

**ICT and Teacher Change:
A Case Study in a Hong Kong Secondary School**

APPENDICES

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Appendices

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This part consists of confidential materials that cannot be published.

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Appendix D

School Documents

This appendix consists of confidential materials that will not be published.

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Student Data

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中一同學使用電腦學習英語問卷調查

Survey on Form 1 Students Use of Computers in Learning English

請回答下列各題。用鉛筆在右表適當之空格內 ☐ 填滿 ☒。注意部份題目可選多於一個答案。
Please answer the following questions. Use a pencil to fill in the square in the right-hand space. Note that some questions allow more than 1 answer.

			A	B	C	D	E	F
甲部	個人資料	你在本年度英文科的組別是	23	30	29	18	25	23
Part A	Personal Information	Your English group for this year is						
			有 沒有				男	女
			Yes No				M	F
			你家中有沒有電腦				你的性別是	
			Does your family have a computer				Your Sex	
			147	1			80	68
乙部	有關使用電腦學習: (以下「多媒體教室」指 Multimedia Learning Center MMLC)							
Part B	Using computers for learning: (N.B. MMLC means Multimedia Learning Center)							
					A	B	C	D
1.	在本年度(2002-03 學年)你曾經到過多媒體教室上課的次數是							
			How many times have you been to the MMLC for lessons this year (2002-03)?					
			A. 0-5 次 B. 6-10 次 C. 11-20 次 D. 20 次以上					
			A. 0-5 times B. 6-10 times C. 11-20 times D. more than 20 times		96	50	3	0
2.	在本學年你曾經到過多媒體教室上英文課的次數是							
			How many times have you been to the MMLC for English lessons?					
			A. 0-5 次 B. 6-10 次 C. 11-20 次 D. 20 次以上					
			A. 0-5 times B. 6-10 times C. 11-20 times D. more than 20 times		107	39	3	1
3.	你認為是否足夠?							
			Do you think it is enough?					
			A. 不足夠 B. 足夠 C. 適中 D. 太多					
			A. No B. satisfactory C. just right D. too many		115	15	18	1
4.	你在多媒體教室上英文課時的學習模式是 (可選多於一個答案)							
			What learning method do you use for English classes in the MMLC? (You may choose more than 1 answer)					
			A. 用 WORD 寫作 B. 使用電郵通訊					
			A. use WORD for writing B. use emails for communication					
			C. 使用電腦軟件學習文法 D. 使用電腦學習會話					
			C. Use computer software for learning English		37	71	38	24
			D. use computers to practice English speaking					
			其他_____					
			Others					
5.	你是否喜歡在多媒體教室上課?							
			Do you like classes in the MMLC?					
			A. 非常喜歡 B. 喜歡 C. 不喜歡 D. 非常不喜歡					
			A. Like it very much B. Like it C. Don't like it D. Do not like it at all		52	80	12	7
			原因_____					
			Reasons					
6.	你認為在多媒體教室上課的好處是 (可選多於一個答案)							
			You think that the positive reasons for having classes in the MMLC is (you may choose more than 1)					
			A. 氣氛較輕鬆自由 B. 學習較有趣					
			A. freer environment B. more fun in learning					
			C. 學得更快更有效 D. 與老師關係更密切					
			C. learn quicker and more effectively D. feel closer to the teacher		99	83	29	10
			其他原因_____					
			Other reasons					

你認為在多媒體教室上課的壞處是 (可選多於一個答案)				
7.	You think that the negative reasons for having classes in the MMLC is (you may choose more than 1)			
	A. 花時間又麻煩	B. 學習比平常慢		
	A. Waste of time and troublesome	B. learn slower than before		
	C. 缺少與老師/同學溝通	D. 沈悶		
	C. Less interaction with teachers/classmates	D. Boring	34	56 43 11
	其他_____			
	Others			
你在多媒體教室時，老師扮演的角色與在課室時是否一樣?				
8.	Is the teachers' role different in the MMLC, compared to regular classroom classes?			
	A. 完全一樣	B. 大致沒有分別	C. 不相同	D. 完全不相同
	A. Exactly the same	B. Not much different	C. Different	22 96 22 7
	D. Totally different			
	其他_____			
	Others			
你在多媒體教室學習過程中，老師扮演甚麼角色? (選最貼切一項)				
9.	What is the teachers' role in the MMLC class? (Choose the most representative answer)			
	A. 督導員	B. 傳授知識者		
	A. Instructor	B. pass on knowledge		
	C. 協助學習者	D. 教練		
	C. Assist learners	D. Coaching	40	44 58 11
	其他_____			
	Others			
你期望老師在學習過程中扮演甚麼角色?				
10	What role do you wish to see you teacher take on when teaching you?			
	A. 督導員	B. 傳授知識者		
	A. Instructor	B. pass on knowledge		
	C. 協助學習者	D. 教練		
	C. assist learners	D. Coaching	18	57 63 13
	其他_____			
	Others			
你贊成使用電腦對學習是有幫助的嗎?				
11.	Do you agree that the use of computers in the learning process is helpful?			
	A. 絕對贊成	B. 贊成	C. 有保留	D. 不贊成
	A. Absolutely agree	B. agree	C. Conditional	D. Disagree
	原因_____			
	Reasons			
			57	61 27 6

中一同學使用電腦學習英語問卷調查

請回答下列各題。用鉛筆在右表適當之空格內 ☐ 填滿 ☒。注意部份題目可選多於一個答案。

		A	B	C	D	E	F
甲部	個人資料						
	你在本年度英文科的組別是	23	30	29	18	25	23
	有 沒有						
		你家中有沒有電腦		147	1	你的性別是	
						男 80	女 68
乙部	有關使用電腦學習: (以下「多媒體教室」指 Multimedia Learning Center MMLC)						
				A	B	C	D
1.	在本年度(2002-03 學年)你曾經到過多媒體教室上課的次數是						
		A. 0-5 次	B. 6-10 次	C. 11-20 次	D. 20 次以上	96	50 3 0
2.	在本學年你曾經到過多媒體教室上英文課的次數是						
		A. 0-5 次	B. 6-10 次	C. 11-20 次	D. 20 次以上	107	39 3 1
3.	你認為是否足夠?						
		A. 不足夠	B. 足夠	C. 適中	D. 太多	115	15 18 1
4.	你在多媒體教室上英文課時的學習模式是 (可選多於一個答案)						
		A. 用 WORD 寫作	B. 使用電郵通訊				
		C. 使用電腦軟件學習文法	D. 使用電腦學習會話		37	71	38 24
		其他 _____					
5.	你是否喜歡在多媒體教室上課?						
		A. 非常喜歡	B. 喜歡	C. 不喜歡	D. 非常不喜歡	52	80 12 7
		原因 _____					
6.	你認為在多媒體教室上課的好處是 (可選多於一個答案)						
		A. 氣氛較輕鬆自由	B. 學習較有趣				
		C. 學得更快更有效	D. 與老師關係更密切		99	83	29 10
		其他原因 _____					
7.	你認為在多媒體教室上課的壞處是 (可選多於一個答案)						
		A. 花時間又麻煩	B. 學習比平常慢				
		C. 缺少與老師/同學溝通	D. 沈悶		34	56	43 11
		其他 _____					
8.	你在多媒體教室時，老師扮演的角色與在課室時是否一樣?						
		A. 完全一樣	B. 大致沒有分別	C. 不相同	D. 完全不相同	22	96 22 7
		其他 _____					
9.	你在多媒體教室學習過程中，老師扮演甚麼角色? (選最貼切一項)						
		A. 督導員	B. 傳授知識者				
		C. 協助學習者	D. 教練		40	44	58 11
		其他 _____					
10.	你期望老師在學習過程中扮演甚麼角色?						
		A. 督導員	B. 傳授知識者				
		C. 協助學習者	D. 教練		18	57	63 13
		其他 _____					
11.	你贊成使用電腦對學習是有幫助的嗎?						
		A. 絕對贊成	B. 贊成	C. 有保留	D. 不贊成	57	61 27 6
		原因 _____					

**Survey on Form 1 Students’ Use of Computers in Learning English
Summary of the Data Collected by the end of the school year 2002-03**

Part A

Group A- 23; Group B- 30; Group C- 29; Group D- 18; Group E- 25; Group F- 23

Except the 3 missing data, 99.3% of the students have computer at home. Only 1 said that he/she doesn’t have one. There are 54% boys and 46% girls.

Part B

1. How many times have you been to the MMLC for lessons this year (2002-03)?

Majority of groups A, C and D: 6-10 times; majority of groups B, E and F chose 0-5 times.

2. How many times have you been to the MMLC for English lessons?

*Majority of groups C and D: 6-10 times; majority of groups A, B, E and F chose 0-5 times;
The answers matched with the one in question #1.*

3. Do you think you have adequate time in the MMLC?

All except group D has a significant number of students chose “not adequate” while almost the same number of students chose “not adequate” and “satisfactory”

4. What learning method do you use for English classes in the MMLC? (You may choose more than 1 answer)

Students in the same group might have chosen different ways of uses. The simple majority of students in a group putting a tick will be accepted as true answer. Group A, B and D use e-mail for communication. About half of the students in group C chose using word for writing as a choice. A bit less than half of students in group A and D chose using CALL in learning English as a choice.

5. Do you like classes in the MMLC?

88% of students expressed that they like classes in the MMLC only 12% dislike it.

Students in the higher ability group tended to like classes in the MMLC more than the other groups.

6. You think that the positive reasons for having classes in the MMLC is (you may choose more than 1)

Significant number of students in groups A, B and C chose “freer environment” and “more fun in learning” as reasons for having classes in the MMLC, Groups D and F preferred that “more fun in learning” as a reason for having classes in the MMLC. Some students in groups D, E and F felt closer to the teacher when having classes in the MMLC. A few from each group felt that they could learn quicker and more effectively in the MMLC. Nearly none in group A chose “feel closer to the teacher” as their choice.

7. You think that the negative reasons for having classes in the MMLC is (you may choose more than 1)

About 22% students expressed that it was “waste of time and troublesome”. Relatively larger number of students from groups B and C chose “Learn slower than before” as a

choice. It worth noting that equal number of students from group A chose “learn quicker and more effectively” in #6 and “Learn slower than before” as a choice in this question. About 29% students found that they had “less interaction with teachers/classmates”. Only very few students expressed that it was “boring”.

8. Is the teachers' role different in the MMLC, compared to regular classroom classes?

Most students in all the groups chose “not much different” as their answer. More students in the lower ability groups, E and F, tended to have chosen “different” or “totally different” as their answers.

9. What is the teachers' role in the MMLC class? (Choose the most representative answer)

A majority of students in group A chose that teacher's role should be to assist learners. Some students chose each of the other choices.

10. What role do you wish to see you teacher take on when teaching you?

Most students preferred their teachers to take up the role as to “assist learners”. A significant number in the lower ability group chose the role of teachers to “pass on knowledge”.

11. Do you agree that the use of computers in the learning process is helpful?

Most students from the high ability groups agreed that it is helpful.

Findings

- The higher ability groups might have used the MMLC for lessons more frequently.
- Most students liked to have more lessons in the MMLC. Students in lower ability groups liked to have lessons in the MMLC more than the higher ability group students.
- Students in lower ability groups considered their teachers' role different in the MMLC from that in other classrooms
- Nearly all students like to have their teachers taken up the role to assist learner but those in the lower ability group also accept teachers' role as passing on knowledge
- In the MMLC lessons, students use, in order of popularity of choice, e-mail for communications, word for writing and CALL for learning grammar.
- More students in higher ability groups found it helpful to have lessons in the MMLC than the lower ability group students.
- In general, students think that there is more fun in learning in the MMLC though many of them think that they learn slower.
- Students like to have their teachers playing the role to assist students in learning rather than instruct or coach them.
- Most student, especially those in the higher ability groups welcomed to have lessons in the MMLC. Only very few disliked it.

Questionnaires about Applications of IT

Pupil Questionnaire Form 3

Date: _____ Name: _____ (optional) Class 3

B G R W
○ ○ ○ ○

Please circle one answer for each question in this part.

	Yes	No
Do you have a games console at home? (e.g.: Playstation,)	<input type="radio"/>	<input type="radio"/>
Do you have a computer at home?	<input type="radio"/>	<input type="radio"/>
Can you access the Internet from home?	<input type="radio"/>	<input type="radio"/>
Do you use computers in places other than your own home or school (e.g. the library, an Internet café, a friend’s house or somewhere else)?	<input type="radio"/>	<input type="radio"/>
Can you access the Internet from these computers in places other than your own home or school?	<input type="radio"/>	<input type="radio"/>
Do you have personal email address?	<input type="radio"/>	<input type="radio"/>
Have you ever created your own web page?	<input type="radio"/>	<input type="radio"/>
Do you have your own mobile phone?	<input type="radio"/>	<input type="radio"/>
Do you use the Internet for visiting Test Revision Sites / HKCEE revision sites?	<input type="radio"/>	<input type="radio"/>

How do you use ICT for “SCHOOL WORK” in Mathematics / English / Chinese?

In the following table, please tick one box for each subject about how often you have used ICT for learning in Mathematics, English and Chinese in this school year. Please consider the following periods:

- ❖ During lesson time at school
- ❖ In school, outside lessons: at lunchtime, break, free lessons or after school
- ❖ Outside school: at home, at friend’s house, the library or somewhere else

	Every week	Most weeks	Some weeks	Hardly ever	Never
In lesson time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In school, outside lessons	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Outside school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

In the following table please tick all boxes that apply (it can be more than one on each line). You may not have done any of the kinds of activity that are in the table. If so, you can tick the box saying none of these.

Which of the kinds of activity using computers have you done for learning Mathematics, English and Chinese in this school year.

	Send/ receive emails	Find inf. on the Internet	Create Web pages	forum / chat / Blog	video- conference	Office App.	Intranet / software	None of these
In lesson time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In school, outside lessons	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Outside school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Office software include Word, Excel, PowerPoint, ... etc; Intranet e.g. e-class

What kinds of things do you use computers for that are “FOR YOUR OWN INTEREST” ?

The following questions are about the kinds of things that you do with computers **outside lesson time** for activities that are **for your own interest**. Do not include computer use for school work. For example you might be sending emails to your friends or finding out about something that interests you.

Outside lessons time includes lunchtime, free lessons, after school club, at home, at friend’s homes, in an Internet café or in a library, etc.

Below are some statements about how you use computers **for your own interest**. Please fill **ONE** box for each statement.

I use computers	Every day or most days	At least once in a week	At least once in a month	Sometimes	Never
to play electronic games (on a games console or computer)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
of surf the Internet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
download files from the Internet (e.g. music, pictures or software)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
send emails	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
to visit Internet chat rooms / Blog	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
to videoconference	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
for writing (e.g. letters to fiends, diaries, stories or poems)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
desktop publishing (e.g. birthday cards, posters, invitations or newsletters)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What kinds of ICT activities have you done for “SCHOOL WORK”
in school at lunchtime, break, free periods or after school?

This part is about the kinds of activities you have done with ICT **FOR SCHOOL WORK** in school at **lunchtime, break, free periods or after school** for each subject that you do.

You may not have done any of the kinds of activity that are in the table in one or more of your subjects. If so, you can tick the box saying that you have not used them.

Which of the kinds of activity using computers have you used in learning each subject below **in school at lunchtime, break, free periods or after school**?

Subjects	Send/ receive emails	Find inf. on the Internet	Create Web pages	forum / chat / Blog	video- conference	Office App.	Intranet / software	None of these
English	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mathematics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chinese	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chinese History	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Geography	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
History	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chemistry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Biology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Religious Education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Liberal St./Civic Ed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Computer Literacy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physical Education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Visual Art	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Music	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How often do you use ICT for “SCHOOL WORK” OUTSIDE SCHOOL?

This page is about how often you use ICT for SCHOOL WORK outside school (for example at home, in the public library, at a friend’s house or somewhere else) for each subject that you do.

Please tick one box for each subject about how often you have used ICT for SCHOOL WORK outside school during this school year.

Subjects	Every week	Most weeks	Some weeks	Hardly ever	Never
English	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mathematics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chinese	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chinese History	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Geography	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
History	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chemistry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Biology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Religious Education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Liberal St./Civic Ed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Computer Literacy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physical Education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Visual Art	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Music	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What kinds of ICT activities have you done for “SCHOOL WORK” OUTSIDE SCHOOL?

This page is about what kinds of activities you have done with ICT for SCHOOL WORK outside school for each subject that you do.

You may not have done any of the kinds of activity that are in the table in one or more of your subjects. If so, you can tick the box saying that you have not used them.

Which of the kinds of activity using computers have you done in each subject during the last school year for SCHOOL WORK outside school?

Subjects	Send/ receive emails	Find inf. on the Internet	Create Web pages	forum / chat / Blog	video- conference	Office App.	Intranet / software	None of these
English	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mathematics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chinese	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chinese History	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Geography	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
History	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chemistry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Biology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Religious Education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Liberal St./Civic Ed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Computer Literacy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physical Education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Visual Art	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Music	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

NOW CHECK ALL YOUR ANSWERS CAREFULLY PLEASE! THANK YOU!

有關資訊科技應用的問卷

中三學生問卷

日期: _____ 姓名: _____ 班別 3

B G R W
○ ○ ○ ○

在這部份，請每題選擇一個答案。

	是/有	否/沒有
你家中有沒有電子遊戲機？(例如: Playstation,)	<input type="radio"/>	<input type="radio"/>
你家中有沒有電腦?	<input type="radio"/>	<input type="radio"/>
你可否在家中的電腦上互聯網?	<input type="radio"/>	<input type="radio"/>
除了在家中和學校外，你有沒有使用電腦 (例如：圖書館、網吧、朋友家或其他)?	<input type="radio"/>	<input type="radio"/>
除了在家中和學校外，你使用的電腦可否聯上互聯網?	<input type="radio"/>	<input type="radio"/>
你是否擁有個人電郵地址?	<input type="radio"/>	<input type="radio"/>
你曾否製作自己的網頁?	<input type="radio"/>	<input type="radio"/>
你是否擁有流動電話?	<input type="radio"/>	<input type="radio"/>
你有沒有使用互聯網去擷取測驗或會考的溫習題目?	<input type="radio"/>	<input type="radio"/>

你如何應用資訊科技於學習中、英、數科上?

在第一個表格內，每題選擇一個答案，表示你在本學年使用資訊科技在中、英、數科的學習上的頻密度。請考慮在以下時間使用資訊科技的頻密

- ❖ 在學校課堂時間
- ❖ 在學校內的非課堂時間：午飯、小息、空堂或放學後
- ❖ 在學校以外的時間：在家中、在朋友家、圖書館或其他地方

	每週皆有	多數週次	有些週次	甚少	從來沒有
在學校課堂時間	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
在學校內的非課堂時間	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
在學校以外的時間	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

在第二個表格內，請選取所有合適(每行可多於一個)的答案。如果你沒有作任何以下的活動，可以選擇「以上均不適用」一項。

在過去一個學年，你有沒有在下列三個時段，以如下方式應用電腦在學習中、英、數科?

	發放電郵	在互聯網上 搜尋資料	製作 網頁	使用網上 傾談室	使用視象 會議	以上均不適 用
在學校課堂時間	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
在學校內的非課堂時間	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
在學校以外的時間	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

你應用電腦作甚麼為「你自己興趣的工作」？

以下問題是關於你在課堂以外會使用電腦作甚麼為「你自己興趣的工作」，請勿包括使用電腦作學校的習作。例如：發電郵給你的朋友或找尋你有興趣的事物。課堂以外是包括午飯、空堂、課餘活動、在家、朋友家、網吧或圖書館等。

下列是一些有關你如何使用電腦作「你自己興趣的工作」。請每項祇選擇一個答案。

	每天或差不多每天	每週最少一次	每月最少一次	間中	從不
玩遊戲機(電子遊戲機或電腦)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
上網瀏覽	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
在互聯網下載檔案(例如：音樂、圖片或軟件)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
發電郵	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
上網上傾談室	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
視象會議	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
寫作(例如：給朋友的信、日記、故事或寫詩)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
桌面製作(例如：生日咭、宣傳海報、邀請咭或會訊)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

你在學校午飯、小息或放學後，曾使用資訊科技作甚麼「有關學習的活動」？

這部份是關於你在學校的午飯時間、小息、空堂或放學後，怎樣在各科目中應用資訊科技作「有關學習的活動」。請選出各項適合在每個科目的應用。

如果在以下科目中沒有應用資訊科技作「有關學習的活動」，你可以選擇「以上均不適用」一項。

在過去一學年中，你在午飯、小息或放學時間，曾如何應用資訊科技在下列香港中學會考科目中？

在你沒有修讀的科目旁加×	收發電郵	網上搜尋資料	製作網頁	網上討論室或傾談室	使用視象會	以上均不適用
English 英文	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mathematics 數學	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chinese 中文	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chinese History 中史	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Geography 地理	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
History 歷史	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chemistry 化學	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physics 物理	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Biology 生物	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Computer 電腦	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physical Education 體育	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Art and Design 美術及設計	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Music 音樂	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

在校外，你使用資訊科技於學習上的次數？

這部份是有關你在學校以外(例如：在家、公眾圖書館、朋友家中或其他地方)，應用資訊科技於學習你所修讀的科目(如：中、英、數及其他)的頻密情況。每科最多選擇一項，表示在本學年，在校外應用資訊科技於學習的頻密。

在你沒有修讀的科目旁加×	每週皆有	多數週次	有些週次	甚少	從不
English 英文	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mathematics 數學	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chinese 中文	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chinese History 中史	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Geography 地理	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
History 歷史	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chemistry 化學	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physics 物理	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Biology 生物	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Computer 電腦	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physical Education 體育	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Art and Design 美術及設計	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Music 音樂	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

在校外，你如何使用資訊科技於學習上？

這部份是關於你在校外，如何應用資訊科技於學習你修讀的科目(如 English, Mathematics, Chinese 及其他科目)。請在每科中選擇所有適用的項目。可能在部份科目你從未在校外使用資訊科技作所列出的學習活動，你可以選擇「以上均不適用」一項。

你在過去一學年，在校外曾否應用資訊科技於下列各科的學習活動中？

在你沒有修讀的科目旁加×	收發電郵	網上搜尋資料	製作網頁	網上討論室或傾談室	使用視象會	以上均不適用
English 英文	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mathematics 數學	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chinese 中文	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chinese History 中史	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Geography 地理	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
History 歷史	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chemistry 化學	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physics 物理	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Biology 生物	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Computer 電腦	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physical Education 體育	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Art and Design 美術及設計	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Music 音樂	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

現在請小心檢查你的答案！

Questionnaires about Applications of IT

Pupil Questionnaire Form 4 and Form 5

Date: _____ Name: _____ (optional) Class 4/5

B G R W
○ ○ ○ ○

Please circle one answer for each question in this part.

	Yes	No
Do you have a games console at home? (e.g.: Playstation,)	<input type="radio"/>	<input type="radio"/>
Do you have a computer at home?	<input type="radio"/>	<input type="radio"/>
Can you access the Internet from home?	<input type="radio"/>	<input type="radio"/>
Do you use computers in places other than your own home or school (e.g. the library, an Internet café, a friend’s house or somewhere else)?	<input type="radio"/>	<input type="radio"/>
Can you access the Internet from these computers in places other than your own home or school?	<input type="radio"/>	<input type="radio"/>
Do you have personal email address?	<input type="radio"/>	<input type="radio"/>
Have you ever created your own web page?	<input type="radio"/>	<input type="radio"/>
Do you have your own mobile phone?	<input type="radio"/>	<input type="radio"/>
Do you use the Internet for visiting Test Revision Sites / HKCEE revision sites?	<input type="radio"/>	<input type="radio"/>

How do you use ICT for “SCHOOL WORK” in Mathematics / English / Chinese?

In the following table, please tick one box for each subject about how often you have used ICT for learning in Mathematics, English and Chinese in this school year. Please consider the following periods:

- ❖ During lesson time at school
- ❖ In school, outside lessons: at lunchtime, break, free lessons or after school
- ❖ Outside school: at home, at friend’s house, the library or somewhere else

	Every week	Most weeks	Some weeks	Hardly ever	Never
In lesson time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In school, outside lessons	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Outside school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

In the following table please tick all boxes that apply (it can be more than one on each line). You may not have done any of the kinds of activity that are in the table. If so, you can tick the box saying none of these.

Which of the kinds of activity using computers have you done for learning Mathematics, English and Chinese in this school year.

	Sending emails	Finding info.on the Internet	Creating web pages	Using Internet chat rooms	Use video-conferencing	None of these
In lesson time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In school, outside lessons	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Outside school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Office software include Word, Excel, PowerPoint, ... etc; Intranet e.g. e-class

What kinds of things do you use computers for that are “FOR YOUR OWN INTEREST” ?

The following questions are about the kinds of things that you do with computers **outside lesson time** for activities that are **for your own interest**. Do not include computer use for school work. For example you might be sending emails to your friends or finding out about something that interests you.

Outside lesson time includes lunchtime, free lessons, after school club, at home, at friend’s homes, in an Internet café or in a library, etc.

Below are some statements about how you use computers for your own interest. Please fill **ONE** box for each statement.

I use computers	Every day or most days	At least once in a week	At least once in a month	Sometimes	Never
to play electronic games (on a games console or computer)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
of surf the Internet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
download files from the Internet (e.g. music, pictures or software)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
send emails	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
to visit Internet chat rooms / Blog	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
to videoconference	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
for writing (e.g. letters to fiends, diaries, stories or poems)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
desktop publishing (e.g. birthday cards, posters, invitations or newsletters)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What kinds of ICT activities have you done for “SCHOOL WORK”
in school at lunchtime, break, free periods or after school?

This part is about what kinds of activities you have done with ICT **FOR SCHOOL WORK** in school at **lunchtime, break, free periods or after school** for each HKCEE subject that you do.

Please tick all boxes that apply for each subject area.

You may not have done any of the kinds of activity that are in the table in one or more of your subjects. If so, you can tick the box saying that you have not used them.

Which of the kinds of activity using computers have you used in learning each subject below **in school at lunchtime, break, free periods or after school**?

HKCEE subjects (Please put a tick in the subjects you are taking)	Sending/ receiving emails	Finding information on the Internet	Creating Web pages	discussion groups or chat rooms	video-conferencing	None of these
English	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mathematics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chinese	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chinese History	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Geography	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
History	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Economics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Principles of Accounts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chemistry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Biology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Computer & IT	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Additional Mathematics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Art and Design	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Music	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How often do you use ICT for “SCHOOL WORK” OUTSIDE SCHOOL?

This page is about how often you use ICT for SCHOOL WORK outside school (for example at home, in the public library, at a friend’s house or somewhere else) for each HKCEE subject that you do.

Please tick one box for each subject about how often you have used ICT for SCHOOL WORK outside school during this school year.

HKCEE subjects (Please put a tick in the subjects you are taking)		Every week	Most weeks	Some weeks	Hardly ever	Never
English	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mathematics	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chinese	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chinese History	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Geography	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
History	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Economics	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Principles of Accounts	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chemistry	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physics	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Biology	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Computer & IT	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Additional Mathematics	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Art and Design	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Music	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What kinds of ICT activities have you done for “SCHOOL WORK” OUTSIDE SCHOOL?

This page is about what kinds of activities you have done with ICT for SCHOOL WORK outside school for each HKCEE subject that you do.

Please tick all boxes that apply for each subject area.

You may not have done any of the kinds of activity that are in the table in one or more of your subjects. If so, you can tick the box saying that you have not used them.

Which of the kinds of activity using computers have you done in each subject during the last school year for SCHOOL WORK outside school?

HKCEE subjects (Please put a tick in the subjects you are taking)		Sending/ receiving emails	Finding information on the Internet	Creating Web pages	discussion groups or chat rooms	video-conferencing	None of these
English	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mathematics	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chinese	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chinese History	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Geography	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
History	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Economics	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Principles of Accounts	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chemistry	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physics	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Biology	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Computer & IT	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Additional Mathematics	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Art and Design	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Music	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

NOW CHECK ALL YOUR ANSWERS CAREFULLY PLEASE! THANK YOU!

有關資訊科技應用的問卷

中四/五 學生問卷

日期: _____ 姓名: _____ (可不填寫)

班別 4

B
○ G
○ R
○ W
○

在這部份，請每題選擇一個答案。

	是/有	否/沒有
你家中有沒有電子遊戲機？(例如: Playstation,)	<input type="radio"/>	<input type="radio"/>
你家中有沒有電腦？	<input type="radio"/>	<input type="radio"/>
你可否在家中的電腦上互聯網？	<input type="radio"/>	<input type="radio"/>
除了在家中和學校外，你有沒有使用電腦(例如：圖書館、網吧、朋友家或其他)？	<input type="radio"/>	<input type="radio"/>
除了在家中和學校外，你使用的電腦可否聯上互聯網？	<input type="radio"/>	<input type="radio"/>
你是否擁有個人電郵地址？	<input type="radio"/>	<input type="radio"/>
你曾否製作自己的網頁？	<input type="radio"/>	<input type="radio"/>
你是否擁有流動電話？	<input type="radio"/>	<input type="radio"/>
你有沒有使用互聯網去擷取測驗或會考的溫習題目？	<input type="radio"/>	<input type="radio"/>

你如何應用資訊科技於學習中、英、數科上？

在第一個表格內，每題選擇一個答案，表示你在本學年使用資訊科技在中、英、數科的學習上的頻密度。請考慮在以下時間使用資訊科技的頻密

- ❖ 在學校課堂時間
- ❖ 在學校內的非課堂時間：午飯、小息、空堂或放學後
- ❖ 在學校以外的時間：在家中、在朋友家、圖書館或其他地方

	每週皆有	多數週次	有些週次	甚少	從來沒有
在學校課堂時間	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
在學校內的非課堂時間	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
在學校以外的時間	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

在第二個表格內，請選取所有合適(每行可多於一個)的答案。如果你沒有作任何以下的活動，可以選擇「以上均不適用」一項。

在本學年內，你有沒有在下列三個時段，以下列方式應用電腦在學習中、英、數科？

	發放 電郵	在互聯網上 搜尋資料	製作 網頁	網上討論或傾談 室/網上日記	視象 會議	Office 軟件	內聯網/ 其他軟件	以上均 不適用
在學校課堂時間	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
在學校內的非課堂時間	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
在學校以外的時間	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Office 軟件 包括 Word, Excel, PowerPoint, ... 等；內聯網如 eclass

你如何使用電腦作「你自己興趣的工作」？

以下問題是關於你在課堂以外使用電腦作「你自己興趣的工作」，(請勿包括使用電腦作學校的習作)。例如：發電郵給你的朋友或找尋你有興趣的事物。

課堂以外是包括午飯、空堂、課餘活動、在家、朋友家、網吧或圖書館等。

下列是一些有關你如何使用電腦作「你自己興趣的工作」。請每項祇選擇一個答案。

	每天或差不多每天	每週最少一次	每月最少一次	間中	從不
玩遊戲機(電子遊戲機或電腦)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
上網瀏覽	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
在互聯網下載檔案(例如：音樂、圖片或軟件)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
發電郵	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
上網上傾談室/網上日記	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
視象會議	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
寫作(例如：給朋友的信、日記、故事或寫詩)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
桌面製作(例如：生日咭、宣傳海報、邀請咭或會訊)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

你在學校午飯、小息、空堂或放學後，曾否使用資訊科技作以下「有關學習的活動」？

這部份是關於你在學校的午飯時間、小息、空堂或放學後，怎樣應用資訊科技作「有關學習的活動」。請選出各項適合在香港中學會考的科目中的應用(可選多於一項)。

如果在以下科目中沒有應用資訊科技作「有關學習的活動」，你可以選擇「以上均不適用」一項。

在本學年中，你在午飯、小息、空堂或放學時間，曾如何應用資訊科技在學習下列香港中學會考科目中？

HKCEE 會考科目 請在你所選修的科目旁加✓	發放電郵	在互聯網搜尋資料	製作網頁	網上討論或傾談室/網上日記	視象會議	Office 軟件	內聯網/其他軟件	以上均不適用
English 英文	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mathematics 數學	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chinese 中文	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chinese History 中史	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Geography 地理	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
History 歷史	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Economics 經濟	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Principles of Accounts 會計	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chemistry 化學	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physics 物理	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Biology 生物	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Computer & IT 電腦及資訊科技	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Additional Mathematics 附加數	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Art and Design 美術及設計	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Music 音樂	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

在校外，你使用資訊科技於學習上的頻密程度如何？

這部份是有關你在學校以外(例如：在家、公眾圖書館、朋友家中或其他地方)，應用資訊科技於學習你所選修的會考科目(如：中、英、數及其他)的頻密情況。每科最多選擇一項，表示在本學年，在校外應用資訊科技於學習的頻密度。

HKCEE 會考科目 請在你所選修的科目旁加✓		每週皆有	多數週次	有些週次	甚少	從不
English 英文		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mathematics 數學		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chinese 中文		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chinese History 中史		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Geography 地理		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
History 歷史		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Economics 經濟		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Principles of Accounts 會計		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chemistry 化學		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physics 物理		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Biology 生物		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Computer & IT 電腦及資訊科技		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Additional Mathematics 附加數		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Art and Design 美術及設計		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Music 音樂		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

在校外，你如何使用資訊科技於學習上？

這部份是關於你在校外，如何應用資訊科技於學習你選修的會考科目(如 English, Mathematics, Chinese 及其他科目)。請在每科中選擇所有適用的項目(可選多於一項)。可能在部份科目你從未在校外使用資訊科技作所列出的學習活動，你可以選擇「以上均不適用」一項。

你在本學年，在校外曾否應用資訊科技於下列各科的學習活動中？

HKCEE 會考科目 請在你所選修的科目旁加✓		發放電郵	在互聯網 搜尋資料	製作 網頁	網上討論或傾 談室/網上市場	視象 會議	Office 軟件	內聯網/ 其他軟件	以上均 不適用
English 英文		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mathematics 數學		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chinese 中文		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chinese History 中史		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Geography 地理		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
History 歷史		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Economics 經濟		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Principles of Accounts 會計		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chemistry 化學		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physics 物理		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Biology 生物		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Computer & IT 電腦及資訊科技		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Additional Mathematics 附加數		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Art and Design 美術及設計		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Music 音樂		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

現在請小心檢查你的答案！多謝你的合作！

Questionnaires modified from the one used in the UK BECTA project were given out to Form 3 to 5 students to see how students use ICT in both inside and outside school for their study, entertainment and others.

