

For discussion on 14 May 2012

**Legislative Council Panel on Education
E-Textbook Market Development Scheme**

PURPOSE

This paper seeks Members' advice on our plan to launch an e-Textbook Market Development Scheme (EMADS).

BACKGROUND

2. In this digital age, using electronic learning (e-Learning) resources to provide interactive and individually-paced learning has become a major global trend in education. E-textbooks could be a desirable alternative to printed textbooks. At present, e-Learning resources are mainly used as supplementary learning and teaching materials in schools and they are not quality assured by a review system comparable to printed textbooks on the Recommended Textbook List (RTL) for informed adoption or reference by schools.

3. While noting that the printed textbooks have long been criticised for being bundled with other teaching materials and they are highly priced, the Task Force to Review Learning and Teaching Materials (Task Force)¹ recommended in its Report in December 2011 that it is time to further implement e-Learning and suggested that e-Learning resources should move beyond their existing supportive role to the more vital role of e-textbooks, which would form a complete and independent set of learning and teaching materials to be developed according to our curriculum requirements. The Task Force opined that the Government should play a more pro-active role in promoting the use of e-textbooks to provide interactive and diversified learning as well as to address the current market distortion problem of printed textbooks².

¹ The Task Force to Review Learning and Teaching Materials was set up in June 2011 to review and examine issues arising from the policy of debundling textbooks and learning/teaching materials for pricing, in particular the operation of the RTL as well as other measures concerning the supply of learning and teaching materials with a view to ensuring the provision of quality and value for money materials. The Task Force, chaired by the Under-Secretary for Education, comprised frontline experts and practitioners from the fields of education, business and IT, as well as representatives from parent associations and the Consumer Council. The Task Force's Report is available at <http://www.edb.gov.hk/index.aspx?nodeID=677&langno=1>. It is also set out in the 2011-12 Policy Address that the Government is committed to developing e-Learning resources.

² A brief outline of the progress in the implementation of the policy on debundling of textbooks is at **Annex A**.

PROPOSED EMADS

Objectives

4. In line with the global trend of harnessing technology for more effective, interactive and self-directed learning by students and the recommendation of the Task Force as foreshadowed, we propose to launch an EMADS to achieve two main objectives as follows:

- (a) to facilitate and encourage the participation of potential and aspiring e-textbook developers to develop a diverse range of e-textbooks in line with our local curricula, subject to scrutiny of quality and pricing proposal by the Government, with a view to gearing up a new, healthy, rich and sustainable e-textbook market from the start; and
- (b) to put together a quality vetting and assurance mechanism for e-textbooks with a view to drawing up progressively a full-fledged Recommended Textbook List³ applicable to e-textbooks (“e-RTL”).

Coverage of the EMADS

5. The e-textbooks to be developed under the EMADS will span across subjects from primary to junior secondary levels, i.e. Key Stages 1 to 3. Senior Secondary level is not covered at this stage as the new Senior Secondary School (NSS) curriculum reform is still in its initial stage and there are possible refinements in the light of the experiences gauged from the Hong Kong Diploma of Secondary Education (HKDSE) Examination. A total of 32 subject sets (at **Annex B**) are identified as suitable for initial e-textbook development. Each application for the development of e-textbooks under the EMADS should cover one subject set. For instance, English Language for Key Stage 1 (primary 1 to 3) is counted as one subject set and English Language for Key Stage 2 (primary 4 to 6) is counted as another subject set. Priority will be given to those applications of the same Applicant which aim to develop e-textbooks covering Key Stage 1 to Key Stage 2 for the same subject, i.e. covering the whole primary level, together.

³ The textbooks used in Hong Kong are mainly compiled according to the relevant curriculum guides developed by the Curriculum Development Council. In order to ensure the availability of quality textbooks to schools, Education Bureau (EDB) has devised a stringent textbook review mechanism. Textbooks will be included in the RTL only if they have met requirements in specified areas including relevance to the curriculum guides, accuracy of content, meeting of learning targets. Currently, there is no comparable quality assurance mechanism for e-textbooks and RTL is applicable to printed textbooks only.

