For discussion on 14 December 2009

Legislative Council Panel on Education

Promotion of e-Learning and Improvement of the Existing Textbook System

Purpose

This paper aims to brief members on the report submitted by the Working Group on Textbooks and e-Learning Resources Development (WG) to the Secretary for Education (SED), and the Education Bureau (EDB)'s response and proposed measures to take forward the WG's recommendations, as well as to consult Members on the funding proposal to implement the relevant e-Learning initiatives.

Background

2. The WG was set up in October 2008 to study the use and development of textbooks and e-Learning resources. The WG submitted its report on the issues discussed and its recommendations to the SED on 22 October 2009.

Issues Discussed & Recommendations Made

3. On the basis that all discussions concerning the development of textbooks and e-Learning resources should focus **on the quality of learning and teaching**, the WG has considered measures on reducing the textbook prices, improving the existing textbook system in the contexts of the Curriculum Reform and providing schools with effective and suitable e-teaching resources to enhance the effectiveness of student learning. The following paragraphs set out the issues deliberated by the WG.

Issues related to development of e-Learning

4. The objective of promoting information technology (IT) in education is to improve the effectiveness of learning through electronic technology. e-Learning enables learning to be more efficient, effective and enjoyable, and helps students develop the habit of life-long learning, which facilitates whole-person development. At present, the adoption and adaptation of

e-Learning to achieve learning intentions varies among schools. Further understanding and development of e-Learning practices to promote effective learning is, therefore, the issue to work on. The WG hoped to find out the role and functions of e-Learning resources in promoting effective learning in conjunction with pedagogies, curriculum contexts, and other supporting factors.

- 5. The following issues have been discussed by the WG:
 - (a) Implementation of e-Learning in schools;
 - (b) e-Learning and e-Learning resources;
 - (c) Development of market for e-Learning resources;
 - (d) e-Learning and students' physical, psychological and social health; and
 - (e) Copyright issues of e-Learning resources.
- 6. The WG noted that the Government had launched three IT in Education Strategies since 1998 and had invested about \$8 billion with the aim of shifting the paradigm in school education from a textbook-based and teacher-centred mode to a more interactive learner-centred mode. e-Learning has since been gradually integrated into learning and teaching, but the pace of development of e-Learning differed amongst schools. Noting that e-Learning modes should be diversified, in order to look into how e-Learning should be implemented in class as well as support measures needed, the WG was of the view that the Government should launch a pilot scheme to support schools that were keen on developing e-Learning so that they could try out e-Learning based on their experiences and ideas. The pilot scheme should encourage collaboration between schools and other sectors to develop and promote the e-Learning resources market.
- The WG also pointed out that successful implementation of e-Learning hinges on the availability of quality e-Learning resources for teachers' selection. It believed that the reason teachers had not fully utilized e-Learning resources was that the existing e-Learning resources could not fully complement the way the curriculum was organized and implemented in schools. To help advance market development, the Government should consider providing grants to schools to further encourage them to buy e-Learning resources. An e-platform should also be set up to facilitate students and teachers to acquire e-resources, and an online community should be set up for teachers to facilitate the exchange of views regarding the use of e-Learning resources and the development of peer review culture with a view to improving the quality of e-Learning resources. is also expected that sustainable business models will arise from the pilot projects mentioned in paragraph 6. As short-term measure, the Government should consider deploying additional resources to strengthen and expedite the development of the Depository of Curriculum-based Learning and Teaching

Resources, currently being undertaken by EDB. The WG believed that the above measures would help to facilitate the further deepening and widening of e-Learning to enhance learning and teaching.