	F3	F4	F5
No	73	53	47

The usage of ICT for learning the core subjects, Chinese, English and Mathematics, inside and outside school are compared as in the following:

	Every week (4)			Most weeks (3)			Some weeks (2)			Hardly ever (1)			Never (0)			Average		
	F3	F4	F5	F3	F4	F5	F3	F4	F5	F3	F4	F5	F3	F4	F5	F3	F4	F5
In lesson time	10%	26%	17%	7%	13%	2%	18%	26%	30%	51%	21%	45%	15%	13%	6%	1.45	2.19	1.79
In school, outside lessons	8%	15%	4%	11%	8%	6%	12%	25%	17%	41%	32%	66%	27%	21%	6%	1.32	1.64	1.36
Outside school	21%	23%	15%	15%	11%	21%	21%	25%	32%	32%	36%	23%	12%	2%	4%	2.00	2.18	2.20

How do you use ICT for “SCHOOL WORK” in Mathematics / English / Chinese?

	Some weeks to Every week (2 to 4)			Hardly ever to Never (0 to 1)			Average		
	F3	F4	F5	F3	F4	F5	F3	F4	F5
In lesson time	34%	66%	49%	66%	34%	51%	1.45	2.19	1.79
In school, outside lessons	32%	47%	28%	68%	53%	72%	1.32	1.64	1.36
Outside school	56%	58%	68%	44%	38%	28%	2.00	2.18	2.20

There is a significant increase of usage of ICT for school work in the core subjects, Mathematics, English and Chinese, for Form 4 during lesson time or outside lessons in school when compared with Form 3 and Form 5. However, for the usage outside school, there is an increase of usage for the Form 5 students.

	email			Internet surfing			Webpage Design			Forum/chat/blog			video conference			office application			Intranet/software		
	F3	F4	F5	F3	F4	F5	F3	F4	F5	F3	F4	F5	F3	F4	F5	F3	F4	F5	F3	F4	F5
In lesson time	7%	13%	21%	30%	26%	57%	5%	15%	11%	16%	8%	19%	1%	0%	0%	30%	25%	43%	19%	19%	26%
In school, outside lessons	14%	11%	13%	21%	28%	38%	1%	0%	4%	14%	13%	13%	1%	2%	0%	14%	11%	28%	14%	17%	13%
Outside school	45%	26%	36%	45%	49%	74%	12%	4%	15%	44%	42%	40%	11%	8%	0%	33%	32%	45%	27%	28%	28%

Concerning the ways of usage, Internet surfing is the most popular amongst all especially for the Form 5 students. On-line communications, like forum, chat room and blogging, are also popular, with more than 40% students using them. Office applications are more popular among Form 5 students than the other forms. More than one third of the students in Forms 3 and 5 use email for communications.

	Every day or most days (4)			At least once in a week (3)			At least once in a month (2)			Sometimes (1)			Never (0)			Average		
	F3	F4	F5	F3	F4	F5	F3	F4	F5	F3	F4	F5	F3	F4	F5	F3	F4	F5
to play electronic games (on a games console or computer)	44%	36%	21%	21%	28%	28%	5%	4%	6%	21%	25%	36%	8%	6%	6%	2.72	2.65	2.22
surf the Internet	70%	58%	49%	18%	25%	38%	1%	4%	4%	5%	6%	9%	5%	0%	0%	3.41	3.47	3.28
download files from the Internet (e.g. music, pictures or software)	44%	32%	17%	26%	32%	32%	7%	17%	15%	16%	8%	34%	7%	0%	0%	2.84	3.00	2.33
send emails	15%	6%	0%	18%	23%	28%	26%	25%	9%	34%	36%	62%	7%	2%	0%	2.00	1.94	1.65
to visit Internet chat rooms / Blog	51%	40%	19%	21%	32%	30%	10%	8%	21%	12%	13%	19%	7%	2%	9%	2.96	3.00	2.33
to videoconference	5%	2%	2%	7%	6%	4%	14%	8%	2%	38%	43%	38%	36%	34%	51%	1.08	0.90	0.65
for writing (e.g. letters to fiends, diaries, stories or poems)	15%	8%	6%	11%	23%	17%	10%	11%	19%	26%	32%	34%	38%	17%	17%	1.38	1.69	1.59
desktop publishing (e.g. birthday cards, posters, invitations or newsletters)	5%	2%	0%	5%	4%	9%	4%	11%	4%	40%	42%	38%	45%	32%	47%	0.86	0.92	0.74

	At least once in a month to everyday (2) to (4)			Never to Sometimes (0) to (1)		
	F3	F4	F5	F3	F4	F5
to play electronic games (on a games console or computer)	70%	68%	55%	29%	30%	43%
surf the Internet	89%	87%	91%	11%	6%	9%
download files from the Internet (e.g. music, pictures or software)	77%	81%	64%	23%	8%	34%
send emails	59%	53%	36%	41%	38%	62%
to visit Internet chat rooms / Blog	81%	79%	70%	19%	15%	28%
to videoconference	26%	15%	9%	74%	77%	89%
for writing (e.g. letters to fiends, diaries, stories or poems)	36%	42%	43%	64%	49%	51%
desktop publishing (e.g. birthday cards, posters, invitations or newsletters)	15%	17%	13%	85%	74%	85%

Concerning the overall usage, surfing the Internet, downloading files from the Internet and visiting the Internet Chat rooms or blogging are the most common in all the Form 3 to Form 5 students, with more than 80% students doing them at least once every month to everyday. About 90% of them will surf the Internet almost everyday.

On the average, these students surf the Internet, download files from the Internet or visit the chat rooms or blogs at least once a week. To play electronic games is also popular, with about 70% Form 3 and 4 students doing it at least once in a month to everyday.

	At least once in a week to everyday			Sometimes to once in a month		
	F3	F4	F5	F3	F4	F5
to play electronic games (on a games console or computer)	64%	64%	49%	26%	28%	43%
surf the Internet	88%	83%	87%	7%	9%	13%
download files from the Internet (e.g. music, pictures or software)	70%	64%	49%	23%	25%	49%
send emails	33%	28%	28%	60%	60%	70%
to visit Internet chat rooms / Blog	71%	72%	49%	22%	21%	40%
to videoconference	12%	8%	6%	52%	51%	40%
for writing (e.g. letters to fiends, diaries, stories or poems)	26%	30%	23%	36%	43%	53%
desktop publishing (e.g. birthday cards, posters, invitations or newsletters)	11%	6%	9%	44%	53%	43%

Questionnaire about students' use of computers for learning

Please answer the following questions. Use pencil to fill the empty ☐ in black ☒. Note that you may have more than one choice in some questions.

Section A: Personal Data 1 2 3 4 5 B G R W M F Do you have any Y N
 Class ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ sex ☐ ☐ computer at home? ☐ ☐

Section B: Concerning the use of computers for learning

For questions 1 to 4, please indicate the level of usage from A to D as listed below:

A. very little ($\leq 20\%$); B. sometimes ($20\%-50\%$); C. quite often ($50\%-80\%$); D. always ($\geq 80\%$)

1. The percentage of teachers' use of computer in lessons in the first term in this school year (2006-07) is
2. The percentage of your usage of computer for leaning (including doing homework or exercises) is
3. How do teachers use computer for teaching? Use A to D to indicate the frequency of usage
 - i. Presentation software (e.g. PowerPoint)
 - ii. Internet resources
 - iii. Computer Assisted Instruction or Learning software
 - iv. Resources on the Intranet (e-class)
 - v. Communication through Email
 Others(Please specify) _____
4. How do you use computer for learning/ doing assignments in lessons or after school?
 - i. Presentation software (e.g. PowerPoint)
 - ii. Internet resources
 - iii. Computer Assisted Instruction or Learning software
 - iv. Resources on the Intranet (e-class)
 - v. Communication through Email
 - vi. Application software such as Word/Excel
 Others(Please specify) _____
5. Do you like teachers using computer for lessons?

A. Like it very much B. Like it C. Dislike it D. Strongly Dislike it

 Others(Please specify) _____
6. Do you like to learn with computers (including during lessons and after school)

A. Like it very much B. Like it C. Dislike it D. Strongly Dislike it

 Others(Please specify) _____
7. What are the advantages of using computers for teaching? (you can choose more than one answer)

A. lessons are more interesting; B. more varieties in teaching methods; C. more systematic in lesson planning;
 D. easier to understand with audio visual aids; E. immediate feedback helps learning;
 G. more efficient and effective in learning; H. suit the progress of individual students

 Others(Please specify) _____
8. What do you think are the advantages of using computers in learning? (accept more than one answer)

A. lessons are more interesting; B. more varieties in teaching methods; C. more systematic in lesson planning;
 D. easier to understand with audio visual aids; E. immediate feedback helps learning;
 G. more efficient and effective in learning; H. suit the progress of individual students

 Others(Please specify) _____
9. What do you think are the disadvantages of using computers in learning? (accept more than one answer)

A. waste time and troublesome; B. learn slower than usual; C. less communication with teachers/fellow students; D. boring

 Others(Please specify) _____
10. What is the role of the teacher when you use computer for learning? (choose the most suitable one)

A. instructor; B. pass on knowledge; C. assists learners; D. coaching
11. What role do you expect teachers play in the learning process?

A. instructor; B. pass on knowledge; C. assists learners; D. coaching

 Others(Please specify) _____
12. Do you agree that using computers will help in learning?

A. strongly agree; B. agree; C. with reservations D. disagree

 Others(Please specify) _____

同學使用電腦學習問卷調查

請回答下列各題。用鉛筆在右表適當之空格內○填滿●。注意部份題目可選多於一個答案。

甲部：個人資料 1 2 3 4 5 B G R W 男 女 有 無
 班別 ○ ○ ○ ○ ○ ○ ○ ○ ○ 性別 ○ ○ 家中有沒有電腦 ○ ○

乙部：有關使用電腦學習

第1至4題，請使用下列A-D表示使用程度

A.甚少(≤20%); B.間中(20%-50%); C.頗多(50%-80%); D.經常(≥80%)

- | | A | B | C | D |
|--|---|---|---|---|
| 1. 在本年度(2006-07學年)上學期的課堂裏，老師使用電腦的課堂比率是 | ○ | ○ | ○ | ○ |
| 2. 在本學年你曾經使用電腦學習的比率是(包括課後做作業及練習等) | ○ | ○ | ○ | ○ |
| 3. 在上課時老師如何使用電腦？請用以下A至D項表示使用經常性 | | | | |
| i. 用展示軟件(e.g. Powerpoint) | ○ | ○ | ○ | ○ |
| ii. 用互聯網網上資源 | ○ | ○ | ○ | ○ |
| iii. 用教學/學習軟件 | ○ | ○ | ○ | ○ |
| iv. 用內聯網(e-class)的資源 | ○ | ○ | ○ | ○ |
| v. 用電郵通訊 | ○ | ○ | ○ | ○ |
| 其他(請註明) _____ | | | | |
| 4. 你在課堂上或課後如何使用電腦學習/完成作業 | A | B | C | D |
| i. 用展示軟件(e.g. Powerpoint) | ○ | ○ | ○ | ○ |
| ii. 用互聯網網上資源 | ○ | ○ | ○ | ○ |
| iii. 用教學/學習軟件 | ○ | ○ | ○ | ○ |
| iv. 用內聯網(e-class)的資源 | ○ | ○ | ○ | ○ |
| v. 用電郵通訊 | ○ | ○ | ○ | ○ |
| vi. 用 Word/Excel 等應用軟件 | ○ | ○ | ○ | ○ |
| 其他(請註明) _____ | | | | |
| 5. 你是否喜歡老師使用電腦教授的課堂 | A | B | C | D |
| A. 非常喜歡 B. 喜歡 C. 不喜歡 D. 非常不喜歡 | ○ | ○ | ○ | ○ |
| 原因 _____ | | | | |
| 6. 你是否喜歡使用電腦學習(包括課堂及課堂以外) | A | B | C | D |
| A. 非常喜歡 B. 喜歡 C. 不喜歡 D. 非常不喜歡 | ○ | ○ | ○ | ○ |
| 原因 _____ | | | | |
| 7. 你認為老師使用電腦教授的好處是 (可選多於一個答案) | A | B | C | D |
| A. 課堂較有趣 B. 教學模式較多元化 C. 課堂設計較有條理 D. 視象輔助較易明白 | ○ | ○ | ○ | ○ |
| E. 即時回饋有助學習 G. 錄取學生學習情況有助改進 H. 切合個別學習進度 | E | F | G | H |
| 其他(請註明) _____ | ○ | ○ | ○ | ○ |
| 8. 你認為使用電腦學習的好處是 (可選多於一個答案) | A | B | C | D |
| A. 課堂較有趣 B. 教學模式較多元化 C. 課堂設計較有條理 D. 視象輔助較易明白 | ○ | ○ | ○ | ○ |
| E. 即時回饋有助學習 G. 學得更快更有效 H. 切合個別學習進度 | E | F | G | H |
| 其他(請註明) _____ | ○ | ○ | ○ | ○ |
| 9. 你認為使用電腦學習的壞處是 (可選多於一個答案) | A | B | C | D |
| A. 花時間又麻煩 B. 學習比平常慢 C. 缺少與老師/同學溝通 D. 沈悶 | ○ | ○ | ○ | ○ |
| 其他(請註明) _____ | | | | |
| 10. 你在使學習過程中，老師扮演甚麼角色？(選最貼切一項) | A | B | C | D |
| A. 督導員 B. 傳授知識者 C. 協助學習者 D. 教練 | ○ | ○ | ○ | ○ |
| 其他(請註明) _____ | | | | |
| 11. 你期望老師在學習過程中扮演甚麼角色？ | A | B | C | D |
| A. 督導員 B. 傳授知識者 C. 協助學習者 D. 教練 | ○ | ○ | ○ | ○ |
| 其他(請註明) _____ | | | | |
| 12. 你贊成使用電腦對學習是有幫助的嗎？ | A | B | C | D |
| A. 絕對贊成 B. 贊成 C. 有保留 D. 不贊成 | ○ | ○ | ○ | ○ |
| 原因(請註明) _____ | | | | |

Description: F1Group Interview ~10 minutes

M: Researcher

Five students – 3 boys (S1, S2, S3) and 2 girls (S4 and S5)

M: Thank you for all IB students who are present here for the interview. My aim is to discuss about how teachers use IT in teaching. What are your views, opinions and feelings, in order to help to analyze how the school can develop its use of IT in teaching and learning? I've just observed your lesson. Miss Lee has used IT in the lesson. Can you tell me what have you done with IT?

S1: Computer

M: What has she done with computer?

S3: Listening to music / song

S2: connecting to the Internet

S4: assessment (give marks)

M: Assessment, ... What else?

S2: for teaching

M: What has she done for teaching?

S2: Let us listen to different types of musical instruments.

M: What do you feel about this teaching method? Like it or not?

S3: not so boring

S2: more interactive

S1: not true!

S4: more varieties

M: How about you?

S1: Nothing special. I use computer very often at home. I rather directly ,.... Ask students to bring MP3 to school. Put the file on the web then load to their MP3. No need to play in front of the whole class.

M: That means the teacher can play it directly.

S1: students can use earphone

S3: not so noisy!

M: That is you suggest to use earphone. Right? How about using earphone during lessons? How do you feel?

S2: If teachers teach by referring to the book directly, then it will be boring. But, if there is something on the screen then it will be more interesting and not so boring.

M: How about you? How do you feel?

S3: Um ... , then it won't be so boring during lesson.

M: That is not so boring. You all feel not so boring. How about the girls?

S4: More convenient. We can know what she is doing?

M: Right! Why it won't be so boring when computer is used?

S4: That is, if we can see a video then we will know what instrument the one is doing.

M: That is, if you can see and listen, then it would be better. How about you?

S5: I think if IT is used, then we can understand better not so confusing.

M: It's clearer. Why it is clearer? 更清楚

S5: We can see and hear, then we will know what is the teacher doing. So, it won't be so confused. 唔會咁亂

M: Which one helps you better? Because you can see or listen, so it won't be so confusing?

S5: Because you can see and listen so it is clearer.

M: How about you? You use computer for connection to the Internet so you feel that using computer at school is boring?

S1: a little boring!

M: What when compared with no computer for use? You prefer not to use computer?!

S1: Should use less. It's now overused. 過份地濫用 It should be more balanced. Too excessively use the INTERNET wasted schools' electricity power.

M: You say overused. What do you mean? Are you referring to the Music lesson or you refer to other lessons?

S1: Other lessons also have the problem(overuse the computer).

M: You say it is sometimes too excessively used. Then is it appropriately used in the last Music lesson?

S1: Yes, it was switched on throughout the lesson. It is on even when it is not in use.

M: So, you concern about the wastage of electricity of the school. ...Good! You are environmental friendly. Let's compare with that when no computer was in use, how do you feel?

S2: it's better to use computer.

S3: better use computer.

S1: better use computer.

M: Consider all lessons but not only restricted to Miss Lee's lesson. Do you feel that teachers frequently use IT this year?

S5: half and half

S4: Yes, Frequently used.

S3: Frequent 多

S2: Frequent 多, yes, frequent 多...

M: What are you comparing with?

S2, S4: compare with that in the primary school.

M: You compare with use in primary school. You refer to MS? There are computers in all classrooms.

S2, S3, S4, S1: Yes, but they are not frequently used (in primary school).

M: You all come from MS (name of the feeder school) ?

S1, S3, S4: yes

S2: I am

M: How about you? Which school do you come from?

S5: LYC(name of another primary school)

M: How do you feel? You have computers at school. Right.

S5: Yes, but they were less frequently used.

M: There is a period of time in the first term that there is no projector in the Music Room. Was computer used in the lessons?

S1: No, it depends on teachers to teach (in the first term)

S2: It depends on the book and teacher talk. It will be more convenient if computer is used. Teacher need not take out the musical instrument for lesson.

M: We are referring to the first term and the second term. Is computer more frequently used by teachers?

S1, S2: Yes, used more frequently (in the second term) (x 2).

M: There are computers in all classrooms in the second term and all the special rooms were installed with projectors. Do you feel that teachers use computers more frequently?

S2, S4: More frequently used (after workstations are installed in all classrooms).

M: Comparing the first term with the second term, do you like IT to be used more frequently or used suitably as in the first term?

S2: I prefer it to be like that in the second term.

S3: I like it to be more frequently used.

S4: Second term is better.

S1: Better in the second term.

M: You all agree that it's better to use it more. Right? You all feel that more frequent use is better. Besides using it for teaching, Miss Lee also used computer to record marks. Do you like this?

S2: Yes, it's good (to use computer to record marks during lesson).

S1: Can just put the marks on paper.

S3: You can lose it if paper is used.

S4: You can compare with others when you see the marks on the screen.

M: I found that some students are very eager to answer questions. Like one of you who was the first time to answer question. Why are you so eager to give answers and raise hands?

S3: The question is too simple (so they are eager to give answers and raise hands).

S1, S4: You want to get marks only!

M: Just wanted to get more marks. ... The question is also easy. You agree that it is a good method. Right?

M: Besides the music lessons, if you are asked about the usage of IT for lessons. You are asked about the percentage teachers use IT in teaching and learning. What is percentage? 50% or 40%

S2: Which term you are referring to?

M: First term then the second term. ... That means you see the difference (of computer usage in the two terms).

S2, S3: First term is half and half (in the first term) (x2)

S4, S5: 50 and 50 % (computer usage in the first term compared with the second) (x2)

M: How about the second term?

S3: about 75% (Computer usage in the second term)

S2: 60 to 70% (computer usage in the second term)

S4, S5: about 60-70% (computer usage in the second term)(x2)

M: Most of you agreed that there is 60-70% in the second term. 70%? OK. That is more frequently used. You all agreed it is a good way of teaching. Right? Then when referring to all lessons but not only music lessons, is it good to more frequently use IT in lessons?

S4: It's good, like in the Mathematics lessons. Sometimes we need to draw diagrams using Compasses. It's easier for teachers to use Computer to show us.

S1: It's good, when we don't know how to draw a diagram, you don't need to repeatedly ask the teacher to draw it on the blackboard.

M: That is, you can see the picture again.

S2: Save time (if computer is used).

M: Also save time ... (if computer is used)

S3: Save chalk as well (if computer is used).

M: Save time and save chalk. ...any more? It will make you concentrate more in lessons.

M: I found that you were very attentive during lesson in this morning. For example, at the beginning, some of you were chatting and they became very attentive in the second half of the lesson. Why? Is it due to the video, something you can see and hear.

S3: Maybe, we become awaken after singing songs.

S1: Maybe, they were aware that you were here.

M: Is it true? I was there for long time already. How about the girls?

S5: Because you can see the video on the screen. With the music, we can see how the instruments are played. So, we concentrated more to see how it works.

M: That is, you will be more concentrated when you have something both to see and hear.

M: What other lessons in which computer can help you concentrate more in lessons? Besides Mathematics.

S3: English Language (teacher uses computer in lesson).

S3: Chinese Language(teacher uses computer in lesson).

S1: Science(teacher uses computer in lesson)

M: English, Chinese, ..., Computer Literacy should involve using IT.

M: Science, ...

S1: Science

S2: Science is not frequently used. (teacher uses computer in lesson)

S3: Chinese Language. Sometimes, teachers' words on the screen are not very clear (words are better to be read if computer is used)

M: Words are better to be read. (if teacher uses computer in lesson)

S1: In Chinese lessons, PowerPoint presentations are used. (others are giving the same answer almost the same time)

M: Is there any chance to connect to the Internet?

S2, S3: Yes (there are chances to connect to the Internet) (x2)

S2: Proverbs, we can read proverbs on the screen

M: Proverbs

M: There are workstations in the classrooms in the second term. Are teachers more frequently use IT? In the first term, teachers need to hook up the computers so waste some time.

S2: Yes, it is more convenient (when there are workstations in the classrooms in the second term.)

M: I still have something to discuss with you but time is not enough. Maybe, I will talk to you again when we have time.

Thank you very much.

Group Interview with Form 5 students – May 2007

M: Researcher

W, E, H: Form 5 Students

M: There will be 2 sessions about IT in teaching. You can give any answers or give any opinions freely. The first part is about your own use of computers. What do you feel about your usage of computers? You think yourself is an expert user, good user or normal user, don't know how to use.

H: Normal

W: Normal

E: not good user, I know only those I used frequently. I'm not quite familiar with the others.

M: In use ,, there should be many areas that you usually use

M: All are not expert users. Do you have computers at home?

W: One (computer at home)

H: Two(computer at home)

E: Two (computer at home)

M: Wow! All have at least one computer at home, even more than one!

M: There are computers at home and at school. How frequently you use the computers? Will you use computer everyday?

H: I will use it (computers) everyday.

W: just use it

M: for what purpose do you use it everyday

W: Check email.

H: Check email.

M: Check email is one. ... Anymore?

H: Xanga, read others Xanga.

M: How about you yourselves?

H: Sometimes

E & W: at times

M: What will you use with Xanga?

H: Use as own dairy

E: Don't know

W: something like this.

M: Use as your own diary. Besides this, is there any other usage with Xanga?

W: No

H: Other usage with Xanga, ... Class club activities.

M: Yea! Class club activities! How about eclass? You can also use eclass for this purpose.

E: Don't know how to use it.

H: We don't know how to use eclass. Sometimes during while sending email. It will be lost sometime during the process. I thought that I must have sent it out but it will be lost.

E: Teachers asked us to find something, I didn't know how to use it.

W: Will overflow. ... There are junk mails from lower form students.

H: Want to know you!

W: Some lower form students will sent emails to you saying I am Form 1, so and so, he/she wanted to know you. Then, the email box is full.

M: You can check who are they . You can tell us since we would not get.

H: I don't know how to find information on it. Like before, English teachers said that they have posted up things on e-notice. But, we don't know how to find it.

W: Teachers also don't know how to use it.

M: You think that teachers themselves don't know how to use it.

W: Sometimes when we told them that we could not find it, they (teachers) would say that they didn't know it either.

H: Then, they would print them out for us.

W: Yea!

M: Yes, that would be the problem. It was due to the time limit set for sending out messages. In fact, it was 'time-out' while sending email out. It's very fast, the time set before was very short. So actually, they were not sent. It happened quite often. Now, it has been adjust. That means, you feel that the system is not good to use. So, you won't use it.

H: hum

M: You prefer to use Xanga. How about your class club? How often have you used xanga?

W: type homework.... During school time, we would type homework, test, etc. During HKCEE period, teachers would type some encouraging remarks or some reminders for us or time to come back to school.

H: Yea, ... like time to come back to school would be posted there as well.

M: Oh! That means this kind of communication would also be posted on xanga. That is all students would use it.

H: yes, but,... most of them.

M: All teachers would use it as well. Most of them or ... ?

H: Most of them (would use Xanga).

W: One or two (would use Xanga)

M: One or two use it (Xanga)?

W: One or two most commonly use it(Xanga).

H: They know this channel so even they themselves won't use it(Xanga), they would ask somebody to help them.

M: I also understand that it is the most effective channel, e.g. to announce ... etc..

M: Back to your own usage. Besides this, would you use computer for other purposes at home. Like search for information, etc.

H: Sometimes, when doing homework, ..., seldom, but sometimes, it needed us to search for something.

M: Which subject would require you to search for information?

H: Before, its for Geography. We're required to search for 'global warming', etc. Seldom, ...

M: That means, there are some uses. Besides, how about other homework. What are required of homework?

H: Sometimes during holidays, we need to go to eclass for doing the tests.

M: Successful or not? You sometimes could not use eclass. ..

W: Successful for that time.

H: Unsuccessful at times. Maybe, too many students connected to eclass at the same time so we failed to do it.

M: There was also some time during the mid-night, the eclass system would be suspended updating information or backing up. But, I understand that you people were most active at that time. That is, some times teachers would give on line test during exams, little search from the web.

H: Hum..., seldom ask us to use computers for homework

M: Do you need to use word, excel, etc. for doing homework.

H: Sometimes, we also use it to search for information.

W: Use copy and paste, just copy from the internet then submit the homework. Teachers did not trust students. That's true. It's too easy...

M: It's the easiest way of doing homework. Just copy and paste.

W: Some teachers didn't like us to do this since students would use copy and paste and then submit without actually doing their own thing. It's easy for us to do that.

M: It's a temptation! Just need to copy and paste, then submit the homework.

W: It's so easy to do that (copy and paste).

M: Then, teachers were not willing to use it (use computer for doing homework). But, there were some homework that could use computers.

W: English

H: English, like news cut and book reports.

M: If you are allowed to use computers, what would you feel? Will you use copy and paste?

H: Book reports required you to give your own comment so it would be difficult for using copy and paste. You need to write something for yourselves. They could not be the same.

M: How about News cut?

H: I feel it more convenient. News cut, ... , type the content. For example, sometimes you have to type and make correction. If you write the words, you need to rub out which would be troublesome. If you use computer, you can just delete.

M: That means, you find typing (using Word) is more convenient.

M: You can all use Word, right? You should be very familiar with (the software) Word.

W: Basic skills

H: Basics

M: Word will be used quite frequently. Right?

H: Yes.

M: What other software would you use?

H: Powerpoint

M: Are you frequently required to use PowerPoint?

E: for Assemblies

H: Yes, assembly, sometimes we need to do presentations.

M: Do you need to do presentations?

W: HKCEE is near. All are rushing for the syllabus so seldom (required us to) do presentations.

M: Then, how about Form 4?

W: more frequently used (in Form 4)

H: Like book reports.

M: On the contrary, you would use computers more frequently in form 4 but less in Form 5.

Your usage is like this. Besides xanga, would you visit some websites?

W: There would not be any website that we visit regularly but xanga will be visited regularly.

M: Is there any other secret websites that you will visit?

H: I'll read many others' blog. In fact, I have a list of blogs. I would regularly check the updates and visit those that are updated.

M: About the blogs, I would like to learn more about this. Whose blog will you visit? Would you only visit those that you know or any others on the Internet ...?

H: Some I know and some not.

M: Who's blog you will visit? Those you don't know.

H: Usually those linked by others I know. Or, when there are some topics that I am interested in, then I will read.

M: What kind of topics will you read?

H: News and music. I am interested in these.

M: That means those topics you are interested in.

H: Yes

M: How about the rest of you? Now the famous stars like to put up their blogs.

W, E & H: We won't.

M: There are many now.

H: I don't like to read those of stars.

E: We know there are many. But we don't want to read.

H: I don't like to know about them.

M: Then what other websites would you like to check.

H: Discussion forum

M: What kind of forum will you join?

M: Don't worry, the information would not be disclosed to the school.

W & H: For example, there is a Forum for the TV program.

W, E & H: Forum about HKCE exam paper and answers.

M: That is people will post their answers up.

W, E & H: Yes, immediately after the exam.

M: Is it so fast? Is it reliable?

W: one or two questions. We check the answers and feel more comfortable.

M: Do you know who send them out?

H: Some said that they come from students, some from teachers and some from 'famous teachers' serving at "private tutorial schools"

M: How can you know that the answers are reliable or not?

H&W: We will wait and see. After some time, if no body response that means the answers are quite reliable.

M: Then, how can you know.

H&W: Usually we will read few hours later to see if there are any more changes.

M: That means, you won't read immediately. Because, it may be dangerous since we don't know who post them. Maybe, the answers are just something to attract people's attention.

H: Hum

M: Do you have any specific problems for going on-line? Or, do you have any comments. Or, have you visited some websites that are not suitable for you? I think no, right, you are all upright persons and you will see those few good websites. About use of IT in teaching and learning

M: Now, let us go back to teaching and learning. In these few years, the whole society or the world is changing to use computers. Computers are used so frequently. So, you also feel that teachers use computers more frequently. (H: um...) Then, please give us some suggestions. What do you think? Especially in your Form 4 and Form 5. Maybe,

computers were used more in teaching when you were in form 4. Then, you can compare Form 4 and Form 5, see if it is good to have increased computer usage in teaching.

H: Don't use without a reason ... don't use inappropriately like that in some subjects.

M: What do you think? Did teachers use computers frequently?

H,W&E: (Teachers did use computers) Frequently.

W: Great increase in usage.

E: Some were used appropriately but some were not.

W: Yes

M: Why they'll use even when it was not appropriate? 唔好硬用

H,W&E: Because the school required teachers to use computers in lesson. ...

M: Don't worry. I wouldn't report back to the school.

W: Especially when there was other teachers observing lessons.

H: Could we mention subject name as well.

M: That's ok. I would not report this to the school.

W: You mention it.

H: For example, mathematics and PA. When it was not suitable to use computer (for some topics) but teachers used them but turned out that they could not handle them well.

W: Just because somebody was there observing the lessons.

H: It was a waste of time. Teacher could not teach well with the computer and we could not learn well too.

M: Then, it wasted time just for using computer.

W: But some are quite good. For example, geography lessons. We loved to see the pictures and the teacher guided us to connect them to the content. We could guess and discuss together and we were happy about that.

M: That is, it was used quite successfully used in Geography lessons. But, it was not too successful in PA and Mathematics. About Mathematics, ... which topic teachers had used computers?

W: Visualizer was used.

H: Yes, we had an experience in Form 3. We went to the MMLC (Multimedia Learning Centre) together to watch the 3-Ds from the web.

W: Yes, we did. But, we only played in the MMLC. There's no use.

H: There's no use. Yes, not useful.

M: Any way of use that is good? If it was used appropriately, then it would be good. For example, in Geography lessons, you could visualize the pictures. Have you ever tried to read the diagrams, maps that you can magnify any small area. It's quite interesting. Except this, what other ways of usage do you think is most helpful when computers are used?

H: Graphics, I think graphics is most helpful.

W: There are some more, ..

H: played games

W: Econ teacher liked to give questions and then, In fact, our class loved to attend Econ lessons. When she asked a yes/no question, we would all attend to it and ...

H: (We were) excited and gave answer enthusiastically)

W: ...all answered yes or no. or any answer for MC questions. We're happy about this.

M: Miss A used the PowerPoint presentation which you liked very much. Miss A used PowerPoint presentation designed for the whole lesson. I'd also observed a lesson by Miss A. You'd talked about questioning. You all felt very excited and watched at the answers immediately and you could participate. Let's discuss the usage of computer, that is the whole presentation using PowerPoint in those lessons, with graphs etc.... Do you think this kind of presentation using PowerPoint will help to understand a concept and to learn.

M: Focused on the content first. Leave the questions later.

W: More interesting.

M: Hum,..What makes you feel more interesting.

E: She had made a good PowerPoint presentation with diagrams and something we loved to see.

M: You mean those cartoons.

H: and Miss A could use the software skillfully so whenever there was a problem, she could fix it immediately without wasting time in thinking about how to solve it. Whenever a problem occurred, she could solve it immediately so the whole lesson was fully utilized. No time was wasted.

