

Legislative Council Panel on Education

Pilot Scheme on the Use of Information Technology in Schools

Purpose

This paper reports to Members on the review of the Pilot Scheme on the Use of Information Technology in Schools.

Background

2. A 2-year Pilot Scheme on the Use of Information Technology in Schools (hereafter referred to as the IT Pilot Scheme) was introduced in summer 1998. Ten secondary and ten primary schools were chosen as pilot schools to implement IT in education. The aims of the IT Pilot Scheme were to allow pilot schools:

- To try out various hardware and software solutions for IT infrastructure
- To experiment individual curriculum innovations
- To try out student-centred teaching methodology
- To improve communications between schools and parents, and amongst teachers
- To encourage sharing of resources

3. Additional resources were given to the pilot schools to engage in their pioneering role for IT in education. The resources included a setup grant of approximately HK\$ 6 million for each secondary school and HK\$ 3.7 million for a primary school, and one additional teacher for 2 years for each pilot school. Pilot schools were given the free hand to implement IT in education according to their own vision and priorities.

4. In late 2000, a review was conducted by the Education Department. Data were mainly collected by scrutinizing school progress reports, and at the focus group interviews conducted during school visits. Findings on implementation strategies fell into the following four domains.

Infrastructure

5. In order to try out various applications for IT in Education, the average number of computers in pilot primary and secondary schools were 160 and 248 respectively resulting in an 8 to 1 average student to computer ratio. It was a common practice for the pilot schools to house and network the computers in computer rooms. The number of computer rooms in pilot schools ranged from 2 to 9 in secondary and 1 to 5 in primary schools. Nearly all pilot schools had installed classroom management and control systems in at least one of their computer rooms. Such system allowed teachers to manage, control and monitor individual students' workstations as well as to allow interaction amongst students at designated workstations. More than half of the pilot schools provided notebook computers with network facilities to teachers. Such provision greatly enhanced teachers' accessibility to IT, acquisition of IT skills and use of IT in the teaching process.

Teacher Enablement

6. Nearly all pilot schools had all teachers attained Basic IT competency level or above by the end of 2000. The IT teacher training focused on skills in using software applications, integration of IT across the curriculum and the changing role of teachers. Teachers' professional development in this area enabled a change in techniques for classroom management and strategies that helped to explore the potential of IT to enhance classroom-learning processes.

Use of IT in teaching and learning

7. The use of IT as an instructional tool prevailed at the early stage of the scheme. Educational Television programmes were commonly digitized and delivered over schools' computer network for class teaching in pilot primary schools. Primary school teachers developed their own IT-based materials, a few even developed course materials on "computer literacy" for junior primary students. Pilot secondary schools focused more on the use of the Internet to facilitate self-learning, collaborative learning and project work. Some teachers developed their own websites for these purposes.

Support

8. The additional teacher provided under the scheme shared the teaching load of a team of teachers, who took the role as system integrators to coordinate, plan and implement the use of IT in the school.

Impact of the Scheme

9. Pilot schools were allowed flexibility to deploy resources according to their own needs and pace. Such approach was well accepted and carried forward to all public-sector schools when implementing IT in education. Another feature of pilot schools that has been extended to all public sector schools is the provision of additional manpower to coordinate the implementation of IT across the curriculum. This scheme contributed to encouraging many schools to initiate creative IT-related projects for students' benefits, such as the setup of school intranet to facilitate dissemination of information and learning resources as well as to enhance communication amongst students and teachers. Pilot schools actively engaged in sharing their experience with other schools; in particular they provided the inspiration for schools to make use of IT to enhance teaching and learning using IT. Much of their practices on the use of IT for teaching and learning had been posted on the HKeducationCITY.net for schools' reference. Their experience also helped to streamline workflow for the territory-wide implementation of IT in education.

Way Forward

10. Pilot schools fully achieved the aims of the scheme. The scheme proved itself to be a productive move to pilot IT in education prior to the launch of the Five-year IT Strategy in late 1998. The next mission of the pilot schools will be to crystallize their innovative experiences into substantive practices. They will continue to take up their pioneering role in enriching teaching and learning environments through the use of IT.

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