

**OGCIO's Observations
on the Consultation Document
on the Third Strategy on IT in Education**

Observation on Students' Accessibility to IT Outside School

1. With reference to the Digital 21 consultation paper released in October 2006, it is proposed to "allowing every student access to suitable ICT facilities to support their learning inside and outside school hours". EDB may wish to consider mentioning how the IT in Education Strategy may help to support student to learn outside school hours.

2. According to the findings of a HKU's recent focus group study, for Children of Low Income Families, the major barriers of having their own PCs at home are:

- accessibility in schools is still limited in terms of opening hours & equipment; and
- insufficient technical support.

Apart from the "natural non-take-up" reasons, "insufficient technical support" may be a major factor preventing students and their parents from having their own PCs at home. Although free recycled PCs are provided to the low income families, they have to bear the ongoing costs (maintenance, software upgrade, etc.) after the one-year warranty. More comprehensive picture of the barriers preventing children of low-income families from adopting ICT is at [Annex A](#).

3. From the digital inclusion angle, while it is pleased to note that "*95% of primary and secondary school students have access to computers at home. Out of these students, 97% have access to the Internet at home*". However, there are still different voices in the community (e.g. based on recent newspaper cuttings) and legislators (based on their comments made at recent ITB Panel meetings) that it is necessary for the Government to provide more support to children of low-income families to get access to ICT facilities. While the problem may not be that big and the views may differ (e.g. some consider that public PC facilities already suffice), EDB may wish to consider including this angle as alleviating poverty and ensuring equal learning opportunities

of under-privileged groups are key areas in CE's policy agenda. For example, this may be addressed under the school-based IT in education development plans (Action 3 in para. 28), particularly for schools in rural/lower income areas (e.g. Tin Shui Wai).

4. Regarding the indicator “95% of primary and secondary school students have access to computers at home. Out of these students, 97% have access to Internet at home”, in page 5, presumably the indicators are based on regular surveys done by EDB, these two indicators may need some qualifications when being used.

5. While the consultation paper acknowledges “*student-to-computer ratio ……at best measures availability of computers for access by students in schools rather than serves as a valid indicator of the effectiveness of using IT to enhance students’ learning outcomes*”, EDB may wish to note and address the same for students’ effective use of IT outside school.

General Observations

Page 5 Box 1

6. The seventh bullet – “62% of primary school teachers and 52% of secondary school teachers are confident in selecting appropriate digital resources to teach.” This shows that teachers would require expertise assistance in selecting digital resources in teaching.

Page 7 Box 2

7. The fourth bullet - “*Teachers expect the HKEdCity to ……*”. Most Chinese software for education in the HK market comes from the Mainland and Taiwan. They may not be that suitable for the HK students. EDB (or via HKEdCity) may wish to encourage local SMEs to create Chinese software for education which is tailor-made for HK students. In particular IT teachers and IT technicians can coordinate among themselves to provide input on what they want both for Chinese software on education and applications for administration.

Page 8 para. 16

8. It seems that one angle has been missing: how to stimulate students to learn whilst they are not in the school. Many schools adopting non-conventional teaching methods are already encouraging students to make good use of the Internet in their learning and assignments. Moreover, Internet learning outside school will probably be extensive needed for Liberal Studies.

Page 11 para. 21 (d), (e) and (f)

9. With the increasing use of IT, breakdown of the IT facilities and unauthorised disclosure of information due to virus infection or hacking/phishing activities will likely increase and affect the effective use of IT. EDB may wish to consider to review again if more resources are needed in Action 4 and 5 to support the schools and teachers in protecting the IT systems and keep them aware of the best practice.

Page 12 para. 24

10. In connection with HKEdCity, while it can serve as the proposed depository of teaching modules, it may further strengthen and extend its role in the area of providing IT support services to teachers students and parents, as mentioned it para 32. In fact, as HKEdCity has its solid foundation and is known to most of the teachers, students, and parents, and has closer relationship with the IT sector, it may play a more proactive role in various areas in supporting the Third Strategy on IT in Education.

Page 13 para. 26

11. It has been rightly pointed out that "*IT is a powerful mediator to enable peer-to-peer collaborative learning activities and can stimulate interaction among students as well as between students and teachers*". EDB may wish to consider extending this statement to sharing among teachers. Seemingly the main purpose of the "Interactive Platform" mentioned in para. 27 is for "disseminating (a one-way activity) good IT pedagogical practices to teachers". With the advent of Web 2.0

technologies, EDB may also wish to consider the innovative use of online/realtime forums among teachers to promote knowledge sharing. For example, EDB may wish to set aside some resources to build a collaborative platform (wiki and alike) among teachers that rides on the HKEdCity infrastructure.

Page 15 para. 29

12. Suggested amendment to para. 29:

“..... In addition, there are extra resources under the Composite IT Grant for meeting recurrent expenses in the procurement of consumables, technical services, Internet access service, [information security tools and service, tutorials and counseling services](#), and the employment of school-based technicians. The EDB will continue to explore how the flexibility of this funding can be enhanced to meet the needs of schools.”

