

Delia Memorial School (Broadway)

Three-year plan on IT development in Schools 2004/05 – 2007/08

I Goal for IT Education

To enhance the quality of learning and teaching with information technology, our school purposely develops learner-centered and interactive teaching mode to facilitate an achievable lifelong learning environment for students and to enhance their ability to acquire creative problem- solving skill. Student can make use of IT for data retrieval, knowledge enquiry, communication and collaboration, and as a personal development tool. They are also expected to develop self-learning and self-fulfilling ability to face the challenge in the new age.

As stated clearly in “Empowering Learning and Teaching with Information Technology” announced by the Government, the vision is that “Students, teachers, schools and other stakeholders will use IT effectively as a tool for enhancing the effectiveness of learning and teaching, with a view to preparing our students for the information age, turning schools into dynamic and interactive learning institutions, and fostering collaboration among schools, parents and the community.” With the promotion from the Government and the rapid development of online learning technology, using IT in learning and teaching has become a trend. Compared with the traditional teacher-centered approach, these technologies do not only help raise learner’s motivation but also the effectiveness of learning and teaching.

Our targets in the coming years are as follows:

1. To fully utilize the IT facilities of the school
2. To build up the basic skills for our students to make use of IT in their learning
3. To build up the basic skills for our teachers to make use of IT in their teaching
4. To develop learner-centered and interactive teaching mode to facilitate an achievable lifelong learning environment for students.
5. To nurture problem solving, critical thinking and communication skills of students, as well as life-wide learning ability.

We hope that we can practically follow the policy from EMB to enhance the efficiency of teaching and learning with the use of information technology. With an integrated online learning platform, we hope that our teachers’ ways of teaching can be enriched by better use of multimedia, available courseware or self-developed resources. And we hope that students can perform learning activities and conduct online test and exam through the platform. We also hope to cultivate concept building skills of students by using concept map, and to build their data searching and searching skills.

II Proposed development on information technology

1. Replacing 35 desktop computers in Computer Room B which are already more than 5 years old
2. Replacing 2 standard servers purchasing using ED3 Funding
3. Replacing the existing firewall with one supporting DM zone and larger bandwidth
4. Purchase 6 projectors
5. Purchase four High volume LaserJet Printer
6. Introducing Wireless LAN technology to cover the whole school area
7. Purchase 5 portable computers for students that can be borrowed by the students to be used for project learning in the campus.
8. Upgrading our eLearning platform (eClass) to include new facilities such as concept map construction, reading room module and online composition marking.

III Strategy to enhance teaching and learning using IT

After upgrading the IT infrastructure, teachers and students can conduct learning and teaching activities in a more stable and secure network environment. As e-learning will become an important part of students' learning, those students who have no computer facility at home will rely on the school's computer facilities and network at school to finish different online learning activities.

To develop an understanding of the fundamental concepts of a computer system, its basic operations and applications in society is so important in the ever changing world today. After replacing the old equipments, students are able to use the computer facilities smoothly. Most subjects could use the facilities in classroom teaching and other learning activities. Each subject will plan how they could use I.T. more intensively in the teaching process.

In developing eLearning in the long run, we anticipate that students and teachers can enhance their learning and teaching skill with the effective use of information technology. Our school teachers, utilizing the information technology, would coordinate teaching activities on the eLearning platform, such as notes dissemination, assignments, tests, and reference materials, etc. The function of auto-marking for tests and assignments on the eLearning platform can reduce teachers' workload. Students can learn through the system by following the learning activities designed by teachers. Students can also have different kinds of discussion under teachers' guidance, in which teachers can assess student performance outside the classroom. With the eLearning platform, students can search for multimedia resources and studying materials. Gradually, the students can build up a habit to learn through the platform on a regular basis. They can also learn gratefully with different multimedia resources. Teachers can set up exercises on the platform to evaluate the learning progress of students. Apart from easing the work for marking assignments and tests, the system also provides information for teachers to differentiate the learning capacity of the students.

At present only computer classes can use the computer rooms, with the application of wireless LAN, we expected that students in any classroom can team up to use computers to access the network to do their team based project work in the future. 10 portable

computers will be provided for students to use in the classrooms. It also allows students to search for reference materials on the web easily. Furthermore, there is a tool on the eLearning platform; students can upload their reports with a built-in concept map for their teacher's evaluation. Discussion over the web is expected to enhance the students' analytical ability and communication skill. The application of wireless LAN does strengthen the use of multi-media in teaching and make collaboration and the use of online resources (video and online TV programmes) more effectively.

In order to implement our plan smoothly, we will set up an eLearning Development Committee. The committee will be responsible for establishing details of the plan. Committee core members include Mr. Poon Ping Kwan. eLearning Development Committee will compose concrete and practical solution in accordance with the mission and vision of this proposal. Teachers from different subjects and study areas will also propose relevant plan in order to achieve the goal.