Eligibility

6. As the aim of the EMADS is to encourage the development of e-textbooks, the Scheme will be open to all potential and aspiring e-textbook developers. Any organisations, enterprises, academic institutes or societies as registered under the laws of the Hong Kong Special Administrative Region will be eligible to apply under the EMADS. By joining the EMADS, the successful Applicant could test out the e-textbooks implementation, through the rolling out of e-textbooks in partner schools, before the formal launch of the full-fledged e-RTL. This would provide valuable early experience to better assure the successful implementation of EMADS. A vigorous quality assurance process comparable to that for printed textbooks will be part of the development process under the EMADS. The completed e-textbooks developed under the EMADS will therefore be automatically recognised for inclusion into the e-RTL to be launched in future.

7. It is our understanding that, prompted by a desire to test out pedagogies, transfer academic knowledge through the process of developing e-textbooks and conduct related research on learning and teaching, some academic institutes and professional organisations are interested in developing e-textbooks. They are also convinced of the potential of e-learning in enhancing students' learning motivation and effectiveness, and in addressing students' learning diversity. To facilitate and encourage these aspiring developers, especially those of non-profit making nature⁴ who are likely to be less well-endowed financially, we propose to provide a seeding grant to successful non-profit making Applicants under the EMADS. The seeding grant will be provided on a 50:50 matching basis, subject to a cap of around \$4 million per e-textbook set or 50% of the development cost of the e-textbook set concerned, whichever is the less⁵. We propose to earmark \$50 million to launch the EMADS, which could help non-profit making organisations to develop at least 12 sets of e-textbooks. By assisting non-profit making developers to enter the market in the initial stage of the development of an e-textbook market, we can help diversify suppliers and genres of e-textbooks available, thereby also much enhancing consumer choice.

8. For other organisations/companies which are not eligible for the seeding grant from the Government as they are not non-profit making organisations in essence, they can join the EMADS through submitting their e-textbook proposals for

⁴ Non-profit making organisations refer to approved charitable institutions or trusts of a public character exempted from tax under section 88 of the Inland Revenue Ordinance (Cap. 112).

⁵ Our initial thinking is that the funding ceiling will be in the region of \$4 million per subject set. The Steering Committee on Selection, Quality Assurance and Review (see paragraph 10 below) will further deliberate the funding ceiling taking into account the differences in development of different subject sets for different key stages.

our vetting although they will not be entitled to the seeding grant. These interested entities could use their own money to finance the development of e-textbooks or, where necessary or appropriate, seek other funding means such as commercial loans guaranteed by the Government under the Small and Medium Enterprises Loan Guarantee Scheme⁶. Notwithstanding the absence of a seeding grant, we believe that commercial publishers will also have an equal if not stronger interest to join the EMADS so as to secure early quality recognition of their products by the Government in both the primary and junior secondary textbook markets.

9. The two types of Applicants will be subject to a similar set of application conditions. For instance, both will be subject to the same quality assurance mechanism (see paragraphs 12 to 14 below). We shall also require all successful Applicants to commit to the sales price of the e-textbook as set out in their application documents throughout the contract period⁷. Any failure to do so may result in removal of the e-textbooks from the EMADS as well as the future e-RTL. All successful Applicants are required to update the e-textbooks at their own cost during the contract period. They are also required to grant a licence to the Government to use the deliverables for internal reference and professional development activities or seminars organised or commissioned by the EDB. There will nevertheless be some differences between the two types of Applicants arising from the provision of grant from the Government. For instance, the non-profit making developers in receipt of seeding grant from the Government would be obliged to provide a specified number of free e-textbooks (accounts and server versions) to specified recipient groups such as schools, the EDB as well as the public reference libraries in Hong Kong during the contract period. A comparison table is at **Annex C** for reference.