M: Hum,..., how about you, Esther?

E: More or less the same.

M: What do you think, in using it for the explanation of graphs, charts etc. Is it very useful? If there are many graphs. Will it be helpful?

E: It would not be very frequently used in Econ.

H: The supply curve – can move. She's expert at making it.

M: Yes, she'd put lots of effort in making the curves and designing for the animation.

H: Yes, the demand-supply curve can move.

M: Does it help you to understand the concept? Does it really help to understand the concept or just something that looks interesting. That is, the concept how the supply and demand related to each other.

H: It helped to understand better. Sometimes, she gave questions that were more difficult so we could not get the correct answer. Then she would show the answer to us, so we could get the correct concept and had better understanding.

M: It's better than drawing on the board

H: We had seen the curves moved so we had a stronger impression about it.

W: and when the whole class got the wrong answer, then we would not let her trap us again.

M: Why were you so happy when she asked a question in the PowerPoint? ... She could also have put down the question on the blackboard.

W,H&E: Not the same. There's something different.

H: Don't know why

W: because we know that something will pop up

E: Something will pop up on the screen

M: You can expect something and this makes you feel happy.

M: The feedback is immediate. Quick enough!

M: Other than these, that is, using PowerPoint for teaching and asking questions. What else has been used that helps you to learn? Or what makes the teacher excels in her teaching?

H: Consider the other subjects as well or just this one

M: You can consider this subject as well as the others.

H: I remembered that some films about the wars were shown in the Chinese History lessons. Not only the film about the war but also something related to that period of time, so we could have better understanding of the background of that period of time.

M: Yes, it's better than just referring to the book.

H: What a 5 minutes film can tell could be more than 5 minutes talk.

M: Yes, what can be put in a film so that it could be delivered immediately. Any disadvantages? Like what you had mentioned, such as the technical problems. Teachers could not handle. Do you have such experiences?

H: Yes ...

W: Yes, such as problems with the connections. Sometimes, it could not show what was planned and time was wasted.

H: But if the teacher knew how to use it, it saved a lot of time. Like what's done before, when a video was to be played, we needed to move the TV into the classroom. If computer was used, it would be a lot faster.

M: Right, just a click will do. Now, we have computers in the classrooms. But, before it, teachers needed to take computers into the classroom and do the connections. What do you think? Is there any problem?

H&W: But we hadn't used the computers in the classrooms before.

E: No, we hadn't used it.

M: In the old way, do you feel that it wasted time?

E: In the beginning, we felt waste of time, but later it's ok. When teachers were more familiar with the process to connect the wires, it's much faster. We had IT helper in class who could help immediately so it was much faster.

M: Eliminating such problems, computers would be helpful on the whole.

M: Then, referring to teachers teaching, your comments are positive. Referring to your learning, you also have positive comments. Right? Besides, more interesting, it helps to have better understanding and deeper impression.

M: Any more advantages, difficulties or anything you want to mention?

M: Anything that can improve? Any problems that should be solved so that it can be more effective? Like, teachers are not familiar with the software so they cannot solve the problems on the spot. ... ? If we recall the 3 stages, I think. One stage before Form 4, teachers used computer less frequently. In Form 4, teachers use computers more frequently. In Form 5, may be teachers are rushing for completing the syllabus, so they use it not so frequently.

W: Form 3 and before, very low, near zero. Except the time in the MMLC.

M: Play in the MMLC.

W: But, when teachers found that we were playing there, teachers stopped us.

H: we were doing our own things

M: Did you feel it waste of time in the MMLC.

W: At that time, the syllabus was not so lengthy.

M: You didn't feel it waste of time. Or, there was no harm even time was wasted.

H: Usually it was not effective to be have lessons in the MMLC.

M: Although it costed a great amount of money. It housed most computers there.

W: the largest investment there

M: For how many times have you ever been to the MMLC.

H: I think less than 10 times in the past 5 years.

M: How about that in Form 1 and 2. There were lessons

W: form 1,2 English lessons.

H: We'd gone to the MMLC at the beginning but later when teachers found that we didn't seriously used the computers there so teachers didn't take us there afterwards.

M: In Form 1 and 2, some lessons were assigned to be held in the MMLC. Recall what you had done in these periods, how did you feel?

H: We didn't know why we had to go to the MMLC.

W: Teachers asked us to go then we went there.

M: You had your own computer in the MMLC.

H&W: yes, we had our own computer.

M: Then, you could not do the same in the classroom.

H: We would not seriously do what we were expected to do there.

M: You were not doing what were required. There was software for you to learn. Had you used that software?

H&W: Usually, we didn't need to try seriously.

W: We just followed but didn't have any idea what had to be done.

W: We followed instructions.

H&W: We didn't want to attempt.

M: Why you didn't have the motivation of doing it?

W: No interest in it.

M: Then, why you were not interested? The material was boring, didn't know what's the purpose of using it?

H&W: Don't feel it was helpful.

W: Are teachers required to go to the MMLC. Must go regularly

H: for a certain proportion.

W: Is it because more than a million spent on it so teachers should take students there.

W: It's not reasonable for keeping the equipment at \$1,000,000 wasted.

M: You don't feel the kind of usage is worth.

M: You think that the way of usage like this would be ok.

... We have discussed on the usage including Econ teacher's usage. Can you see any difference in the teaching style or method. That is, they have some more equipment for teaching. Do you feel any other differences in their teaching? Do you feel any differences in skills, methods, etc. can be changed accordingly.

H: Just like in the Geography lesson, we mentioned that diagrams would be given but not only talk and talk. By referring to the diagram, and asking us to guess or discuss. Rather than asking us just reading the books.

W: I felt the information given by teachers is richer than before. Since teachers have their own notebooks, they will search more information for us. For example, history teacher searched much more information for DB, DG and more diagrams for us. There were lots of information on the web for us to search.

H: Yes, more abundant information given to us.

M: Teachers have more teaching materials and more teaching methods. Right?

H: Hum,...

M: Do you feel that teachers have more ways of using computers in teaching? You mainly have a teacher in front of you and do the teaching but you didn't have many chances to search for information.

W: We would not search for information on our own.

M: Why you didn't like to search for information? In fact, there were lots of resources just by clicking on some links then you would get abundant materials. What's the reason? You're not so willing to do it on your own but prefer teachers to get all those information for you. Any reason for it?

W: We'll lose the interest after going back home, most likely, There was so much homework to do so we'd select those that could be done immediately.

M: The main reason was you did not have much time for searching for the information.

H: And, we would do our own task when we sit in front of our computers. ,,

M: Then, you will waste lots of time on it. ...

M: Good, you yourselves aware of that problem. If you were a teacher, how would you use the computer in teaching? Though you think that you would waste time on-line, do you think you would learn better if you do it your own.

H&W: Sure,

W: Of course, we would learn better.

E: Better memory

M: If you were a teacher, how would you use this tool in your teaching?

E: Don't use so many words. In fact, people don't have the interest to read.

H: More diagram is better.

M: You have come across so many different teaching styles. If you were a teacher, choose a subject or a task. What will you use to make a lesson more effective? That is, students can get more information, learn more, the lesson be more effective. Or, suppose students have one or two computers at home, what will you require your students do to learn. Let's think about it, just imagine, you can ask them to do other kinds of homework besides those written work because there are already so many written assignments. You can think if you are given the chance to design, how will you make use of it?

E: Like presentation? ..

M: Not necessary a presentation, but can be many other means. Presentation is only one of them. Second type may be going on the internet or taking students to the MMLC to explore. In the past, the method used is not so well designed that it seems to be not good.

H: Before a topic is taught, just give the students the topic and ask them to search for information under the topic. Then ask them to do it in groups and present it before the topic is actually taught. I have the experience that I myself search information about a topic, do a presentation and then ask somebody to teach me the topic. Then I learn much better than taught by somebody from the very beginning.

W: About the teaching method.

M: That is, if you were the teacher then how will you use computer to teach.

W: It requires students to have good discipline. Teach each others in a group because when I myself have tried how to teach a topic, share with others in the group, it's easier for the group members to understand the topic and I would also understand better. We would be clear about the topic and understand much better.

M: What do you think if you ask students to do this, is it very difficult?

W: Very difficult unless they have the interest.

H: If they are interested in the topic.

M: If they are interested in it.

H: You need to push them or you can threaten them by counting marks, etc.

M: Ah ha

W: but, I think it's useless. The quality will not be good. Cannot force them to do it!

M: Then, how can it be done?

W: I don't know either.

H: The teacher needs to be very strict.

W: Or, very good

H: Either very strict or very good.

M: Should be very attractive. Students would do anything you ask them to do. You have mentioned some different teaching methods. Is there any different in teachers' role? How do you feel when you compare with what it usually is now? That is, a teacher in front of the whole class for presentation and the other is let students search for information on their own. Can you see any differences?

H: Not to teach directly but search with them and guide them to convert them to their own knowledge.

M: Which one do you like?

H: In fact, both are good. Both are good!

M: Are they both necessary?

H: I think, it's necessary.

M: If time allows, it's good to have both. If only students search, not only much time is required, they may not get the relevant information needed. You have good understanding of these issues. I have certain amount of information about your views in IT in education. Your attitude, feelings, comments on it.

M: One more question to ask you all. Whether you have noticed any changes in teachers? For example, do you see any change in Miss Lau's lesson? Any changes in her method of teaching? Any change in her teaching role besides using different tools or methods in teaching? Do you feel any changes in your learning style?

W: No way to compare since we are the first time to go through Form 4 and Form 5 so no reference point to compare.

H: Econ Lau is a more frequent user of computer for teaching but she had not taught us in Form 3. I feel that in Form 3, teachers seldom use computer for teaching but in Form 4, almost all lessons involve the use of computers. All teachers used computers, computers,..., Maybe, for just a little piece of information, the teacher would just copy on the board, but now teachers would use Word to show it instead. Teachers used computers more frequently. More materials were given to students.

M: Any other changes you have observed in these few years? Those positive points you just mentioned. Any more obvious changes you have observed? Even the way you learn had some changes.

H: not only focus on the books. For example, what I'd just mentioned about viewing films for Chinese History, PowerPoint for Econ, pictures for Geography but not only read the books and then do assignments as some years before. We use more visual and audio materials for learning and from different points of views.

M: In your own learning, will you become more active in learning because of the computer resources.

W: Yes, but it depends on the subject.

M: That is, teacher ask you to do then you will do it or it depends on the subject.

H,W&E: For some subjects, we'll have the interest to do more.

M: There are lots of other materials on the Internet, like PowerPoints on other schools' website.

W: We won't do it ourselves. Teachers will get these materials for us.

M: You won't do this yourselves

H: Seldom do this

M: You seldom do this. Your initiative may be similar to what you have before but you find more interest in learning.

H&W: yes

M: Ok! Do you have any other comments, suggestions to the school or any expectations for the development of IT in teaching and learning. Your opinions that you like to have more films, skills of teachers need to improve.

H: Teachers can let us view those films not necessarily directly related to the content but can arouse our interest.

H: Don't use computer just because you are required to use it. Inappropriate use is just waste of time.

W: It is more difficult to use it in History lessons. It is not suitable to have too many words on PowerPoint. It is difficult to view and have confusion. If there are many words on it, teachers should print them out for students. Otherwise, it will be a wastage.

M: Need to remind the teachers.

H: Fonts,..., some teaches used funny fonts which make it difficult to read. Use basic font styles on PowerPoint.

M: What else you want to remind teachers?

E: Sometimes, teachers printed out PowerPoints which in fact were not really useful.

W: should try double side printing.

E: Sometimes, they intended to print the pictures. It's ok but they print also the ruled lines which were not necessary but just waste of paper.

M: Is it possible that we don't print them out but put it in the computer system for students to view when they need them.

W: It would not be good. Put materials on e-class is not convenient. No one will get it if you put there since it is not convenient.

M: Why? Download it only when you need them.

W: After viewing the material, then, there is no need to print.

H: The problem is we usually cannot get the information from e-class. There are many pages, it's not convenient so that waste time to open the files one by one.

M: Have you ever tried the ebook on e-class?

W: What is it?

H: Very complicated. We don't know how to get back those information on it.

M: In fact, it is very convenient. We put the whole book there so that we don't need to bring any book to school or to home. Just go to the subject, then the chapter. You can get the book from home. There are also PowerPoint on the e-class so that whenever you need them, you can open it.

W&H: We don't know there is something like this.

M: Is there any more comments you want us to consider?

H: I wonder if the purpose for the school to use computer is to save paper or for convenience. For example, exercise put on the e-class still require students to print them out when they do the exercises. Why don't just print them out? Some are saved as PDF so we cannot do it on the computer. So, the reason for doing this is environmental friendly or for convenience.

M: Sometimes, it is for convenience. Some students will lose all their notes or exercises so by the end of the year, they will ask Miss Mo whether they can get back those exercises. So, putting these materials on the e-class is for students to refer back to those exercises. Is it really for environmental protection? Sometimes, we upload exercises on the e-class so that students can get from it and type the answers on the word document. After you have finished the exercise, you can print out a hard copy with questions and answers. Teachers also mentioned that if they should use computer in their teaching... Of course, in the IT policy of the HK government, there is a target that teachers can reach a certain percentage of usage in their lessons. But, it is not really so rigid. Only that you were in the first few years of that period so you have encountered lots of problems in the start of the project. Do you feel it better in the last year.

W: It's better this year.

M: Teachers have experience for more than one year already so they become more skillful in using computers.

W: Improved a lot but still need improvement.

M: Further improvement needed.

H: Teachers still need to ask for help when there is any problem so it waste time.

M: If teachers need to ask for help from other You also feel that teachers need to improve their skills in using.

W: Are they required to use computers. Teachers are very busy.

M: You have pointed out two very important points, teachers cannot use just for the sake of using it and cannot force them to do it.

At the beginning, it would waste time in setting up the computer systems for lessons but later, teachers were already familiarized with the setting so they would not waste so much time. The IT helper at school also helped

M: Don't you feel that teachers' skills have been improved.

All: Teachers should improve their skills.

Description: Interview with F1 students - January 2009 ~13.5 minutes

M: Researcher

A, D, J, S: Form 1 students

M: First, today is January 23rd. I thank the 3 Form 1 students to attend this interview.

In fact, this will be put in a thesis to be submitted to a University in the UK. Your names will not be disclosed but I still want to know your name. Let me know later not now. You can now give yourself another name.

A: Student A

M: Can give a name, Alan?

D: Danny

M: How about you?

J: Johny

M: Your name?

S: Stephen

M: Thanks again for coming for this interview. First, I'll explain to you that the topic we are going to talk about is about how teachers use computers in classrooms. How's your feeling about teaching with ICT? Do you have any opinions? You can express your comments freely. Now you have come to the school for a term that is about half a year. Do you think teachers use computers frequently?

D: Quite high

S: I feel it's so and so

S: But most are for doing listening...

M: What's the percentage?

D: ... do corrections

M: listening and doing corrections...

A: teaching

M: what is used in teaching

A: PowerPoint ...

M: Mainly used PowerPoint for teaching

S: ar,

M: Let us measure with % to describe. If you say that PowerPoint is used in lessons, than how much is it?

D: aaa

M: How about 60%

S: Do you think there is up to 60%

M: How about you? Is it up to 60%

S: Yes, up to 60%

M: In which lessons will computers be used?

S: Science...

A: Geography ...

D: Computer, PTH

S: Chinese History

M: How about Chinese?

D, S: Chinese... very little!

M: That means very little usage..

D, S: Yes, very little

M: How about music?

D, S: Some times

S: Mainly for playing music

M: which subject will use computer most frequently? Computer.. Of course... any subject else?

S: Computer should be used in Computer lessons

M: What other subjects will use computer more frequently?

D: English

S: Science.. Most of the lessons used computers

M: Computers are used more frequently in English lessons than in Science lessons.

S: Like that

M: What other subject?

S: Geography

M: What will they use the computer to do in lesson?

D: Check answers,..

M: Besides checking answers, what else is done by using computers

S: use computer for teaching..

M: that is, use of PowerPoint

D: CD of the book

M: that is, powerpoint on the CD by the publisher... How about Geography

S: Geography... is for checking answers

D: check answers

M: there are a lot of answers to check...

D: and for teaching

S: that is, using the visualizer to project photographs

M: use visualizers to project photographs relating to Geography

S: projected the answers of the worksheets and asked us to copy the answers

M: like using overhead projectors. Is there any other usage?

S: For Chinese History, it is used mainly for teaching.

M: teach using PowerPoint or anything else?

D: PowerPoint

S: Some from the book and some were prepared by teachers themselves.

M: How do you think about such usage for lessons? Since it is now promoting the use of ICT for teaching. Are you satisfied with this?

D: It's OK

S: ... but sometimes it is a bit boring.

M: that is, its better not to use it

S: No. but the content can be much better. Not interesting enough, can be better.

M: that is, the same type, like PowerPoint is used too often so it becomes boring. That is, the same style repeated too often will make you feel boring. Then what do you prefer, teachers talk or use computer.

ALL: use computers ...

M: Why?

S: easier to read and more convenient

M: Why is it easier to read?

S: Since the handwriting of teachers are difficult to read and understand but display through the computer is easier to understand

D: Explanation will be better

M: Why is it better?

S: Clearer

M: Why is it clearer?

S: Because it is most accurate with the information from the book.

M: More accurate... Just read from the book. Can see the answers from the book? Right?

M: Any more advantages of using ICT

D: For example, when there are CDs then teachers do not need to copy on the blackboard. It would avoid teachers writing too small words on the board so that those at the back cannot see.

M: Do you feel it saves time or wastes time?

D, S, A: Save time...

M: Do you feel teachers waste time setting up computers in the classroom.

S: will not be too much

D: There are IT prefects to help

M: It's convenient since there is a computer in the classroom and teachers usually use the computer there.

M: That is, you prefer to use computer. Do you have computers in primary schools?

S: Yes, we have

S, A: Not so often

M: Why?

S: because the teachers usually teach only the books

M: Only the content of the books but seldom But now, the PowerPoints are also the same as the books.

S, A: They are boring,...

D: Teachers are boring... They will not think about others related but only read the books.

M: Read the books only...

D: Too much restricted. Not enough ...

M: You three come from the same school.

S, D, A: No

S, D: We come from the same school

M: You come from a school in Kowloon City

A: Yes, you're right!

....

M: That is, primary teachers seldom use computers for teaching but in the secondary school, even teachers use computers to teach the content of the books, you still think it helpful.

M: You think that it helps you to learn. You'll pay more attentions. What other advantages can you find? What else?

A: More interactive.

M: How is it interactive? If teachers mainly used the PowerPoint to teach, how can it be interactive?

D: More varieties

M: More varieties

A: More creative

M: But they are only PowerPoint

D: the pictures, etc. are better

M: the pictures are more attractive

A: if teachers teach directly, they will not use pictures

D: Even if they draw pictures on the board, they are not ... I'll prefer to use computer to get pictures

M: More attractive

D: More close to the real objects...

M: Like that in Geography lessons, teachers can give you pictures ...

M: How do you think about the standard of teachers in this school using computers for teaching?

A, S: Very good!

M: basically, you think they are very good. Now that, there are some teachers who have many years of experience but some fewer years of experience... You know who have more experience. Right? ... Who do you think use computers better in lessons A, S: Not many differences! Just the same.

M: Almost the same. Basically they all used computers in almost every lesson. The difference is how much it is used in lesson. What do you mean by 60% of usage? You mean, in 10 lessons, computers will be used 60% of the whole lesson..

S,A: Six in ten lessons.

M: That is, they will use computers six lesson out of ten but when they start using it, they will use it throughout the lesson.

M: You think it is more effective, because you can check answers from the computers immediately. Any more comments? You want to increase the usage or you want teachers to think carefully before they use them.

D: More varieties

M: Can you give some examples?

D: Use different software to see ..

M: Give examples

M: Any other suggestions to teachers to improve their teaching?

D: PowerPoint with other software...

M: Let me know if you have any comments or opinion, so that I can pass the message to the teachers. That will be good to the school.

School Self Evaluation 2006-07 (Student Data)

一、二、三、四、五、六、七、八、九、十、十一、十二、十三、十四、十五、十六、十七、十八、十九、二十、二十一、二十二、二十三、二十四、二十五、二十六、二十七、二十八、二十九、三十、三十一、三十二、三十三、三十四、三十五、三十六、三十七、三十八、三十九、四十、四十一、四十二、四十三、四十四、四十五、四十六、四十七、四十八、四十九、五十、五十一、五十二、五十三、五十四、五十五、五十六、五十七、五十八、五十九、六十、六十一、六十二、六十三、六十四、六十五、六十六、六十七、六十八、六十九、七十、七十一、七十二、七十三、七十四、七十五、七十六、七十七、七十八、七十九、八十、八十一、八十二、八十三、八十四、八十五、八十六、八十七、八十八、八十九、九十、九十一、九十二、九十三、九十四、九十五、九十六、九十七、九十八、九十九、一百

Form 1

1) E-class 能否有效地促進學生的學習？試討論如何有效運用此系統。

Could e-class have effectively improved student learning? Discuss how can this system be effectively used.

- 能：Could
- 方便師生溝通，老師還可以 upload 學習上的文件
Facilitate the communication between teachers and students. Teachers could upload learning materials.
- 有效地促進學生的學習
effectively improved student learning
- 學會能宣傳最新動向給同學們
Clubs and societies could inform students of the most updated messages
- 不能：Could not
- 老師只是間中才 upload，其實他們有 photocopy 在紙上
Teachers only upload materials occasionally. In fact, they already have hard copies.
- 很多人在 e-class mail 裏打些不關學業的東西
A lot students send e-class mails not related to learning.
- 在這裏不能討論功課或向老師提問
Could not ask questions or discuss homework with teachers
- 只能寄郵件、上傳檔案
Could only send email and upload documents
- 不是太多老師有使用 e-class 的設施
Not many teachers used the facilities provided by e-class
- 老師太少叫學生上 e-class
Teachers seldom asked students to go to e-class
- 可以將功課放上 e-class 做，這樣不會浪費紙和油墨
Could upload homework to e-class so that there will not be waste of paper and ink.
- 同學在家中沒有上網功能
Students did not have connection to the internet from home.
- 建議：Suggestions
- 老師可以把一些有關學習習的短片放上 e-class，更可以把上課的情況錄影放上，令同學在家中可以更有效地溫習，重溫上課的知識
Teachers could put up learning videos on e-class. Teachers could also video tape lessons and upload to e-class so that students could revise on the lesson materials effectively.
- 把測驗、筆記等加入 e-class，該學生可於家中溫習及進行練習
Put up tests, notes to e-class for students to revise and practice at home.

- 增加學習用的練習
Put more exercises for learning
 - 更多指示
More instructions
 - 應把功課表和測驗範圍上載到 e-class，讓學生可以得知
Homework list and test syllabus to be uploaded to e-class to ensure all students being informed
- 2) 試討論本校之校網有何可改進的地方。
Discuss how our school web can be improved
- 增加多些項目
add some more items
 - 應有中文和英文的語言選擇
should have both English and Chinese versions
 - 校網的資訊可以設立中文版本，因為有很多家長未必懂英文，中文可以令他們更了解學校運作
Information on the School web should have a Chinese Version since there are parents who do not know English. They can better understand the operation of the school if there is a Chinese version.
 - 加入留堂名單、借還書紀錄等
Add detention list and records of books on loan and return, etc.
 - 修改版面，美化網頁
Modify the webpage and beautify the website
 - 可以加入近期活動的相簿，太單調，應有特色
could add the photo album of current activities. It's too simple. Should have some special features.
 - 不能盡錄校方資料
Cannot contain all school information
 - 網頁指示應可更清晰
Instructions on the web should be clearer
 - 將 e-class 主頁更新，利用有趣的圖片來吸引學生上 e-class
to renew the e-class main page, using interesting pictures to attract students to go to e-class
- 3) 試討論本校現有的資訊科技設備，如何發揮其協助學生發展之功能。
Discuss how the present IT equipment at school can be utilized to facilitate student development.
- 讓學生在網上進行資料蒐集、做練習等，加強學生的知識
Let students surf information on the web, do exercises and enhance students' knowledge.

- 把各科練習放上 e-class
- Put exercises of all subjects on the e-class

Form 2

1) 試建議如何使用本校已有的設備，以提升現有之教學水準？

Suggest how the school can use its equipment to raise the standard of teaching and learning.

- 可以有網上書本，將整本書上載至 e-class，方便同學學習。
- could use on-line book, upload the whole book to e-class to facilitate the learning of students
- 上課時多播影片。
- Use films or videos more frequently for lessons.
- 老師可多用課室的電腦來進行教學，並提供有用的網業給同學學習。
- Teachers could use the computers in the classrooms more often for teaching and suggest good websites to facilitate the learning of students.
- 電腦室應長期開放。
- The computer room should be open for longer time
- 圖書館應擴大，更新書本，加強人手。
- The library should be expanded, add more new books and strengthen human resources.
- 老師應多用電腦教學，如 PowerPoint，使課堂氣氛更好。
- Teachers should use computers, e.g. PowerPoint, more often for teaching to make lessons more lively.
- 小班教學。
- Small class teaching
- 於課程中包含 MMLC 課程。
- Include MMLC lessons into the curriculum
- 老師能讓同學於課堂時即時到 MMLC 搜集資料。
- Teachers can allow students to go to the MMLC to surf for information during lessons.
- 使用得有效率及有系統。
- Use it more effectively and systematically
- 課室應在小息及午膳時間開放學生。
- Computer rooms should be open during recess and lunch hour for students.
- 擴大課室，分組討論時有更多空間。
- Expand the classrooms so that there are more spaces for group discussion
- 其他：
- Others
- 水準已經很高。

- The standard is already quite high

資訊科技資源：

IT Resources

- 2) E-class 能否有效地促進學生的學習？試討論如何有效運用此系統。

Could e-class have effectively improved student learning? Discuss how can this system be effectively used.

- 能：
- Could
- 不能：
- Could not
- 因為同學沒有定期上 e-class 更新老師給的資料。
- Students didn' t go to e-class regularly to update information given by teachers
- 不應太依賴 e-class，因為網絡或電腦是很易有問題。
- Never depend too much on e-class since there would be problems with the Internet and computers
- E-class 的結構太複雜。
- The structure of the e-class is too complicated
- 有些老師不懂用 e-class，有些老師則太忙，不能常常 update 網上的功課欄。
- Some teachers didn' t know how to use e-class, some were too busy so they could not frequently update the homework list on e-class
- 建議：Suggestions
- 可把每天教學重點上載，方便學生學習和備課。
- Put the highlights of the lessons on e-class to facilitate student learning and preparation for lessons.
- 老師可把一些科目的專題研習的題目放在 e-class，讓我們把專題研習上傳到 e-class，那便不用手寫。
- Teachers could put project names on e-class so that students could upload their project work on e-class without the need of doing by hand.
- E-class 的功用暫時只有發放和提交功課，應該在 e-class 增設一個關於功課或上課問題的討論區。
- E-class is temporary used for dissemination and collection of homework. There should be a forum for the discussion of homework or problems arise from lessons.
- E-class 可設計得生動些。
- E-class could be designed more interactive.
- 應該加設一堂，全堂也用e-class 上課。
- should add a lesson for using e-class.
- E-class 常出錯，甚至學生找不到老師上載的資料，學校重新應整理 e-class。
- Problems arise quite often on e-class. Students even could not find materials

uploaded by teachers. The school should reorganize the e-class.

- 所有功課都在 e-class 交。
- All homework should be submitted to e-class.
- 放些功課及資料在 e-class , 增加使用率。
- Put up homework and information on e-class to increase the usage.
- 禁止胡亂傳達訊息的學生。
- Stop students who send junk mails.

3) 試討論本校之校網有何可改進的地方。

Discuss how our school web can be improved

- 可增設網上課本。
- Add text books on the web
- 登入經常有問題。
- Problems arise often when logging in
- 班相應早些放上網。
- class photos should be uploaded to the school web earlier
- 學校網業應設中文，方便家長。
- the school web should have a Chinese version for parents to read
- 學校網業應增設一個「最新消息欄」。
- The school web should have a column for updated NEWS.
- 應擺放更多校隊在校外得獎的圖片。
- Should put the photos of school teams who got prizes in external competitions
- 加設學生對學校設施的意見區。
- Add a forum for students to express their opinions about the improvement of school facilities.
- 把所有通告放上網，相片(尤其是班相) 要經常 update 。
- Put all notices to the web and always update the photos (especially the class photos)
- 版面略遜，建議由有創意的學生設計頁面。
- WebPage design is not good. It is suggested to invite creative students to design the webpage.
- 放些校內片段在校網。
- Put up some videos of school life on the school web.
- 不應該這麼繁複。
- cannot be so complicated
- 其他：Others
- 太平凡，沒有人使用。
- Not special so nobody uses it.

4) 試討論本校現有的資訊科技設備，如何發揮其協助學生發展之功能。

Discuss how the present IT equipment at school can be utilized to facilitate student

development.

- 可讓同學知道學校最新資料。
- Can let student know the most updated information
- 多媒體電腦室(MMLC)的設備太弱。
- The equipments in MMLC are too week
- 增設電視，令同學增加時事新聞。
- Install a TV set to let students read more news
- 多使用 MMLC。
- Use the MMLC more often
- 資訊科技設備只是給老師使用，應不限制學生使用那些設備。
- Now the IT equipments are for teachers only. Should also let students use them freely
- 增設電腦及攝影工具，可增加同學對這方面的興趣。
- Add more computers and video capturing and production equipments. This can help to improve the interest of students in this area.
- 老師讓同學在課堂到 MMLC 搜集資料，若回到家中，同學遇到難題便不用發問。
- Teachers should let students surf for information in the MMLC. Otherwise, students could not ask questions if they do it at home.
- 多舉辦資訊科技班以協助學生。
- Organize more IT skills training courses for students.

Form 3

教學資源：Teaching resources

- 1) 學校目前的教學設施是否足夠？請建議一些新設備以提高教學質素。
Is the equipment for teaching sufficient? Please suggest some equipments for enhancing the quality of teaching and learning.
- 不足夠：Insufficient
 - 機械方面不完善。
 - Mechanical equipments not sufficient
 - 沒有游泳池。
 - There is no swimming pool
 - 小賣部地方不足。
 - Tuck shop area is too small
 - 沒有網球場。
 - No tennis court
 - 建議：Suggestions
 - 每人一部電腦。
 - Each one has a computer

- 建設足球場，羽毛球場。
- There should be a football court and a badminton court
- 班房內增設電視機、DVD 機。
- There should be TV set and DVD in classrooms
- 老師多用電腦教學。
- Teachers should use computers more frequently for teaching
- 其他：Others
- 巧婦難爲無米炊。同樣道理，有教學設施，沒有能人使用，有何用？
- It' s difficult for a good woman to make a meal if there is no rice. Similarly, it' s useless if nobody could use the teaching equipments.
- 2) 試建議如何使用本校已有的設備，以提升現有之教學水準？
- Suggest how the school can use its equipments to raise the standard of teaching and learning.
- 應多點讓學生到電腦室上課，使大家熟悉運作。
- Should let students use the computer rooms for lessons more frequently so as to make them more familiar with the operation.
- 其他：Others
- 水準已經很高。
- The level is already very high
- 用多些電腦設備。
- Could use computers more frequently
- 廁所要有廁紙。
- There should have toilet papers in toilets.
- 加大自修室，延長開放時間。
- A larger room be assigned for private study and the opening hours should be extended.
- 多使用 MMLC，善用互聯網接收多一點資訊。
- Use the MMLC more often. Better use of the Internet to get more information.

資訊科技資源：IT Resources

- 3) E-class 能否有效地促進學生的學習？試討論如何有效運用此系統。
- Could e-class have effectively improved student learning? Discuss how can this system be effectively used.
- 能：Could
- 因學生可從 E-class 接收老師的資訊，促進學習的效率，節省時間去尋找資料。
- Students can get information from teachers on e-class to improve effectiveness of learning and save time in searching for information.
- 不能：Could not

- 因為太繁複，不是人人懂得用 e-class.
 - Since it is too complicated, not everyone knows how to use e-class.
 - E-class 使同學不想做功課。
 - E-class makes students not willing to do homework
 - 難以尋找檔案。
 - It is difficult to search for files.
 - 未必每個學生家中也有電腦。
 - Not every student has a computer at home.
 - 建議：Suggestions
 - 學生用 E-class 交功課。
 - Students submit their homework on e-class
 - 老師可把一些課堂上的額外資料放上 E-class。
 - Teachers can put extra information on e-class.
- 4) 試討論本校之校網有何可改進的地方。
Discuss how our school web can be improved
- 登入經常有問題。
 - Login problems occur frequently
 - 班相應早些放上網。
 - Class photos should be put on the web earlier
 - 應每天更新，使家長盡快知道最新消息。
 - should be updated everyday to let parents receive news as soon as possible.
 - 連結有問題。
 - There is connection problem
 - 更新緩慢，外觀不佳，資訊不足。
 - Slow in updating information. Outlook not very good and there is not sufficient information.
 - 建議中英對照，多加相片。
 - Suggested to have both Chinese and English versions and add more photos.
 - 增設網上續借圖書系統。
 - Add a system for renewing library books
- 5) 試討論學生會網上論壇是否應繼續運作。並建議如何善用其已有功能。
Discuss whether or not the SU forum on the web should continue or not. Suggest how to fully utilize its functions.
- 應繼續運作：Continue to operate
 - 因能廣泛運用，傳播訊息。
 - Since it can be used extensively to spread news
 - 學生可有發言的渠道。
 - there is a channel for students to express their views

- 不應繼續運作：Not to continue operating
 - 建議：Suggestions
 - 加設學生聊天室。
 - Add a chat room for students
 - 多用互動軟件。
 - Use interactive software more often
 - 很少人知道論壇的存在，應多加宣傳。
 - Few students know that the forum exist. Need more publicity
 - 其他：Others
 - 我不知道有學生會論壇。/ 我沒有使用過。
 - I don' t know there is a SU forum / I never use it
- 6) 試討論本校現有的資訊科技設備，如何發揮其協助學生發展之功能。
Discuss how the present IT equipment at school can be utilized to facilitate student development.
- 班房應設立幾檯電腦供學生使用。
 - There should have a few computer systems in each classroom for students' use
 - 多使用 MMLC
 - Use MMLC more often
 - F.3 應全年都有電腦堂。
 - There should be computer lessons throughout the year for Form 3 classes
 - 課室燈光太暗。
 - There is not sufficient lighting in classrooms
 - 老師可多用電腦上課。
 - Teachers could use computers more frequently for lessons
 - 課室加設電視機，讓老師播放 E-TV。
 - There should be TV sets in classrooms for teachers to use ETV for teaching.