IV Evaluation

To ensure the effectiveness of the plan, regular evaluations and reviews can help to find out the best implementation method. Apart from planning and implementing an eLearning project, our eLearning Development Committee is also responsible for monitoring the progress and effectiveness of the project regularly. In order to obtain meaningful data for evaluation, we have devised the following methods:

Goals and evaluation methods:

1. Teachers and students fully utilize the intranet and e-Learning platform
 - Usage report generated from the system
 - Frequency of use and usage statistics
 - Amount of creating eBook and surfing statistics
 - Amount of setting up online assignment and usage statistics
 - Amount of building online question bank and usage statistics
2. Enhance students' interest in learning
 - Questionnaire survey for students
 - Questionnaire survey for teachers
3. Parents' positive attitude toward children Internet usage
 - Questionnaire survey for parents

V Implementation plan

V.1 2004 – 2005

1. Extend the usage of the Intranet System
 - Upgrade the existing e-Learning platform from version 3.0 to version 3.1
 - Synchronize data between WebSAMS and eClass
 - School Administration Enhancement with IT:
 - i. School and group announcements deliver through eClass platform
 - ii. Create communication channel on eClass platform for different subjects or ECA groups
 - iii. Disseminate school notice through eClass platform
 - iv. Staff resources booking through eClass platform
 - v. Conduct school-based survey (APASO) through eClass platform
2. Extend the use of Online Learning Platform

The eClass learning platform is open for use by every subject and every teacher, however, basically it is now mainly used by the computer teachers to collect homework or project. We believed it is still below usage. In order to remedy this situation, we will provide training workshop for teachers on eClass

 - Introduction to the concept of online teaching and how it assists in classroom
 - Conduct training on focused functions
 - Practicing different online teaching functions
 - Teach them how to upload notes and create worksheets
 - Promote collaboration through eClass by using bulletin and other collaboration tools

V.2 2005 – 2006

1. Upgrade the workstation in computer room B to cope with the increasing need of IT education
2. Replace one standard server
3. Enhance the promotion of online learning platform
 - Review of online learning on staff development day
 - Teacher sharing on online learning experience in previous years
 - Promote online learning with eClass for more subjects
 - Conduct and manage project-based learning with eClass
 - Promote online essay writing and make use of online marking tools to facilitate teachers to mark students' essays in an efficient way.
 - Conduct online reading scheme by uploading scheme details, recommended book list and worksheet to the platform and receiving and managing students' reading records through eClass.

V.3 2007 – 2008

1. Wireless LAN infrastructure construction to cover all the classroom
2. Purchase 6 projectors
3. Replace the monitor of Computer Room A
4. Replace high volume laser jet printer
5. Evaluate the use of wireless LAN on teaching and learning

VI Financial Budget

VI.1 Based on different area

	Price	Quantity	Amount
Hardware replacement			
(a) Desktop PC	HK\$6,400.00	35	HK\$224,000.00
(b) Monitor CRT	HK\$ 800.00	45	HK\$36,000.00
(c) Standard Server 1	HK\$20,000.00	1	HK\$20,000.00
(d) Standard Server 2	HK\$23,500.00	1	HK\$23,500.00
(e) Portable Computer	HK\$11,800.00	5	HK\$59,000.00
(f) 3 com Super Stack switch 4400	HK\$16,500.00	6	HK\$99,000.00
(g) Stack module	HK\$2,300.00	5	HK\$11,500.00
(h) Firewall	HK\$23,000.00	1	HK\$23,000.00
(i) High Volume Laser Printer	HK\$14,000.00	4	HK\$56,000.00
		Subtotal	HK\$552,000.00
Wireless LAN Infrastructure			
(a) Cisco Access Point	HK\$3,000.00	12	HK\$36,000.00
(b) Cabling & Installation	HK\$12,000.00	1	HK\$12,000.00
		Subtotal	HK\$48,000.00
Projection System, and e-learning			
(a) Projection system	HK\$20,000.00	6	HK\$120,000.00
(c) e-Learning	HK\$7,000.00	1	HK\$7,000.00
		Subtotal	HK\$127,000.00

Expenditure on yearly basis	Items	Expenditure	Source
2004-2005	e-learning	HK\$7,000.00	School
2005-2006	Replace computers in Room B	HK\$224,000.00	EMB/School
	Standard Server 1	HK\$20,000.00	EMB/School
2007-2008	Access Point	HK\$36,000.00	EMB/QEF
	Cabling & Installation	HK\$12,000.00	EMB/QEF
	Projection system	HK\$120,000.00	EMB/School
	Monitor CRT	HK\$36,000.00	QEF/School
	Standard Server 2	HK\$23,500.00	QEF/School
	Portable Computer	HK\$59,000.00	QEF/School
	3 com Super Stack switch 4400	HK\$99,000.00	QEF/School
	Stack module	HK\$11,500.00	QEF/School
	Firewall	HK\$23,000.00	QEF/School
	High Volume Laser Printer	HK\$56,000.00	QEF/School
		HK\$727,000.00	