Selection and Quality Assurance

10. A Steering Committee on the Selection, Quality Assurance and Review of EMADS will be formed to oversee the implementation of the EMADS. Chaired by the EDB, the Steering Committee will include experienced school principals and

⁶ The Small and Medium Enterprises Loan Guarantee Scheme is a funding scheme for small and medium enterprises (SMEs) run by the Trade and Industry Department (TID). It aims to help SMEs secure loans from participating lending institutions (PLIs) in acquiring business installations and equipment and meeting working capital needs, with the Government acting as the guarantor. The Government provides guarantee for up to 50% of the approved loans under the scheme and the maximum amount of loan guarantee for each SME is \$6 million. All SMEs registered under the Business Registration Ordinance (Cap. 310) and with substantive business operation in Hong Kong are eligible to apply. All applications must be lodged through the PLIs. A list of the PLIs and more detailed information about the scheme can be downloaded from the website of TID's SME Funding Schemes at www.smefund.tid.gov.hk.

⁷ Taking into account the development period, the price commitment is expected to cover four and two school years respectively starting from 2014/15 school year for non-profit making Applicants and other Applicants.

teachers, a Hong Kong Education City Limited's representative as well as representatives from the business and the information technology (IT) sectors. It will set the criteria for assessing and approving applications for the EMADS, monitor the EMADS projects and advise the Government on all matters related to the EMADS including the dissemination of good practices in using e-textbooks.

11. To facilitate the development of a healthy e-textbook market with multiple and diverse sources of supply, each Applicant can only submit applications of no more than four subject sets. In order to have a diverse range of e-textbooks under the EMADS, our initial plan is to approve not more than two applications for each subject set. Furthermore, in line with the objective of encouraging new and aspiring e-textbook developers to join the market, we would accord priority to non-profit-making e-textbook developers who have passed the "quality" vetting in the process of selecting amongst almost equally strong top contestants (assessed on the basis of both quality and pricing.)

12. All Applicants, whether they are non-profit making or not, will be subject to the same stringent vetting and quality assurance process. All applications will be judged on their "quality" and in particular, how e-features are appropriately applied to contents of learning and "pricing commitment", with more weighting accorded to the "quality" component. Only those above the passing mark for "quality" will be considered further for vetting on "pricing commitment".

13. The quality of the e-textbooks to be developed under the EMADS will be subject to stringent quality assurance criteria derived from the experiences in our textbooks vetting including content, accuracy of concepts, information, presentation and language, etc. Therefore, the development teams of the proposed e-textbooks under the EMADS should be well versed with the subject content concerned, the development and teaching of the local curricula, and/or development of electronic resources. From the professional perspectives, the contents of the e-textbooks under the EMADS should be aligned with the curriculum aims and objectives in the relevant Key Learning Area curriculum/subject guide. They should provide accurate and up-to-date information and concepts, incorporate learning and assessment activities that provide feedback on students' performance effectively, allow for flexible arrangement of modules to support alternative learning strategies/paths and are written in language commensurate with the language standards of the students.

14. On the technical side, the e-textbooks should be accessible by popular computing devices and should embed such e-features as a print-on-demand function, intuitive navigation, multi-media elements, interactive activities, adjustable font size, annotation and bookmarking tools as well as other subject-specific requirements. We consider the print-on-demand function to be an essential feature of e-textbook development as it provides flexibility in usage for face-to-face group work, off-line

assessment or homework purposes.

15. To help ensure that the e-textbooks under EMADS could achieve the intended learning objectives, we shall engage partner schools to try out the e-textbooks. We believe that frontline school experiences provide invaluable authentic feedback to help realise the potential of e-textbooks for optimising pedagogical effectiveness in the classroom. The experiences of the partner schools and the e-textbook developers in the EMADS will, we envisage, generate pointers on the essential success factors for propelling e-learning through, among other things, the greater use of e-textbooks. We estimate that two to three schools will be needed per subject set and we will thus invite around 50 among aided, government, caput, Direct Subsidy Scheme and special schools to participate as partner schools to try out the e-textbooks.