Form 4

甲、學校資源及設施 School resources and equipments

教學資源：Teaching resources

- 1) 學校目前的教學設施是否足夠？請建議一些新設備以提高教學質素。
Is the equipment for teaching sufficient? Please suggest some equipments for enhancing the quality of teaching and learning.
- 不足夠：Not sufficient
 - 廁所沒有廁紙,
 - no toilet paper in the toilets,
 - 投影機壞,MML 電腦壞
 - Projectors not functioning. Computers in the MMLC not functioning
 - 建議：Suggestions

- 將電腦升級，特別是圖書館的電腦
 - To upgrade the computers, especially those in the library
 - 更新 MMLC 電腦設備，定期檢查及維修電腦
 - Upgrade the computers systems in the MMLC. Should check and maintain the computers regularly.
 - 每班房的電腦應能讓學生使用,並加設 printer
 - Suggest that students are allowed to use the computers in the classrooms. Install printers into classrooms as well.
- 2) 試建議如何使用本校已有的設備，以提升現有之教學水準？
Suggest how the school can use its equipments to raise the standard of teaching and learning.
- 3) 試討論本校師生有否善用本校已有的設備。並建議如何善用此等設備。
Discuss whether the teachers and students have well used the school equipments and suggest how to improve them.
- Yes
 - 沒有：No
 - 已沒有足夠設備能使用
 - No sufficient equipments for use
 - 師生不能善用每班房的電腦
 - Both teachers and students could not fully utilize the computers in the classrooms.
 - 學生沒有善用 gym room 應搬到一個較大的地方
 - Students have not well used the facilities in the gym room. It should be moved to a bigger place.
 - 建議：Suggestions
 - 如新新校舍都未能完全使用
 - The new (South) wing has not yet be utilized fully.
 - 呼籲同學於課外時間使用那些設備
 - Encourage students to use those facilities fully outside school hours.
 - 運用南翼校舍的活動室來進行活動，能善用空間
 - Fully utilize the SAC in the south wing for activities.

資訊科技資源：IT resources

- 4) E-class 能否有效地促進學生的學習？試討論如何有效運用此系統。
Could e-class have effectively improved student learning? Discuss how can this system be effectively used.
- 能：Could
 - 透過電郵，加強大家之間的溝通
 - Enhance communications through imail

- 可以跟蹤老師所指的網頁尋找資料
 - Can follow the links of the teachers for searching information
 - 不能：Could not
 - 不能成功 login，空間不足夠
 - Cannot successfully log in and there is not enough space
 - 系統不太有用，不方便
 - The system is not very useful nor convenient
 - 系統經常出現問題，不能成功登入 E-Class，低年級常濫發電郵，浪費學校資源。
 - Problems arise frequently and students cannot successfully log in e-class. The lower form students often send spam mails and waste school resources
 - 老師應該把教材放上 E-class，方便同學學習
 - Teachers should put teaching materials to e-class to make it more convenient for students to learn.
 - 建議：Suggestions
 - 多點將課堂的資料上載
 - Put lesson materials to e-class more frequently
 - 將網頁簡單化
 - Simply the webpage
 - 放多些 Past Paper 上 E-Class
 - Put more past paper to e-class
- 5) 試討論本校之校網有何可改進的地方。
Discuss how our school web can be improved
- 需要更多資料
 - need more information
 - 資料舊，要時常 update
 - Materials outdated. Should be updated more frequently
 - 資料難搜尋，簡單化
 - Difficult to search for information. Should be simplified.
 - 電腦版面可以新穎一些
 - The layout of the webpage can be more elegant
 - 增加中文版，方便家長瀏覽
 - Add a Chinese version to facilitate parents usage
- 6) 試討論學生會網上論壇是否應繼續運作。並建議如何善用其已有功能。
Discuss whether or not the SU forum on the web should continue or not. Suggest how to fully utilize its functions.
- 應繼續運作：Should continue

- 將新資訊第一時間放到論壇供學生參考
 - Put new materials to the forums for students' reference.
 - 不應繼續運作：Not to continue operation.
 - 論壇有如一個是非論壇，資料不夠多
 - There is not sufficient information on the Forum. It's just like a gossiping forum.
 - 只有部份人使用，有點不切實際
 - Only some students are using it. Not really practical.
 - 浪費資源
 - Waste of resources
 - 建議：Suggestions
 - 如不用付出任何金錢去運作網站，可以繼續運作，加以宣傳，增加新鮮感。
 - If there is no cost for running the school web, it can continue to operate but there should be more publicity and more creative
- 7) 試討論本校現有的資訊科技設備，如何發揮其協助學生發展之功能。
Discuss how the present IT equipment at school can be utilized to facilitate student development.
- 可以讓同學設計版面
 - Let students design the webpage
 - 可以令學生學習到課堂以外的事物
 - Can let students learn something outside the classroom

其他資源：Other resources

- 8) 本校課室之基本設備，是否能滿足日常課堂之需要？試提出可改進之地方。
Can the basic equipment at classrooms sufficient for use during lessons? Please suggest some areas for improvement.
- 能夠：Possible
 - 不能夠：not possible
 - 建議每班房加設一個洗手盆，方便學生和老師擦黑板後洗手
 - Suggested to have a washing basin in each classroom to let students and teachers wash their hands after cleaning the blackboard
 - Projector 不清晰
 - Projector not clear
 - 冷氣機問題，投訴半年沒有理會
 - Problem of the air conditioner persists after complaining for more than half year
 - 本校電腦枱防礙同學學習，阻擋視線
 - Workstation block the view of students and affect student learning
 - 課室部份位置欠缺燈光
 - Not enough lighting in some part of the classroom
 - 建議：Suggestion

- 增設大學式的黑板(上下左右拉開)(重疊式)
- Install the kind of blackboard used in the Universities (pull up down and left right) (overlapping)
- 改善廁所衛生情況
- Improve the situation of toilets
- 增加時鐘及櫃
- Install clock and cabinets

Form 6

教學資源：Teaching resources

- 1) 學校目前的教學設施是否足夠？請建議一些新設備以提高教學質素。

Is the equipment for teaching sufficient? Please suggest some equipments for enhancing the quality of teaching and learning.

- 建議：Suggestions
- 電腦設施要更新（特別是圖書館）、增設打印機
- Upgrade the computer systems (especially those in the library) and install printers
- 圖書館藏書量不足，且略嫌殘舊
- Not enough books in the library and the books are too old
- 設施質素欠佳（如投影機）
- the quality of the equipments is low (such as the projectors)
- 增設 CD 機及耳筒讓學生做語文科的聆聽練習
- add CD players and ear phones for the listening practice of students
- 圖書館坐位需增加
- Increase the number of seats in the library
- 要有更大的黑板
- Bigger blackboards needed
- 在圖書館設聆聽練習室
- Install rooms for listening practice in the library
- 專設、固定的自修室
- room for private study needed

- 2) 試建議如何使用本校已有的設備，以提升現有之教學水準？

Suggest how the school can use its equipments to raise the standard of teaching and learning.

- 透過校園電視台播放知識型節目
- broadcast knowledge base programs through the campus TV
- 增加課堂使用電腦的機會
- Increase the usage of computers in the classrooms
- 善用投影機
- Better use of the projection systems

- 課室電腦需進一步開放予同學使用
- Allow students to use the computers in the classrooms

資訊科技資源：IT resources

- 3) E-class 能否有效地促進學生的學習？試討論如何有效運用此系統。

Could e-class have effectively improved student learning? Discuss how can this system be effectively used.

- 能：could
- 不能：could not
- 很少人用 E-class
- very few people use the e-class system
- 建議：Suggestions
- 老師透過 E-class 為同學提供課堂補充資料
- Teachers can provide supplementary materials for students through e-class
- 培養學生有效運用 E-class（如多宣傳，校方透過 E-class 發通告、給予功課等）
- Encourage more effective use of e-class (e.g. more publicity, publish notices through e-class, disseminate assignments)
- 課室電腦長期開放予學生使用 E-class
- Allow students to use the computers in classrooms all the time
- 簡化系統
- Simply the system
- 增加伺服器容量，減少超連結
- Increase the storage capacity of the server and reduce the number of hyperlinks.

- 4) 試討論本校之校網有何可改進的地方。

Discuss how our school web can be improved

- 版面可以更美觀，多加插圖，改善設計，超連結可更清晰
- Beautify the layout, add pictures, improve the design and hyperlinks
- 資料宜重新整緝及維持更新
- Information need to be reorganized, maintained to be more update

- 5) 試討論學生會網上論壇是否應繼續運作。並建議如何善用其已有功能。

Discuss whether or not the SU forum on the web should continue or not. Suggest how to fully utilize its functions.

- 應繼續運作：Should continue to operate
- 提供平台給學生自由發表意見
- Provide a platform for students to freely express their views
- 使用量不高，但可提供一個另類的溝通渠道
- Usage not high but can provide a channel for communication
- 不應繼續運作：should not continue to operate

- 建議：Suggestions
 - 透過校園電視宣傳
 - Publicize through Campus TV
 - 與 E-class 合併
 - Merge with e-class
 - 鼓勵同學瀏覽，加入對學校政策及設施的問卷、投票等，以便同學發表意見
 - Encourage students to browse, add questionnaires for the school policy and resources, voting etc to facilitate students to express their ideas
 - 其他：Others
 - 從不知道它的存在
 - Never know of its presence
- 6) 試討論本校現有的資訊科技設備，如何發揮其協助學生發展之功能。
Discuss how the present IT equipment at school can be utilized to facilitate student development.
- 開放時間宜加長
 - extend the opening hours
 - 增設彩色打印機，解決紙張堵塞（Jam 紙）問題
 - Add a color printer and solve the problem of paper jam
 - 增加素描器（scanner）
 - Add a scanner
 - 善用互聯網作教學之用，如觀看各界最新消息，學習知識，撰寫報告，做 PowerPoint 等
 - Better use the Internet for teaching, like reading news, acquiring knowledge, writing reports and making powerpoints, etc.
 - 善用投影機以增加課堂趣味
 - Better use of the projection system to make lessons more interesting
 - 培訓老師使用資訊科技器材，增聘電腦技術人員
 - Train teachers for using the IT equipment and employ more IT staff
 - 每科皆需定期到多媒體教學室上課
 - All subjects should be assigned time to have lessons in the MMLC

其他資源：Other resources

- 7) 本校課室之基本設備，是否能滿足日常課堂之需要？試提出可改進之地方。
Can the basic equipment at classrooms sufficient for use during lessons? Please suggest some areas for improvement.
- 能夠：Could
 - 多餘的設施：課室裡的電視機，長期沒有使用
 - Extra equipment: TV in the classrooms are not used for long time

- 不能夠：Could not
- 課室和黑板面積較小，令人感到壓逼，容易入睡。而且黑板小讓造成不便
- Classrooms and blackboards too small that have made people feel stressed and easy to fall sleep. The blackboard too small makes it inconvenient to use.
- 儲物櫃太舊
- Storage cabinet too old
- 14 號室燈光不足，課室過小，牆壁顏色容易使人疲累
- not enough lighting in room 14, classroom too small and the wall color too pale.
- 建議：Suggestions
- 在課室增設時鐘
- Install clocks inside classrooms
- 燈光光一點，改用布窗簾
- Brighter lighting and use curtains instead
- 在家政室增設微波爐供學生使用
- provide microwave for students to use in HE room
- 擴建及改善保健室
- Improve and extend the medical room

Appendix T

Teacher Data

Teacher Questionnaire ***T-1***

T1 Questionnaire for a Form 1 English Teacher (Phase 1) **T-1**

Teacher Interviews ***T-3***

TA1 First Interview with Teacher A **T-3**

TA2 Second Interview with Teacher A **T-9**

TA3 Third Interview with Teacher A (Added after the research period) **T-17**

TB1 First Interview with Teacher B **T-26**

TB2 Second Interview with Teacher B **T-33**

TH1 First Interview with Teacher H **T-39**

TH2 Second Interview with Teacher H **T-43**

TK1 First Interview with Teacher K **T-47**

TK2 Second Interview with Teacher K **T-52**

TL1 First Interview with Teacher L **T-55**

TP Interview with the Principal B **T-61**

TT1 First Interview with Teacher T **T-67**

School Self Evaluation - Teacher Data ***T-72***

TX1 Teacher SSE Data - Using IT in Teaching and Learning (Translated) **T-72**

TX2 Teacher SSE Data - Using IT in Teaching and Learning (Raw data) **T-76**

Teacher Surveys

TY1 Teacher survey result 1 **T-79**

TY2 Teacher survey result 2 **T-82**

TY3 Teacher survey result 3 **T-86**

TY4 Teacher surveys combined for comparison **T-92**

中一同學使用電腦學習英語調查
Form 1 students' Use of Computers in Learning English
中一英文科老師用問卷
Questionnaire for Form 1 English Teachers

1. 在本年度，你曾多少次使用多媒體教室內的設備(電腦)上中一的英文課?
How many times this year have you used the equipment (pc) in the Multi-media Learning Centre (MMLC) for teaching Form 1 English lessons?

6-10 times

2. 你認為你使用的次數是否足夠? 為甚麼?
Do you think the number of times you used the MMLC is adequate? why?

As classes in the final term has been disrupted due to the outbreak of SARS, I have not been doing what I have planned to. In other words, I should have CALL (Computer-assisted Language learning) classes a few times more this year.

3. 你如何使用多媒體教室內的設備(電腦)上中一的英文課? 請舉出三個例子
How do you use the equipment (PCs) in the MMLC for teaching a Form 1 English class? Please list 3 examples.

Word for writing , E-mail for communication , Dynamic English for Grammar and searching information on the NET...

4. 你對使用多媒體教室內的設備(電腦)上英文課有沒有困難? 若有，請列出三點
Have you experienced any difficulty in using the equipment (PC) in the MMLC? If yes, please list 3 points.

Technical problems eg. Computer breakdown, access to websites is slow as too many students were gaining access at the same time, not confident technically, some mischievous students may not be doing what is required of them but doing their own work (eg. Having ICQ)

5. 你認為使用多媒體教室內的設備(電腦)學習英語有沒有好處? 若有，請說出三個主要好處。若沒有，亦請說出三個理據。
Do you think that using the equipment (PC) in the MMLC can better facilitate the learning of English? If yes, please list out 3 major benefits. If not, please provide 3 reasons.

Good for motivating students to learn (so long as the tasks are well set and the students know what they need to do), Cater for individual differences, provide a rich resources to get information

6. 你是否已充份使用多媒體教室內的設備(電腦)上英文課? 請說明原因
Have you fully utilized the equipment in the MMLC for your English classes? Please give reasons for your answer.

No. I would rather students having group discussion face-to-face in class than talking to each other by using mic on the computer.

If there is alternative to watch VCDs such as projecting video on big screen , I'd rather not use the computers. It is easier to check and monitor students who are not doing individual viewing.

7. 你認為使用電腦教學有沒有改變你的教學模式? 如何改變?

Do you think that the use of computers in teaching has changed the way you teach?
How has it been changed?

In CALL lesson, I need to give full explanation before dispatching students to work on their own computers. Once they are sitting in front of the computer, they will be too obsessed with the work that they will not listen to teachers' explanation. However, in conventional classroom, I may guide students along steps by steps such as alternating explanation and work in different steps.

8. 你認為使用電腦教學有沒有改變你的在課室內的角色? 如何改變?

Do you think that the use of computers in teaching has changed your role in the classroom? How has it been changed?

In conventional classroom, I have a "stronger" and an "explicit" role to play such as being an instructor, a coach, a facilitator, a guide. But in CALL lesson, I usually take a few minutes to brief the students and students are allowed to work on their own. In CALL class, students are "active" in using their computers and I am relatively "passive" – i.e. offering help only on demands. The reason for my passivity in CALL lesson is that I have work actively in classes before CALL to prepare students for their activity in CALL class.

9. 你認為如何能有效使用電腦教學?

What is your opinion on how to effectively use computers in teaching?

Training for using the computer systems, on-site technical support ...

10. 你對香港政府投放大量資金在學校電腦的設備上，有何意見?

What is your opinion on the way that the HK Government is spending such a large amount of money on computer equipment in schools?

Too much. As far as English is concerned, computer helps/facilitates teaching and learning but it can't replace the teaching and learning process which involve mainly teacher-student and student-student interaction.

First Interview with Teacher A – July 2006 ~22 minutes

M: Researcher

A: Teacher A

M: Thank you Miss A for accepting my invitation for an interview on the usage of IT for teaching. My main purpose of this interview is to ask about some further information about your usage of IT comparing the first term usage with the second term usage after you have filled in the information of the survey.

First, I would like to ask the number of times or the frequency you use IT in the second term, that is January and after?

A: What you mean by how many times? What's the unit?

M: That is the percentage you use IT in teaching. For example, you have 8 lessons in a week, then about how many lessons you have used computers.

A: I think about 80%.

M: If referring to the first term, that is when we didn't have notebooks say in beginning of the school year in September and October, do you think you have obviously increased your usage of computers.

A: I think I used computers more often not because of the notebook but because of ...

M: That is, you have used it more often.

A: Yes, I have used it more but not because of the notebook.

M: That is exactly what I want to ask you. Then, why do you use more often in the second term.

A: Because ... there is external school review. We did not know when they would come and we didn't know whether we need to show how we used IT in mock interviews so I made PowerPoints for the rest of the chapters. Therefore, it became 100% use for lessons.

M: The rest was 100%.

A: About 100%.

M: What you meant by the rest? Is it March and after?

A: I think it was the last few lessons. For the last 3 chapters, I used computers to teach. In fact for the others I took the computer to the classroom and used Word during lessons.

M: use Word, PowerPoint ...

A: connecting to the Internet

M: ... and going on the Internet, then why you will use PowerPoint when there is school external review.

A: It was required by you

M: That is, because it was a school policy.

A: Yes, but ... I wouldn't use computer merely because of making PowerPoint. I would think that since we were required to use computers in lesson, so I think what can I make use of the PowerPoint. Otherwise, if I just put the notes on the PowerPoint, I would rather use Word during the lessons.

M: That is, there are advantages of using computers

A: but you really need to think of it

M: For example, you have used it for so long, what advantages can you find?

A: For example, something you need to search from the Internet or see something special ... relatively... e.g. something you cannot describe by words, such as pictures, then, it would be better because I am not using text book so I could not suddenly say figure # ... or if I want to find some examples which could be found on the Internet, or the pictures are clearer on the Internet. These are advantages ...

M: Now is already some time after the external review, will you continue to use it and will use it more frequently.

A: I use it normally, the point is whether I have time for the preparation...

M: That is, you know the advantages before it but the time limitation will determine whether you will use it or not.

A: yes, sometimes, I just used Word. Sometimes, it depends on the topic and see if it is suitable and whether I have any idea of using IT for this topic.

M: Had the external review 'forced' you to use computer more and think more about using it.

A: that is the fact. See I can make more than 100 slides for 12 pages of notes!

M: If there was no external review, you may not use it so often

A: yes, I will still use it but ... For external review, we know the requirement of the external review, we will think of more interactive materials. If there was no ESR, I would still make IT materials but the degree of interaction would have been lowered.

M: What do you think the differences of using and not using computers? In which aspect are they different? Any other differences? For example, it helps in direct instruction, or anything else...

A: In fact, it is not whether using computer or not in making the difference. It depends on whether you can think of a way of using it to make the lesson more effective. If you cannot think of a good way of using it, you better not to use it as what students commented in the evaluations. Not the computer can help you teach but whether you can think of a good way of using computer in your lesson.

M: That is, if you could find something that is useful, it is useful but not to use it merely because you are required to use it. Besides the right match, is there any other way of learning that must use computers? That is, is there any teaching method that should make use of computers or it would be less effective or something could not be achieved.

A: In fact, still the same, you need to think a way of using it. You cannot just ask the students to go to a certain website and search for some information. The assignment you give to the students should have a good design. It depends on the design whether the computer or websites can help students to learn. Otherwise, students still cannot learn anything from the websites.

M: Is there anything ... you think if there is no computer?

A: If you are willing to think of ways of using computers. Computers can really offer more ways to teach. But, you should think about the way to make the flow smooth and

cannot merely put something in the presentation. If you can put effort in the design, you can find more varieties of teaching.

M: Besides the increase in varieties, is there any other changes in basic learning method?

A: If it suits the design, it does. Just like if you ask them to search the websites, the teachers should think clearly how to guide the students learn or answer which kind of questions. You cannot just ask them to search the Internet, read it or just ask them to comment. It seems that it is used just because you are required to use it.

M: OK, that is, there should have a reason for the use. You need more time indeed to prepare for a lesson. It will not reduce the work load for preparing a lesson but can let you explore other learning methods.

A: Yes...

M: Therefore it needs more time for teachers to prepare for a lesson. Content is not restricted to the book.

A: Teachers need time to think clearly. Teachers need more time to think of the way to teach. So, the preparation time is longer.

M: Preparation time is longer. Then do you think you will continue to use computers or use it more in your lessons in the future. Assume that time allows it.

A: In fact, it all depends when there is a good way of using it. If I can think of a way of using it, I will use but if I cannot, I'll prefer not to use it rather than use it for the purpose of using it.

M: you feel, ... , as you have just mentioned that not because of the hardware, the notebook computer provided so you use computer more frequently but because of the school policy requires you to use it, the influence of the external review, that is, the requirement from outside, school policy, I just include the hardware, software as one of them. If I put these 5, er... 4 points here, how you will arrange their importance in influencing your usage.

A: I should pass my views. I should feel it does help in teaching and learning before I use it even though you make me use.

M: It is here before, you say that if it is useful for your learning and teaching then you will use it.

A: So I said that it is not due to the notebook computer.

M: So, this is the first priority. Before, you also know that computer can help you in your teaching but due to time limitation or other reasons that hinders you from using it enthusiastically. What makes you increase your usage to 100% in this term? Can you arrange in order of importance? (ur...) First, external factors, requirements

A: Increases of usage, there should be an increase. For example, external factors, such as external review. Secondly, those materials would be accumulated gradually, e.g. this year I can only make detail material for two chapters, then in the second year, I just need to modify the two chapters. Say in a year, I can have 3 days for making the materials, then one out of the 3 days would be spent for the modification and the rest 2 days can be used for preparing the extra chapters. Then, the materials are increased.

M: That is the availability, the availability of materials is also a point.

A: The modification for materials, is not like starting from zero.

M: That is, Hardware, ...

A: As times go by, the materials will increase naturally and..

M: It is a natural increase ..

A: and also, for the increase of use since you count also using word as using IT. before, I had not used word for teaching. If you include word, then you can say that I have used IT everyday.

M: If you are required to arrange the order of those factors influencing your usage. That is, the reasons making you more actively use IT. Is hardware in the lowest level. It is always here anyway. Then the software or materials which are accumulated for some time already, school policy, and external review. How will you put them in descending order of importance. ...

A: material, policy and external review?

M: yeah

A: Then first is external review, second is material and third is policy.

M: But, the school policy has been there for some years. Teachers were also required to use IT. But, why it has been so seriously considered in this year. It was required to use for a certain percentage. What is the difference?

A: Yes, there is ...

M: Can you see the difference? Why is it so seriously considered when the same policy is put here?

A: The difference is due to that we have the notebooks. The principal is different.

M: Do you think that the requirement of the principal or strong requirement of the principal or her push have made the difference?

A: Sure, it is definitely a point. If you refer to the notebook then I don't think it is so significant. Before then, we used the notebooks provided by the school as well.

M: So, notebook does not make up the main reason. The principal's or the school's requirement is the key reason. That is, it is the main point.

A: But, I am not sure how other teachers feel.

M: It doesn't matter. You only need to response with what you feel.

A: I don't feel I use computer more often because of her (the principal).

M: You feel it's natural. But due to the external review, the usage increases even more.

A: Yes, because of the external review but not because of her.

M: ... That is, in your opinion the use IT or not in teaching, is there any change in the teaching paradigm?

A: Yes, there is.

M: Is the change big? Do you feel you have changed your paradigm?

A: The teacher's role can have changed. It depends on whether the teacher can think of good way of teaching even without computers, otherwise, teaching is rather monotonous without computers if you don't have any special methods. If computers are

used, teacher's role can be facilitators. You can ask students to read information on their own. You can also tell them that there are many resources so you don't need to make photocopies to them. You can ask them to search from the website. They can assume more responsibilities in their own teaching.

M: Do you think it is helpful for their learning? That is, whether it is better to prep are everything for them or ask them to search for themselves?

A: If they are adapted to it, it should be an advantage. But, as mentioned before, it should fit it the flow or the design, otherwise, it becomes meaningless.

M: That is, you cannot put IT in your teaching just on its own sake.

A: You should put efforts in the design. Then, it will make your teaching more effective and change the teaching method, introduced more independent learning. Students should learn to search for information from the web besides searching from the library. Or, in fact, when they search the web during their leisure time, they can also find some very useful examples.

M: You mean that there are advantages of using computer in teaching.

A: Yes, there are some advantages.

M: What is your trend of development of using IT in teaching?

A: Just in my mind, ...

M: That's ok.

A: To PowerPoint, I have fully used. If I still want to do some more, I would like to design some teaching packages. Like that for pre-lesson preparation or independent learning or something like that. I am trying to search for information on the computer, organize them and design for teaching materials, tasks or assignments after screening. I like to do it this way, not for teaching but for the other ways of using IT.

M: You will also lead students in the development.

A: Not really lead them to do so but to design something then let them do the testing. See if they can learn better in this way, more efficient, more effective, etc.

M: The following is about using eClass for administration. The school has obviously used eClass more frequently in this year. What are your comments for the usage of eClass in administration or communication? That is for internal use.

A: I think it's quite good. I can read the announcements even when I go to the Internet at home.

M: How about for the students? Like, giving homework to students.

A: In fact, I think that they are still not familiar in using eClass.

M: If they are familiar with it, do you feel it is helpful for them? Do you think it is worth the development?

A: It depends on the subject. If they are asked to do the MC on eClass, some students do not do it seriously. They just click A, B, C for the answers by random. I'll never believe that they can finish in a minute. But for questions require written answers, like for higher forms, it's rather impossible to give them short questions. Even for short question, it's impossible to have questions that require answers with diagrams then it would be impossible. This is no more testing them Econ matters but testing them how to

draw pictures using IT. It is easy to set a question but not suitable for collecting answers from it.

M: That is, ...

A: If they are required to submit their work to eClass, unless they scan the diagrams otherwise, they cannot submit their answers with diagrams. Further, it is not the requirement for learning Economics. It is not appropriate to test them this skill.

M: That means, it is not suitable for higher forms to submit homework.

A: Like that for some symbols, strange characters are displayed instead. So, it is not possible to require students to submit on eClass but I should not assume all of them have scanners at home. Therefore, I cannot ask them to submit on eClass, not because I don't want to do so.

M: You cannot even assume that students have computers at home.

A: Computer is so common that I can assume that all of them have computers at home but I cannot assume all of them know how to draw diagrams on the computers. Some even don't have word in their home computers so they told me that they could not read the diagrams in my notes on eClass.

M: ... It's rather obvious that we cannot depend on the eClass to collect homework. The main purpose is for administration or communication.

A: So, we can mostly use it one way. That is, to give them materials. If two ways communication is considered, only email can be used.

M: How about the forum?

A: We haven't tried the forum but they have tried to use email to ask questions.

M: It has given little help. Right?

A: But, this is not a common way of communication.

M: They are not yet adapted to it. Then, do you think it is better if they have the habit of communicating using eClass?

A: Of course, it would be better.

M: So, we can plan for development in this way.

M: Then, you can give your teaching materials-PowerPoint to the new teacher of your subject.

A: It is useless. It's useless. He should know the flow. You know the most important point is the flow. What I am selling is the flow not the materials only. Even I give the PowerPoint to him but if doesn't know how I've designed it and the flow then it's useless.

M: The material can provide a basics for the lessons. Like the materials provided by the publishers also serve as the basic materials for teaching.

A: In fact, he still needs to modify. Otherwise, when students ask him questions then there will be big problems. If he doesn't know what I think and how I put them this way, then there is of no use. I cannot give them the script as well. The slides in the PowerPoint are discrete. The link between slides is very important. It depends on my verbal descriptions to connect them. So, it's useless if one do not know how to use it or make effort to design his/her own teaching flow.

Description: 2nd Interview with Teacher A February 2007 ~ 33 minutes

M: Researcher

A: Teacher A

M: It has been half a year since the implementation of computer teaching in July. Let's have a look at the changes. Are there any changes between the first six months this year and last year after using computer in teaching in terms of method reasons content and the teaching style?

A: There are some changes in the way how we use computers. For long they have been used to display things. After using them for a while I can think of the special effects they have. The difference with last year is the relatively frequent use of e-class.

M: For example what is the use of e-class?

A: Uploading notes in e-class. Because for the present Form 7 pupils, I had not taught them in Form 6 I'm not sure if I need to print them the notes as some got the notes but some didn't. So I decided to upload them (notes) on the Internet and let them decide according their needs. I use e-class less often for those classes that I'm teaching as pupils seldom check it. They would think if the whole class need the notes the teacher will give them the printouts. The Form 7 class can't have any excuse cos if they need the materials they can download them from the Internet.

M: Do the pupils accept this teaching style?

A: As you saw last time, it would be okay if doing multiple choice questions but you need to teach them how to use it. Power Point has its problem because it will jump to the next slide if you press wrongly and you won't get the slide you want. In doing MC you can choose either options A, B or C. If you press A you can get the slide. If you press B you can simultaneously check the answer and the translation but you need to demonstrate to them. If you want to continue producing the materials using computer, I suggest that the format should be consistent so that pupils can get used to the format. Then pupils will understand the format when using Power Point to do the exercise. Instructions must be clear. There should be an icon showing the second question after the first one, then there will be another question after question two and also answer options A, B and C so that they won't get confused. That's for doing MC questions. If it is for self-directed learning purpose, similarly pupils must be taught how to approach this at the initial stage. It's better to have an exercise to go with the Power Point so that pupils can follow the usage. Of course you need to give instructions in the Power Point and after some explanations ask them to do question one then they can check the answer by pressing the icon. That's the sequence.

M: Will you use Power Point to upload the things that you are going to teach?

A: Yes I've tried once cos I didn't have time. I asked those Form 7 pupils who struggle a bit to do this during their free time.

M: In other words can this help those weaker ones?

A: At the moment it's difficult to say if there is any effect as I've used once or twice and the effect is not obvious. There is limitation. We cannot just leave it with pupils it's better to have someone around who can make sure that they won't do the wrong procedure. There's no need for teaching. We can do this this year because Miss Ho can take the notebook computers to the classroom but we won't allow pupils to do the exercise in a rush without referring to the Power Point. It's to check if pupils have

followed the rules it's not for teaching. Otherwise we can't assess the effects. It would be meaningless if pupils simply do the exercise without referring to the Power Point.

M: Do you mean there should be someone to guide to supervise the pupils?

A: Not necessary for those who follow the instructions.

M: Do you think this can replace the teacher?

A: I think it depends on how the instructions are written. If you don't have anybody to ask, you will just get stuck at those questions that you don't know. Therefore, self-directed learning is obviously catered for certain kind of pupils. We can't be too ambitious to the weaker ones they should be given some easier questions, but for those brighter ones it won't be a problem if difficult ones are assigned to them. However, you won't get the desired outcome for the mixed ability group. If teachers are not available there will certainly be problems.

M: But is it useful to you?

A: Just did it once. Because there's no time for production it takes longer time to do this than making Power Point.

M: So are you at the trial stage? You don't really know the result.

A: Yes, coincidentally we have a teacher to help out this year. You need to have sufficient manpower. But if pupils do it at home, I won't know how they get on with it. If they do it at school, then everyone needs one computer and it can be a problem. In fact there is a lot of limitation.

M: In fact can this be done at home?

A: Yes I think using Power Point to teach is the same. After producing new materials with Power Point, you may not get the ideal effects with the first attempt. You have to try and teach using it before you can identify where to add one more sentence and where to delete where to add one more slide and where to elaborate a bit more. Therefore when asking which is more practical you need to try and revise the materials a few times to achieve better effects.

M: Do you think by doing that you can help pupils with mixed abilities?

A: If you have time it'll be okay. The first version won't work well it's difficult difficult to achieve the desired outcome with the first version. The first version is an experiment you need to know what doesn't work and where to add some more instructions. It will be up to the fourth or fifth version that you feel more suitable to certain pupils in a wider sense.

M: Do you find them serving as a resource the moment? Can you use the materials for some years and for more people?