Page 15 & 16 paras. 30 & 31

13. School leaders and teachers may require more information to differentiate between the \$110 million grant (para 30) and the QEF (para 31).

Page 16 para. 32

14. EDB may wish to appeal for IT sector’s support to maintain the ITeHelp call centre service such that the service can continue even the \$5 million cost budget is exceeded.

15. Suggested amendment to para. 32:

“....and other recurrent operational grants to augment on-site technical support services. [The OGCIO has published on the Web practical guidelines and relevant IT information that could raise the technical support skill at schools and for teachers. There is public information specially developed to advise teachers and parents the countermeasures on IT security threats, spamming, virus attack and how to handle issues like copyright and data privacy of digital contents. Specifically for the Hong Kong environment, the use of both Chinese and English in daily communications is very common. There are also practical guidelines on](#)

Chinese computing for parent and teachers as well as students on possible technical issues to communicating electronically in Chinese.”

Page 17 para. 33

16. For Action 6, while it is important to support parents to guide children to use IT ethically and legally, it may be worthwhile to update them on how to use IT in a secure manner.

17. Suggested amendment to para. 33:

“Given the high household penetration rates of personal computers and Internet connectivity in Hong Kong, there is great potential for students to engage in on-line self-learning activities at home and participate in Web 2.0 activities such as blogging and social networking. The younger generation is also open to meet friends in the virtual world and exchange personal particulars over the Internet. Parents’ associations raise concerns that many parents are not information literate and they need more support to guide children to use IT ethically and legally for learning purposes at home. Some non-governmental organizations have already developed educational and information kits to assist parents in supervising their children in using IT at home. To enhance support to parents in this respect, we will allocate \$1 million to commission non-governmental organizations to develop resources and programmes to empower parents to guide their children to use IT appropriately, securely and intelligently for learning purposes.”

18. Moving towards an Information Society, where everyone can create, access, utilise and share information and knowledge, enabling individuals and communities to achieve their full potential in promoting their sustainable development and improving their quality of life, is now a common goal to many societies including Hong Kong. EDB may consider highlighting the notion of Information Society to our teachers and students.

**Office of the Government Chief Information Officer
November 2007**

**Barriers Preventing Children of Low-income Families
from Adopting ICT**

(Extracted from the study report on “*Identification of Barriers on ICT Adoption of Disadvantaged Groups in Hong Kong*” published by Department of Social Work and Social Administration of HKU in November 2007)

3.2.2 Children of low-income families

1. Some students indicate that the computer equipments (models) at their schools are outdated, and the Internet access is slow. Although there are computer labs for students to use, the opening hours are restricted. Besides, the labs could be fully booked by other students.
2. Some mention that the computer equipments and software at centers are also outdated and Internet access is slow.
3. Sometimes students need to print out their homework assignments and hand back to their teachers; however, there is no printer either in center or at home to do so.
4. For some students, there are a few printers available in the computer labs in their schools. Teachers would need to help these students to print out their homework, since students have limited access to printers and papers only.
5. There is always a long queue to wait for their turn to use the computer/Internet at public library, and users can only use it for half an hour. The time is not enough to search for information they need to do their homework.
6. Some said that they know there are students out there would do their homework assignment at the Internet Bar (網吧), where it is usually intended for users to play online games.

7. The recipients of the Computer Recycled Scheme (CRS) expressed that the computer equipment is outdated:

- Either some functions of the operating system are not working (e.g. PC always hang) or some features in the computer is missing (e.g. sound card).
- Since Microsoft Office does not come with the recycled computers (earlier CRS recipients), some students have to purchase the piracy version. The original version of Microsoft Office is rather expensive for students to get.
- The use of Microsoft Office is necessary for some students because they are taught to use Word, PowerPoint and Excel at school. Besides, teachers would ask students to do presentation with PowerPoint.
- For some students while they are already familiar with using Window XP or Window 2000 at school, they have to work with a CRS computer that runs with Window 98.
- The CRS computer frequently breaks down. When students called for help from relating organization, the turnaround time for on-site maintenance/repair is about a month.
- If on-site maintenance/repair is not available; they would need to take the computer back to the repair shop (Kowloon Bay) for servicing. This costs time and money for parents' of the students.

8. For students who do not have much knowledge about maintenance/repair of computer, they would not know what is the reasonable quote for such service. For example, the one-time consultation fee for checking up the computer is \$200. If repair/upgrade is required (replacing hard disk), the quote could be ranging from several hundred to a thousand dollars.

9. The monthly Internet service charge (\$150-\$190/month) is rather expensive for the low-income families to afford.

10. Original copies of software such as Microsoft Office and Anti-virus programs are costly.

**Office of the Government Chief Information Officer
November 2007**