16. The Steering Committee on the Selection, Quality Assurance and Review of EMADS will monitor the implementation of the EMADS project. All successful Applicants have to submit progress reports and a final report to demonstrate compliance with the terms of the EMADS and, where applicable, the seeding grant. Funds will be disbursed to non-profit making developers in phases and only upon successful completion of development milestones. In case of non-compliance with any of the said terms by a successful Applicant, the Government may terminate the contract with the successful Applicant. The e-textbook and the developer concerned may also be removed from the EMADS and the e-textbook so involved may be excluded from the e-RTL to be introduced⁸.

PROPOSED IMPLEMENTATION

17. We propose to launch the EMADS and earmark \$50 million for the provision of seeding grants to the successful non-profit making Applicants to develop e-textbooks under the EMADS. We plan to invite applications in end Q2/early Q3 of 2012, subject to the funding approval of the LegCo Finance Committee. We expect that e-textbooks developed under the EMADS will be launched in the market in early/mid 2014 the earliest for use in the 2014/15 school year.

18. Thanks to the IT in education strategies launched since 1998/99 school years, most schools in Hong Kong should have basic IT infrastructure though the hardware of some is more advanced. We shall ensure that those schools eventually selected as partner schools would have the needed IT infrastructure to benefit from the use of the e-textbooks to be developed under the EMADS. Such may involve, for example, upgrading their network switches and/or installing additional multi-channel

⁸ In case of non-compliance, the successful Applicant in question may be required to repay to the Government the full amount of the funding disbursed to it or any part thereof as well as other costs, after consultation with the Steering Committee.

WiFi access points. For others, relevant professional support and training in the use of e-textbooks will be provided. The Government will, in the light of the specific circumstances of the partner schools, advise and assist the schools with respect to the upgrading, where necessary, of their IT facilities to support the adoption of e-textbooks under the EMADS.

19. Since the adoption of e-textbooks will have a long term impact on the learning and teaching experience in schools, it will take time for prospective developers to develop high quality e-textbooks covering a wide spectrum of subjects. The EDB will conduct a review in the 2014/15 school year to examine the effectiveness of the EMADS, the quality assurance system, the benefits e-textbooks generated and experience gained especially through the Partner Schools Scheme. The result of the review will help refine our overall strategy in e-textbook development.

ADVICE SOUGHT

20. Members are invited to note and comment on the proposed EMADS and the implementation plan. Subject to Members' comments and support, we plan to seek the funding approval of the Finance Committee in June 2012 for creation of a commitment at \$50 million to implement the proposed EMADS.

Education Bureau
May 2012

Progress of the implementation of the policy of debundling textbooks and teaching and learning resources for pricing

1. The implementation of the policy of debundling textbooks and learning/ teaching materials for pricing was deferred to 2011 in response to publishers' request to put on hold for one more year to allow them more time to resolve copyright issues.
2. To prevent publishers from passing their production and sales costs to parents, the EDB has banned schools from accepting donations/benefits or textbook lending services from publishers with effect from April 2011.
3. The EDB requested textbook publishers to provide separate pricing from 2012 for teaching materials that are most needed by teachers, including teacher's handbook, assessment bank materials and CDs for listening exercises, in response to request by schools. To meet the pressing needs of teachers, the EDB also allowed, as a special measure in the 2011/12 school year, schools to borrow "inspection copies" from publishers for textbook selection and assessment bank materials of secondary six for reference.
4. The Task Force to Review Learning and Teaching Materials (Task Force) set up by the EDB in June 2011 had reviewed and examined the issues related to the policy of debundling textbooks and learning/ teaching materials for pricing, in particular the textbook review system, the operation of the Recommended Textbook List (RTL), as well as other measures concerning the supply of learning/teaching materials, to ensure the provision of quality textbooks and learning/teaching materials that are worth their prices. The Secretary for Education accepted the report and recommendations submitted by the Task Force in December 2011.
5. Five of the six recommendations of the Report are related to the improvement of the textbook review system and the RTL. These five recommendations are as follows:
 - (a) The textbook review system should be further improved to include new criteria so as to keep abreast of the latest developments. The new criteria should include comprehensive textbook content, suitability for independent use, textbook layouts and designs conducive to textbook recycling.
 - (b) Publishers should be allowed to submit textbooks for individual subjects for a Key Stage in batches for review on a trial basis in order to lessen publishers' risk and lower the entry barriers to the textbook market.

