For discussion on 11 May 2015

### **Legislative Council Panel on Education**

# Progress of Implementing the Support Scheme on e-Learning in Schools and the e-Textbook Market Development Scheme

#### **Purpose**

This paper updates Members on the latest position on the implementation of the "Support Scheme on e-Learning in Schools" (Support Scheme) and the "e-Textbook Market Development Scheme" (EMADS). It also outlines the way forward on the launch of the "Fourth Strategy on Information Technology in Education" (ITE4).

## **Support Scheme on e-Learning in Schools**

### **Background**

- 2. As a pilot scheme, we launched the Support Scheme in January 2014 with the objective of pioneering a new out-sourcing model for enhancement of IT infrastructure in schools so as to set up the necessary WiFi environment covering all classrooms of the school premises for the effective use of e-textbooks and other e-learning resources in class. Under this out-sourcing model, schools only need to hire a service provider to design, build, own, maintain and upgrade the whole WiFi infrastructure and to pay for the service fee by subscription thereafter.
- 3. After a vetting process on school proposals based on the criteria of track record on IT in education, details and schedule for adoption of e-textbooks or other e-learning resources, curriculum planning, engagement of parents and other stakeholders, plan for professional development of teachers in e-learning, etc., 100 schools were selected from 174 school applications to participate in the Support Scheme. These 100 schools include 53 primary schools, 42 secondary schools and 5 special schools. The 100 selected schools include 20 schools of which the infrastructure is not the most advanced and the social-economic status of students is relatively low, but with other conditions for e-learning equally strong as compared with other schools. At the request of Members, we provided Members with a list of the selected schools in March 2014.

4. The selected schools were provided with one-off funding of \$350,000 per school on average for enhancement of WiFi infrastructure covering a service period of three school years starting 2014/15 (\$250,000), and for acquiring mobile computing devices (\$100,000).

#### Latest Position

- 5. The Support Scheme has progressed well. Among the 100 selected schools, 92 schools have chosen the out-sourcing model for subscription of WiFi services while the remaining 8 schools opt to enhance their WiFi infrastructure by themselves. All 100 schools have completed their WiFi infrastructure enhancement works for use in the 2014/15 school year as scheduled and have disseminated their successful experience and practices from this exercise to the other schools during seminar and sharing sessions. The subscription mode for WiFi services is proved to be a viable and cost-effective solution in terms of attractiveness to market players, flexibility in meeting the diversified e-learning needs of schools, reasonable service fees, as well as alleviation of workload of teachers.
- 6. To enhance the capacity of schools in utilizing the WiFi environment in e-learning, we have provided 32 professional development programmes covering topics on school planning on "Bring Your Own Device", use of mobile computing devices to enhance learning and teaching, effective use of mobile Apps and e-resources, etc. from April 2014 to March 2015. Some 1,300 primary and secondary school teachers including school heads/deputy school heads attended these programmes.

## e-Textbook Market Development Scheme

## Background

- 7. In line with the global trend of harnessing technology for more effective, interactive and self-directed learning by students, we launched a \$50 million EMADS in June 2012 with the objectives of facilitating and encouraging the participation of potential and aspiring e-textbook developers to develop a diverse range of e-textbooks in line with the local curricula; and trying out a quality vetting and assurance mechanism for e-textbooks with a view to drawing up progressively a full-fledged Recommended e-Textbook List (eRTL).
- 8. Upon the close of the application period in September 2012, we received 86 applications for the development of e-textbooks. 30 applications were approved in November 2012. Out of the 30 approved

applications, 20 had signed the project agreement with the Government (including eight applications from four non-profit making (NPM) applicants and 12 applications from six other applicants) while ten had not entered into agreement out of business consideration. The total amount of seeding grant approved for the eight applications from four NPM organisations is around \$18.9 million.

