

To: consultation_ited@edb.gov.hk

Some Comments and recommendations on the Consultation Document on the Third Strategy on IT in Education

Developed by a group of MScITE students

Faculty of Education, Division of Information and Technology Studies,

The University of Hong Kong. November, 2007.

1. Referring to the "Consultation Document on the Third Strategy on Information Technology in Education", this document is similar to previous ones, replete with general comments about IT in Education reportedly based on overseas reports and recommendations. There is scant reference to research on ITE in Hong Kong. The literature review (Annex C) makes no reference to research in Hong Kong. However, there is some reference to Hong Kong research on p.12. It would be interesting to know what the HKIEd did to 'evaluate' the use of IT? What are the details of the research that identified the 'push' and 'pull' factors (pp.17-18) as relevant to Hong Kong schools?
2. The rationale for the Third Strategy - 'We need to adjust our strategy to meet the changing needs of schools, teachers, and students as their capacity to use IT in the learning and teaching process develops' (Foreword). The 'changing needs' of schools, teachers and students in Hong Kong are undefined, except in very broad terms.
3. Lack of strategic planning to integrate IT into teaching and learning acknowledged (p.13).
4. Technical support was withdrawn a few years ago. The accuracy of the statement that 'Many schools now have at least one technician to help teachers overcome malfunctions in hardware and software' (p.26) needs to be tested.
5. The references to grants of '\$10 and \$20 per student' (p.33) (which has to be regarded as minimal funding), 'e-learning materials', HKEdCity and 'digital resources' indicates that IT in Education is all about producing teaching aids in electronic form, rather than any fundamental changes in teaching and learning activities ('pedagogy'). I wonder whether a look at the 'More than 200 exemplars" on the Good Practices on IT in Education" Interactive Platform would support this view?
6. Is there any data on the use which teachers made of the 'ITeHelp call centre'?

Comments on Action 1

To provide a depository of curriculum-based teaching modules with appropriate digital resources

EMB proposes to develop an on-line structured depository of teaching modules which support the curriculum targets set out in selected KLAs similar to the Practical Support Pack in UK. Our teacher group thinks that the prototype of on-line structured depository of teaching modules must be supportive. It not only provides user-friendly interface for the teachers to access the teaching materials easily, but also builds up the platform to solve the problems met by the teachers.

After we accessed the Practical Support Pack from the UK website, we found that the Pack provides a simple and systematic ICT environment. The Practical Support Pack is a digital resources platform to allow teachers to gain the module content, extension activities, evaluation etc on relevant subjects at different levels in the schools. For example; the following website is the convenient place allowing the teacher to see the curriculum on how to teach Spreadsheets.

Source: <http://www.teachernet.gov.uk/supportpack/module.aspx?t=2&s=9&y=33&p=&m=21452>

However, we found that the digital resources may not be multimedia that the teacher cannot repackage the digital resources for specific teaching in different situations. We found similar designs from the Education Department of Taiwan. The website also provides more textual teaching materials for Taiwan teachers. The following is the example from the Taiwan website.

Source: <http://etoe.edu.tw/scripts/learning/index.asp>

Our group located the Singapore website for comparison. Surprisingly, it provides more multimedia digital resources including text, picture, video etc. The following includes examples from Singapore website:

Source: http://www.moe.gov.sg/edumall/tl/digital_resources.htm

In addition, the Singapore version provides Mother Tongue websites that allows students of different countries to use their own language in the learning activities. It reduces the burden of teachers on preparing teacher' materials accompanied with different language versions. The following website is an example:-

Source: http://www.moe.gov.sg/edumall/tl/tl_websites.htm

Thus, EDB in Hong Kong may wish to deploy a SWOT analysis and compare its proposed resources.

Comments on Action 2

To continue to sharpen teachers' IT pedagogical skills

The following provides a real problem for HK education teachers. We often focus on how to use technology and ask teachers to equip themselves by learning about software. But in fact, it is important to learn why to use the software and how to get the most out of it is far more important than just learning the tools. It is interesting to know that this is a universal problem by viewing some of the statistics and comments from teachers overseas. As below:

Is there too much emphasis on technological training and not enough focus on making technology pedagogically effective?

