

ITEM FOR FINANCE COMMITTEE

HEAD 156 – GOVERNMENT SECRETARIAT : EDUCATION BUREAU

Subhead 700 General non-recurrent

New Item “Implementation of the Fourth Strategy on Information Technology in Education”

Members are invited to approve the creation of a new commitment of \$105 million under Head 156 Government Secretariat : Education Bureau Subhead 700 General non-recurrent for the implementation of various measures under the “Fourth Strategy on Information Technology in Education”.

PROBLEM

We need to further promote e-learning in schools.

PROPOSAL

2. The Secretary for Education proposes to create a new commitment of \$105 million for the implementation of various measures under the “Fourth Strategy on Information Technology in Education” (ITE4).

JUSTIFICATION

3. Deploying information technology (IT) in education is crucial to continuously strengthening and facilitating learning and teaching in the 21st century. The proliferation of mobile computing devices and the availability of rich learning resources on the Internet enable learning to take place beyond the confines of time and space. Learning will no longer be confined to the classroom or bound by the school timetable and prescribed textbooks. It will become more interactive, collaborative and self-directed.

4. The Education Bureau (EDB) released the ITE4 consultation document with student learning being the focus on 7 May 2014 for a two-month consultation. Our goal is to unleash the learning power of all our students to learn to learn, and to excel through realising the potential of IT in enhancing interactive learning and teaching experiences. The proposed measures covered by this funding proposal have received broad support from the public. We are therefore keen to give early effect to the measures, pending completion of the consultation.

PROPOSED ACTIONS UNDER ITE4

5. We propose to create a new commitment of \$105 million to cover –
- (a) a one-off grant totalling \$90 million to enable 900 public sector schools to acquire mobile computing devices,
 - (b) a \$10 million grant to Hong Kong Education City Limited (HKECL)¹ to enrich e-learning resources, and
 - (c) a \$5 million grant for related support services.

Enhancing schools' IT infrastructure and re-engineering the operation mode

6. On 10 January 2014, the Finance Committee approved vide FCR(2013-14)50 a non-recurrent commitment of \$50 million for the scheme “Supporting Schools to Adopt E-textbooks”. The Scheme offers one-off funding support for 100 public sector schools to –

- (a) acquire mobile computing devices (\$100,000 per school on average); and
- (b) subscribe for WiFi services on a pilot basis for three years (\$250,000 per school on average).

7. As an extension to the Scheme, we now propose to offer a one-off funding of \$90 million to enable the remaining 900 public sector schools (including local schools under the Direct Subsidy Scheme) to acquire mobile computing services.

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¹ The HKECL is a wholly owned company of the Government for serving the education sector with, among others, an information portal and a resource depository as a one-stop shop for learning and teaching materials.

8. Separately, EDB will raise the recurrent Composite IT Grant (CITG) to enable all public sector schools to subscribe for WiFi services on a recurrent basis. The increased CITG for schools will also cover the expenses of replacement/maintenance of the mobile computing devices.

Enhancing the quality of e-learning resources

9. The e-textbooks developed under the e-Textbook Market Development Scheme (EMADS) which are in line with our local curricula will be available for use starting from the 2014/15 school year. The free learning and teaching resources available on the EDB One-Stop Portal managed by the HKECL complements the use of e-textbooks in enhancing the learning experience of students.

10. To give impetus for enhancing the provision of e-learning resources in view of the launch of e-textbooks under EMADS in 2014/15 school year, we propose to provide HKECL with a one-off funding of \$10 million to acquire quality e-learning resources from local and overseas developers for use by both teachers and students on its well-established platform.

Involving parents, stakeholders and the community, and other support measures

11. To reach out to parents, we will launch a series of promotion videos on issues related to e-learning and e-safety. This will facilitate early guidance for their children to make good use of IT in learning and to make ethical and legal use of IT. We will collaborate with the federations of parent-teacher associations, community organisations, non-governmental organisations, and other sectors including local tertiary institutions and the IT sector in organising promotional activities (e.g. conduct of seminars and distribution of leaflets) to support children in e-learning, promote healthy and ethical use of e-learning and foster cooperation to nurture gifted IT young talents in our schools.

12. To facilitate schools' building up of their IT infrastructure, we will provide them with necessary support including technical advisory services and/or centralised procurement procedures promulgated by EDB. With the increasing trend of Bring Your Own Device in education, we will also provide information for schools' reference on how to set guidelines for both parents and students, as well as to formulate measures on the better use of students' own mobile computing devices.