Issues related to development of textbooks

- 8. Textbooks are an important learning tool for students. Quality textbooks can help students learn, enhance learning effectiveness, broaden their knowledge and develop their ability of learning to learn. However, expensive textbooks have imposed a heavy financial burden on parents. Although the Government has, in the principle of not interfering with the free market, implemented various measures to reduce textbook costs and curb increases of textbook prices so as to alleviate parents' financial burden, the public remains concern about textbook prices. The WG set out to make effective improvement recommendations on textbook publishing and pricing to provide students with quality and reasonably priced textbooks through a review of the various aspects of textbook development, while observing the principle of maximizing benefits to student learning and not compromising the quality of textbooks.
- 9. The following issues have been discussed by the WG:
 - (a) Textbook publication;
 - (b) Textbook review mechanism;
 - (c) Selection of textbooks in schools;
 - (d) Textbook prices;
 - (e) Textbook revision; and
 - (f) Textbook recycling programme.

Recommendations of the WG

- 10. The major recommendations and proposed action plan put forward by the WG in respect of e-Learning and development of textbooks are summarized below:
 - (a) A three-year pilot scheme on "Promoting e-Learning" will be launched in 20 30 local schools in the 2010/11 school year;
 - (b) From the 2009/10 school year onwards, additional resources will be provided to strengthen and expedite the development of the existing "Depository of Curriculum-based Learning and Teaching Resources" (including Primary Chinese Language, English Language, Mathematics and General Studies). In the meantime, measures will also be taken to expedite the development of the Depository for the junior secondary levels so as to expand the coverage of the Depository in terms of Key Stages and Key

Learning Areas;

- (c) In the 2009/10 school year, a one-off grant will be provided to all local schools for purchasing e-Learning resources for students (the grant to be used by schools in the next three years);
- (d) To set up an e-commerce platform for e-Learning resources and an online community for teachers at the HKEdCity website;
- (e) From the 2010/11 school year onwards, textbooks and teaching and learning resources will be debundled for pricing so as to allow the market to operate on a user-pays basis. Teachers and parents may choose to buy only the resources that fit their needs. The EDB will issue guidelines stating clearly that schools are not allowed to solicit any free teaching or learning materials from textbook publishers. The EDB will closely monitor the situation after the debundling of textbooks, as well as teaching and learning materials. If schools have any financial difficulties in purchasing teaching materials, the EDB will, where appropriate, provide more funding for schools to ensure that they have the materials required for teaching; and
- (f) From the 2010/11 school year onwards, the "three-year rule of no revision" will be changed to "five-year rule of no revision".

Government's Proposed Measures

11. After considering the WG's recommendations, the following are the measures that EDB intends to take forward.

Measures to address issues related to the development of e-Learning

- (i) Pilot Scheme on e-Learning
- 12. In line with the WG's recommendations, in order to look into different modes of implementing e-Learning as well as the necessary support measures, we propose to launch a three-year pilot scheme on e-Learning in schools. The aims of the proposed Pilot Scheme are to
 - (a) develop, try out and evaluate when and how e-Learning works best to bring about effective interactive learning, self-directed learning, catering for learner diversity in different curriculum and school contexts in Hong Kong in order to facilitate the charting of the way forward for implementing e-Learning in schools; and

- (b) explore commercially viable business models for the development of e-Learning resources, in order to meet the needs of schools, teachers and students.
- 13. Specifically, through trying out e-Learning in different contexts, we will be able to understand teachers' need in respect of e-Learning resources, infrastructure, professional development, support services and the like, as well as challenges on strategic school development that schools would face. Through encouraging schools' partnership with other sectors including the business sector, we hope different viable models may emerge to meet the needs of schools, teachers and students. In other words, the Pilot Schools will be research and development centres and change agents for further wider adoption and adaptation of e-Learning.
- 14. We propose that all government, aided, caput and Direct Subsidy Scheme (DSS) primary and secondary schools (including special schools) may apply to join the Pilot Scheme. Schools will be required to submit school-based proposals to implement e-Learning for the schools to enhance the effectiveness of learning and teaching. While schools may submit proposals on their own, they may also form school clusters and submit joint applications. Selection will be based on the merits of the proposals, the criteria of which to be decided by the Steering Committee to be tasked to oversee the Pilot Scheme (see paragraph 18 below).
- 15. To facilitate schools to make sound proposals and to collaborate with other relevant stakeholders, a series of engagement activities will be organized. These include briefing sessions to enhance schools' understanding of the aims and objectives of the Pilot Scheme, exposure sessions to expose schools to different schools of thoughts and relevant resources, experience capturing sessions to enable schools to tap ideas through the sharing of local and overseas practitioners' experience, and partnership sessions to facilitate schools to line up with academic and private sector partners.
- 16. In line with the WG's recommendations, we propose that the Pilot Scheme will be implemented starting from 2010/11 school year. To allow some flexibility, we propose that some pilot schools can start in 2011/12 school year. The Government will continue to provide professional support to the Pilot Schools during the Pilot Scheme.
- 17. Pilot Schools will be given a cash grant to implement their proposals within three school years. The estimated financial implications for the Pilot Scheme are \$68 million, including \$57 million as grant to 20-30 schools, and

