

LEGCO PANEL ON EDUCATION

Consultation Document on the Third Strategy on Information Technology in Education

Right Technology at the Right Time for the Right Task

Purpose

On 26 October 2007, the Education Bureau released the consultation paper on the third Strategy on Information Technology (IT) in Education for a one-month consultation. This paper outlines the proposals in the consultation paper.

Background

Why IT in Education

2. In the context of the proposed strategy, IT in education specifically refers to the use of IT in the learning and teaching process to improve learning outcomes. IT can enhance the effectiveness of learning and teaching by making visualization of concepts easier, motivating students, enabling interaction among students and between teachers and students, as well as facilitating student-centred learning approaches such as collaborative and inquisitive learning.

3. In 1998, the Government released the first IT in Education Strategy document entitled “Information Technology for Learning in a New Era: Five-Year Strategy 1998/99 to 2002/03”. Our long term vision is to turn our schools into dynamic and innovative learning institutions where students can become more motivated and creative learners. The first IT in Education Strategy focused on equipping schools with necessary IT facilities, connecting them to the Internet and the provision of digital resources for learning and teaching.

4. In July 2004, the Government published the second IT in Education Strategy document entitled “Empowering Learning and Teaching with Information Technology”. The objectives were to enhance students’ information literacy, build up the capacity of teachers and disseminate best practices in using IT in the learning and teaching process among teachers, nurture e-leadership among school leaders, engage the community in creating an environment conducive to the use of IT in education, and narrow the digital divide.

Where we are

5. At present, all public sector schools are connected to the Internet. The student-to-computer ratios in secondary schools and primary schools are 4:1 and 6:1 respectively (the ratio in the most advanced OECD countries is 5:1). All teachers have received basic IT skills training and most schools have acquired adequate digital resources such as e-learning platforms to enhance student-centred learning. In conclusion, Hong Kong is on par with other advanced economies in terms of availability of IT facilities and digital resources in schools and teachers’ IT skills.

6. However, we are aware that not many schools have school-based development plans to guide sustainable development of using IT in education. Also, many teachers indicate that they do not have sufficient confidence in choosing appropriate digital resources although the majority of them believe that the use of IT can enhance the effectiveness of learning and teaching. We also need to raise parents’ information literacy for effective parental guidance on e-learning at home.

Third IT in Education Strategy

Overall considerations

7. We recognise that with increasing use of IT in education, a more flexible, interactive, and student-centred learning environment is emerging. The two technological trends that are shaping the learning environment are the use of web-based environment for collaboration and sharing (or Web 2.0 applications) and m-learning which generally refers to the pedagogical applications of mobile technologies to enable “learning anywhere, anytime”. The role of the Government is to provide the necessary conditions and practical advice on pedagogical applications of IT to reduce the barriers to the integration of IT into education. We also need to enhance administrative flexibility, especially in funding, to enable schools to embrace

appropriate technologies smoothly.

8. Like governments in other advanced economies, our focus in future is the human factor rather than the technical factor. We put IT in the wider context of a learning environment in which IT is only one of many mediators in learning and teaching. Teachers and students will need to decide whether the use of IT is the most effective mediator for a particular learning and teaching activity. This explains why *Right Technology at the Right Time for the Right Task* is the theme of this strategy.

9. When mapping out the way forward, we are mindful of the differences in schools' priorities, teachers' readiness and students' motivation. We also need to avoid imposing additional workload on schools, teachers and students. Based on the opinions and expectations gathered from stakeholders through the Phase I Evaluative Study on IT in Education Strategy (2004/07)¹ conducted by the Hong Kong Institute of Education, on-going consultation with schools, sharing sessions and focus group discussions among school heads and teachers, as well as advice from the Steering Committee on Strategic Development of IT in Education, we propose the following actions in the third IT in Education Strategy –

- (a) ***to provide a depository of curriculum-based teaching modules with appropriate digital resources.*** The proposed on-line depository of teaching modules contains practical advice on how to use IT to perform teaching activities and digital resources relevant to the curriculum. This will reduce teachers' workload and boost their confidence in selecting digital resources and integrating IT into learning and teaching activities. Students and parents can also access the digital resources;
- (b) ***to continue to sharpen teachers' IT pedagogical skills.*** Training activities in the past were skill-based. In future, professional development activities will focus on pedagogical applications of IT;
- (c) ***to assist schools to draw up and implement school-based IT in education development plans.*** The Education Bureau will develop sample IT in education roadmap and provide evaluation tools for schools' reference; and support schools to develop, review and implement plans to integrate IT in education. These will reduce

¹ The report on the Evaluative Study, i.e. Phase (I) Study on Evaluating the Effectiveness of the 'Empowering Learning and Teaching with Information Technology' Strategy (2004/2007) is available at the website of the Education Bureau at <http://www.edb.gov.hk/ited>.

school leaders' workload in preparing and implementing development plan to integrate IT in education. We will continue to invite schools which are successful in implementing IT in education to share best practices with other schools;

- (d) ***to enable schools to maintain effective IT facilities.*** In addition to the existing recurrent Composite IT Grant (to meet expenses on IT consumables and technical services), we will set aside a \$200 million one-off grant for replacing and upgrading IT facilities in all public sector schools. In addition, we will strive to make the ambit of existing recurrent operational grants more flexible so that schools can use the operational grants to replace and upgrade IT facilities from time to time;
- (e) ***to strengthen technical support to schools and teachers.*** We will collaborate with IT organisations to continue the provision of technical back-up services to support schools. In addition, the IT in Education section of the Education Bureau will set up a team to provide on-site technical support to schools; and
- (f) ***to raise parents' information literacy and assist them in guiding children to use IT at home.*** About 95% of primary and secondary school students have access to computers at home. We plan to collaborate with non-governmental organisations to raise information literacy of parents and launch programmes on parental guidance on e-learning at home.

Way Forward

10. We welcome Members' views on the proposals in the consultation paper. We will organise briefing sessions to collect views from the school sector, parents associations, and the IT industry. We plan to release the strategy document by January 2008 after taking into account the views of stakeholders.

**Education Bureau
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