- 9. In mid-2013, we completed an interim review on EMADS with partner schools and developers. In view of the positive feedback received from stakeholders, we launched Phase Two of EMADS in August 2013 and received 57 applications upon the close of the application period in November 2013. 20 applications were approved in December 2013. Out of the 20 approved applications, 16 had signed the project agreement with the Government (including ten applications from four NPM applicants and six applications from one other applicant) while four had not entered into agreement out of business consideration. The total amount of seeding grant approved for the ten applications from four NPM organisations is around \$20.6 million.
- 10. All e-textbooks developed under EMADS have to go through a rigorous quality assurance mechanism before they can be included on the eRTL for school use. To help developers enhance the design and content of the e-textbooks, primary and secondary schools were recruited under the Partner Schools Scheme to field-test the e-textbooks developed under EMADS and provide feedback. e-Textbooks developed under Phase One of EMADS were intended to be rolled out for school use in the 2014/15 school year while developers of Phase Two of EMADS were allowed to opt for the launch of the e-textbooks in the market in either the 2015/16 (Plan A) or the 2016/17 (Plan B) school year.

#### Latest Position

11. Having gone through the field-testing of the e-textbooks in the partner schools and the quality assurance mechanism, 26 sets of e-textbooks (including 18 sets under Phase One and eight sets under Plan A of Phase Two) have been uploaded onto the eRTL for school use since its first release in May 2014, covering the subjects of Chinese Language, English Language, Putonghua, General Studies and Physical Education at primary level; and the subjects of Chinese Language, English Language, Geography, History, and Life and Society at junior secondary level. Compared to the prices of printed textbooks on the same subject, e-textbooks on the eRTL developed under EMADS, which carry a pricing commitment of two to four years, are generally priced more than 20% lower.

- 12. Phase Two of EMADS is in progress. The try-out of e-textbooks under Plan B at partner schools is now underway. Subject to the same rigorous quality assurance mechanism, another eight sets of e-textbooks under Phase Two of EMADS are expected to be included on the eRTL for use in schools in the 2016/17 school year, covering the subject of Mathematics at primary level; and the subjects of Mathematics, Geography and Computer Literacy at junior secondary level.
- 13. As for disbursement of grant, around \$15.2 million and \$11.6 million seeding grant have so far been disbursed to the NPM developers for Phase One and Phase Two respectively. The remaining seeding grant of \$12.7 million for both phases will be disbursed in the next three years.

#### Way Forward

- Among the public sector schools, 100 of them have enhanced their 14. WiFi infrastructure under the Support Scheme. Regarding the remaining 900 public sector schools, we proposed under the ITE4 to complete the enhancement of their WiFi infrastructure in the next three school years starting from the 2015/16 school year (the proposal). Having regard to the success of the Support Scheme, and also the general support from stakeholders especially the school sector towards the proposal during the ITE4 consultation period which ended in July 2014, it is our plan to go ahead with this proposal. Schools from the Support Scheme have been invited to share their experience with these 900 schools. A total of 1,100 participants from 650 schools attended the briefing sessions. We have also invited the 900 public sector schools to express their interest and indicate their work plan for enhancing their WiFi infrastructure in the coming three school years. We intend to disburse the necessary funds to eligible schools for commencement of the procurement exercises for the WiFi infrastructure enhancement works as soon as practicable after the Legislative Council has approved the funding for implementation of the ITE4 in the context of the 2015 Appropriation Bill.
- 15. In addition, we have finalized all other measures under the ITE4 in accordance with the consultation outcome, and would likewise roll out these measures in full swing upon funding approval given. Apart from the five actions proposed in the areas of (i) upgrading of WiFi infrastructure in all public sector schools, (ii) enhancing the supply of quality e-learning resources; (iii) curriculum renewal and transformation of pedagogical and assessment practices; (iv) building professional leadership and capacity; and (v) community involvement as set out in the consultation document, we have added a sixth action of (vi) conducting on-going research and evaluation studies for coherent and sustainable development of IT in education.

16. On the e-textbook front, EMADS is considered a good starting point in paving the way for the development of a healthy, rich and sustainable e-textbook market. Since late 2014, we have been accepting the submission of e-textbooks of different subjects for review in stages. Continuous efforts will be made to promote the use of e-textbooks and encourage schools to use electronic resources including e-textbooks for teaching and learning, taking into account their school contexts and the needs of students. Concurrently, we are planning to evaluate the effectiveness of EMADS, including the quality assurance mechanism, the benefits e-textbooks generated and experience gained especially through the Partner Schools Scheme, in the context of the promotion of e-learning. The evaluation results will help refine our overall strategy in the development of e-learning and e-textbooks.

## **Advice Sought**

17. Members are invited to note and give their views on the content of this paper.

Education Bureau May 2015