- \$11 million for other expenditure required (e.g. backend support, workshops/briefings, evaluation and research).
- 18. A Steering Committee will be tasked to oversee the Pilot Scheme and to recommend the way forward on e-Learning in the light of the results of the Pilot Scheme. The Steering Committee will comprise representatives from the school sector, IT sector, education publishing/e-content providers, academia and parents. School councils and relevant stakeholders will be consulted on the implementation details before actual implementation.
- (ii) Strengthening and expediting the development of the existing "Depository of Curriculum-based Learning and Teaching Resources"
- 19. At present, when implementing e-Learning, teachers need to spend hours to search for resources in the Internet which has increased their workload. To cope with this, the EDB has undertaken under the Third IT in Education Strategy to develop an e-Depository of Curriculum-based Learning and Teaching Resources for Primary to Secondary 3 levels in Chinese Language, English Language, Mathematics and General Studies (Science for secondary). The original intention was to complete the e-depository for the primary level by the end of 2010/11 school year; and the secondary level by the end of 2012/13 school year. The development of the e-depository for the primary level has been progressing well. It collects free resources, both online and printed, provided by local and overseas government organizations, tertiary institutions, schools and non-profit-making organizations. The resources are selected and organized into thematic units based on the local curriculum framework, with teaching suggestions as well as user guides.
- 20. The WG recommends that the development of the e-depository at primary and junior secondary levels should be strengthened and expedited. In line with the WG's recommendations, we propose that the completion of the e-depository for the primary level should be advanced to the end of the 2009/10 school year, and that the e-depository should be further strengthened, updated, and enhanced thereafter for two years. As for the e-depository for the junior secondary level, we propose that the scope of the Key Learning Area(s) (KLAs) to be covered should be expanded. Which KLA(s) should be added will depend on the outcome of the needs analysis that we are conducting through seeking views from schools.
- 21. A sum of \$20 million has been earmarked under the Third IT in Education Strategy for the staff costs to develop the e-depository for the primary to junior secondary levels, according to the scope and timeframe in paragraph 19 above. In order to expedite and strengthen the development, additional

manpower is needed. We estimate that an additional \$2.5 million will be required for the primary level and about \$9.5 million for the secondary level, totaling \$12 million from 2010-11 to 2013-14 financial year.