A: That's true but you need the time. In fact you need to think what kind of topic is more suitable. You've got the idea but you need to think about what topic goes well with the method. If you want to develop pupils' thinking Power Point may not be that useful. The last time I chose to use it to present diagrams to illustrate how lines are constructed how one line comes after another and why this line can do but not for the other one. It's much more useful. Pupils only knew how to draw lines but didn't know their sequence and this can help their thinking because Power Point can show one line after another. This is better and it depends on topics. Also you need to design the

materials to such an extent that pupils can work on their own without teachers' supervision.

M: Do you think computer can help teaching especially with presenting images?

A: I think it's on steps more on steps.

M: Does it help you with showing steps?

A: Layer by layer cos books or notes are end products they can't show it's the first line to draw where to stop for second line how to draw the third line and it becomes very confusing when reaching the tenth.

M: Is it better than textbooks but not good if goes without teachers?

A: Depends on whether the pupils follow instructions. If teachers are not available, the design should be very pupil-oriented. In teaching you can interact with pupils, whereas in writing these materials you have to think in advance what sort of obstacles they will encounter and whether they can understand or whether one more sentence should be added you have to think through all these in advance.

M: We need to design it well only a delicate design can help there is no need for teachers to talk too much. Right?

A: Yes otherwise it will waste the time of both teachers and pupils.

M: What can it help other than in teaching?

A: Pupils can bring home the MC questions. Self-directed learning is intended for revision not for teaching. All the materials designed are not for teaching purpose. I'll make use of Power Point in teaching and that's why I upload all the MC questions to e-class.

M: Do you think pupils have made use of computer more in revision?

A: Not sure about the situation at home apparently not much.

M: For example you have uploaded so many things on the Internet are they useful?

A: Things uploaded are primarily for them to print out.

M: Do they simply want to get the materials?

A: Exactly.

M: How about those MC questions do they use them?

A: To be honest I don't know. The problem is if you want them to use the computer for revision there are limitations in time and space. Again it is a great limitation if you want them to sit at home without anyone competing for the use. Say if they pop in to the self-study centre to do revision it will be impractical if they have to rely on the computer rather than the printed notes. In fact there are great limitations in terms of time and space.

M: Especially for those studying for public exam say Form 7?

A: Yes. Should we expect them to move their computer to the self-study centre to do revision?

M: Do you think it is not helpful for revision?

A: So I'd consider preparing some hard copies after using the materials. But the problem is some images linking with the Power Point will change after printing. Really have to think how to cater for different needs.

M: Any feedback from pupils? Do you mainly teach Form 6?

A: They found it interesting to have MC questions in lessons. They found it interesting to see images moving a sense of novelty when seeing these things things that they seldom see.

M: Do they have a stronger sense of involvement?

A: Yes but the MC questions need to be short otherwise a slide cannot contain everything.

M: This can only arouse their interest give them varieties in lessons and let them feel better.

A: That's right. A sense of novelty to give them varieties in lessons.

M: Do you think this will increase the workload of teachers?

A: Not for designing MC questions. It would be easier if you can find appropriate topic something similar in style and you can set the questions easily. But it will be difficult if you have to set ten unrelated MC questions. Doing copy and paste for a similar set of items requires only slight changes in information numbers and diagrams. The process is more or less the same just using similar icons it's very fast.

M: In fact this is a very important design and students are happy using it. Do you use computer in each lesson?

A: Not all but most of the time more or less the same frequency as last year because the materials have been produced and I simply add or delete a bit of things it's more or less the same as before.

M: Do you find that students are more involved as there are more varieties?

A: Just like the Form 4 class I taught last year they come in with anticipation. Knowing that you will use Power Point they want to see what you are going to do perhaps they are only interested in seeing the varieties see what you are going to do this time.

M: Do you think they are just interested in the varieties you are showing in teaching but not in other things? Say how much this has helped them?

A: In terms of self-study I'm not sure as it depends on their home environment but I don't think it would be effective if they solely rely on computer for revision.

M: Overall speaking do you use computer more frequently than last year?

A: Yes more frequently.

M: You mean in teaching?

A: Yes.

M: Roughly how much more? What percentage is on teaching?

A: What do you include when referring to teaching?

M: Purely in teaching not on administration.

A: Almost 90% is done through the computer except for some topics which have not yet been prepared in Power Point then I have to rely on verbal teaching. All the notes and many other things are done through the computer.

M: Basically what kind of evaluation or feeling do you have towards this instrument?

A: In fact I would worry more if my computer rather than the TV or washing machine breaks down cos you don't know what to do how to repair it.

M: The most worrying bit is the technical problem. Right?

A: That's true. Sometimes with virus sometimes here sometimes there the most worrying thing is computer breakdown.

M: Do you have a computer at home and a notebook at school?

A: Yes.

M: Like this morning the server was suddenly down all my colleagues were very nervous.

A: Yes cos we couldn't identify the source we didn't know the reason. It doesn't matter if we know how to repair it but I am not a technician. For many things we cannot identify the sources of problem and we don't know how to deal with them.

M: How do you evaluate the use of computer in teaching and their impact on pupils?

A: I felt it's like one's business and people are doing things on their own. I'm not sure if anyone has got better ideas.

M: Have you ever referred to resources elsewhere?

A: In fact I felt that the Power Point available outside and even teachers' are very ordinary unless they are your own ideas. Regarding those materials showing varieties, they won't be of interest anymore after being used for seven to eight times. Afterwards you have to think again well not sure how much can be generated from one brain.

M: How about if people teaching the same subject work together?

A: Or it'll be better for those sharing the interest design together. It'll be useless if you have the idea but don't have the time to do it. After all you have to think about something new when you have time but it's really difficult to develop new ideas.

M: Is there any impact on teaching? Is it worthwhile with all the efforts you've invested?

A: I think so. As said before don't expect the first version to be okay.

M: Anyway we have to revise continually.

A: Not sure how much revision is required. It is not worthwhile for the first version which is definitely very time-consuming and has the least impact.

M: Therefore you felt you should improve continually. When it comes to the second and third year you will find it worthwhile?

A: Yes as you know how to improve them by adding a bit of things to certain areas. Because you can use less time to revise the same Power Point just update a bit of the same version and by the second or third year you will see the benefits they bring.

M: Are there any benefits to the pupils?

A: I think you have to ask them I really don't know. Whether they will upload the Power Point to e-class I think they will do so but I don't think they can see the meaning behind maybe just as insurance. They will find it useful for revision after downloading and printing everything out because they will refer to notes in their revision. In fact there is no special effect if they just print out things without knowing what they are for. Some pupils can make use of Power Point and follow well in lessons. They may write footnotes beside their notes and they don't need to print the Power Point out. Perhaps with the diagrams and images Power Point can help pupils to understand a bit more as simple as that. After they have understood the lesson, the pictures and images are not that important and it's not necessary to print everything out.

M: Does it raise their interest in learning and make it easier to understand?

A: Yes but not much use for revision unless we can think of more usages.

M: Are there any changes to teachers' role or do they just teach in the same way but with more varieties in teaching?

A: Yes. Let pupils do it once in lesson and let them do it the second time in revision.

M: Are there any resources that pupils can explore from the Internet?

A: Following instructions is very important. You can't just ask them to surf from the Internet as they won't know what they should be after. You have to give them guidelines and instructions. I once asked pupils to refer to a website on statistics and look for certain kind of information. But the first version was experimental I didn't know what they had learnt and which question was good. In designing teaching materials, you need to give pupils very detailed guidelines so that they can go to a specific page identify certain things and answer the questions and as detailed as that. If you just provide the website, they won't know what they should do.

M: So do you mean they can do the questions if detailed instructions are given?

A: That's right they can understand and follow the questions.

M: In other words do you mean we can utilise a lot of resources but the instructions must be clear? Are the teachers using more time?

A: Yes teachers have to think in greater details. Traditionally the role of teachers was expressed in the way how interactions were dealt with but it's different now you have to think well before the lesson. You have to think in advance type them out and identify the difficult areas that pupils may have.

M: So more preparation work?

A: Yes, traditionally we can answer questions right away but you can't do it now as pupils won't ask in front of you.

M: Therefore is it very difficult to design good IT materials?

A: So we need to revise the materials several times based on the feedback from pupils here they don't understand and there they can't get it, or it's better to have a look at their work to see which part they can't do. Usually problems in instructions are revealed in these areas.

M: Is it useful to teachers?

A: Which aspect are you referring to?

M: Teachers now have to think in greater details. Does it mean they have to be more serious in teaching than before?

A: That's right you can have a better understanding of the mistakes that pupils make. You have to think in details and to think from the perspective of your pupils. In the past teachers and pupils used to interact face to face in lessons and pupils could raise their questions directly. But now we can't do this we have to think everything in advance, say if they don't know the meaning of a certain word you have to think about in advance.

M: Now you have to prepare the lessons in greater details this is the outcome. Is it something good? Something more demanding to teachers.

A: Yes that's true otherwise you'll feel that you've spent too time without any effect.

M: Other than producing learning materials to pupils, do you think computer also serve as an instrument? For example using the Internet using computer as their instrument in their learning process?

A: In saying we need to appeal to five senses in learning, computers can draw pupils' attention increase their interest and motivate them more with more varieties in teaching, which is different from work like copying using pens and paper something that they don't like.

M: Do you have any other opinions and any comments regarding the future development?

A: I'm not sure about the future development. Unless we learn how to use more software it'll be difficult to add more varieties, say the existing Word, Excel, Power Point are still very limited.

M: Perhaps we need to learn more software.

A: Yes otherwise it's difficult to think of more varieties.

M: Any expectation? Do you expect to have more software which is more user-friendly?

A: I really don't know. In fact whether it is user-friendly depends on whether you use it frequently and whether you are familiar with the usage so that you know if it suits you. For example people say you need to do sums in Economics Excel is useful. I've designed some exercises using Excel but only the higher ability pupils can use it. But Power Point can cater for those of lower ability something that I have not considered before. In my experience I found it difficult to make use of Excel to develop exercises that suit the lower ability group. As far as calculation is concerned, it is the way how you perform the functions of calculation. I once thought of inputting all the equations into the computer and you can solve the equations by inputting some figures. You can input different figures and an answer will be automatically generated based on the figures you key in. In fact pupils may not have the interest to do them perhaps only those smart ones or those who are interested in research can appreciate the use of the exercise. With a file of over a hundred and two hundred items, pupils of lower ability can hardly appreciate the use. They just do what they have been given.

M: Do you mean they just copy the answers when they see them?

A: Yes exactly. But Power Point is easier and more suitable to pupils of different abilities. To me it's easier. You asked if there are any benefits after learning new software I'm not sure. I don't know what kind of new software is available and it will

take you some time to see the advantages. No matter how detailed the description is, you won't know whether the software will suit you unless you are familiar with it.

Description: Third interview with Teacher A*M: Researcher**A: Teacher A*

M: after such a long period, I still want to understand the process of implementation. This is what I want to be discussed in my thesis. Therefore, I want to talk to you again about it as an afterword. In fact, there were so many changes in the past few years. So, I want to know after these one to two years, it seemed like the change stopped for some time. When Principal B came, there seemed to have lots of changes in policies and hardware provision. Now it was settled for some time, what you could see about the implementation? Is what had been done for the changes remained or set back. Therefore, I want to ask about the recent situation you have observed from your point of view since you had done lesson observations in the last year.

A: ah.. This year, there are more and more new teachers and for the new generations of teachers, there is the concept that all teachers should use PowerPoint. I don't know why. But, it is the fact that they should use PowerPoint, especially when there is somebody to observe your lessons. It seems like that if you don't you PowerPoint, it is not a lesson. It is considered as a standard requirement. Therefore, if you ask whether more people use computers or not. In fact, there are more people using computers but if you ask why they use computer. There is a question mark. For example, in the last year, new teachers like Mr. A, he will come to ask whether I have PowerPoint to give to them. I'll tell them that first, my PowerPoint may not fit your teaching, you may need to following my teaching but if you don't know what going inside my mind how I want to teach. Also, I said that if you didn't have enough time to prepare for lessons, the possible thing you can cut was the PowerPoint. You have to know how to present the lesson first. Like myself, maybe I am not of this generation, I don't know why we should use PowerPoint. To me, I think if you know your explanation, then you will know how to use the computer for your teaching and if you don't use computer, what else can you do. But, it seems like teachers of this generation, will put PowerPoint before the others. So, I think just consider the usage, there are more teachers using computers, but if we ask whether it really improves the effectiveness in learning and teaching, then it depends whether they know why they use and for what purpose they use it. Therefore, some are only using what the publishers provide and modified from other sources. It depends whether you feel it really have the effects you want. Otherwise, I just feel that it is a matter of quantity instead of quality.

M: That is, you mean when they get the information from the publisher. Theoretically

speaking, the publishers do have concepts behind the PowerPoint, then, do you think that it will help in preparing the lessons.

A: In fact, PowerPoints are discrete. How to connect them together depends on the teachers' relating them together. So, only if PowerPoints are used suitably, otherwise, they still cannot understand what you mean. The only advantage is that they can see something visually but, back to the same point, if you use it for ten periods, they only can have some picture to see visually but, whether you can use it, like for Geography, there are some diagrams, then it would be better... ha.. But, if for Economics, you have to think clearly what is the purpose of using PowerPoint. I always say that if your PowerPoint is just your notes, then you can simply open word document and you will have the same effect. Why do you need to waste time making it. Therefore, in fact, when they think of the PowerPoint, whether they want the PowerPoint to help them teach or the PowerPoint is something they need for teaching, like students are required to bring their books for lessons. I think now people use various methods of teaching, whichever method they use, whether flash, PowerPoint, they don't have any thought about why they need to use them. They don't have any objectives of using it. They all think that they should have it but they of course, when you have inspections, then you do think that it seems that you have done something more if you have PowerPoint. However, whether they have thought about whether the PowerPoint or the computer, have somehow helped their lessons smoother or clearer in explanation. In fact, if you take into consideration these points as well, then you may think that if you only pop up some words, why don't you just use the blackboard. You only have told me that you have used some more resources. Yes, it is the fact that there is a point to tick on the observation form whether you have used IT or not.

M: that is there is such a point on the observation form.

A: Sometimes, it is, there is a point to check whether you have used IT or not. Because I want you to put one more tick on it, I just try to do some more preparation work. Er.. um... Unless, he/she has thought about the purpose of using IT or if he/she is required to use it. I'll think whether I am required to use PowerPoint, then I have to think how can I use the PowerPoint to improve the effectiveness of the lesson.

M: Then, how do you feel whether they have thought about it or not.

A: I think they won't think so much about it. Sometimes, just because you want to observe their lessons (so they use it). Maybe, they don't have much time to prepare for it. In fact, making a PowerPoint needs quite a lot of time.

M: That is, you think that they will waste time thinking about the PowerPoint.

A: Some of them will be like this. In fact, unless you intentionally design a PowerPoint for your own lesson, you cannot copy from others, since it is your own sequence of teaching which is different from others. You have to make one for your own which is really very time-consuming. Like that for two or three pages of your books, you need to make 40 to 50 slides. Also, when I watched the lessons of experienced staff sometime before, I found that the PowerPoints made by new and experienced teachers were different. Since new teachers do not have the sequence of teaching, they don't know the sequence of the slides. In the universities, only slides will be displayed on the screen but they don't need to think about the sequence. Like that for the lectures at the universities, they simply display the slides but don't know why and how they use it like this. For current teachers, they may not have the feel of making it.

M: They don't have the experience.

A: They do have the experience but they do not know how can they make use of the computer to help them.

M: that is, they cannot connect them together.

A: Yes, just like how they use computers to help them. For example, some experienced teachers do not have the experience of having IT in lessons. I don't know what kind of functions computers can help us to do. I may not know how to do it. Like, if I want to make animations, and I have the ideas but I don't know how to use flash.

M: yes, haha

A: It makes you think whether you can get the effects. Or, you do not have the computer skills, so you only think that you are using IT but you cannot make use of what IT can really help.

M: If you are asked to use a point scale from 0 to 10 marks, then what is the mark you want to award to them.

A: Use for what?

M: That is, they can use appropriately. For example, you think that the effect is not of 100% but of 50% or 30%.

A: It will exceed half. It's better than they don't need to think of it. In fact, what ever they do, they do need to start it somewhere. They need to do some reflections. They may realize that this chapter can include some photos. Then, they have to take the risk for the first round. Then, they can do evaluation and check what can be added to this chapter. Or else, they can think how they prepare for the next year. How to make the

effect? In fact, they need to practice in the lesson then they will know the effect. Like for our subject, we don't have many pictures like Geography. For example, for the topic of landslide, they can have some photos. The most useful thing for me is to draw diagrams. Maybe, I have to put tens or twenties of lines on a diagram, when students have difficulties in understanding it, we have to remove the lines and draw them again if chalk and blackboard are used. But, if we use PowerPoint, we can replay it again many times until they understand without redrawing over and over again. I can even simplify it by hiding up a few lines and this is the advantage of using PowerPoint. Teachers need to realize this before they can use it properly or if it is the first time you use it on the blackboard. If I need just to put words on the board, then I prefer to use blackboard. However, sometimes teachers want to use short forms in order to save time but students will just copy. Since I don't want students to copy short forms, I'll use full length words, then they won't get it into their memory. However, if you use the blackboard, you probably can't afford it. So, I'll use PowerPoint. For every sentence, I use full length words but not short forms and I won't allow them to use it either. Then, they will learn that they have to write the words in full.

M: That is, you feel that new teachers feel that it is a must for them as a habit or rule for using IT in their lessons, then it becomes their culture or norm.

A: I don't think there is any problem. Only that whether they will evaluate their usage or not. I don't mean they should stop using it but they need to evaluate it.

M: Then, what do you think? Although they now use it, they may not use it to its best effects. Whether you prefer them using it or not?

A: I told them that they should spend time in thinking about how they explain the concept. If they still have time, they then think about the resources they can use to make it more effective. This should be the practice. That is, there is time constraint so you should put the priority on making explanations clear. At least, those who want to learn and listen to your explanation then they should be able to understand. If you cannot explain clearly then even if you have a PowerPoint you still cannot make them understand.

M: Do you think your colleagues know it or this is obstructing them from understand better?

A: You mean, whether it will side track them or not. In fact, it won't. Throughout the process of designing the slides, you have to think about how you explain it. That means, you are thinking about the explanation throughout but their purpose is just to put their notes on the PowerPoint. That is, if there are three points, then they will put the three

points on the slides. However, if they are already there, then why you bother to put them there? What you need to prepare is how to connect them together. Rather, I won't put any more examples in my notes but I will put them or other pictures in the PowerPoint to help in my explanation. That is, I'll make something that may not be put in the notes but helps them to understand. However, they make PowerPoints by just copying the key points onto the slides.

M: Yes, that is, just to simplify the notes for teaching. Yes, this should be one of the purposes of using PowerPoint.

A: Yes, back to the previous point, why then you don't pop up the word document. It has one more advantage of letting students know which page you are referring to and you can highlight the notes with red, blue or whatever, together with the students. It's just the purpose. Why then you need to waste time to transfer it to the PowerPoint. So, if you don't have anything to add, then I don't know why should I make the PowerPoint. Unless you have something to add, then instead of shifting back and forth between word and PowerPoint, then you can put them together on the PowerPoint. Otherwise, if you don't have additional information, then I don't think there is a need to use PowerPoint.

M: In these few years, to you whether you will use PowerPoint or you will use it less. Before it was a requirement that you should use it but now it is not.

A: It is not true, unless I think it is useful, otherwise, I won't use it. I'll insist.

M: Since there is no longer such requirement, will you reduce the use of it?

A: It's almost the same. In fact, I use it more often since I have accumulated more resources using IT.

M: That is, you will continue to use it but you won't reduce the frequency of usage even it is no longer a requirement.

A: Yes, I'll still use it but sometimes, I will shift back to use the blackboard. Like drawing lines on a diagram, I will use the blackboard. Like those concepts they need to understand, then I'll use PowerPoint so that they can repeat as many times as possible. But, it really depends on the students. Some students may need to see how you actually draw the lines on the blackboard together with them so that they can follow step by step. For this group of students, even if I have PowerPoints made before, I may not use it. It all depends on the students. If they need to follow your action to draw the lines one by one since you can immediately discuss with them the problems. In these cases, you may need to draw on the blackboard to give them better impressions.

M: Whether you are more skillful in using IT now or not. You know better when to use IT

and when not to use it.

A: I don't think I have the skill. I am not teaching computer. I just use Word or PowerPoint only.

M: For skillful, I mean, you know better when to use IT and use it more appropriately. Not equivalent to using it more frequently but to use it more appropriately. That is, do you think that you are more competent in suitably using IT in lessons. Like that you can now comment on the new teachers' usage and tell when and how to use it.

A: Then, it depends on whether you are familiar with it. You need to try and you need to have the material for the lesson and think about the method of presenting it. If you can think of a way then of course it is good but even if you cannot think of a method, it doesn't mean it is not suitable but only that you cannot think of the way and get suitable resources for it. Also, there are some problems. As the EDB emphasize on interactive learning using IT but sometimes it is difficult.

M: Mostly, PowerPoint is not really interactive.

A: It can just make your presentation better but for interactivity, it is really quite difficult. Especially for those content subjects, it is even more difficult.

M: Unless you have something for them to do in front of the computers in the computer room.

A: Unless you have a computer for each student.

M: yes,

A: Otherwise, it is really very difficult for making an interactive lesson. It needs a lot more effort to think about the ways.

M: Will it be also one of the alternatives for your teaching besides chalk and talk.

A: Yes, of course, it should be one.

M: I have the interest to know that whether for content subjects, you will bring your students to the MMLC for lessons if the computers there are upgraded.

A: It is not a matter of whether I use it or not but can I think of any ways of using it.

M: Take your subject as an example. Do you think there is any opportunity of using it?

A: All are possible but it depends on the ways you can think of for using it. The same point again is that whether you know how to suitably use it. It is not a matter of using it or not. If even all students do according to the plan but it is just the same as doing it in

the classroom then why bother to take them there. So, far, I really do not have any idea because I haven't thought about it. It will be useful if you can think of a way that students can learn on the computers when each of them can work on one.

M: That is, if there is a certain amount of money for upgrading the computers there, do you think you will have any chance of using it? Some colleagues think that it is not necessary because the computers were not used often when they were there in the previous years. Before then, lessons were assigned there for the English lessons but now no special arrangement is made for them, there are few English teachers using it.

A: One person working on a computer means that you just pop up something and do it together. One advantage is that they can get immediate feedback so the most suitable way of using it is doing MC together by pressing a key so that the results are shown on the screen. But, now it cannot be done in the classroom. Unless you ask them to do this, otherwise, it is difficult show short question answers on the screen simultaneously. However, there is a problem, if you are going to do some calculations and there are mathematical symbols, then should I assume that all know how to make equations using the software. Then, there is the problem. Another example is drawing diagrams, it cannot be done immediately. ... One more question is time limitations. Now, I don't like to do exercise during lessons since I don't know how long should I wait because they are not of the same pace. I'll ask them to do it during recess or lunch time. Then there is no need to do it in the MMLC since it becomes meaningless since you won't expect to show their answers on the screen together.

M: there is a possibility. You still think that all depend on whether you can think of a way of using it. But if the facilities are there, then you'll still think of using it.

A: Yes, I'll still think of using it but if I teach Form 7, then I will use it less since they need to draw diagrams and I cannot expect that they know how to type equations and draw diagram even if they know how to use word.

M: You don't have the need. If you can do it on paper then you don't need to use it. Unless you can do something differently like you can do something together and project on the screen immediately for discussion but in fact, you can still use visualizer to project them on the screen. So, it is not a must for using it. It is only an instrument to help you teach.

A: You can think it like this. It is not for making your teaching more effective but only a means for offering more varieties for lessons.

M: Also, you can think of lessons without teachers teaching them something but they search for information on the Internet. Of course, now that we have to teach a long

syllabus for the external exams. But, now for the NSS, students are expected to search for information rather than teachers teaching them.

A: It depends whether you require them to do it during lessons or before lessons.

M: Both are necessary, at least they need to do some during lessons.

A: If they are required to do it before lessons, then it makes no difference from teaching since they will take what they have found to school. They only need to load what they have searched for the lesson.

M: In fact, you can think any way of using it. You can think about the ways of using it. Like what you have said. You may need more open ended questions for them to explore.

A: Not necessary with open ended questions but ... only that they can go to the Internet to get more information. It depends whether you can find some websites with suitable materials. It is still by chance. Like what I had come across before that now both Form 6 and 7 are doing, I found GDP data of different countries and I got all the tables and asked them just to base on the set of data to explore more, like this..., then you could be more structured. Then they would feel that you had something to give them. Like that I asked them to go to the world bank then they thought that the material was useful, ... then you gave them the questions, in fact, they were doing comprehension but it did not need them to go online. They had to do some exercises just like going to the Internet to do the exercises. Based on those exercises and I would ask you to do some plus minus multiplication and division then I would ask you after you copied some data from the web the questions or you copied something from the passage to do some comprehension, ... just like this.

M: Is it possible to give them some open ended questions. Like, ... there is no boundary. Just let them explore on their own. Theoretically speaking, we have to teach them to explore more on their own.

A: Umm.. they would not ... in fact, you can do so, like that when I ask them to do presentation. I can give them a topic and then I give them 2 websites but usually they may not click on them, that is... , it is very difficult to control. But, if I give them ten to twenty websites, it will be scaring for them and they might not be able to find the information needed. I shall give them 2 websites and give them a reading list and ask them to search for the information. If there are hardcopies as well as websites as references for them, they will prefer to get hardcopies from the library than go on the Internet for searching information on the web.

M: That is, they still do not have the habit..

A: Yes, they feel it is troublesome because they may not be sitting in front of the computers all the time. But, if I have hardcopies then I can discuss with group members how to present.

M: Thank you very much! In fact, I just want to see the progress of using IT in teaching at this moment.

Description: First Interview with Teacher B – July 2006 ~ 25 minutes

M: Researcher

B: Teacher B

M: To you, have you used computers more frequently in the second term of this school year 2005-06?

B: Yes, I've used it more frequently since I have a notebook computer.

M: The reason for using it more frequently is because there is a notebook computer.

B: Yes

M: How much more frequent is it used by percentage? Second term refers to January. That is to compare January 2006 with that in September and October 2005.

B: It's quite big. Basically, for Music, I use it almost for every lesson.

M: That is almost for every lesson.

B: Yes, like when they go into groups, or when they argue about submitting homework, whether submitted late or on time, then we can immediately check to see if they have submitted to eClass or not.

M: That is, they will use eClass to submit HW.

B: For example, when they do their project, they will put their presentation in my computer and connect to the projector to show to the class the data they have collected and the result.

M: You never do it before?

B: Yes, we have done that but we went to the MMLC

M: You need to go to the MMLC

B: Yes, about one theme for a year.

M: What's the percentage of usage before?

B: It's only about 25% as required so I would check if I'd met the requirement and we would use even IT game. Just met the requirement and that's it. Now, there's much more usage. Like PowerPoint presentation, or viewing notes on the screen, singing while viewing the songs together.

M: That means you have a special software for it?

B: No, I just saved the file in PowerPoint. In fact, if this software can be used it would be much better.

M: I wonder whether we had bought one before or not.

B: Yes, but we have only one so according to the copyright regulations, we cannot use like this.

M: That is only one computer can use it. Yes only one can run the program.

B: That is the point, only one computer can run the program.

M: We can think about it. In fact, we can buy this kind of software using the CITG (Composite IT Grant). You only need to submit a proposal. What do you feel about the effect of more frequent use of computer on teaching and learning?

B: I feel that there is a good point for using IT since we usually lost the paper on which we wrote down something but if computer was used, we could save the data as soon as we modified them. But it would be very dangerous if the computer is down. There are also problems like when connecting to the projector, problems may have occurred.

M: Technical problems.

B: Yes, technical problems.

M: Do you think it's serious or just at times?

B: It's acceptable. It happens only at times. If we consider the quality since we usually depend on the visual display, then the quality is not very good. If we use the DVD or VCD, then the effect is much better. This is my situation.

M: That is, you mainly use the PowerPoint?

B: No, sometimes also for playing some excerpts from the web or other from DVD for comparative study. That is for the same portion of a song, there are different ways of storage. We can learn while we try it on the computer.

M: That is, it's easier.

B: Yes, it can be done with a computer but before then we have to play the portions one by one by replacing them in the machine. Sometimes, if we can prepare these beforehand, it will help to save time. But, it cannot be done very often.

M: You feel that it is helpful in teaching.

B: But, it is very time consuming.

M: for the preparation?

B: Yes, it's really very time consuming. And, because we are not very familiar with searching on the web and we still don't have the technique of editing a video so we need the help of Mr. J or Mr. B (the IT technicians).

M: Since you feel it time consuming, why do you use it?

B: The topic is suitable for using IT. ... Musical is something that is high sounding and this is also something of high profile so the two match in style.

M: You feel it suitable then you will use it.

B: If I am teaching Chinese opera then I will not use it.

M: You also teach these before. Right?

B: Yes, but I teach these in the MMLC.

M: You have taught these in the MMLC.

B: Yes, I just count that it can just meet the requirement.

M: Now, you can use it more extensively.

B: Yes, I now use it more frequently in terms of time.

M: You think this change is based on the availability of a notebook computer. Right?

B: Yes

M: Is there any other reasons? That is, with the notebook computer.

B: This is indeed the main reason.

M: Besides this reason, is there any other reasons?

B: Any example?

M: Is it because there are more web resources?

B: No, in this half year, it's not. Definitely not.

M: Before, the requirement for IT usage is 25% but this year, the requirement is more than that. I mean this year the school requires us to use more.

B: Really? I don't know.

M: School policy is not the reason for your increase of usage, then, is there any other influence on you?

B: What is the requirement then?

M: No, it is not clearly stated. Only that teachers are required to use and they are required to use IT for lesson observations.

B: It may have some effect.

M: Is there any influence on our usage based on the requirement of the school? So you try to use it more since it is one of the major concerns of the year.

B: Yes, but only for times, I have paid attention (to the usage) but it depends on whether it is suitable for that particular topic.

M: That is, whether it is suitable for that topic. This is not for usage's sake but depends on whether it helps you. Right? That is whether it is suitable or not is the major reason and there is little influence by the policy.

B: In fact, the influence of policy really is very little, not big. I have been using computers but since I need to reserve the MMLC for use so I'll not use it so often. But, sometimes for students doing presentations, I would also set a computer in the Music room for them to do presentations. But, now, it is more convenient. PowerPoint will be used more often but it is really too time consuming.

M: Then, why do you still spend so much time in using computer?

B: Because music is high sounding and high profile subject so should use something high.

M: Use something high to match it.

B: Yes. For another topic like opera, I won't use IT. Or, when I need to give talks I will use IT. Otherwise, I will use television or just listen to lyrics. Like singing songs, I'll not think of using PowerPoint. We can sing without PowerPoint. It depends on whether the topic or the activity or the task is suitable for using PowerPoint. It's just recently that computer is used more frequently.

M: Just recently?

B: I can also refer to the English lessons. I believe that I am the one who has used computer most frequently in the Form. When we teach each topic, we usually search for diagrams on the web for motivation. It's quite good. And also, for non-theme things you need to prepare something more active then I will search from the computer something like fictions or something for practicing oral or something by playing a PowerPoint, video clips or visit any web sites related to the topics, scan the information on the websites see if there is any information that can help with the task. So, the most

important point to consider for whether to use IT or not are what is the subject, the topic and the situation. This is the main reason. About the requirement of the school for using IT, it is also considered but not as important.

M: Why you will you use IT for every lesson now? Is it only because you have a computer with you?

B: Yes, I take it to lesson with me. I'll use it to check whether they have submitted their work or not or show them what I want them to do with some instructions or reminders. I will open those files and ask them to read them on the screen before I distribute the information sheets to them. So, they will be more attentive. But, it cannot be used for every moment.

M: That is, you will consider the subject, the topic and the task in order to decide whether to use it or not.

B: But, it is time consuming for the preparation part.

M: IT is time consuming for the preparation. Then how about the effects after you have used it the many times? What do you think about the effects?

B: What can be done in a lesson is more and the mode of delivery has more variations. Sometimes you can give them something like a video to watch or something to listen, or just highlight something in the PowerPoint. The ways of using can vary a lot. I can use the tab function to switch between the usages and switch between instructions. It therefore is faster in delivery. The class discipline will become better since there is not so many gaps during the lesson. However, there are some other disadvantages, like that when computer is used, the lights should be switched off so the students will become sleepy. This is not good then. So, it cannot be used for so long in a lesson. It can be used only for a while. Overall, I'll use it when there is a need.

M: Anyway, use it only when there is a need. Now, because it is convenient so it is used more frequently.

B: Yes, something like this.

M: Before it, you also know the advantage of using IT. Right?

B: Yes, I know it. But, we don't have a computer at hand.

M: You can borrow a computer.

B: It's troublesome since you need to load something when you need it but you also need to delete them after use. You cannot be sure that what you have found can be used in that computer. Since there are so many problems, I prefer using the other methods instead.

M: You really think that if it helps you in your teaching then the students will be more motivated to learn?

B: Motivated? It depends on what you present and what they are to learn. There is no close relation between them.

M: Does this tool help them in learning? Does it really help?

B: It's difficult to measure.

M: Before, you don't have computer at hand but now you have one. So, if you compare the same topic you teach in these 2 years.

B: The topics are different, so cannot be compared in this way.

M: That is, you teach different topics due to different tools available.