Source http://www.teachingenglish.org.uk/talk/vote/vote30_technology.shtml

By comparing the Korean experience, it is observed that the teacher's education system is quite similar to HK. First it relies on teachers' initiative for further study in universities likes waiving tuition fees to some programs...etc.

But for in-service training of teachers, they are very different. It is good to know that they links training performance to teachers' wages and promotion opportunities. I quote:

"Training programs are categorized according to the purpose of training: information digitalization, curriculum formulation training, general training, and teaching training. The head of the program may determine the course, content, and period of training contingent on the purpose of the training.

Teachers' performances at training programs is quantified and managed for the purpose of utilizing such data in the promotion of teachers and wage increases.

An assessment is conducted on those who complete 60 hours or more of the training program. The distribution curve has a range of 80 and 100 and reflects the performance of teachers with 60 points or higher out of the total 100 points. "

Korea Ministry of Education and Human Resources Development (Teacher Education and Qualifications)

Source: <http://english.moe.go.kr/main.jsp?idx=020901>

Hong Kong professional development for teachers about ICT in pedagogical change is not enough (at least not having enough promotion). Whereas, Singapore has done something in supporting teachers on ICT in pedagogical change.

Ministry of Education (Singapore) -- Teachers Network

Source: http://www.moe.gov.sg/corporate/teachers_primary.htm

The above website contains the information on the teachers network built in Singapore teachers to share excellent practices, professional ideas and support for each other. Some key communities are listed below:

1. Teachers-On-Line
2. Teachers' Forum
3. Learning Circles
4. Teach and Share

For details, please goto the site: Teachers' Network, Singapore

Source: <http://sam11.moe.gov.sg/tn/>

“Using Technology to Train Teachers” suggests different ways to carry out the Teacher Professional Development (TPD) by technology, they are:

- 1) Radio
- 2) Compute through network
- 3) Television
- 4) Video recording
- 5) Online distant learning

Besides, TPD is the tool by which policymakers convey broad visions, disseminate critical information, and provide guidance to teachers. Effective TPD begins with an understanding of teachers’ needs and their work environments—schools and classrooms. TPD then combines a range of techniques to promote learning, provides teachers with the support they need, engages school leadership, and makes use of evaluation to increase its impact.

As mentioned in Action 2 of “Right Technology at the Right Time for the Right Task”, EDB stresses the importance of professional development framework for teachers and highlights the integration of technical knowledge and pedagogy and builds the learning community among teachers to share the experience in pedagogy.

It is clear that both “Using Technology to Train Teachers” and “Right Technology at the Right Time for the Right Task” emphasize the teacher professional development.

However, the detailed planning for teacher professional development should be mentioned and it needs to make sure that all teachers are in the designed progress on their development.

Comments on Action 3

To assist schools to draw up and implement school-based IT in education development plans

The document states:

"The IT in education section of the Education Bureau will collaborate with local tertiary institutions to develop a model school based IT in education roadmap for school's reference" p. 25.

We have been discussing where the proposed "roadmap" is going to direct organizations towards. Will the roadmap address:

- the "mindset" of the educational environment, including that of the students?
- the physical structure and associated design of learning environments for the future?
- What will the classroom look like?
- What are the educational standards and benchmarks the document refer to?

Looking through the "Consultation Document on the Third Strategy on Information Technology in Education" We find no reference relating to the review of Technology related Standards & Benchmarks (performance indicators), or the intention to do so.

The European Union E-government plan has been presented as being "modest" in the approach to change needs yet they clarify below, focusing on the need to "promoting standards"

Policymakers in European Union (EU) member states should use this action plan to recognize that most of the challenges facing successful e-government implementation and government transformation must be addressed by individual countries. They should not expect the EU to provide a strong support policy. However, the EU could and should play a greater role in promoting standards, as well as supporting and networking research to achieve longer-term objectives.

Maio, Andrea. May 2006. European Commission's E-Government Plan Shows Modest Ambition. Available at:

http://www.gartner.com/DisplayDocument?doc_cd=139971&ref=g_fromdoc

[Accessed 15 Nov 2007]

Comments on Action 5

To strengthen technical support to schools and teachers

Here is some information about professional development in ICT:

1. AU (Australia)

There is a wide variety of professional development opportunities available in varying formats, from participating in an online discussion list to participating in an extended action research project.