- (iii) Providing a one-off grant to schools for purchasing e-Learning resources
- 22. The use of e-Learning resources is a world trend. As the WG has pointed out, the expertise of the textbook publishers and the IT sectors should be made full use of, in order to develop e-Learning resources that suit the needs of students and teachers. While there are recurrent funds for schools which can be used for purchasing e-Learning resources, in line with the WG's recommendation, we propose to set aside \$50 million for providing a one-off grant to government, aided, caput, and DSS schools (including special schools) in 2010-11, which the schools may spend over three years, as a further incentive. The grant is for purchasing e-Learning resources and aims to promote the use and enrich the inventory of e-Learning resources in schools, as well as to facilitate and promote the development of the e-resources market. The rate per school will commensurate with the number of classes.
- 23. We will arrange a series of supporting activities to help schools use the grant effectively. These activities include, for example, seminars on how to choose pedagogically sound e-Learning resources, and exposition or online information on sources of e-resources. These activities may be organized by the EDB or Hong Kong Education City (HKEdCity), or in conjunction with other sectors. Before implementation, we will also consult school councils and relevant stakeholders on the implementation details.
- (iv) Setting up an e-platform for transaction of e-Learning resources and an online community for teachers at the HKEdCity website
- 24. To complement the above action items, the WG recommends the setting up of an e-platform for transacting e-Learning resources. Accordingly, we will task HKEdCity to develop the platform, the aim of which is to provide a secured online one-stop shop where e-Learning resources can be sourced and acquired. Specifically, this infrastructure will assist students, teachers and parents to acquire e-Learning resources online from various providers, facilitate the education publishing sector, the education sector, the IT sector and other e-content providers to develop e-Learning resources, display their products and effect online transaction.
- 25. To act as market facilitator, HKEdCity will consult relevant stakeholders (including the IT sector, publishing sector, NGOs, schools, parents, etc.) to work out the standards of the platform, the collaboration mechanism, the user requirements, transaction models, etc. The intention is that the e-platform

will be inter-operable with existing e-platforms and e-resources; it will also attend to Digital Rights Management issues of the e-Leaning resources as well as the necessary payment gateway facility. We aim to have the platform ready by early 2011. The estimated funding requirement to develop the platform is \$10 million.

- 26. Besides the e-platform for online transaction of e-Learning resources, the HKEdCity will strengthen its online teacher community with a view to facilitating peer review and sharing of e-Learning resources. We will absorb any additional resources required.
- (v) Carrying out in-depth studies on the copyright of e-Learning resources and the possible impact on students' health due to the frequent use of such resources
- The WG has expressed concerns about the possible impact of the frequent use of computers on students' physical and psychological health. Some stakeholders are also concerned about copyright of online resources. It pointed out that as the source of a large amount of online resources was unknown, some teachers were unable to obtain permission to use the materials. Publishers, on the other hand, are concerned about illegal use of e-resources as these resources can be disseminated more readily than printed materials. The WG suggests that studies on the two issues be carried out in order to formulate relevant strategies and support measures.
- 28. We will carry out the studies on the issues of copyright and health, consult and work in collaboration with other relevant organizations and professionals, with a view to implementing awareness programmes, preparing resource materials to help teachers, parents and students to understand more about the two issues and providing relevant advice and support. We will absorb the financial implications resulting from this recommendation.
- 29. The estimated total non-recurrent funding required for the e-Learning initiatives in paragraphs 12 28 above is \$140 million. EDB will include relevant provisions in the draft Estimates of the respective years. Subject to the comments of Panel members, we will seek the Finance Committee's approval for the funding proposal at its meeting on 5 February 2010. EDB will absorb other resources requirements arising from monitoring the implementation of the measures. The table below summarizes the funding requirement for the measures:

Measure	Funding requirement (\$ million)
Pilot Scheme on e-Learning	68
Strengthening and expediting the development of the existing "Depository of Curriculum-based Learning & Teaching Resources"	12
Providing a one-off grant to schools for purchasing e-Learning resources	50
Setting up an e-platform for transaction of e-Learning resources and an online community for teachers at the HKEdCity website	10
Carrying out in-depth studies on the copyright of e-Learning resources and the possible impact on students' health due to the frequent use of such resources	No additional funding required
Total	140

30. We are aware that the community is concerned about home Internet access by students from low income families. To this end, as announced in the Policy Address in October, the Financial Secretary will co-ordinate the efforts of relevant bureaux to examine, through tripartite collaboration between the community, business sector, and the Government, options to provide convenient and suitable Internet learning opportunities for students in need.