B: Yes, also, the principal requires me to change the topic. You know, I need to change topic in the middle of the year.

M: But the principal's requirement will not refer to the use of IT.

B: No, she won't care about it.

M: It just so happens that those topics are more suitable for using IT. Right?

B: Yes, since the material is more easily found from the web. You know, we may not be able to get the information from the web.

M: Just you can find the material from the web so you use more frequently.

B: There are such materials so I use it more frequently. If there is no suitable information then I won't use it.

M: About the students learning style, is there any change?

B: Learning method?

M: Yes, like you teach in different ways, then how have they learned differently. Can you give some examples?

B: For example, they need to submit homework on line or search for information from the websites. There is the difference.

M: Then what are the advantages.

B: There are advantages. Like sometimes, I just ask them to visit the websites to see something but I don't really know whether they understand it or not. Though I still don't know whether they understand or not but I can immediately go to some websites and demonstrate to them where should they visit or the words, phrases they can highlight for searching. Even I don't know whether they can really catch or not, I am not sure, but this is more handy.

M: That is more convenient.

B: I really don't know or not sure whether they will learn more since they find it easier to learn. I don't know how to measure cos even they have seen how you do it they still don't know what you have done. But since most of the time they are going to do group projects so students will teach each other. Some students can understand even from the written notes. Not able to measure. I don't have the data.

M: Do they learn better by visual learning? You can just guest but cannot confirm it.

B: They may understand better but I don't have data to verify.

M: Then we have to gather some data for it. How do you feel, are you satisfied with these add on tools for improving teaching and learning. Do you agree with the emphasis of the Government saying that use of IT will help in teaching and learning.

B: Half half

M: Half half

B: Yes

M: But, when you have a computer then you use it so much more frequently.

B: Yes, I have said that it would be more convenient for recording those data like whether they have submitted homework or not. I don't need to waste time to search for things.

M: That is to organize the materials

B: Data, like marks and check whether they have submitted homework or not. The whole class can see the records so there is no more argument. All should check records with date and time. It's transparent so it helps and has the advantage. But, whether it really helps in teaching and learning, I still have the doubt. That is, if we use the traditional method like blackboard and chalk. Since this is a practical subject and experience is more important so whether there is PowerPoint or IT to help in the delivery makes no big difference.

M: Overall

B: For example, before that, I turn over a book or pass on something, it may have made no difference.

M: It may be just a different way.

B: So, I'll say that it's half and half, no definite answer.

M: Only convenient but it is not sure whether it is effective or not.

B: But, it is really more convenient. Since it is a practical subject, students need to sing, practice, walk and jump around. A different way is used. One point that is for sure is that it is efficient for checking homework, records, presentation, instructions, websites, etc. But, I am not certain whether students will learn better or not. I just feel that it saves time for handling other data.

M: It is efficient in handling things but whether it is effective in improving teaching and learning is still a question.

B: When I am going to search for information, preparing PowerPoint etc., it is very time consuming. People will say that you can reuse the material but actually you need to revise every time since all classes are different. It may help a bit but cannot reuse the whole piece.

M: Will you continue to use it or explore to use it.

B: It depends on the content. I'll explore more on it. I'll explore how to use the i-portfolio which will be in use in the coming year. I'll try it.

M: That is, you will try different ways of using IT.

B: It depends whether it is suitable for that topic. I won't use only because I'm required to use it. I'll think about the topic, material, need etc. If there is inspection then I'll use it. For example, inspection by the EMB, I'll use IT. Like in the English lessons I taught, I used PowerPoint throughout the lesson.

M: Why you should use when someone inspect your lesson?

B: It is written that it is required.

M: Then, do you feel that the requirement is a push or influence your intension to use or not.

B: Of course, it has some influence but it is not the major reason.

M: It is not the most significant reason, it is the hardware, availability and the topic.

B: The topic, the need are the major reasons for using.

M: Except the school policy or the requirement for inspection. Right?

B: Yes, since it is required so I'll use it.

M: Just like the % required for use in lesson then you must have met the requirement.

B: Sure, I'll meet the requirement.

M: You will use if it is available, convenient, suitable.

B: But may not be used every time.

M: In the next stage, what will you do with IT?

B: I have said that I'll try i-portfolio.

M: It's one of them, what else?

B: I have tried most of the possible ways, like editing video, PowerPoint, etc.

M: You think that you have fully utilized IT for teaching.

B: It is true item wise but for each topic I am not sure.

M: You think it worth using.

B: Yes, I'll continue to use it. Like the data keeping I will use so that I don't need to search everywhere. You know there are so many classes I will easily lose the records if written on paper. If I record them on the computer then there is no need to search and there is no doubt for the records. Students are happy and no mistake will occur. This is a very good tool.

M: Thank you.

Description: 2nd interview with Teacher B – February 2007 ~27 minutes*M: Researcher***B: Teacher B***M: Thank you for talking with me again about half a year after the last interview in July.***B: I've forgotten.***M: The purpose is to see what changes are there, that is the progress after this half year.***B: I've forgotten what answers I gave before.***M: It doesn't matter. I just want to see how computers are used in this year and what you perceive about using IT in teaching, that is the new way of using IT, students' comments on using computers in learning, etc. I would like to see your opinions in these areas. What do you think or what you observe about the students' progress and their response? How's your feelings?*

B: In the first term, eClass is more frequently used for submitting homework. There are advantages and disadvantages. The advantage is you have a whole picture of who have handed in their homework and who have not. It's clear to see how many student have submitted homework and how many failed. The disadvantage is students can use copy and paste from each others' work and then upload as their own homework. However, they have done the same copying homework, only in different ways. That's how I feel. I feel that it's easier for collecting homework. And also, for some homework, such as some worksheets we have already taught but students are required to submit after some time like a week or two. Then those students who are not so good or not so careful will have lost it. Now, these worksheets can be put on eClass. If students are asked to do some worksheets and submit after some time but not tomorrow, some students will lose the worksheet. Now, the files can be uploaded to eClass, the public files area. They can get them there. It's more convenient since if a students suddenly ask me after one or two month, Miss B I've lost my assignment and what is the criteria for the assignment or which items are we going to do, then there are some difficulties in getting back those worksheets for them. computers do help in this way.

I think when computers are used, class discipline is also better since we've used record keeping as you have seen, so it's better. All of us can look at the records, if they are good or have answered a question then a mark is added to their term mark. On the contrary, if they failed to bring anything to lesson, they will be given something like grace or chances for them to erase the bad record. If they answer a question, a bad mark will be erased. Then, by this way records are cancelled one for one so they become very active in answering questions in lesson, otherwise, they are reluctant to. Since they want to erase some bad marks due to missing homework, forgetting to bring things to school, or any other misbehavior, they will be very active in raising hands and answering questions. Because they are all looking at the mark sheet on the screen, they know what will happen as a consequence, nothing tricky, so it is helpful to some extend in this way of use.

In some classes, computers can get resources, such as web resources or CD ROM, then I don't need to turn round and face the blackboard. I can have more frequent contact the students and avoiding the student from misbehave while I turn round for writing things on the board. There are certain advantages but there are also disadvantages like that students will feel boring and sleeping after watching the screen for too long.

M: Students will feel boring?

B: So, time allocated for teaching using computer must not be too long and there should have a number of activities varying throughout the lesson. For example, listening, reading, writing, analyzing all kinds of activities. It's not good if students are required to watch for too long. There is a good point since the HiFi Component in this room has some problems when playing a film for too long. Since there is a computer, I can put a musical (CD) in it and the Real Player can immediately play the film and solve the problem. This is an advantage. But, sometimes, when I need to play several films, I'll still use the HiFi component so that they can be used alternatively. It is useful when using them together.

Beside, students are required to submit PowerPoint presentations. But, since there is a computer in the room, students can do presentation using PowerPoint immediately with other materials they have collected in front of the class. They feel more rich in a visualize screen. This is also an advantage. It is more efficient in terms of time. Before, when PowerPoint is not in use, they present using scrap book and read a long report in front of the class, it is monotonous. Classmates will not be so attentive as well. Since they now can see and hear and do assessment in several areas at the same. They need to take into consideration a number of points so their thinking skills and analytical power will both be upgraded since they are required to present in such a way in front of a group of people. Computers are in some sense good for teaching and learning.

For example, I have a project for my Form 3 students, Form 2 as well. This is about the passing over of sovereignty to China for 10 years. They need to do some analysis and compose songs and write lyrics. If there is nothing on the Intranet or Internet that they can use for searching WebSite then there will be obstacles for them to collect information. You know, when the government or the public have any activities, people will give comments on the web. This is also the way I prepare for the materials for my lessons. For the motivation, sometimes, I will also download relevant materials or documents from the websites. If there is no search engine, I have more difficulties to prepare for a lesson like this something about social issues. I find it easier to search for material on the web. This is also an advantage. But, there are disadvantages at times, like what just happened, we could not access the Internet suddenly. If I put up materials on eClass for downloading them during lesson but now it's not possible to connect to the Internet, so you cannot go on eClass and get the information. There are big problems. Or, if I want to demonstrate on the website, but you still cannot do that because you cannot connect to the Internet.

Some other problems like when connecting the computer to the sound system, the quality of sound is not good or have nuisance due to poor connection. It's very disturbing but will happen at times. This is a technical problem. But, since we are not familiar with the technical side, it may take few days or even a whole week before the problems can be solved. The problem may come from the HiFi, the amplifier etc. but since I am not a technician so I cannot fix it myself so I need even to ask my students to help and sometimes ask the technical support staff to help. For example, there is no wire for permanent connection for the sound system. Since the technician also has only one wire at hand so he cannot provide one for the Music Room.

Overall, it's useful for teaching since it is faster for retrieving information, more convenient for storage and others. When I organize the worksheets and other materials, questions, it's really convenient for preparing lessons especially now that each of us has a notebook computer. We can use it in our own seat but do not need to wait for a

computer available, may be in a queue, so it's now more convenient that we can type some words and save them any time we need to. In teaching and learning, basically, it is positive and it is more efficient if I am asked to give comment. For students, they cannot be given the same kind of activity for long time or they will fall asleep. When they watch something for too long, they will fall asleep or start to talk and play at the back. You need to shift between methods. These are the main points. Do you have any questions to ask?

M: In fact, your views on using computer in your teaching are different from that in the last year? Have you any changes after experienced using computer in teaching and learning since last July?

B: In fact, there are some. In the last year, it's new to me so I need time to familiarize with it but now I have used it more often. Another problem is about connections. There is a projector already installed in the music room so it doesn't need to do the set up whenever you use the computer so its more time saving. Therefore, we only need to switch on and plug a wire so its much more convenient. This is because of the hardware so it is used more frequently. Before then, I needed to borrow the wire every time I used it. Sometimes, if I forgot to get the wire, I'd prefer not to use it. Just talk to the class and students just listen but nothing to see. Now that students can have something to watch on the screen when the teacher simply plugs in a wire and switches on the power. It's much easier so we don't mind even there is still a problem with the sound wire. In fact, it's a problem since when the wire is plugged in then the teacher cannot use the microphone. If I want to use the red and white sockets, Mr. B told me that there is not any spare wire for me. If there is such a wire then it would be even more convenient. In fact, better say that since the external factors are improved.

M: Because the external factors are favorable, you will explore more for using it. After you have used it for some time, you will have experienced the advantages.

B: Yes, in addition, I am now more familiar with using the computer.

M: Have you noticed that you have explored more of the ways of use, besides the technical side?

B: Yes, I just use a paper to record down students who failed to bring books to lesson or put the records in a book with the dates. Now, we can look at the records together. What's your record and what's his/hers. All can see.

M: That means you have explored lots more ways of using computers to assist in your teaching.

B: Therefore, I think that it is useful. Basically, I shall bring the computer for every Music lesson. It is because I will put records during lesson and I need to upload information on eClass for their homework. I'll show them the folder for submitting their work. I'll demonstrate to them where to upload their work otherwise, they won't know how to do it or put into the wrong folder. There's the case that a student put his/her work into other class's folder. I don't know why they can upload to that folder!

M: That means, you now use your computer not only for doing presentations but also for assessment, submitting homework and organizing teaching materials. Right?

B: Yes,

M: That is, you think computer can help you to do these. Then, what can it help in students' learning?

B: Students can visualize what they learn since some students are better in visual learning. In fact, those of visual learning are of the majority. Some people are not good at listening and analyzing but they are good at visual learning. According to the research of the psychologist, about 60 to 70% students are stronger in visual learning. They are better in color and figures.

M: That is, you think it is good for those students.

B: Yes, it helps those in learning. They will be quicker in understanding. Some will think you are wasting time. They will think that you don't need to show so many things to people. Just explain in one or two sentences. Why bother to show on the screen.

M: You mentioned that it will be helpful to those students who have discipline problems.

B: Yes, since they themselves can see the records on the screen. All can see the records, so they will try hard to answer questions. I always invite them to answer questions voluntarily. I won't force them. Therefore, I have provided a healthy classroom. Since I won't force them, so they won't feel tension and stress. This is what I heard from a seminar about innovative teaching and learning method. They stressed on the point that we cannot give stress or pressure to students. We need to make them voluntarily raise their hand and voluntarily answer questions in order to create a happy learning atmosphere.

M: You think this can help create an atmosphere.

B: Yes, it can help create an atmosphere that they will take the initiative to answer questions. Since they can see so it is more efficient and they will have more positive response. In fact, it's helpful. Indeed, it helps.

M: And how about the presentation?

B: There is no need to print so many pages for them. They can read on the screen. Use the pull down menu to show them page by page on the web. Like that for the project we are going to do, I just distributed 10 copies to them, one group each. They can see what to do for the first page and what for the second. So, all their attentions will be focused on the screen. After that, ask each group leader to get one copy. It saves resources. It saves resources on the world, save the trees.

M: About students' presentations. Will it help when they use PowerPoint for their presentations.

B: It depends on the class and the students. There are students, four or six in a group, but there are only one or two actually doing the work but the others are just putting their names on the list but doing nothing. At least, there are 50 to 75%, depending on which class, participate in it. They know that they are required to do this and they are conscious about where to get the information. Even though they are not the one who actually does this part, they can still have the awareness. I feel that it has upgraded their consciousnesses. When they do their presentation, there are students who just read those words written by others. There are some students like this in each class but at least, they will know what they are doing. At least they know what they are doing. Before that, they may even not open the notebook but now they have to look at the screen and get something. That is, their consciousness, alertness are higher. Before that, they can say anything without referring to anything prepared but now they at least need to say something related to the PowerPoint presentation on the screen. These are advantages.

M: Towards the end, do you have anything to say about the development of IT in teaching? What other changes will you like to see?

B: It will be better if it can be more user-friendly, that is all equipments are connected properly so that there is no need to do any connection during lesson. You only need press ON. Otherwise, if there is a problem in any one component, the teacher cannot use it for this lesson.

M: Is there any desktop computer in this room?

B: Of course not. There is only one put inside the cabinet but need to make connections when you want to use it.

M: In fact, all the special rooms will also have computers set up there.

B: I've never seen it. It's very good if it is possible.

M: I mainly want to see your own view.

B: Basically, they are positive. Expecting more user-friendly skills used. But, in fact, we're not that type of technical people, so if publishers or other websites can support our usage, no matter on CD ROMs or any kinds of teaching resources, websites then we can use them, otherwise, we still cannot use them.

M: You think that this is good to use but why don't people use them in the past? Do you think that teachers do not use only because there are not sufficient resources?

B: In fact, the resources are still not sufficient by now. In fact, still very limited.

M: Then, why do you think that we have such great progress?

B: It's because we have computers on hand. Everyday, we are using it. If we explore something everyday, then we can have a lot. It's thousand miles in one day in the outside world, at least we can have on mile (progress) in one day.

M: Is it your conclusion that hardware is the most important while technical support and resources are also important.

B: Now, I have used it more frequently but for further improve, I need something more, like that if I have a program for generating musical notes, ... , then when I create a piece of music, ... now I have to write on the blackboard and then play on the piano, ... but if I can use the software for generating notes some years ago, that is 2004 version, is now outdated. Now that the computers are so advanced that there is not compatible so I cannot demonstrate instantly while composing music.

M: How about the big musical board?

B: The board can only get a note when it is typed and that's it. And, it is really too big that it has occupied more than half of the blackboard of the music room. It would be better if it was installed on the wall instead. What can be better is to have the notes immediately generated by the computer so that we can save and get a copy upload to the eClass for the whole class. It will be better for further development. But, I don't know whether there is such program for hands on use.

M: You mean that the computer is important. Last year, we have discussed about why we use the computers. The principal has put the use of computer in the school policy but for this year, it is not mentioned that we need to use it.

B: But we get used to it already.

M: What do you think if there is no such policy at the beginning, will the situation be the same?

B: I'll still use it but never think whether I'll use it as frequent or not. But, in fact, I don't know. But, I am sure I'll use it. Like when there is a projector, we will use more frequently.

M: That is, if the hardware is available then we will use it.

B: Then why I seldom use the board. It's because it is very limited. It's useful only when teaching music theory but it's already clearly stated in the book and can be explained in few words. If the board is used, I need to do lots of connections and I also need to face the board and turn my back to the students so I think it is not user-friendly. Also, I need to put it away after use since it is too big and has occupied over half of the board. You know, the Music room is now very small and the storage space is a big problem. All the musical instruments are put in the music room so it is even worse now. It's always so messy since there is not enough space for storing the musical instruments and some musical instruments have to be put on the stage. So, it's not practical to have the big board in the music room.

M: Thank you for sparing time for this interview

Description: First Interview with Teacher H – July 2006 ~20 minutes

M: Researcher

H: Teacher H

M: Have you used computers more frequently in lessons in this year?

H: Yes, I have used more frequently.

M: You feel you have used it more frequently. How many lessons do you have in a week?

H: About 26 periods in a week.

M: In the 26 lessons, about how many lessons will you use computer on the average? Considering the month that you use computer most frequently. Which Month is it?

H: March. I have used computers most frequently in March.

M: About how many lessons have you used computers on the average?

H: About 14 to 15 among the 26 lessons. Except those for the lower forms. Mainly in the higher forms since the higher forms have double lessons. I have only Chinese History lessons with the lower forms and they are single lessons only so it is not so convenient.

M: Because it is single lessons. If they are not single lessons, then you will still use it. Right?

H: Yes, I will.

M: How will you use computers?

H: I have used PowerPoint, play videos, DVDs at times. I have also tried to go to the Internet, show students web materials, mainly in Chinese lessons. Mainly in these three areas. I have also used eClass. I have asked students to submit homework on eClass. This is how I use computer in this year. I am thinking about using forums in teaching in the coming year. I have heard about it from my colleagues but I am not yet sure about the operation.

M: This is a good practice. Then you will use eClass for teaching mainly using its function to submit homework. Right? Besides teaching, have you used eClass frequently or not?

H: Yes, quite frequently. For example, receiving school information, reading notes and agendas for meetings, announcements. Besides, I have also tried to use eClass for sending emails to colleagues. Also I have searched for new information from the web. So, I have used it quite frequently. It's useful in sending and receiving messages.

M: Why, as you said, that you used IT More frequently in March?

H: Maybe because we have to collect homework after the new year holiday and prepare for the external school review. In ESR, we may be required to show how we have used IT such as PowerPoint. In the first term, the school has also required us to use more IT in teaching. So, we should use it more in March.

M: That means, the school's requirement is also one factor.

H: Yes, the school's concern is very important.

M: Yes, it is very important. In fact, the school has computers for quite a long time, even before 2000. But, why do you use them more often suddenly but not so often before?

H: Before that, I seldom use IT. Because I don't have notebook computer before this year so it is not convenient for using IT. Also, the school didn't have the culture for using IT. But this year, it is quite obvious that the school has given each of us a notebook computer and make it more convenient. For example, I can prepare a PowerPoint or some notes for students in the lessons. Back to the school culture, since the school takes the lead so we use IT more often. It's like that. First, it is now more convenient since we now have notebook computers. Second, the school encourages us to use IT in teaching.

M: How will you rate it? The school's encouragement for using IT in teaching or teachers having notebook computers is more important.

H: I think it's the encouragement by the school is more important.

M: Besides this, what other reasons can you tell? For example, the teaching philosophy or other advantages.

H: Yes, there are some reasons. For example, using IT, the visual effects do help, like while we talk about poems of the Tang Dynasty, we describe the sceneries of the Long River or the desert, we can show them the scene so that they can see it 3-dimensionally. Or sometimes, we are going to describe some objects like Golden box, then we can show them the picture. This will help them to understand. This is very useful.

M: You mean that you've tried and see the advantage or you use it because you know there is the advantage.

H: In fact, it is interactive. Sometimes, I know that computers can do something like this but be more practical, it need lots of time to make it. You know, teaching is already a hard job. So, even I know it can help to make lessons more effective but if there is no requirement or encouragement given by the school I would not be willing to spend time making it since it really demands lots of time especially when I am not very familiar with the hardware even my wife can help in some ways.

M: You now have your wife to help you but do you think that support given by the school is sufficient or not? In fact, we have a technical support staff for years.

H: I have to say it this way. In fact, there are lots of training courses for us in the time of the former principal. Honestly speaking, the trainings given are already sufficient. We have learnt a lot but we haven't tried them out and we do not have an atmosphere for using it. To me, I don't have confidence in using it. Resource put on training is sufficient but I still have the fear that problems may arise during lesson. There is not sufficient support on-site. This is the problem I have come across in the first term.

M: But, we have the same amount of man-power for assisting teachers.

H: Because we become more familiar with the software. Like I am now more familiar with PowerPoint so I know which key is for what so I have the confidence. However, for the new hardware, we still have the fear of using. This is true.

M: How did you break through this?

H: There is an atmosphere that we must follow. If we do not follow then we will be lagging behind the requirement.

M: You mean the requirement of the school.

H: Yes, I mean the requirement of the school.

M: The EMB set up this requirement since 1998.

H: But our school had not been as serious as it is now to enforce this requirement. The school was relatively loose in this policy. Like, for inspection, Mr. M also took this not so serious, which is actually 'good'. This year, the principal inspects the lessons herself so we become more anxious about this. Since it is the school's requirement and it is also to test teachers' ability so we tried very hard to do well.

M: You mean that lesson observation is the principal's requirement. Do you think the principal's requirement is the major reason?

H: Yes, this should be the major reason. Of course, when we use it we will feel its advantages. This is the fact.

M: That means you feel the advantages after you have tried to use it. You find more advantages when you use it more.

H: Yes, I can see the advantages but it still depends on the time available.

M: Time constraint is also a factor.

H: Yes, I need quite long time for preparing for a PowerPoint. I am not very familiar with the software, like how to put the photos in or how to edit the photos and the others. I have just talked about the PowerPoint but not yet include the others.

M: In fact, there are some ready made materials.

H: I have tried some of them. I have searched for some on the NET. But the problems is not really suitable for our syllabus. We also need modifications and tailor for the lessons. But, it's true that we can get lots of teaching materials from the WEB.

M: Some are free. You don't need to pay. So, there is no worry about the ethics issue. We have to depend on these since we are not able to design all for ourselves.

H: Yes, we cannot do it all by ourselves. It's quite impossible.

M: It would be very difficult for doing this. It's too demanding. But, still we prefer to get resources from the INTERNET. It is also the principal's preference. It really need large amount of money and time. If you are asked to rate 1. hardware (notebook or the workstations in classrooms), 2. software (ready made materials or web resources), 3. teaching concepts (ideas or belief), 4. school policy (principal's strategy). Among these four, what is the order of importance to you yourself that will affect the implementation.

H: Now, I will put school policy the first. If not, we will not be so actively using it. It depends on the need. If the principal inspects my lessons then I must use IT. If she becomes our department head, then I should know how to use IT and know how to use IT in lessons when I observe others' lessons. This year, my former department head also asked me to be an IT seed teacher so I must try to know how to use it. To me, the school policy is of the utmost importance. Second, in the second term, I think teaching concepts is also important. Since, conceptually, I find that not only PowerPoint but forums are also very important. We can get PowerPoint from other resources for teaching. But, when we use forum or web platform then it requires large amount of time so though it is good but I doubt whether I have time to use it. It involves interaction with students even after school. But it requires lots of time so we worry about the time we can put on it. But for the long run it is worth. Theoretically, I think I have to use it. Third, concerning the notebook computer, it is important to have the notebook. The fourth one is software. Because we have computers so we will do all these. Otherwise we will not use it and we will use only chalk and talk. This is the order.

M: In Hong kong, this is one of the educational change that is enforced in high profile. How do you feel this can affect teaching? Is it only the teaching method or the teaching concept?

H: I think it is the teaching concept not only a method.

M: Do you think that you have achieved the target set for using IT in teaching?

H: I have achieved the target. I have changed from one who does not use PowerPoint to one who has tried PowerPoint and use computer to submit assignments.

M: Do you think you have achieved it exceptionally?

H: I dare not say I exceptionally achieved the target. There are teachers who can match their IT teaching with their explanation in class. The effects are very good in these classes. I cannot be as good yet.

M: You feel that you have made a big leap this year.

H: Sure, it is a big leap.

M: Which area will you develop in the next stage?

H: I have mentioned that I wish to explore to use forum but it requires time. I will teach Chinese Culture in the coming year. Students are required to discuss on cultural issues. If there is a social issue related to cultural issues, students can discuss them seriously on the forum and teachers give them feedback by the end. When they give good ideas, I can give them encouragements and when they have any wrong concepts, I can also correct them on line. Then, their discussion will become more fruitful. However, this is the concept only. If students actively participate in learning, not only memorizing the notes, then they will learn much better. This can help our students to develop their thinking skills. Our students need to develop their deep thinking, critical thinking. This is a way to help them develop. If it can successfully be done, it will be a big breakthrough.

Description: Second Interview with Teacher H - February 2007 ~20 minutes*M: Researcher***H: Teacher H***M: We had discussed on how to use IT in teaching and learning. Now, after more than half a year, I would like to see if there are any changes in it, including teachers use or student's learning? Is there any differences? That is, your concepts and views of using IT in teaching.*

H: In the first interview, I was just at the first stage of using IT in teaching. Just for presenting PowerPoint etc. or used as an instrument for Computer Assisted Instructions. But, in the second time, we start to think that computer teaching in teaching Chinese Language, besides as an computer assisted learning tool, we think that it can also be used for storage and for extension. Except playing recordings for listening exercises, teachers can also record students' presentation, if possible. After capturing and storing them, teachers can play them on the screen and give feedback immediately. Students can review their presentations after organization and consolidation by the teacher then they can memorize their points of argument and it is very helpful for their development. This is an improvement from the previous applications.

M: That means, the storage capacity of the computer and the capability for giving immediate feedback are useful for language training.

H: More immediate feedback can be given.

M: That is, you have discovered more advantages of using computers. Then, how about the frequency of usage? Will you use it more frequently?

H: Yes, I will. Since for the speech training, we cannot only read but we need to give them chances to speak and listen and involve immediate feedback most of the time. This will be very helpful using IT. Like in this lesson, due to the limitation of time, if the records made during the lesson can be put on the web than it will be very helpful. They can see how their fellow students perform, so they can improve their attitudes and skills in speaking after reviewing and reflections. So, it will be very helpful.

M: They can review the video and this will be helpful to them.

H: Yes

M: How do you feel? In fact, these do exist sometime before now, how do these changes come forth?

H: We can approach it from two points of view. There is an assessment method that requires the listening materials to be put on computers and the analysis of materials to be done through them. The second is also related to the change of assessment methods. Before then, assessments are mainly done in written form, like after marking compositions, we just write down summaries and give assessments to the end. But now, the learning method is different and we are required to do continuous (formal) assessment. Like in this speaking exercise, we need to point out what should be corrected or improved. I feel that, by using IT, we can point out the problems immediately and store the information, then do a simple evaluation and assessment by the end. This is a main reason for making us use IT in teaching.

M: In other words, the change of modes of assessment introduced by the HKEAA leads to the use of IT in teaching.

H: Yes, the assessment method is in favor of the changes. As a supplement, I want to add a point. Theoretically, the lesson of training for speaking you just observed could be even better. That is, the computer could help recording the lesson. During the operation of the lesson, the first minute is the introduction then comes the development part. The development extends from sixth minute to the fifteenth minute. With the accurate timing, students chances of speaking can be increased and the quality can be improved. Before, we used impression and asked students to speak several times, so it is not as accurate. Second, the impact not be as strong, the third point is also important, that the instructions given to students is not exact. Like before then, we will ask students to say when they think fit but now, we will tell the students to say something at around 5 minutes from the start then it will be easier to follow and make the method of assessment clearer to students. This is very important for promoting the learning method.

M: This helps to promote the use of IT in their learning. Besides assessment, what else you have increased the usage of computers in your teaching?

H: Besides using it in this assessment mode, it is also important in three ways. Firstly, it is for attracting the attention of students for learning. Honestly speaking, if we can clearly put the main theme of the lesson on the PowerPoint, students will be easier to follow. Secondly, when we use computer in teaching, the visual and audio effects can help to produce some teaching materials with more varieties. For example, if we are going to design a group discussion, then we can play a short advertisement if possible say a short film produced by the government not to ban smoking, then through these visual and video effects, students are easier to grasp the message and will not be so boring. Besides the advantage of having visual and video effects, the second point is that with IT, teaching can be more interactive. Another example is that in compositions or speaking, students' points of view can be illustrated immediately through the computers or modified so that they can know that where they can do better. It is more efficient in terms of time. Simply say that, it achieves a more high efficiency teaching. Compared with the procedure of going to and fro many times before getting to a final version, it is more time saving and helpful in learning the subject. First, is the attractiveness of the visual and audio effects. Second is the effectiveness of teaching. Third is also very important, it can also show to our students that with this computer design we can have a very good school based sample as part of our teaching. This makes students easier to build up their sense of belongings. For example, when we make shorts of school life as part of our teaching, this will make our students easier to participate and improve their sense of belongings as well as the promotion of civic education of the school, like listening the recordings of the speakers. Then, their training will be more all rounded. All the three points are important.

M: Then, what makes you have suddenly discovered so many advantages in this half year?

H: I can say that this way, the school strongly encourage teachers to use IT. Our principal strongly encourages teachers to use IT in teaching, and encourages teachers using this tool for teaching. Since our peers all use this tool in teaching, honestly speaking, it will push us to follow the good way of teaching. This is the first point. The second point is that using IT in teaching is also a change in usual practice (habit) in teaching. Before that, we usually give out notes to students, filling out and explaining notes and then end the session with feedback. However, the ability usually requires weighting, viewing, speaking and guessing etc. Using computers is relatively easier to manage. Now, we are talking about a method that improves learning for assessment, so

we have to use IT technology to help us to get good examples and good things to teach our students. For example, we just say that what is good in speech or just use measuring tools to say what is good but in fact, it is not exact and students could not understand it well. But if we play a video and show them what is good, what makes it get high mark, what is good then it is clear to them. Also, like what means good attitude, it needs to be demonstrated (真人) before we can understand clearly the standards, so it also encourages the use IT through the curriculum revolution. Besides the encouragement of the school and the revolution of curriculum, the third one may be teachers' changes in their concepts. It changes from using pen and paper for assessment to using various means for the assessment. With these various assessments, we need to use computers to help us to have more accurate assessments. These three are all important.

M: In this half year, you think the main reasons for the changes are the new curriculum and the principal's encouragement for teachers' peer influence. Before, we have computers in the school for some time already but the increase in usage is very slow. Do you feel that the change is much faster in this half year?

H: It is much faster. Especially in the Chinese subject department where there are new teachers so there are habits changes. Mutual influence is also quite big, like push by peers, etc.

M: What do you think about the direction for development? Or, according to your view, what is the effect on the students learning?

H: First, relatively speaking, students will firstly find it more interesting, not only learn with the books but also with the sound, images, video etc. I think this should be one point. Another point is that it is easier to understand external support and standards for assessment. It is clear that what is good and what is not. Also, there are more spaces for students to interact if they are willing to review. That is, if they can do their own after lesson review, they can learn more as it is the trend of development. Of course, there are also limitations. There are also certain difficulties in using IT in teaching. First, I'm still not very familiar with the operations, so when there is any problem and stop during the process, then it will affect the progress of the lesson. Of course, we can give them notes or do something else but it will not be able to follow the pre-designed flow of the lesson. It will affect the progress and the flow of the lesson. Second, I feel that I myself need to have better coordination with other colleagues in order to pool in more manpower in the development. It needs more collaboration amongst staff. For example, a teacher cannot do everything by himself/herself. Maybe, he/she needs other colleagues to give IT support, like editing videos, or putting videos on the web. All need to have somebody to help completing the task. For example, we need to have better cooperation to make use of the IT facilities to help us give feedback to students as early as possible. This is one area that we can have done better. Another difficulty is time constraint. For those developments I have described above, I think other teachers won't have any objections to them. Like the amount time needed for the preparation of materials before lessons and editing of materials after the lessons is actually quite large. Although I have some experiences in making a PowerPoint presentation, I still need to spend quite a lot of time to prepare materials, like that I need more than two hours for the production of teaching materials, including the design, the selection of materials and editing, etc. It's really time consuming. If it relies on one teacher for the production, it's really a tough job. Like editing the tapes after recording or even organization of materials, it's really a tough job, though we have Mr. B (IT technician) to help us. No matter the time frame

and others, the process is rather slow so we need to think of ways to improve the situation.

M: That means if we can have some technology that help us to do faster like recording directly onto the hard disk of the computer. We can explore further in this direction. This is how you view the development. Right? Thank you very much for your opinions. In fact, this is a follow-up of the last interview on your use of IT in teaching.