Source: http://education.qld.gov.au/smartclassrooms/teachers/prof_development.html

2. UK

There is a wide range of national support programmes designed to help teachers, support staff and school leaders improve their use of ICT. They range from free diagnostic and exemplar materials to guidance on how funding can be used to facilitate peer-to-peer coaching and sharing best practice through local networks.

Source: <http://www.teachernet.gov.uk/wholeschool/ictis/cpd/>

Here is an article from Sciencedirect:

1. ICT teacher training: Evaluation of the curriculum and training approach in Flanders

Abstract

A policy-evaluation study was set up of Information and Communication Technologies (ICT) teacher training in Flanders, focusing on the following questions: (a) What is the validity of the content and format of the teacher training, and (b) to what extent is the ICT teacher training linked to policies of schools? In-depth interviews were organised with respondents of primary, secondary, and adult education schools. The results indicate that ICT school policies are not well developed and reveal a partial match between policies, needs, and the actual in-service training. Innovative applications of ICT are not promoted. The supply-driven approach, the school-based nature, and follow-up activities are questioned

Source:

http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6VD8-4NF2HCC-1&_user=28301&_coverDate=08%2F31%2F2007&_alid=644680129&_rdoc=6&_fmt=f

ull&_orig=search&_cdi=5976&_sort=d&_st=4&_docanchor=&_ct=43&_acct=C000003298&_version=1&_urlVersion=0&_userid=28301&md5=31cd77ac33346cd668bcd50ddc8d406

2. Developing conceptual frameworks for creativity, ICT and teacher education

Avril Loveless, , Jeremy Burton and Keith Turvey
Education Research Centre, University of Brighton, Falmer, Brighton BN1 9PH, UK

Received 30 October 2004; revised 25 July 2005; accepted 26 July 2005.
Available online 6 March 2006.

Abstract

This paper presents the first phase of a study in teacher education, which explored how a conceptual framework for creativity with information and communication technology (ICT) might be developed and expressed in professional development for primary education pre-service and newly qualified teachers. The Creativity and Professional Development Project (C&PD) involved 16 education ICT specialists in the final stage of their BA in an English University. They participated in the project to investigate their classroom practice in the use of ICT to promote creativity in the making of digital video movies, and to reflect upon the development of their pedagogy with ICT in primary classrooms. The analysis focuses on the student teachers' experience of engaging in creative activities to prepare, teach and evaluate a school-based project, and identified themes of their understandings and personal experience of creativity, the contribution of ICT, and their reflections on professional development. This analysis raises the issue of designing learning experiences, which promote and support creativity with ICT in the context of teacher learning. A conceptual framework to describe creative practices with ICT in teacher education was developed from the study.

Source:

http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B7XN8-4JDT11X-3&_user=28301&_coverDate=04%2F30%2F2006&_alid=644680129&_rdoc=16&_fmt=full&_orig=search&_cdi=29692&_sort=d&_st=4&_docanchor=&_ct=43&_acct=C000003298&_version=1&_urlVersion=0&_userid=28301&md5=1edb496525dc9f28611d4603be8ee921

Discussion by our group

We think that there are three interfaces in the technical support to schools and teachers. The support will be cultivating the teachers with positive attitude towards using IT in the teaching and learning process, enriching the teachers' IT knowledge through related seminars, as well as enhancing the teachers' IT skills by practising in the authentic situations.

First of all, the administrative sections of the government have to be supportive in this education evolution. It is imperative to implement effective policies to facilitate the use of IT in schools. EDB needs to provide sufficient funding to support the necessary hardware and software used by the schools and the individual teachers and technical maintenance services to the schools (eg antivirus protection systems and the upgrading of the software and hardware).

After creating a positive atmosphere to apply IT at the school level, the government has to cooperate with the school administrators to hold some IT seminars for the front-line educators, the teachers. They have to motivate the teachers to learn these new skills in the 21st century, and it is strongly suggested to subsidize the related courses and give some special offer (such as releasing the teachers earlier) to the participants. Besides, the school should encourage those who are proficient in IT literacy (like the computer teachers) to share their knowledge with their colleagues. Collaborative learning is highly recommended among the teachers.

