragraphs 3.23(a) and 3.24, EDB agreed to, in collaboration with the Hong Kong Education City Limited, consolidate the experience gained from the implementation of eREAP with a view to improving eREAP and determining the way forward for e-learning resources acquisition. What is the progress in this regard?

Response/Information:

(a) The main objective of eREAP was to establish a mechanism to coordinate evaluation, acquisition and licensing of e-learning resources to support large-scale implementation in addition to enriching the pool of e-learning resources available for schools. According to the Service Agreement of eREAP signed with Hong Kong Education City (HKECL), the e-learning resources acquired may be subject/level specific or cover more than one subject/level. Notwithstanding this, HKECL had considered including all major subjects in their procurement of e-learning resources. It was explicitly stated in the invitations for submission of EOI that preference would be given to e-learning resources covering major subjects such as Chinese Language, English Language, Mathematics, General Studies and Liberal Studies. The two rounds of invitations received 27 EOIs on Chinese Language. Among them, 13 EOIs meeting the selection criteria were shortlisted for detailed evaluation on their suitability to be used in schools. However, the proposed Chinese Language e-learning resources submitted by providers received low scores in the quality and/or suitability for use in Hong Kong. As a result, no suitable e-learning resources for Chinese Language was recommended by the evaluation panel which comprised experienced school teachers taking into account the level of difficulties, suitability for the local curriculum and technical compatibility of the resources. HKECL has tried their best in sourcing Chinese Language e-learning resources but in vain due to the lack of available e-learning resources in the market suitable for use

in local schools as Hong Kong is a small market for Chinese Language and requires very localised contents.

(b) The implementation of eREAP is overseen by a Steering Committee (SC) which comprises 10 members including school principals, school librarians and frontline teachers. The subjects to be covered in the project has been discussed by the SC. Proposals on any subjects were accepted in the open invitations for EOIs though preference would be given to e-learning resources covering major subjects, including Chinese Language as mentioned in 7(a) above.

(c) HKECL has closely monitored the withdrawal cases and taken follow-up action, and reported to the Steering Committee of eREAP. The EDB has also been monitoring the implementation of the project through constant communication with HKECL on information related to the project, including needs and concerns of schools, gathered from ongoing communication with schools, school visits, surveys and focus group meetings conducted by HKECL. In fact, eREAP is a pilot scheme for schools to have an opportunity to try out local and overseas e-learning resources. Since eREAP was just one of the many e-learning resources available in the market, the e-learning resources from eREAP would by no means satisfy the needs of all different schools. The 46 schools chose not to participate in the second year due to reasons such as the suitability of the e-learning resources in their schools' context, teachers' readiness and schools' different priorities in their learning and teaching plans.

(d) The pilot project is in the third year of implementation and HKECL has been regularly reviewing and enhancing the supports for schools. In light of the experiences gained from the first year of implementation, additional training courses were conducted to help schools to better adopt the e-learning resources from eREAP and teachers who have tried out the resources were invited to share their experiences with other schools to build the teacher community. The recommendations of the Audit Commission on this project have been reported to the Board of Directors of HKECL in the meeting held on 29 November 2018. The latest progress of the projects and feedbacks gathered from surveys and focus groups conducted in late 2018 will be reported to the SC in January 2019. HKECL will continue to consolidate experiences gained from the implementation of eREAP and seek views from members in the SC before proposing the way forward on e-learning resources acquisition.

Part 4: Professional development of school leaders and teachers

8) According to paragraph 4.6(b), some participating teachers of the professional development programmes were too busy to attend all the sessions or submit their course-related work. What measures have been/will be taken by EDB to ensure that the programme schedule can cater for as many teachers as possible?

Response/Information:

In order to facilitate the participation of teachers in the programmes, each commissioned course generally comprises a number of identical events each with two sessions held on different dates for enrolment by teachers. Teachers who cannot attend one of the sessions of the enrolled event could request for attending the relevant session of another event. Besides, to provide more flexibility to teachers in attending the courses, the EDB has started offering related online courses from the 2018/19 school year. The EDB has been identifying ways to reduce the administrative work of teachers and principals so that they may focus on teaching and professional development and to this end, as announced in the 2018 Policy Address, schools will be provided with additional resources to strengthen the administrative support for schools and their management committees from the 2019/20 school year onwards.

9) With reference to paragraph 4.7, does EDB consider the decrease in the certificate award rate of the commissioned courses a matter of concern? With reference to paragraphs 4.10(a) and 4.11, what measures have been taken by EDB to improve the situation?