Description: First Interview with Teacher K – July 2006 ~24 minutes

M: Researcher

K: Teacher K

M: I would like to ask about your opinions on IT in teaching and learning. Without doubt that the use of IT in teaching in the second term is more often than in the first term. How about you? Is the using rate of computer in the second term higher than that in the first term?

K: I am rather balance in using IT. Maybe, because of the lesson observation of the principal in the first term that I use IT quite frequently.

M: That means you used computer quite frequently in the first term.

K: I mainly use the internet, powerpoint and watch films, watch short video, do homework during lesson.

M: I want to compare with that before computers are given to us. We are given computers in November. The notebooks are distributed to us in November.

K: Yes, is it November?

M: Then, what are you referring to? Are you referring to the usage before the provision of notebook computers or after that?

K: Really? I think notebooks are given to us very early this year!

M: It's November. The notebooks are given to you in November.

K: Then, the usage in the second term is definitely more frequent than in the first term.

M: Let's say compared with when there is no notebook, or you can even compare with that in the last year.

K: Of course much more usage now.

M: What is it when compare with your usage in 2004-05?

K: Compare with 2004-05, the usage is much more.

M: For how much?

K: In the second term, almost double. That is, in the second term, basically almost all topics I taught I used PowerPoint.

M: We can see the changes. The government required us to use IT in teaching for many years, about 10 years. That is more than 5 years and about 8 years. Why that you use computers so often in this year?

K: First, it is more convenient. Second, publishers ... I think they have provided more teaching materials, in fact, there are much more in the last year already, mainly for Form 4 in the last year and up to Form 5 and all other classes in this year.

M: More resources, ready made materials

K: Yes, they provide us with something and we just need to add or minus something, then you can tailor made for your teaching.

M: Is there any other reasons?

K: Of course, we have the computers available and the third one is I feel that it is useful for teaching. It facilitates teacher teaching and student learning.

M: Any more reasons?

K: What you mean by teaching? Are you referring to the student learning?

M: I refer to student learning.

K: Students can absorb more with the use of IT in teaching. It is much more convenient than before.

M: Who feel that it is more convenient? You feel it more convenient or the students feel it more convenient?

K: It is more convenient for teaching.

M: More convenient for teaching?

K: Students find it more interesting in learning on the whole. Students are better involved in learning and more efficient in learning.

M: You feel it more efficient?

K: Yes, for doing homework, taking notes and doing any follow-up.

M: Before, we have notebooks for teachers to borrow for use.

K: We have notebooks.

M: We have notebooks but you need to borrow them so it is not convenient.

K: This year we have the IT helpers. They are very helpful. Before, we need to ask the 2 colleagues. Now, we can ask the students to help. Teachers may not be very familiar with the operations, the students can help us and show us which key to press. Before, we need to ask a student to go to the office and get help from the technicians, but they sometimes are not available. Now the student helpers are familiar with the system. So, it is more convenient.

M: Convenient, you feel supported, hardware ready and software available. You think these are the reasons.

K: These make teachers have more confidence. They will not feel inconvenient. Like in the ESR, I taught 3X, I had also used IT in teaching. That means, it helps to improve our confidence.

M: Why then you use IT? What do you think, will you use IT in External Review?

K: Not sure. Because I'm afraid that I pressed the wrong key. Very simple, when I play PowerPoint, film, outlines, I can ask the student to do it together and have more interaction. I can put all the answers in the PowerPoint, including easy and difficult questions and their answers. You understand what I mean?

M: That is you can prepare everything before hand.

K: Yes, you can just hide up the answers.

M: That is you can prepare everything before hand so you feel it can facilitate the teaching in the lesson.

K: The most important is that I have the confidence.

M: Before, you don't have confidence because...

K: Confidence means I dared not use it so often before but now, it is very fast for setting up a PowerPoint. It's much faster.

M: You become more familiar with it.

K: Even if you don't know how to do it, you will have many boys to help besides the IT helpers.

M: In fact, there have been computers for many years. Why you are so slow in using IT?

K: I think it is the confidence. We cannot break the gap for using IT.

M: What helps you break the gap?

K: The conditions are more favorable in this year. It makes teachers more willing to use it.

M: First, ...the reason is...

K: When you feel that the conditions are more ready. You can prepare the equipments for teaching much faster. Before, we have 35 minutes for a lesson, if there is any obstacles, then you will feel threatened and feel bad since you cannot finish the teaching. So, you prefer to use the overhead projectors, transparencies, visualizers. Mainly these since they are more reliable. But now I find that the visualizer and the PowerPoint can be used together just by pressing a key to shift between the two.

M: Yes, just by pressing a key

K: You can now view something on the computer, PowerPoint, then view a film and then use visualizer to see something else. Both can do.

M: That is more convenient now. You have practiced more and so are more familiar with it now. Right?

K: Yes, we have more confidence, more familiar after using it many times.

M: What ignites it? What is the most important factor?

K: I feel it is the hardware. Hardware available and the IT helpers

M: How do you feel about the principal's enforcement? Otherwise we won't have the notebooks and the school policy with it as one of the major concerns.

K: But, I really don't remember or concern about whether it is a major concern or not. I just feel that it is more convenient to use especially after I have completed the Form 7 lessons so I have 4 more free lessons that I can gradually use it more after February and March. It's not very good at the beginning. Gradually, I have more confidence and feel it convenient.

M: That is major concern is not the main reason and you mean that you will use IT for the ESR.

K: I can do better

M: You mean ...

K: For ESR, if I have lots of free lessons on that day, ... For example, when they inspect my lesson on Wednesday, I prepare for the inspection on Tuesday after school. Either one lessons will be chosen for inspection. I asked Mr. J to help me edit the short video, organizing the materials and prepare for the PowerPoint presentation. So the PowerPoint is better than what I have designed before.

M: Why did you use IT in the lesson? Is it because you feel that using IT will make the lesson better.

K: More interactive.

M: What are the advantages?

K: First, the presentation will be more attractive. Second, more efficient. You will not miss anything, etc. including the organization and order. I can also handle the answers better. One more important point is that it is more interaction.

M: You feel it is helpful in your teaching but you need more time for the preparation.

K: For preparation, ... I think I am in a better position since for my subject, History, the syllabus is new for the year before last but now I have taught for 2 years and Miss D have taught for 1 year already so we already have collected lots of materials and the framework is well formed so in this year we just need to add supplementary materials or modify it then it becomes ready made. It is the same for the Form 6 and Form 7. For the subjects I teach, the preparation of PowerPoint is not too difficult.

M: You have a collection of all these materials, then it is very helpful.

K: Yes, you just need to consolidate, upgrade and improve the quality, that is, to consolidate and enhance the quality of presentation and materials. I feel that the materials for Form 7 History is quite good. This is our first time, Miss D and I have checked the credit rate at 1999 and 2000 is nearly the same as the outside and this year we are the same as the outside which is 31% and ours is 32%. They are almost the same and even a bit higher. We have some improvements.

M: You think that there is improvement. Then, what about students learn with IT as you mentioned before? What have it helped? For example you have mentioned that they have improved interest and are more efficient in learning.

K: Due to constraint of time, I still cannot do as the principal said we can read information on the internet immediately and go on the Internet. Is it more sophisticated?

M: No, in fact, it is not too difficult either.

K: Maybe, because my skills are not good enough yet. I hope that I can get more information and help from Miss D and Mr. C. I will not ask Mr. L since he is too busy. I shall ask Mr. C for help since he is still young he can show me how to use IT. It is also a reason why I use IT more often in the second term because of the presence of Mr. C (IT teacher). He has not taught me much but we can know how to do whenever we have problems and become more confident. That is, teachers are more efficient in their preparation. We can teach better since we have sufficient preparation for lessons. It should be helpful to teaching.

M: You think that, at least, it is helpful for doing presentations.

K: Materials, ...

M: Materials, ...

K: Materials, information and steps of presentation and these make the lessons more efficient.

M: But, you have not yet tried to use web materials.

K: Right, the principal has mentioned it very often.

M: There are lots of materials on the web for History.

K: There are lots of materials, the principal had invited us to have meeting, starting with content reading and then asked Ms Y to start working for it. She has suggested interesting websites that can be used immediately. I'll try them during the summer holidays.

M: Yes, then how the principal has affected the progress of use of IT in teaching and learning?

K: I think that she is very positive. I agreed with her suggestion for this change. She has never put pressure on us, not blaming us if we cannot achieve. She is open to it.

M: You don't feel any pressure.

K: She encourages us to use and provides lots of encouragements and sources for us to search.

M: She has given us encouragement and providing resources as support.

K: At the beginning she had asked us to use the eClass and required us to do this and that but she had not required us to achieve something or there is a consequence.

M: She will not scold you

K: She said that she will put it as part of the appraisal. But I find that even she had not required us but teachers were all quite self-conscious. Maybe all accepted that it is the trend that we need to follow. Only that some teachers achieved higher standard and some others, like me, also use IT quite often but may not be so sophisticated. I hope that I can do better in the coming year. I find that the principal's push is very useful. She is positive and has given lots of suggestions to teachers and provided lots of help. I appreciate this policy. ...

M: As I have heard that there are several areas, like hardware readiness, notebooks and others software, support, your belief.

K: Yes, its really user-friendly and useful.

M: It's really useful, your belief, and the principal's leadership.

K: Her encouragement, she's really lead and encouraged and never put consequence on colleagues when they failed to fullfil something. In fact, colleagues voluntarily use more, like myself have used IT more frequently on my own accord. Maybe, I will use even more in the coming year.

M: Then, if you are asked to put the following in order of importance for the successful implementation of this policy. Which one is the most important? Please arrange them in order. They are hardware, like notebooks, second, publishers' materials given, third, your own belief and also the principal's leadership and the principal's policies. In these 5 points, how will you arrange them in order. You have mentioned that these five all have some effects.

K: Policy is of the first position, the second is my own belief and confidence (in using IT), the third is publishers, the fourth is hardware and that is all.

M: The fifth is other supports. I just want to see why we are so different from that years before even we have already put forth the use of IT in teaching and encourage teachers for some years.

K: But we don't have so many computers. It is very troublesome for borrowing computers since we cannot have one computer for everyone.

Description: Second Interview with Teacher K – February 2007 ~ 19.5 minutes*M: Researcher***K: Teacher K***M: Thank you Mr. Lai for attending the 2nd interview about the situation of using IT in teaching. From the last interview till now, it's already about half a year. I would like to see the usage now and the progress*

K: I feel my general application is through practices and consulting different personnel like when there are problems I'll ask different people, such as students, teachers or technician to help. I feel the usage is higher. For general applications, I can handle. For general applications, I refer to something as simple as surfing information from the web, referring songs, downloading pictures from the internet. I know how to do it and can do it.

M: That is you have used web information more frequently.

K: Yes, information from the web. General operations, like setting up the computers, and starting up the system are smoother than before. Maybe, due to the improved equipment of the school, they are easy and convenient to use. Basically, it requires me to plug on 2 wires, one for the power and the other for the projector. Then, the system works.

M: Yes, ... That is, the equipment is more convenient for use so you have used it more frequently.

K: More frequently and easier for use.

M: Then, you will feel the method of usage, you have mentioned, varied more as well. What are the examples? Like web searching. ...

K: The simplest is the PowerPoint for lessons, listening to songs,

M: What kinds of songs will be used?

K: Like for the National Education in LS, we'll listen to songs that have themes relating to national identity.

M: You feel it's easy and convenient

K: Yes, like search for the websites ... and ... download songs... It's rather simple, I can ask a student to help me connect to the sites. At the beginning, I don't know how to do it but the students in lower forms know how to do it and they asked me what to search and they got the songs almost in a minutes, like 龍的傳人、中國人、中華民族, these songs are easy to get from the Internet.

M: How do you think the usage can help in your teaching?

K: These are closely related to the curriculum. We are talking about National Education. Others are ... what are they ,.... like excerpt of historical films that can be played during the lesson.

M: You feel that these help to improve the lessons. ...

K: Much faster! it adds varieties to the lesson as well. PowerPoints are normal, like those provided by the publishers, we just need to modify a bit and be used in lessons. PowerPoints and other computer information are very basic information for lessons. They are very simple. For the preparation of lessons, we can use web materials.

M: You feel web materials help you prepare for the lessons.

K: Besides textbooks, web materials do

M: That is, there are more resources

K: Web materials are more comprehensive. Maybe, these are not the best but more comprehensive, better than publishers, in deed.

M: Then, how do you feel about the effectiveness... that is the effectiveness of learning. The effectiveness of learning,.. Is the effectiveness improved.

K: Just so simple, they can have contact to more varied sources of information. The sources of information and knowledge is widened so they will absorb more information as a consequence.

M: That is, they have more input, right, then how about their interest in learning?

K: Yes, they are more interested in learning.

M: They are more interested in lesson

K: Like questions asked during lessons, you can ask a lot more... Students will response more, ... think more and response more often. Then, more or less, students will answer more questions. Students will answer more questions if I ask them more. Also, it will enhance their knowledge and their standard.

M: you think this can help to raise their standard.

K: Yes, it can

M: Then, is it a reason that encourage you to use IT more in lessons

K: Of course, I cannot use IT in every lesson. ... But, you know the length of a period is shorter now, so I'll use IT once in 2 to 3 lessons. I will use some updated historical films during lessons. I cannot use films, songs or picture so often during lessons. We cannot use it too often. We need to teach concrete content matters.

M: You use IT more frequently.

K: Much more frequent

M: How much more frequent

K: Now, for at least half of the lessons

M: More frequent

K: much more frequent

M: ...

K: Except words and materials, we'll use visualizer.

M: What do you think are the causes for more frequent usage. What is the reason behind? Why you use it more frequently? Convenient?

K: Because I myself can handle. When you do more, you had better skills for doing it.

M: That is, confidence.

K: That is, from trial and error, practice and then become experienced, more experienced. ... Yes, this is my own process.

M: That is you feel that you are now a competent user.

K: I think I've achieved 70 marks out of 100. Of course, for very skilful work, I may not be able to do it. But, just for searching information on the Internet, preparing materials for lessons and then making PowerPoints, then search for more materials like photographs, videos, music, ... I am ok. For general things for my subject, I am able to get it. Of course, for deeper usage like what the principal said about website, then I could not do it.

M: You can search information immediately on the Internet and then use in the lessons.

K: But I cannot do it during the lessons.

M: Like what students had helped you to search for songs from the Internet. ..

K: Oh, Yes, yes

M: The reasons that make you increasingly use IT. What's the most important one?

K: The comprehensiveness of information and the teaching effectiveness.

M: If it helps in these two areas, you will be active in using it.

K: Since it really helps us to get lots of information.

M: ... yes!

K: It can really help you get more and more information. In fact, if you have time, you can really get lots of information. For some topics, there are lots of information on the web, like reading some passages.

Description: First Interview with Teacher L – July 2006 ~ 25 minutes

M: Researcher

L: Teacher L

M: Thank you for interview with me about IT in education. My main theme is about IT in education. My main theme is about the implementation of IT in teaching. I think all teachers felt that the whole school has increased the use of IT in teaching. How about you? Do you think you have increased the use of IT in teaching?

L: Yes, I have.

M: How much? What is the percentage?

L: Like say I have used about 40% before then now I have used about 80% in this year. Yes, about 80%. Double it is before.

M: Double. For what reasons that you have used it frequently this year?

L: First, the subject I teach uses another text book. So, I needed to revise the notes. When I was doing the revision, I felt that using IT would be easier to update and could be used for longer time. Since I had to update it, I changed them into PowerPoints. For those notes written on the blackboard, were transferred to word documents and stored in computers. This is one of the reasons. At the same time, I had learnt something new that I wanted to try. I had a notebook computer so I used it more frequently.

M: That means, you felt that the notebook computer was a cause for the increase in usage.

L: Yes, but this is not the main reason. Since I had my own notebook before that I would take to lessons but sometimes, I might have left it at home. Now, the computer provided by the school is more convenient for me to use both at school and at home. This should have really helped.

M: Except this, is there any other reasons? Like the external school review.

L: This is also a reason. Since the school had set teachers using IT in teaching a major concern, the panel should think how to use it and my use served as a model for the panel for I am the panel head.

M: If you are asked to rate the importance, first, hardware such as notebook. Another one I call it software, examples are resources or materials from publishers, or other usages, other resources. Third, external factors, like external review and school base assessment. Fourth is school policy. Also, you find that there is good for teaching theory, belief change. Amongst these, how will you rate the importance in influencing the usage? Which one is the most important?

L: Software is of the first priority. School policy is also important. Since if there is not such school policy, it will not be since it is really very hard to do. It needs much time for preparing the materials, especially in the beginning. If it is already established, it will be very convenient. I think the first is software and second is policy.

M: How about hardware?

L: Hardware, I think school policy, ..., Do we have 5 factors, right?

M: Yes, there are 5. No, only 4.

L: Third is the external factors and the fourth is hardware. I feel that the hardware is already more than it is needed. But, there is minimum requirement that will make it better if they exist. I still think that software is the most important.

M: One more reason is that you suddenly find that the use of IT is good in terms of teaching philosophy.

L: I know that already for some time so I won't think it a reason.

M: Then, another question is what hinders us from using it. Why it is so slow to implement using IT in teaching though people know the advantages of using IT in teaching?

L: The main reason for using it more frequently this year is to face the change of syllabus, change of textbook is the main reason. In fact, I have used it quite frequently before. On the whole, I feel that the notebook given to teachers is most important. In general, for the school, the basic infrastructure is most important in the first step. After that, it is not as important but the software becomes important. For example, in this year, like we have somebody come to teach us how to use the smart board and the software for teaching. It has a rather great impact on me. Though we don't have smart board but I have used hand written pad instead. Later, I will propose to use touch screen LCD monitor which I think will be even better than using smart board. This is also because I think that it can be used this way. The software can be used in teaching. It is worth trying. I have the intention to try it, otherwise, we will use the old methods. So, to the whole school, the provision of notebook computers is important. In fact, I saw that colleagues had used their notebook and discovered that the publishers indeed have provided a lot of materials useful for teaching. That means, with well established infrastructure, but you don't search or find any information or use those provided by publishers then it won't have much help.

M: You mean that when these exist, then teachers will use.

L: I find that to the whole school, this is a big improvement, a turning point.

M: You mean the hardware or the software is the turning point.

L: This is the first step. I think.

M: Then how do you think about the influence of the school policy and it is strongly in force.

L: To me, it is the second. I feel it is the second one.

M: How about to the colleagues?

L: To the colleagues, I think it is the same. When they have the notebook, they want to see what they can get. In fact, they know that it is the trend. But, they need a push then they will have a culture to try. Like, if they see everyone in the same department uses it, they themselves will have little pressure to try. And, when other colleagues have prepared something already so they can share with each other. Then they will use more since they have materials at hand.

M: In fact, this is a culture.

L: Right, if they are not originally using IT, it is rather difficult for them to start using it or initiate to do it. Unless they really have the interest or are familiar with it already, it is really very difficult. If it is implemented as a school policy, that is, not only you but the whole staff is required to do that. Then, each teacher does something and share with

each other then they will all feel easy to do it together. I am saying that through school policy to build up a culture, everyone does something then you don't need to do it again in the next year. You only need to modify a bit. So, I feel this is the third.

M: To other teachers, it is the third. That is, to other teachers, hardware is the first, second is...

L: Software ... Otherwise, there is no point to require a teacher to use IT.

M: Second is the software

L: Software is important, Otherwise they are not able to produce something for themselves even if there is the policy. They are unable to make so many things themselves since they won't have so much time.

M: However, there are many resources before but the usage is a bit ...

L: But, is there any example?

M: Like that the publishers have such materials ready before this year. They are not published this year but some years before. However, teachers seldom use them.

L: Yes, I also agreed with that. ... But, is it because there are so many updates this year? I think so. There are many updates this year, such as English and Chinese syllabuses. There are many updates.

M: Anyway, this creates an atmosphere.

L: Right

M: What do you think about the use of IT in teaching. You have said they are good for teaching. Can you tell some more about the use of IT in teaching?

L: Advantages.... I think the use of IT for recording is good. Record of a lesson. Even just for a lesson, I feel, like using the blackboard, after I wrote something on the blackboard, I have to clean it. Then when a student ask you something you just taught then you cannot go back but when IT is used, then in my experience, it is much more convenient. Since I have recorded all I have written in the computer so I can recall what I just taught so I can go back and get back to the point where he/she has the problem. Then, I can repeat. In this way, recording during the lesson is very helpful. And also, if you want to use IT, you need to prepare well beforehand. Then, you are required to prepare it much better. For example, if you have prepared a PowerPoint, then you need to go through it before you teach otherwise it will be of no use. For a difficult topic, if you use PowerPoint to be a prompt during lesson, it will help to make your lesson smoother and help in the organization of the lesson. Even for new teachers, PowerPoints can give teachers structure of the lesson to certain extend. I feel this is good. If we share teaching materials, even the teacher can only read the material, or something like this, in front of the class, the students will at least have gone through the process of learning. This can, to certain extend, help to safe-guard the quality of a lesson and make sure the content or the syllabus is taught and monitor a lesson as well. The disadvantage is that it reduces the flexibility of the lesson if this method is used. Then, I feel there is such advantage but it also has the problems that the interactivity in lesson will have been lowered and it depends on the design of the lesson. It is also very time consuming.

M: Is there any other advantages. If you have designed a PowerPoint for presenting a lesson or leading the theme of a lesson is on the..

L: And also, it helps students to do revisions. It's more convenient for them to do revisions at home. For example, if they could not copy everything during lesson, the PowerPoint was saved on the eClass so they could get it back from the e-class and read through it again. If they still have any problem, they can ask the teacher later. I have also tried to use the forum. The forum mainly helps to search information and is quite good. Also, for some abstract concepts in science, it helps students to understand better with IT since the multimedia application is good for helping students to understand in my subject (Biology). It's really of big help. Like something that cannot be demonstrated with the actual object, you can make use of animation and the computer to help.

M: How about the web resources? Are these useful in your subject and are they frequently used?

L: Up to now, we mainly use it in classroom teaching. For the take home exercise, we use it less this year. Since basically, even for doing projects, they might not need to use web materials. We just started trying to use the eClass this year but not yet too frequently used. Later, I hope that we can use it more often. If students are to use the Internet to search for something.

M: This can be developed

L: Yes, Like preparation for lessons. There are definitions that can be searched on the web and they are also very good.

M: Do you feel any changes in paradigms in your teaching or any changes of your ways of teaching.

L: Yes, there are differences. Before, we have used transparencies but now there is a big difference. Using the former method, it is more direct. We have directly followed what was written on the transparency. It is rather direct. But now, we will use some of their own ideas. There is not big difference in the lower form but bigger in the higher forms. We will spend more time in the MMLC. I'll ask them to explore. I have not taught anything before and tell them the topic and ask them to do some activities and search from the web. Basically they will understand after they have finished the task. So, the role of the teacher is not as strong after IT is used in teaching. The paradigm has been shifted. The role of teacher is not as strong.

M: You act as a facilitator.

L: Yes, they will ask when they come across a problem then you can sit besides him/her to explain it to them but you don't need to teach from the beginning to the end. However, the process is much slower. In fact, it's much slower. So, it's impossible that we don't add supplementary lessons. Since it is really much more slower.

M: Do you feel it is worth doing this way?

L: I feel it is worth. In fact, though it is slower, the effectiveness is higher. For their teaching, like you teach in 10 lessons before, they will learn very little but now they can understand in 2 to 3 lessons. The effectiveness is therefore much higher now. However, the overall time needed is longer.

M: What is your expectation for the progress in the next stage?

L: What are you referring to? The school or myself?

M: Both the school or yourself.

L: I think that the first step should be using PowerPoint. The only change is the way of teaching. When the teachers are adapted to the new way of teaching, acquired the skills and psychologically prepared and students have improved their study habits, there is a change. The change is to switch to student centered learning mode. Like the way we learn computer before. There is no one to teach us computer and there is even no computer lesson. We learn on our own by reading books. We bought books to read. This is the way of learning we need to teach our students. The same applies to the learning in a subject area. When there is a problem, we use IT or library to learn. This is one direction for the development. Teachers are to shift gradually in this direction. But, not all teachers are of the same pace. Some teachers are still in the stage of paradigm change.

M: You agree that the direction of change should be like this.

L: It should not be like that. Otherwise, the use of IT remains in the stage only with little difference from using LCD projectors and overhead projectors. (from using slides to powerpoints) This is only the way of teaching. Then, it would not bring forth big improvement.

M: What comment will you give for the big leap in the implementation of using IT. Who should have the merit? Behind notebooks or others, there should be some reasons.

L: I'll say that the school leaders should take the lead. Their concern on this matter, like, the resources put on notebook computers and the priority set in the school policy. Even if the school pushes teachers to observe lessons, the school should have emphasis on it, otherwise, they would not put any effort. For sure, I will say those in the leading position have significant influence, their positive attitude and their openness to this matter. They can just think that the use of PowerPoint is already satisfying. In fact, the requirement for using IT is also important. The requirement for teachers to use IT should be set. Teachers need a little push. If they are not required to do that, then they won't use it. However, after they have achieved a little, they are required to change a little more, then they can achieve more. In an environment that they are all required to do it together, I think they can be given a little more push so that they can move forward a little further, then gradually they will have improvements.

M: What is your next comment? Whether we have achieved our aim or not, that is, whether the target set in our school policy are achieved?

L: I think we have achieved the target already. At least all will check eClass almost every day. This is already very good.

M: The last question is about eClass. You have increased usage of eClass. This year, it is obvious that teachers have used eClass more frequently. Do you think it is useful?

L: About eClass. I think yes. But, the system has lots of limitations. I think basically colleagues have used it in administrative work. But concerning teaching and learning, there are lots to improve. In fact, there are lots of potential use not yet explored. The reasons may be that colleagues find it not convenient for use. The limitations are crucial sometimes. The steps are complicated and fixed that caused lots of inconveniences. The way of using is not the same as teachers used to do. Teachers need to learn the whole process again and these are obstacles. Not only the teachers but the students met those problems. They have the problems of submitting their work. The file was lost after they had 'submitted' their work. There were such problems in my Form 6 class. They even used the print screen function to capture the screen, save it and send it to me through email since they could not submit their work through the eClass after several attempts.

The reason is the system will log them out after very short time of use and it did not save up their work. Students need time to think when they were doing their work. However, during the process, the system already logged them out quietly and no warning was given. This is really a very bad experience.

M: Yes, this is a problem. The worse is that the system never let you know when it logs you out. I also have such experience. ...

L: When students found that they could not submit their work even after pressing the icon for submitting several times and so they logged out and logged in again. Then the work they had done were all lost. You know, they had spent lots of time doing their homework. If this is for lower Form students, it is not so worse since they would have been required to do only 5 to 10 questions at a time but for the senior Form students, it would be a very painful experience since they had spent lots of time thinking about their work. However, the system would log them out sometime while they were thinking about the questions without saving up their work. After some time, they found that they had lost everything so they felt very unhappy. The system has to give warnings or auto-save students' work.

M: The system should save the work temporary at a certain area

L: Yes, then it should save the work so that we can get them back later.

M: Just like what I had done before. The system guided me to continue even after the system had logged me out.

L: I had tried to set an assignment and then attach the answer. When I paused for a very short time for searching for the attachment or typing the model answer. The whole file was lost. Need to type all over again. Very very poor. The experience is so bad! You know the worksheet was very long you know. Poor!

M: I never heard about it before until I myself have such experience.

L: They haven't done that so they won't have such problem. They may have prepared some multiple choice questions in the question bank which only need very short time then there is no problem. But, if you need to set an assignment and require students to think for longer time while doing it then there are big problems. These are very crucial.

M: That is, hardware and software are both very important.

L: Yes, if they have problems frequently and wasted their work so often they will give up very soon.

M: I think I have to check the system. The system should have auto-saved the work from time to time.

Description: Interview with Principal – December 2006 ~ 40.5 minutes

M: Researcher

P: Principal

M: I am grateful to have our principa, here to talk about the use of IT in our school. Would you mind if I record tape the interview?

P: No, I don't. It's my pleasure.

M: Can we start now?

P: Yes

M: You joined our school since last September. When you first came to our school in September, 2005, how do you feel about the level of IT in teaching and learning of our school?

P: I was very surprised, because it was 2005, already it was the 21st Century. Yet, there were only 8 computers in a staff computer room which is very very small for more than 50 teachers to use. I think that no way can my teachers can catch up with using IT in education extensively it they didn't even have a computer at hand.

M: Hum, You thought that they didn't have any computer at hand for their teaching and learning.

P: I don't think anyone would like to use the computer much if they don't even have access to a computer on their desk or in the classroom. Later, I found that quite a number of them don't even have a computer at home. They have to bring their notebook computers home in order to work at home.

M: How do you rate the extend of use of IT in teaching and learning of our teachers at that time?

P: At that time, I think only a few teachers, like those IT teachers or a few in one or two departments only used computers frequently. I think around 10 teachers or even less.

M: Why did you have such impression? How did you get such impression?

P: When I walked around the campus in my routine checking on classroom teaching, I didn't see teachers use computers at all except for in the special rooms or when I observe the lessons. A few of them would carry their own personal notebook computers to the lessons or some use the special rooms. Most of the others didn't. When I observed the lessons in the last 2 weeks of September and the lesson observations spanned over early October.

M: So, you will rate the use of IT at our school to be rather low.

P: Compared with what I saw in my previous school and in other schools I knew, I would say its very low.

M: Very low, yea! Before you came, what did you expect a school like this should be using IT.

P: I knew that the situation is like that when I read the documents, such as minutes and program plans of the departments before I came, that was July and August 2005. And when I proposed buying notebook computers for my colleagues in July at the last Board of Management Meeting which I participated as, you know, a new coming principal I was first introduced to the board of management in that last board meeting of 2004-

2005. I proposed buying notebook computers for my staff and I encountered objections and queries from the board so I was not ... I was not very optimistic about the use of IT with such management.

M: So, what target you have set for improving the use of IT in our school?

P: My target was everybody should use computer in the class teaching, for direct teaching at stage one for two years in 2005-07. So, my colleagues should sharpen their saw in using PowerPoint and showing resources from the Internet in their lessons. From 2007 to 2009, I expect my colleagues to use IT in a much more interactive way in their teaching and also in helping students complete their assignments. I think that was my target when I assume office as a principal there.

M: So, then, what were your plans for achieving these?

P: Number one, I must get the whole school equipped with computers, and I must start with equipping my colleagues with computers and also help them learn the skills of using the computers in direct teaching and the second thing I must do is to get computers into all the classrooms. So, without the computers in the classrooms, teachers need to bring along their notebooks and they have to plug in and then to unplug, so it needs a lot of time and students won't develop that kind of repertoire skills and habit and attitude towards using the computer for routine classroom operation and also teaching and learning and management if there is no computer in the classroom. And, I don't just want one computer in each classroom. My dream or my plan is to have at least 6 to 8 computers or workstations in the classroom so students can have one computer for each group of say 5 to 6.

M: Five to six have one computer during lesson. Then, how do you perceive the importance of using IT in teaching and learning?

P: Well, I think it is really very very important. Well, in 5000 years ago, there was no writing at all, ok, and then people used brush, right, to do writing in the mainland in China. Ok, Then later, they used pens and pencils when I was young. I learnt writing using a brush and ink but the computer is now just like a pen to us, so number 1, computer is a tool which is very important and has turned the world around. And, with the use of computer we can assess information in a way that can never be replaced by another things to this point of the world so we can reach and we can learn from many different resources using the computer. We don't learn from books and materials but we also learn from people all over the world real time with the computer so we have access to you know much more information many more people of different expertise, so it's a real information age and a knowledge base society that is totally different from what I experienced when I was in primary school and secondary school.

M: So, what were the policies you had made in the last year to implement what you ...

P: Number 1 is to equip the whole school, purchases of the computers and also I asked somebody to come into this school to look at the infrastructure. We were advised to upgrade the network or something like that so that our computers can work much faster. So, this is number 1, infrastructure. By stages, stage 1, teachers computers, stage 2, classrooms, right, stage 3, we'll have many computers and I'll have planning for at least one more computer room with facilities for on-line testing and video conferencing. This is the infrastructure part. And then for the knowledge and skills of people, mainly the teachers. I started with a very incremental approach to staff development. When I noticed that my colleagues were still using a very traditional way of communicating among people, between groups. They didn't even use paper to write memo. They just

talked, so I was just like backed to the 19th century, so the first thing that came to mine is to facilitate administration by improving the communication system. I remember very deliberately in December, I asked my vice principal to plan a session in the staff meeting so everybody brought their notebook computers to the lecture room where we had the staff meeting. And then, they learnt to send email, to use the chat room and also to make use of the questionnaire function of e-class. After I think two to three such sessions, right, I remember in those staff meetings we built in, built in ... you know ... use of notebook computers that lasted one hour to one and a half hours right. I think three times, ok, then my colleagues became very good at using the announcement and the email system. Let me remember some colleagues told me that, some colleagues said hey, Principal, you know people said, come, read announcement, now Principal is now giving us announcements again. There was a complaint, some sort of complaint in writing I read in the consultative committee saying that, wow, so many announcement in e-class that they found that overwhelming. But, according to the ERS report, right, this really helped with communication and improved the efficiency of the school. So, number 1 communication, efficiency of administration. Number 2, I need to help me colleagues to develop that kind of habit to use the computers in direct teaching. Because lots of the teaching I saw in September, October and early November were merely chalk and talk, ok, very boring, very monotonous and quite a large number of students, I think, the majority, just like students in other schools, visual learners, their learning will be facilitated if they can see complex and images in learning English, right, they can see the text of what a teacher says is much better than encoding, understanding and memorization. So, for developing this part of teachers' expertise, I set a requirement for my colleagues, that they have to observe one another's lessons in the early second term and the focus of observation can be either reading or using IT in their teaching. And, I anticipated that most of my colleagues would like to be observed using IT, because that was easier than reading. Very few of them or even I can say none, really knew the reading strategy at that time. I did put forward this policy, and I remember, in terms of school structure, I created this year structure in the middle of the year that every department should appoint an IT seed teacher, one or two IT seed teachers. And this IT seed teacher from Mathematics, Chinese, English, PSHE, Social Science, etc. Department should form IT seed teachers core group. I remember my vice principal held the meeting in this room. In that meeting we talked about what the IT seed teachers should do and we discussed plans, ok, of helping the colleagues to observe lessons using IT and developing banks of resources of using IT. So with the structure and with the requirement of lesson observation, the whole school was immersed in discussing and creating lesson plans using IT and observing lessons using IT. I remember one day in December, my vice principal was not very happy with me. Wow, Principal, you are really, you know, pushing people to the extreme and they found lots of pressure on them and she was not very happy about that, right. ... To me, I anticipated that, so in the second term, right in the second term, things turned out much better because wow, with pressure, then they worked hard and then they had motivation, may be intrinsic in this initial stage but they found that right it's really beneficial to student learning. And because of the preparation for external school review, we did school self evaluation and a very important part of school self review is listening to students voices so we designed a number of questions to elicit students opinions with school policies and one part of it was the use of IT and the students opinions were very positive, and they said that right teachers used much more IT than before and this use of IT really helped them improve in their learning, so everybody is happy.