In order to transform the knowledge into skills, the teachers need to apply what they have learned to the teaching and learning process. For instance, they can require the students to hand in their project work online. By doing this, the teachers can monitor the students' work even after the school time.

Comments on Action 6

To raise parents' information literacy and assist them in guiding children to use IT at home

According to the 3rd strategy plan, the EDB is aware of the necessity of educating parents to be information literate, in order to guide children in online self-learning activities at home and to use IT ethically and legally for learning purposes and propose to allocate \$1 million to commission non-governmental organizations to develop resources and programs to empower parents to guide their children to use IT appropriately and intelligently for learning purposes.

We suggest that the program should not emphasize on educating parents to guide children of their online self-learning activities at home, as students should be able to manage these activities themselves as these programs are apparently user-friendly. However from the stakeholders' feedback, we find that parents' concerns regarding needing assistance to enable them to guide their children in using IT responsibly and legally at home. Apart from the present learning program, the HKEdCity should be strengthened to provide practical online learning program for parents to know how to deal with children's problem on using the Internet, including time management, safety, ethics, self-disclosure, harassment and legal responsibilities.

The Scottish Government Publication pointed out that students must come to understand the need for regulations and guidelines and become aware of the possible consequences of not abiding by them in order to become responsible users of the technologies provided.
Source: <http://www.scotland.gov.uk/Publications/2005/09/09104316/43184>

The Singapore Master Plan 2004 mentioned that studies all over the world find that parents hold the key to a child's motivation to learn. Many parents want to create a culture of thinking and learning at home. But they are not always equipped with the know how or resources to help stimulate their children and get them thinking for themselves. This is where the community, schools and parents can partner each other - to help parents help their children. It is suggested that providing a learning center to accumulate material for parents to borrow online or offline
Source: <http://www.moe.gov.sg/edumall/mp2/mp2.htm>

It is the fact that parents are not necessarily information literate. When children use the computer and may be even addicted to it, they may have no idea about supervising and guiding them. Although nongovernmental organizations have already developed educational and information kits to assist, government should take the key role on it, but not only allocate money without any further concern.

In United States, the department of Justice, Federal Bureau of Investigation announced "A Parent's Guide to Internet Safety". It's not only a guideline for parents, but also includes some cases solution:

What Are Signs That Your Child Might Be At Risk On-line?

- Your child spends large amounts of time on-line, especially at night
- You find pornography on your child's computer.
- Your child receives phone calls from men you don't know or is making calls, sometimes long distance, to numbers you don't recognize.
- Your child receives mail, gifts, or packages from someone you don't know.
- Your child turns the computer monitor off or quickly changes the screen on the monitor when you come into the room.
- Your child becomes withdrawn from the family.

On the other hand, the parents' guide also suggests ways to minimize the chances of an on-line exploiter victimizing the children.

Source: <http://www.fbi.gov/publications/pguide/pguidee.htm>

However, when providing Internet guidance, children might be unrealistically confident in their ability to handle themselves online. So, from the National Academies, steps to take on kids on the road to safe, responsible and fun surfing are suggested:

1. Become Internet savvy.
2. Set up a model Internet home.
3. Talk to your kids about Internet do's and don'ts.

Source: http://www.nap.edu/netsafekids/pro_set_guidelines.html

Other useful links are:

<http://www.forwardedge2.usss.gov/pdf/csl-safety.pdf>
[www.pgcps.pg.k12.md.us/~temple/Internet safety.ppt](http://www.pgcps.pg.k12.md.us/~temple/Internet%20safety.ppt)
<http://www.unioncountynj.org/prosecutor/intonline.pdf>
<http://www2.state.id.us/ag/protecteens/ParentsGuideToSocialNetworking.pdf>
<http://www.ftc.gov/bcp/edu/pubs/consumer/tech/tec13.shtm>
http://homepage.oceanside.k12.ny.us/mdaulton/INDEX_files/page0009.htm

All of these are providing some effective guideline for parents and government should benchmark and make use of it.

Photos included in the document

Various photos used in the document reflect old 'teacher-centred' ways of doing things. We recommend they be changed especially those on p.14 and p. 28