Response/Information:

Although the award of a certificate is not a prerequisite for attaining the Continuing Professional Development (CPD) hours, it serves as an incentive to teachers to achieve full attendance and successful completion of an assignment. The EDB will continue to remind enrolled teachers to fully attend the commissioned courses through all feasible means and to improve the certificate award rate by requiring the service providers to ensure completion of the course-related work during the events. The EDB has also been evaluating the courses on an ongoing basis for continuous refinement, including offering online courses in self-learning mode to facilitate the participation of teachers (reply to question 8 refers) taking into account the views of participating teachers collected from course evaluation meetings that some participating teachers were too busy to attend all the sessions or

submit their course-related work and were not very keen to obtain the certificate.

10) According to paragraph 4.9, in August 2018, EDB had uploaded to its website materials of 14 of the 24 commissioned courses conducted in the school years of 2015-2016 to 2017-2018. The materials of the remaining 10 (i.e. 24 – 14) commissioned courses had not been uploaded. With reference to paragraphs 4.10(b) and 4.11, what measures have been taken by EDB to ensure timely dissemination of the materials of commissioned courses for access by the teachers? Have the materials of all the commissioned courses been uploaded?

Response/Information:

The materials of all the commissioned courses from the 2015/16 to 2017/18 school years have been uploaded to the EDB webpages. The EDB will upload the course materials of commissioned courses on the EDB webpages biannually and organise related online courses for teachers' self-learning on a need basis.

Part 5: Monitoring of implementation of IT in education

11) In paragraphs 5.4 and 5.5, the response rate of the annual school survey of 2016-2017 school year was only 72.7%. 56 schools indicated in the survey that their progresses on implementing e-learning were behind the targets set in their three-year School Development Plans, but EDB had not ascertained why their progresses were behind targets and explored whether these schools would need any assistance from EDB to help them catch up with the progresses.

(a) With reference to paragraphs 5.7(a) and 5.8, what actions have been taken by EDB to step up efforts to follow up with schools that did not respond to the annual school survey? Did EDB know why some schools did not respond to the survey? What was the response rate of the latest annual school survey for 2017-2018 school year?

(b) Why did EDB not cover all schools in the annual school surveys?

(c) Did the schools which were behind their targets explain the reasons?

(d) Apart from offering advice, did EDB provide any assistance (e.g. manpower and technical support) for those schools which were behind their targets to achieve their targets?

(e) What additional measures have been/will be taken by EDB to closely monitor schools' performance on the implementation of e-learning?

Response/Information:

(a) EDB has been making intensive efforts in encouraging schools to complete and return the survey through various means including e-mails and telephone calls as well as extending the closing date for submission, thus further increasing the response rate of the survey for the 2017/18 school year to 74.2% from 72.7% (involving 17 more schools) of the survey for 2016/17 school year.   Some schools reflected that as the survey covered various aspects of the development of e-learning, it required time and inputs from relevant teachers for completing the survey and they often missed the closing date for submission.

(b) The surveys target mainly all public sector schools joining the WiFi-100 and WiFi-900 Schemes to solicit a holistic understanding of the implementation of ITE4.   Schools are invited to complete the survey on a voluntary basis.   The response rate of 72.7% of the survey for the 2016/17 school year is considered statistically good enough to generate holistic understanding of the implementation of ITE4 in schools.   The EDB will explore measures to further enhance the response rate in future surveys.

(c) Based on our understanding of the schools and information collected from school visits and that available on schools' homepages, we note that schools with progress in implementing e-learning being behind targets set by themselves are not necessarily having difficulties or are under-performing in e-learning.   They might have set too unrealistic targets or might have to adjust their progress taking students' reception into account.   Besides, some schools had not even completed their enhanced WiFi infrastructure at the time when the survey was conducted in the second quarter of 2017.   With the advance of time, most of the 56 schools (77%) mentioned in paragraph 5.5 of the Audit Report had revised their progress as "in advance" or "on progress" in the survey for the 2017/18 school year.

(d) and (e):
The EDB has been gauging the progress of IT in education development in schools through various means such as school visits, on-site support visits, focus group meetings, surveys and case studies.   The EDB plays a supporting and advisory role in facilitating schools to implement e-learning in accordance with their school-based e-learning development plans. Various forms of ongoing support, e.g. on-site support services by the CoE, professional development programmes (PDPs), relevant online

resources as well as technical support services, are provided to schools as mentioned in 1(b) to (d) above. Apart from sending letters to schools by fax to invite teachers to attend the latest PDPs from time to time, a letter was also issued to invite the schools which considered their progresses of implementing e-learning behind the targets set in their SDP to apply for CoE on-site support services. The EDB will continue to keep in view the implementation of ITE in schools with a view to fine-tuning the actions and identifying further support measures to schools. We will also strengthen our efforts in conducting school visits to understand schools' progress on the implementation of e-learning and provide assistance, if necessary.