- (c) “Double-blind” system should be adopted in conducting textbook reviews to enhance the objectivity and impartiality of the exercise.
 - (d) The Task Force recommends two measures to enhance the transparency of information in the RTL to facilitate choosing appropriate textbooks by schools. The first is to report comments on textbooks on the RTL.
 - (e) The second measure is to report on information on comparisons and changes of textbook prices on the RTL.
6. The EDB has accepted the recommendations and revised the vetting criteria and submission guidelines of printed textbooks for implementation starting from July 2012, including the provision of comments on textbooks, information on comparisons and changes of textbook prices in the new RTL to be launched in early May 2012. The revisions have been accepted by the Curriculum Development Council. Such changes have been reported to the Committee on Home-School Cooperation. Textbooks publishers have also been informed of the details. The new RTL will be launched in early May. Other measures will take effect from July 2012 to allow preparation time for publishers.
7. Special measures will continue to be adopted in the 2012/13 school year by the EDB to address the concerns of schools in face of partial debundling. Schools will be allowed to borrow inspection copies of textbooks (including newly published/revised and existing textbooks) from publishers for textbook selection. Further, schools are also allowed to accept from publishers free teacher’s handbooks, which serve as “user manuals” for the textbooks in use to help teachers get a better understanding of how to use the textbooks effectively. However, these teacher’s handbooks can only serve the purpose of providing explanations and suggestions on the learning and teaching strategies adopted for the textbooks. They should only contain the information that is critical for effective use of the textbooks and should not contain excessive learning and teaching resources other than for illustration purposes. Apart from the above two special measures, it is stressed once again that schools are not allowed to receive any complimentary teaching materials, donations, or any form of on-loan service from textbook publishers. EDB believes that these temporary measures will not have any impact on textbook pricing, and that they will fulfil the purposes of the debundling policy at the same time.
8. In parallel, the EDB has developed alternative curriculum resources and assessment items for the convenient access of teachers through a one-stop portal (www.hkedcity.net/edbosp) that centralises them. The assessment items bank would help address teachers’ concern on the implementation of the NSS curriculum and preparation for the HKDSE examination. The portal has

already been launched in early May 2012.

9. Textbook publishers announced in 2011 that the textbooks of the core subjects for primary 1 to secondary 3 will be debundled for pricing in 2012. The submission of textbook prices from publishers recently represents one third of the total number of textbooks. Publishers also reiterated that the textbooks for the rest of the subjects for primary schools and junior secondary schools as well as all textbooks for senior secondary will be debundled for pricing in 2013 and 2014 respectively. The EDB is of the view that publishers' delaying tactics are not acceptable and we will continue to urge textbook publishers to debundle the most needed teaching materials for pricing with a view to creating space for lowering textbook prices and alleviating parents' financial burden.

10. The EDB has continued to provide schools with various grants for their flexible use to purchase teaching materials and meet daily operational needs. In the absence of pricing information, it has not been able to ascertain the costs to schools in purchasing teaching materials. Schools should exercise professional judgment in deploying resources to purchase debundled teaching materials. The EDB will continue to monitor the situation in schools in the coming school year.