13. The above support measures will entail an estimated total non-recurrent funding of \$5 million.

FINANCIAL IMPLICATIONS

14. The proposed actions will involve a non-recurrent funding of \$105 million, with breakdown and estimated cash flow as follows –

Expenditure item	2014-15 \$ million	2015-16 \$ million	2016-17 \$ million	2017-18 \$ million	2018-19 \$ million	2019-20 \$ million	Total \$ million
(a) One-off grant to schools for acquiring mobile computing devices ²	-	40 (for 400 schools)	20 (for 200 schools)	20 (for 200 schools)	5 (for 50 schools)	5 (for 50 schools)	90
(b) Funding for HKECL to enrich e-learning resources	5	5	-	-	-	-	10
(c) Other support measures (technical support for schools, engagement of contract staff for project management, support for teachers/parents)	-	1	1	1	1	1	5
Total	5	46	21	21	6	6	105

15. The increase in CITG for schools for on-going payment of WiFi services fee and maintenance/replacement of mobile computing devices will involve additional recurrent expenditure of \$70 million per year in the long run (additional recurrent provision of \$70,000 per school on average). The necessary provision will be included in the draft Estimates of relevant years.

/PUBLIC

² For estimation purpose, we anticipate that around 400, 200, 200, 50 and 50 schools will opt for WiFi and become eligible for the one-off grant yearly from the 2015/16 to 2019/20 school years. The actual cashflow will be adjusted in light of the actual response from schools.

PUBLIC CONSULTATION

16. We have set up a dedicated website³ to host the consultation document and information relating to ITE4 as well as to collect views from the stakeholders and the public. We have organised eight forums and participated in various meetings to solicit views from different stakeholders of the education community, parents and the business sector especially the IT and publishing industries. Over 740 school heads, teachers, parents and related industry practitioners from different institutions and organisations attended the eight consultation forums. A questionnaire survey was administered at the forums for school heads and teachers on specific issues and there were 344 responses received from 522 participants, representing a response rate of 66%. The majority of respondents to the questionnaire survey agreed or strongly agreed with the goal of the ITE4 (79%) as well as the adoption of a holistic approach to implement ITE measures in tandem with curriculum reform (74%). In addition, 84% of the respondents considered e-learning important. As regards the different proposed measures, the level of support ranges from 68% to 84%.

17. While there is a general consensus on the goal and direction as well as the actions under the ITE4, the school community has mixed views on some implementation issues. A few schools are not familiar with the new out-sourcing mechanism in acquisition of WiFi infrastructure network and services. Some expressed concerns on whether the amount of recurrent subsidy would be sufficient for ongoing subscription of WiFi services. A number of schools highlighted the importance of technical support service to the smooth implementation of e-learning in schools, in particular, the turnover problem of technical support staff (TSS) in schools, and have proposed various means such as outsourcing of technical support services and establishing permanent TSS posts in schools to address the issue. We will further analyze the views from stakeholders and fine-tune our proposed actions and implementation details as necessary.

18. We consulted the Panel on Education on 9 June 2014. Members supported the proposed actions for the ITE4 and the submission of the funding proposal to the Finance Committee for approval.

BACKGROUND

19. In line with the global trend of harnessing IT to facilitate learning and teaching, the Government has invested a total of over \$9 billion since the 1998/99 school year in implementing three strategies on IT in Education and other major

/e-learning

³ <http://www.edb.gov.hk/ited/ite4>.

e-learning initiatives.⁴ All the strategies and initiatives are in line with our education reform that aims to promote life-long learning and whole-person development of our students. They have laid a solid foundation in areas such as the provision of basic IT infrastructure, learning resources, enhancement of teachers' professional capacity and students' learning. All these have enabled a gradual paradigm shift from a teacher-centred mode of teaching to a student-centred mode of learning that has raised students' digital literacy.

20. Public sector schools (including local schools under the Direct Subsidy Scheme) have been provided with the recurrent CITG since the 2004/05 school year to cater for their needs in IT infrastructure and services. In the 2013/14 school year, the grant amount per school ranged from \$177,590 to \$552,367 depending on the school size. The CITG is a constituent grant of the block grant for schools which is annually adjusted in accordance with the movement of the Composite Consumer Price Index.

21. The Government has formulated the ITE4 which is undergoing public consultation and scheduled for implementation in phases starting from 2014/15 school year. Apart from the proposed measures mentioned above, ITE4 also comprises the following proposed measures which can be implemented with EDB's existing resources and hence are not part of the funding proposal in this submission –

- (a) reviewing curriculum, transforming pedagogical and assessment practices in light of latest development in IT; and
- (b) building professional leadership, capacity and communities of practice in schools to support school leaders and teachers in using IT for enhancement of learning and teaching.

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⁴ These other major e-learning initiatives include the provision of the recurrent CITG for all public sector schools since the 2004/05 school year; the organisation of a wide range of professional development programmes for educational professionals over the years to enhance their knowledge and skills to promote e-learning; as well as the launching of specific schemes as follows: (i) a three-year "Pilot Scheme on e-Learning in Schools" since the 2010/11 school year vide FCR(2009-10)52; (ii) two phases of the "e-Textbook Market Development Scheme" since June 2012 vide FCR(2012-13)35 and FCRI(2013-14)8; and (iii) "Supporting Schools to Adopt E-textbooks" in January 2014 vide FCR(2013-14)50. In addition, there was funding support of some \$1.9 billion from the Quality Education Fund for e-learning projects.