Measures to address issues related to the development of textbooks

- (i) Implementing the "debundling" policy
- 31. The EDB will adopt the WG's recommendation on the implementation of the "debundling" policy. We consider it an opportune time to rationalize the current situation of bundled sale and purchase of textbooks and teaching/learning materials. Through the implementation of this policy, the principle of user-pays could be enforced. Textbook publishers will be encouraged to produce the appropriate amount of teaching/learning materials as required by schools. This will help reduce cost and avoid wastage, thereby lowering the textbook prices. On the other hand, schools will be encouraged to

buy the appropriate teaching materials that fit their specific needs. The following course of actions will be carried out:

- (a) liaising with the textbook publishers via the Textbook Committee regarding the ways and means to implement the "debundling" policy;
- (b) issuing school circular/guidelines to schools stating clearly that they are not allowed to solicit any free teaching or learning materials from the textbook publishers;
- (c) uploading prices of textbooks in the Recommended Textbook List onto the EDB website in April each year so as to increase the transparency of textbook prices;
- (d) monitoring the pricing of textbooks in collaboration with the Consumer Council subsequent to the implementation of the "debundling" policy; and
- (e) collecting feedback from schools regarding the expenditure related to the purchase of teaching materials from publishers.
- 32. At present, under the Operating Expenses Block Grants (OEBG) / Expanded Operating Expenses Block Grants (EOEBG), schools already have grants which could be deployed for purchase of teaching materials. If schools have genuine financial difficulties in purchasing teaching materials due to the inadequacy of their reserve to cover the expenditure, the EDB will provide more funding for schools to ensure that they have the materials for teaching.
- (ii) Changing the "three-year rule of no revision" to "five-year rule of no revision"
- 33. To facilitate the implementation of this proposed measure, the EDB will liaise with the textbook publishers via the Textbook Committee regarding the concrete arrangements for the implementation of the "five-year rule of no revision" at various key learning stages or levels. Besides, the criteria for judging applications for textbook revision, i.e. "needs" in respect of textbook revision, will be re-visited and clearly conveyed to the textbook publishers. Further, whenever there are minor changes or updates in the curriculum in the future, the EDB will provide supplementary teaching/learning materials of the modified parts for schools' reference and use. It is anticipated that the above measures could help to reduce the frequency of textbook revision, thus addressing the public's concern on the frequent textbook revisions. In the long run, it could also help to stabilize textbook prices.

- (iii) Enhancing the existing textbook publication and review mechanism
- 34. The EDB takes notes of the WG's deliberations on the existing mechanisms on textbook publication and textbook review. The EDB echoes the WG's recommendations on: (a) strengthening of communication with publishers regarding the adequacy of time available for compilation of textbooks; (b) enhancement of the existing textbook review mechanism; and (c) provision of a wider range of choices regarding the development and compilation of textbooks and teaching/learning materials. The following course of actions will be carried out:
 - (a) liaising with the textbook publishers via the Textbook Committee regarding the strengthening of communication during the entire process of the development of new curriculum and the processes of textbook compilation, as well as the ways and means to enhance the existing textbook review mechanism;
 - (b) exploring the feasibility of allowing other educational organizations to be involved in textbook reviews;
 - (c) providing schools with supplementary teaching and learning materials whenever there are minor changes or updates in the curriculum in the future; and
 - (d) liaising with the relevant professional bodies to solicit their views and intention on participation in the development/compilation of textbooks and teaching/learning materials with a view to widening the range of choices for teachers and students.

(iv) Other supporting measures

- 35. The EDB takes notes of the WG's recommendations on a series of supporting measures related to the textbook development as stipulated in the Action Plan (items numbered 11 to 15) and will devise practical actions accordingly when appropriate. These refer to: (a) strengthening of communication with parent organizations; (b) enhancement of transparency of textbook prices and teachers' professional judgement in selecting textbooks; and (c) promotion of textbook recycling.
- 36. As the proposed measures to address the issues related to the development of textbooks are within the existing service, the EDB will absorb the resources requirements thus arise.

Advice Sought

37. Members are requested to note the issues discussed and the recommendations made by the WG, and provide their views and comments on the strategies and measures formulated to address the issues related to the development of e-Learning (as per paragraphs 12 to 28) and the issues related to the development of textbooks (as per paragraphs 31 to 35). Members are also invited to support the funding proposal to implement the e-Learning initiatives in paragraphs 12 to 29.

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