Annex B

32 Subject Sets identified as suitable for development of e-textbooks under the EMADS

Key Learning Area (KLA)/ Subject set	Chinese Language Education	English Language Education	Mathematics Education	General Studies	Science Education	Technology Education	Personal, Social and Humanities Education	Physical Education	Arts Education
Key Stage (KS)									
1 (Lower Primary)	- Chinese Language - Putonghua	- English Language	- Mathematics	- General Studies	N.A.	N.A.	N.A.	- Physical Education	- Music - Visual Arts
2 (Upper Primary)	- Chinese Language - Putonghua	- English Language	- Mathematics	- General Studies	N.A.	N.A.	N.A.	- Physical Education	- Music - Visual Arts
3 (Junior Secondary)	- Chinese Language - Putonghua	- English Language	- Mathematics	N.A.	- Science	- Design & Technology - Computer Literacy / - Home Economics / - Technology and Living	- Religious Education - Geography - History - Chinese History - Life and Society	- Physical Education	- Music - Visual Arts
Total no. of subject set under each KLA of each KS	6	3	3	2	1	3	5	3	6
TOTAL: 32									

Major Features of the EMADS for Different Applicants

	Non-profit making organisations	Other organisations/companies
Funding Support	Government monies of up to 50% of development cost or \$4 million, whichever is the less, will be provided.	Free to seek their funding means if required.
Selection of Application	Subject to the same stringent vetting on quality and price.	
Price Commitment	Shall commit to the sales price of the e-textbook as set out in its application documents throughout the contract period.	
Duration of Contract with the Government	Six years from the date of execution of the contract by the Government and the Applicant or until 31 August 2018, whichever is earlier.	Four years from the date of execution of the contract by the Government and the Applicant or until 31 August 2016, whichever is earlier.
Quality assurance	During the development process, the e-textbooks shall be subject to quality vetting by EDB and shall be tried out in selected schools under the Partner Schools Scheme with a view to assuring/fine-tuning the quality of the e-textbooks.	
Deliverables	Shall grant a licence to the Government to use the deliverables for internal reference and professional development activities or seminars organised or commissioned by the EDB ⁹ .	
	Shall provide a specified number of free e-textbooks (accounts and server versions) to specified recipient groups such as schools, the EDB and the	- N.A.

⁹ The Government is agreeable to the developer granting a licence to the students (and teachers) participating under the EMADS' Partner Schools Scheme to try out the use of the e-textbooks during the contract period. The developer will also grant a licence to the Government after the contract period.

	Non-profit making organisations	Other organisations/companies
	public reference libraries in Hong Kong.	
Updating of e-textbook	Applicants shall bear the updating responsibilities and associated costs during the contract period.	
Control mechanism	Apart from price commitment and quality control, also subject to a set of stringent conditions in respect of budget, progress report, audited accounts, etc.	Mainly subject to price commitment and quality control, though other administrative requirement (e.g. submission of progress report, etc) will still be required.
Intellectual Property Rights (IPR)	<p>The IPR of the e-textbook (including its drafts and uncompleted versions) and the underlying works (except for those underlying works incorporated in the e-textbook, the IPR of which belong to a third party (“third party underlying works”)) will be owned by the Applicants. A “first charge” will be imposed on the Applicants’ title, rights and interests of the IPR of the e-textbook (including the underlying works developed by the Applicant) and the licence of the third party underlying works (“licence”) to protect the Government’s interests during the contractual period¹⁰. Upon occurrence of a breach of the contract or the charge, the charge will entitle the Government to enforce, take possession of, hold or dispose of the charged IPR and/or licence. Moreover, the Applicant shall not, without the prior written consent of the Government, sell, transfer or otherwise dispose of the charged IPR and/or licence, or use or allow to be use the charged IPR and/or licence for any purposes other than for the development of e-textbook under and in accordance with EMADS and the contract, during the contractual period.</p>	

¹⁰ The developer should be required to obtain an irrevocable and transferable licence from all relevant third party IPR owners in respect of the third party underlying works to be incorporated into the e-textbooks in favour of the Government.