M: So, how will you rate level of use after a year of work

P: After a year, I think in some departments such as Science and Social Sciences right and in the Chinese Department, the use of IT is much higher than before, but for English right, I think it's a little bit higher but still half of them don't use much. Ok, and Mathematics, I don't think they use much IT in Mathematics but subjects like Chinese History, History, Geography, Biology, Chemistry, Physics, teachers really used IT a lot.

M: Um, so you can say actually that we have great improvement in the use of IT.

P: Yes, because we have a very low starting point.

M: Yes, so, what do you think are the key factors for the improvement.

P: Number 1 is money. Without the support of the board of management, I don't think we can do anything, because of the approval to my proposal that we got the computers in the staff room for teachers and also in the classrooms ok. We are very willing to spend money on upgrading whatever facilities to make we need to make the computers work faster. This is number 1. Number 2 I think right people. Its true that we were really far behind the others at the beginning of the year 2005 to 2006 but this has an advantage to because we had no burden right so once we got into this use of computers then people immediately jumped into a lot of readily made resources, video clips, images, and also mp3s, and also lesson plan already well tried out, overseas and in Hong Kong. It is time consuming to familiarize with these resources but they were no longer as crude as those ten years ago so this is an advantage for us ok and teachers will find that much easier to handle right and to use these resources which already had been found very beneficial. They didn't need to start from scratch and start with things that might not be ... to you. So this is the resources, another favorable factor is that we have a vice principal whose major interest is in IT so that's really an advantage. I know nothing about computers except that I use computers a lot. She is expert in the hardware and I think she is very dedicated to promoting the use of IT in teaching and learning in the school and also for facilitating administration. I think that's human factor and I think I am also a favorable factor. I came from a school which was very advanced in using IT for helping teaching and learning and for the information system and comparing QESOSASS which I came from and Methodist College, at first I found it very sad right such a good school here with 47 years history yet students and teachers are not really being properly led to use such an advanced tool for teaching and learning and the academic results say the public exam results showed clearly that we were not that good in terms of value-added compared with other schools and I attributed this to you know the lagging behind in the use of IT as part of the reasons. I remembered in QESOSASS, the first time we had computers in every classroom we started with computers for students and teachers very early in 1999. In 1999 we already have notebooks for everybody. But then in I think 2001, we have computers in all the classrooms. All of a sudden, you know the amount of use of IT in teaching time increased at several times and then the CE results and the AL results that year jumped within a few months. I think we installed computers say in November and then when the exams were held, it was May, April for AL and May for CE. In that summer we saw a big jump in both passing and credit rate. So, it was my belief that using IT really can improve academic performance and in summer 2006 we found slight increase right and some big increase in most of the subjects. Ok, in terms of added valued and passing rate and credit rate, except subjects like Mathematics and Physics ok. These 2 subjects did not see significant rise in value-addedness but in most other subjects we did see you know rise in value-addedness some smaller, some bigger. Subject like History, right, Miss Lo and Mr. Lai had used a lot of IT in classrooms since the purchase of computers and you can see a significant rise in the value-addedness. So,

I think the principles policy making and the principles ...way of, ... strategies of implementing the policy are very important to the success. Of course you know teachers, if they do not care for students, right they can still remain stubborn and refuse to try out using IT and I did see some teachers right quite scared of using computers, especially those over 55. Yea,...

M: So, it is your belief that using IT can improve the quality of teaching or will be better for students to learn.

P: Yea,

M: So, this is your belief. And, what do you think are the key factors that make teachers change? Besides the hardware? Of course, it is much more convenient for them to use the computers in the classrooms now but what other factors do you think are important in pushing them to change. You know, for so many years they didn't border to change.

P: I think they do want the students to learn better. This is the most important factor. They cared the students and they have their intrinsic desire or motivation to improve their own teaching and I treasure my colleagues you know determination to help students to learn better. They are willing to learn. My colleagues are willing to learn and they showed little resistance to input sessions, right staff development sessions and they are willing to exchange experiences with one another with the implementation of CPDG collaborative professional development groups which is mainly for developing lesson observation culture among colleagues. I think this practice is most important. Yea, and having some exemplars for colleagues is important and having some colleagues who are more capable of using IT to share with others is also very important. I think the norm or the practice is gradually developed in the school or you can say it's kind of culture, a new culture is being nurtured there through policies. At the beginning stage of such new policies, there will be some misunderstandings and some uncomfortable feelings but as people see that it's not really that downing there are already colleagues who can help them, who can show them, who can demonstrate to them how things can be done in a more effective way, then hardly can I hear any complaints now about using IT.

M: Hum, so exemplars important but policies are also very important in bringing forth the changes. So, what is your target for this year?

P: I really hope that my colleagues will progress from using IT in direct teaching to enabling students to use IT in self-direct learning. This is a real paradigm shift. From improving teacher from teaching to you know to designing a lesson, designing assignment, designing blog or you know site for students to learning in an interactive way and for students to develop their own study habit. It's totally different from just using PowerPoint or resources in the Internet enhance teaching by adding more visual images

M: Adding visual images will increate their interest or help to motivate them but if they develop the habit of self-learning then they will benefit much more. Yea! What are the policies you've put forward this year for this move?

P: I have set the goal of you know student becoming self-directed learners, equip their skills, habits, attitudes in the school plan and I announced that on the first day of the school year in the beginning of school opening service. And I piloted such a move by having, by employing the right person, so I have got Mr. W and Mr. S at the beginning of the year they form the team to work at developing this but Mr. S had left us and Mr. W would continue. Both of them actually have used blog and linked up with resources and other useful website and develop other kinds of programs to students. This is the

pilot scheme developed in the beginning of the year. I dared not make any bold move because my experience before I came here showed to me that it took a lot of time for a teacher to become familiar with web resources, with the student pattern of learning in using platforms. It took a lot of time to get assignment put in e-class, in the intranet. It took a lot of time to get use to such mode of learning but it was beneficial and I would say it would take at least half to one year for one teacher with ¼ of workload reduced to develop. So, I did not really announce any demand on teachers in achieving such a goal and I did not push any department head to you know to ask the members for meeting any set criteria. But, I know that I had set such direction, and somebody get this started, then more and more people will become interested. When they see someone using the platform successfully, then people will become interested and then the culture will start, right, we will say the ball is rolling.

M: What is your future plan or what is the ideal picture of the change of the school in your mind?

P: In terms of using IT?

M: Yea, in terms of using IT.

P: In my junior form English, for example, the department head, the English department head complied in this requirement. Students have to complete on line reading report so they are assigned, students are assigned to record, transcribe, copy, you know, the subtitles of some documentaries such as police reports, Hong Kong collections, from the RTHK archive and some parents reported to me that they saw their kids reading such on line resources and they were very happy about that. Their positive impact on students' learning in terms of general knowledge and also English proficiency improvement are still to be seen and we haven't hired people to take care of the research side to collect data or to find out how well students achieve right using such material. We don't know anything about it yet but it's already built in the homework guide and most of the students using these resources already. This is not really that kind of self-directed learning, its still teachers directed but students are being led to become exposed to such material regularly so we've laid the ground work for self-learning. My ideal picture will be each department will have their own IT resource bank and then each subject will have their own self-directed learning program and students once registered with the college will have access to the pool of resources. They can you know choose the site the link the self-directed learning programs they like or they are being assessed and assigned to according to their abilities and interests. So, that's my ideal picture. Just like my son who is studying at IVE, he goes home everyday and log in and have a list of modules he is studying and then in all these modules, he can access all the self-learning materials, assignments and resources. So, I don't think it is not that difficult.

M: We can put forward this policy. Actually, I think it can work.

P: It works, right.

M: It works, some teachers are ready now.

P: I think so.

M: Thank you very much Principal.

The principal urged me to add to the end of this conversation. - For all policies, the most important step is to follow-up closely the plans.

Description: Interview with Teacher T - July 2006 ~19.5 minutes

M: Researcher

T: Teacher T

M: Thanks for Mrs. Tang attending this interview about IT in teaching. I have a few questions about IT in teaching to discuss with you and ask for your opinions. First, it is quite obvious that teachers used computers more often in the second term when compared with that in the first term. What do you feel about this? Do you agree?

T: Second term... I can say that there is more usage of computers.

M: That is, you also agreed that there is an increase of usage of computers. Can you say something why you use computer more frequently compared with September and October in the last year.

T: First, because a notebook computer is available. It is much more convenient. With the notebook computer, we need some time to familiarize with it. Such as the use of eclass, etc. so we get use to using it in the second term. When we are familiar with it, we will use it more frequently.

M: OK, in fact, we have computers in the school for so many years already. We promote IT in teaching for some years in Hong Kong, then why there is a sudden rise in usage or speeded up the usage.

T: I think it is because of the notebook computer. When we have the notebook computers, we can put the computers in classrooms. Before then, we have to book the MMLC or computer rooms for use. It is not so possible or convenient to get the rooms available. It's rather impossible that we go to the computer room for every lesson. Sometimes, we don't need to use the computer for the whole lesson. If we use the notebooks in the computers, we can use computers for just a short period of time. It's more flexible and good for use. I think this is the main reason.

M: This is the most important reason.

T: I think it is the most important reason.

M: Is there any other reasons for increased usage. Such as ESR in this year or our school policy.

T: Ah, yes, there is another reason. To me, there is one more reason. We've joined a pilot scheme, the HKEdCity TV News. I have to take my students to the MMLC for the TV News regularly. This is an external factor. Second, there is the TSA which required online assessment, so we have to use computers.

M: M...m. Then, how about the ESR or school policy. Do you think they have affected your usage, make you use more.

T: Policy? Maybe, ..., not merely because of the policy but it is more convenient to use the computers. The convenience is the most important reason.

M: Hardware, right! That is the availability. ... Second, the external factors such as the pilot scheme and TSA. Third, ... Is there any other reasons for using computers in lessons?

T: Teaching. More usage for teaching. Not only for checking answers, but also For English, we have more resources,...

M: You mean those ready made resources...,

T: Ready made resources are some of them. There are some more collected by teachers from websites. English teachers will introduce those resources to students. So, there is rich in resources so, in fact, it helps in teaching.

M: You seldom need to produce PowerPoint etc.

T: Yes, we have made PowerPoints.

M: Yes, ...

T: We do make PowerPoints.

M: There are several sources of materials – some made by yourselves, ready made resources, resources on the Web, etc. For checking answers, those materials are ready made.

T: MS Word,... we usually use MS Word for giving the answers. We also have PowerPoint presentation.

M: You use IT more freq

T: Yes, we used more frequently.

M: There are several reasons: external factors, second, hardware, third, readiness of resources, (yes, yes,...) 4. school policy. From these 4, how will you rate their importance, or their effect.,,,

T: Can you repeat

M: 1. hardware, 2. software, including all resources on the web, or any ready made resources; 3. external factors, such as TSA, pilot scheme; 4. school policy, that is the requirement of the school. How will to rank order them. What makes you use computers more frequently.

T: I will rate hardware of the first priority. It is more convenient. Though it's now really very convenient now, it's much better than before. It's better to have computers in the classroom so that we don't need to set up the computers during lessons. I feel hardware make me like to use IT. Otherwise, students become noisy. Second is software. With software to work together with the hardware, I like to use IT more. School policy will be put to the fourth position. I will follow the order hardware, software, external factors, requirements and then the school policy.

M: If you have used IT definitely more frequently in the second term. Then can you say, how much more you have used computers in the second term. Or, can you estimate the amount of usage in the second term? The percentage..

T: In fact, I don't feel there is a big increase. You're talking about the proportion...

M: Yes, the proportion.

T: I think,... it's about 20% increase.

M: Increase for about 20%

T: Yes, its about 20%

M: Then what is the of usage now? That is the percentage of usage.

T: About the percentage... I think 6 out of 8 lessons but not for the whole lesson.

M: That is, you will use for part of the lesson.

T: So, if count by time, then I would say half and half.

M: That is, 50% and in terms of lessons, then it is about three quarters.

T: in terms of number of lessons. I'll not use it for the whole lesson.

M: What effects it has on the lessons?

T: First, it makes the lessons more rich. For English lessons, we will use computers for multimedia as well. We have to watch video or films as required in this school year. This is also the requirement of the SBA which is an external factor. In fact, it makes the lessons more rich. Because of the lessons are richer, so they are more attractive for students.

M: That is their motivation is higher..

T: They will be more attentive. But we need to have very good planning. The effect can be very extreme. It can be very successful but it can also be a mess especially when there is any problem with the computer or any other obstacles for the lesson. The lesson may have been a total loss. If everything goes together well, then it would be helpful for those of lower ability. It would help them to attend to the lesson for longer time since they can both hear and see so it's easier for them to follow and understand because there are pictures together with text. Like for the English lessons, we have to read the whole passage, some students will have got lost and don't know where we are talking about. You can highlight where you are talking about.

M: it is more visual.

T: Yes, it is more visual, so it is easier for them to follow.

M: Do you feel that is IT just a tool to help you teach or have helped to change the direction of teaching. That is, it only provides a platform for you to put all the teaching materials on the computer or it provides a means for you to teach with more varieties of teaching method.

T: more varieties...

M: and also, is there any effect on the progress of student learning.

T: to some extend, it is true, ... but, there is a difference between high ability classes and low ability classes. In fact, English lessons not only require students to receive materials directly but discussions, etc. Better ability students have the effects but for the lower ability students cannot do the same because it is rather difficult to handle their discipline so it depends on the visual effects to help. I have used IT for presenting things and for reflective skills but not so much used for productive work. Comparatively, what is done is less than for written work.

M: Do you think that the ideal development should be more productive if discipline problems can be eliminated.

T: for language learning, I don't think it is true. I think for language learning, IT cannot replace say speaking, group discussions,...it's different from doing it with speakers and headphones. Honously, I do not agreed to 100% use computers for teaching.

M: Sure. Then, can it help to explore other ways of learning or ... like self-directed learning.

T: Yes, it will.

M: Like the TV project...

T: Yes, in fact they cannot do everything at school. They will be told what to do and how to do it. They are required to do it at home.

M: Do you think students can do that at home.

T: Basically for those better group of students and those motivated students can do it.

M: Do you think you will promote this type of learning.

T: Yes, I will, but I think the proportions of usage in lessons should also be noted. That is, for the language subjects, the proportion of using IT for learning and the proportion for learning in lessons and learning at home should be carefully designed.

M: What do you think is the next step of development, that is, for the language subjects? Now students have computers. How can the school develop the usage of IT in teaching and learning? Or, in which are do you think deserve more effort?

T: ... any hints?

M: It doesn't matter. Just like self-directed learning is an approach that can be further explored but for language learning, you said that it required certain time of face to face communication.

T: I think student can be provided with more resources especially for those better students. In fact, there is limitation for learning in lessons. More IT resources can help cater for learner diversities.

M: The last question, ... in fact, there is not a fixed list of questions to be asked. I've recalled that the school has provided more resources to the English Department for Language learning some years before and many time slots in the MMLC are reserved for English lessons. However, teachers will not 100% use the MMLC for lessons but now teachers use computers more and obviously there is an increase in usage. In general, it is the fact. As a department head, do you feel that it speeded up the implementation. Considering the whole department, what are the factors that can speed up the implementation.

T: In fact, the software provided was not appropriate. As I mentioned before, hardware is also very important but the school investigated only on the software. The time allocated for lessons in the MMLC may not match with the progress of lessons. So, the assigned lessons in the MMLC were not well used.

M: The matching between the hardware and software is important. Suitability of the software is also important.

T: The software purchased was not really very good. It was the Principal's choice.

M: The school is an important factor. The school should provide the suitable environment, suitable software and hardware. ... How comes there are suddenly so many more suitable resources in this year?

T: Publishers produced more resources. Since the use of IT in teaching is the trend, there are more resources tailor made. The software bought before were from outside and not suit the students.

M: It was the principal who took the lead to buy the software. Is it the same now?

T: No, there is nothing bought by the principal.

M: You all explore the resources.

T: Yes, we mainly use films and DVDs now. We have also used web resources.

M: Why then is there more resources?

T: I think because it is now more convenient for teachers to get information when we have free periods, we can go to the Internet immediately but we don't need to wait for computers. So, I think it is of first priority to have the hardware available to us.

M: That is, now it is more convenient for you to explore more resources to be use for lessons. ... OK. Thank you very much for attending the interview.

SSE Teacher Data - Using IT in Teaching and Learning – 7th Feb. 2006

1. Computers in the Library have problems frequently. Please attend to it.
2. The e-class is not powerful enough for Forum with respect to responding to certain classmates' opinion. Now, only each one gives his/her opinion individually ie. Only 1 Layer.
3. The layout of the Computer Room (Room 10) is very poor. When students go to their computer for practical work after teacher's teaching and demonstration, they will have turned their back to the teacher and the screen. There are also pillars to block the teacher's view and make the teacher like talking to him/herself. He/she cannot see the progress of the students. When a student wants to follow the instructions of the teacher, he/she has to turn round very frequently to look at the demonstration of the teacher or 'monologue of the teacher' at the far end where the student cannot see clearly.
4. (a) The computer network at school is very unstable. There is no improvement in the past years so there is a great obstacle to teacher's teaching using IT.

(b) Since using IT in teaching is one of the major concerns of the school, more resources should be put on the hardware and software packages. Otherwise, it would have "little effect with double effort". This will make teachers feel get lost.. (e.g. who can we ask for help if there is any problem with using IT? We need immediate help at school.)
5. (a) What is the reason for not able to send PowerPoint through e-class?
(b) It's even unable to send my word file which is only 74kb!
6. (a) It can help students to better understand the contents of Chinese Language and Culture if IT is used. For example, PowerPoint is useful in teaching Chinese Art and Painting.
(b) But, once I played a short '鏗鏘集' video to the 4R class in their room, the sound volume was very low and the students could not hear. What can I do? There's no such problem when I tried on my own notebook computer. It's impossible if we have to borrow the original CD from the Radio Television Hong Kong (RTHK). Should we improve the hardware of the school computer?
7. (a) Computers installed in each classroom.
(b) Technical support
8. (a) A computer should be installed in each classroom so that teachers don't need to take the lap top to the classroom.

(b) Equipment like the projectors, the wire and the remote control should be regularly checked, say once bi-weekly to ensure the equipment functions well when usage is in need.
9. Install computer in each classroom so that teachers need not bring along the notebook computer & spend time setting it up in classroom.
10. School on one hand encourage teachers to use IT, but on the other hand the no. of usage of IT

should not become one of the criteria to justify teacher's teaching & student learning.

11. Computer installed in each classroom & the teacher only needs to bring his/her file/disc/stick.
12. Hire a teacher assistant to assist teacher's input data/prepare test bank for e-class.
13. The projector and microphone of each classroom should be regularly checked for maintenance and repaired when necessary. Teachers are always helpless when they find those equipments are out of order.
14. It is more convenient for teaching when there are computers. This also make me try to design more activities in lessons but these should not be used to often, especially PowerPoint, which can make students feel boring.
15. More training for teachers to equip them with IT skills (students now have acquired more IT skills than teachers)so the teachers will be more confident in using IT for teaching & more effective in using it.
16. When there are notebook computers, I have used computers more frequently in lessons. When I suddenly think of introducing something to students, I can do it using the computer to search or display it. This has strengthened my interest and motivation in using IT in teaching.
17. Yes, it is useful. I suggest that, for each bag in the classroom, a LAN cable should be included. We can make use of web resources, more easily.
18. (a) It's useful (to have my own notebook computer). We don't need to wait for using a computer in the staff computer room. Therefore, it's more flexible.
(b) We need more time to prepare for a lesson but it makes the lesson more effective.
19. Definitely yes, for illustration, immediate recording etc.
20. (a) Yes, when there are notebooks, teachers do not need to fight for using computers.
(b) Teachers can put lesson materials like PowerPoint in their computers to avoid being lost.
(c) Teachers can install software related to their own subjects.
21. (a) Computers frequently hang in the middle of a lesson. Is there any way of preventing this to happen?
(b) When there is a need for surfing the Internet, it will be rather troublesome to do the connections.
22. (a) Computers are useful only if the teachers have time to prepare the lesson beforehand.
(b)The teachers should have free choice to use computer or not, depends on their IT competency & teaching style.
(c)Teaching is an interactive process, not only a presentation of academic material.
23. IT should not be used only for the sake of using it, otherwise, it would not help to improve the effectiveness of teaching.

24. IT is a means to an end, not an end in itself. It should be used if and when needed. If we use it for the sake of using it, especially when it gets in the way (setting up/technical problems etc.), what's the point?
25. If there are computers in all the classrooms, it would be more convenient. Anyway, it wastes time in setting up the computer in the classroom.
26. IT should not be used for too long. It makes students feel sleepy. It's good enough for motivating students in each chapter. The major concern should be effectiveness for learning.
27. It should not be a must for using IT in teaching. It depends whether it is suitable for the subject and the topic. I have asked some Form 6 students, they also feel that the use of IT in teaching does not help much.
28. The school should restructure the hardware to suite IT in teaching. There are lots of problems with the amplifiers and cables so that it cannot have satisfactory sound effects. I have encountered such problems in a classroom but not in the others. All in all, this problem is a stumbling block for the implementation of IT in teaching.
29. Should be used if and when the teacher thinks it is appropriate. It does not have to be a prerequisite in every lesson.
30. If there is a computer in each classroom, would it be more 'effective'?
31. It's much more convenient when we are provided with the computers. But, since there are not sufficient IT helpers, we cannot get help when there is a need. This is an obstacle to the smooth operation.
32. If teachers use computers for all their lessons, students will feel that teachers are too much focused on the computers but have reduced interaction with students. I suggest that teachers should use computers appropriately, like using it more for the introduction of a topic. For consolidation, revision and discussion, teachers can have more interaction with students.
33. (a) Yes, there is no need to go to the computer room.
(b) Yes. However, the sewer is not so stable.
34. Sure, very useful as teachers don't need to wait for the computer in the computer room.
35. Yes, I have more chances to experiment with different uses of IT in teaching.
36. (a) Use of IT in teaching should be determined by the need but not for the sake of using IT.
(b) There is no network node near a teacher's seat so it is not convenient when the teacher wants to use his/her notebook computer.
37. Yes, no need to compete for the computers in the computer room.
38. Very effective policy! Enrich and provide teachers with different kinds of activities that can be

- conducted during lessons so as to motivate students to learn and to consolidate what they have learnt.
39. The school must employ T.A. specifying in preparing IT materials for teaching & learning.

SSE Teacher Data - Using IT in Teaching and Learning – 7th Feb. 2006 (Raw Data)

1. 圖書館電腦常有故障，請多多關注！
2. The e-class is not powerful enough for Forum with respect to responding to certain classmates' opinion. Now, only each one gives his/her opinion individually ie. Only 1 Layer.
3. 電腦室(Room 10)目前的座位安排很差，老師教學及示範之後，學生回到自己電腦前親自操作，背向著老師及投射螢幕，更有柱可以完全阻擋老師視線，於是常常有好像老師自言自語，不知學生的學習進展，學生如果想跟著步驟，便要常常轉身、轉身、不停轉身，但還看不清楚在遠處的”教學示範”或”老師自言自語”。
4. (a) 學校的電腦網絡十分不穩定，這麼多年來從未改善，嚴重影響老師實施 IT 教學。
(b)既然 IT教學是本年度的教學重點之一，學校應投放更多資源在 IT硬件及軟件的配套組合上，否則只會事倍功半，令同事無所適從。（如：有 IT疑難找誰？在學校我們需要立即的協助。）
5. (a) eClass為何不能 send PowerPoint?
(b) 我的 word file只有 74kb 也無法 send!
6. (a) 使用 IT 有助學生理解中國文化科的內容，如教授中國繪畫藝術時，PowerPoint 便大派用場。
(b) 可是，我曾給 4R播一段鏗鏘集的短片，自己用 notebook播，沒有問題，但在課室裡播放則聲音奇細，學生根本聽不到。如何是好？若每次都到 RTHK租借 original CD實不可能，是否要改善學校的硬件？
7. (a)Computers installed in each classroom. (b)Technical support
8. (a)A computer should be installed in each classroom so that teachers don't need to take the lap top to the classroom.
(b)Equipment like the projectors, the wire and the remote control should be regularly checked. Eg. To check equipment once bi-weekly to ensure they operate well.
9. Install computer in each classroom so that teachers need not bring along the notebook computer & spend time setting it up in classroom.
10. School on one hand to encourage teachers to use IT, but on the other hand the no. of usage of IT should not become one of the criteria to justify teacher's teaching & student learning.
11. Computer installed in each classroom & the teacher only needs to bring his/her file/disc/stick.
12. Apply teacher assistant to assist teacher's input data/prepare test bank for e-class.
13. The projector and microphone of each classroom should be regularly checked for maintenance and repaired when necessary. Teachers are always helpless when they find those equipment are out of order.

14. 有了電腦，確方便了教學，也使我多去嘗試設計課堂活動，但也不可常用，特別是 PowerPoint，因學生也覺悶。
15. More training for teachers to equip them with IT skills (students now have acquired more IT skills than teachers) so the teachers will be more confident in using IT for teaching & more effective in using it.
16. 有了手提電腦，我也多了用電腦作課堂之用，即使突然想介紹一些東西給學生認識，也可立刻用電腦在課堂搜尋或顯示，加強了我以 IT 教學的興趣及動力。
17. Yes, it is useful. I suggest that, for each bag in the classroom, a LAN cable should be included. We can make use of web resources, more easily.
18. (a) 有用，方便在自己的位置工作，不用輪候在電腦室的電腦，更靈活。
(b) 需時間去準備 IT 教學，可更有效率地運用上堂時間。
19. Definitely yes, for illustration, immediate recording etc.
20. (a) Yes, notebook 數目多了，同事們不須爭用電腦。
(b) 老師能夠將課堂要用的資料如 powerpoint 先儲存於電腦，減低風險！
(c) 老師可按自己任教的科目安裝相關的軟件！
21. (a) 電腦不時在課堂中停機（hang 機），有沒有方法可防止。
(b) 課堂上網需要連線，每堂都要插線，十分麻煩。
22. (a) Computers are useful only if the teachers have time to prepare the lesson beforehand. (b) The teachers should have free choice to use computer or not, depends on their IT competency & teaching style.
(c) Teaching is an interactive process, not only a presentation of academic material.
23. IT 教學不應為用而用，否則 IT 並未能幫助教學效能。
24. IT is a means to an end, not an end in itself. It should be used if and when needed. If we use it for the sake of using it, especially when it gets in the way (setting up/technical problems etc.), what's the point?
25. 如每個課室也有電腦則更方便，始終帶電腦到課室教學也要花時 setting 呢！
26. 用 IT 並不適合長期用，同學容易打瞌睡，只是每一章書有一些引起興趣便足夠。有效令學生學習才是最重要。
27. IT 的教學不應該是必要的，視乎某一些科目及題目，我也曾詢問 F.6 學生，他們也認為 IT 教學沒有太大的幫助。
28. 學校必須改組硬件來配合 IT teaching。有不少課室的擴音器或線？根本不能傳達清晰的聲音和足夠的聲量。我曾在 3B 課室遇到以上問題，但其他課室卻沒有以上問題發生。總括而言，這是邁向 IT 教學的絆腳石。
29. Should be used if and when the teacher thinks it is appropriate. It does not have to be a prerequisite in every lesson.
30. 每班也有電腦，不是更有「效能」嗎？
31. 有了電腦，方便了許多，只是因個別需要，有時想得到支援，卻因 IT helper 不足，使運作不能暢順。

32. 如老師每堂都用電腦教學，學生覺得老師太集中在電腦上，反而少了與學生的互動。我建議老師應適當地用電腦教學，如在引起對新課題時，可多用。但在往後的鞏固、溫習、討論方面可少用一些，多些與學生互動。
33. (a) Yes, there is no need to go to the computer room.
(b) Yes. However, the sewer is not so stable.
34. Sure, very useful as teachers don't need to wait for the computer in the computer room.
35. Yes, I have more chances to experiment with different uses of IT in teaching.
36. (a) IT教學應視乎需要，而不是為 IT而 IT。
(b) 老師的座位附近並沒有插座位，導致用手提電腦時，造成很多不便之處。
37. Yes, no need to compete for the computers in the computer room.
38. Very effective policy! Enrich and provide teachers with different kinds of activities that can be conducted during lessons so as to motivate students to learn and to consolidate what they have learnt.
39. The school must employ T.A. specifying in preparing IT materials for teaching & learning.

Start Date	2006-01-09
End Date	2006-01-15
Title	Integrating Information Technology into Teaching
Description	
Creator	Teacher
Target Group(s)	Teacher

Total Number of Received : 26

1. What fraction of your teaching hours is allocated for IT teaching?

Less than 10%	6 (23%)
11%-30%	7 (27%)
31%-50%	6 (23%)
51%-70%	3 (12%)
More than 70%	3 (12%)

2. What kinds of IT software are used in teaching?

Presentation Software

0 - Never	1 (4%)
1	12 (46%)
2	5 (19%)
3 - All of the time	6 (23%)

Graphics / Multimedia software

0 - Never	8 (31%)
1	11 (42%)
2	5 (19%)
3 - All of the time	0 (0%)

Homepage design software

0 - Never	14 (54%)
1	5 (19%)
2	3 (12%)
3 - All of the time	0 (0%)

Spreadsheet

0 - Never	12 (46%)
1	5 (19%)
2	4 (15%)
3 - All of the time	1 (4%)

Word Processing software

0 - Never	2 (8%)
1	5 (19%)
2	11 (42%)
3 - All of the time	7 (27%)

Browser (e.g. I.E., Netscape)

0 - Never	3 (12%)
1	3 (12%)
2	12 (46%)
3 - All of the time	5 (19%)

Communication software (e.g. E-mail / ICQ software)

0 - Never	6 (23%)
1	6 (23%)
2	9 (35%)
3 - All of the time	3 (12%)

Others: Please specify

Teaching materials and sources provided by history publishers, e.g.
powerpoints, cartoons, worksheet, data-based questions, maps
1 (4%)
Visualize
1 (4%)

3. In using IT software in teaching, the main purpose(s) is (are)

To facilitate teachers' explanation / demonstration

0 - Never	0 (0%)
1	5 (19%)
2	11 (42%)
3 - All of the time	8 (31%)

To provide suitable teaching materials and activities and hence enhance the understanding of knowledge

0 - Never	0 (0%)
1	4 (15%)
2	12 (46%)
3 - All of the time	8 (31%)

To provide opportunities for creative work in order that students can earn from it

0 - Never	0 (0%)
1	13 (50%)
2	9 (35%)
3 - All of the time	2 (8%)

To let students analyze problems and search for information in small group

0 - Never	3 (12%)
1	11 (42%)
2	10 (38%)
3 - All of the time	0 (0%)

To provide drills and practice exercises by using computers

0 - Never	2 (8%)
1	13 (50%)
2	8 (31%)
3 - All of the time	1 (4%)

4. Do you use the eClass?

Yes	24 (92%)
No	1 (4%)

If yes, what is the use of eClass?

Campus Mail	20 (77%)
Deliver / Receive announcements	21 (81%)
Forum	3 (12%)
Online teaching	5 (19%)
Online tests	3 (12%)
Deliver / Collect assignments	15 (58%)

Others: Please specify

Communication/Q&A session/Discussion	1 (4%)
Hyperlink of useful websites	1 (4%)
N/A	1 (4%)
	22 (85%)
Provide supplementary notes and suggested answers of exam	1 (4%)

5. What is the major subject that you teach?
Confidential data not to be reported

Appendix TY2 – P.1

Start Date 2006-07-05
End Date 2006-07-31
Title Use of IT in Teaching and Learning
Description *This is a survey on the use of IT in Teaching and Learning in the second term. The purpose is to see the progress of implementing the use of IT in teaching and learning which is one of the focus of the year. This will also help the school in planning for the support to teachers in the coming year. Please fill it out before 12th July. Thank you for your cooperation.*

P.S. The data collected from this survey may be used for my personal research work upon your approval.

Creator Teacher 教師
Target Group(s) Teacher 教師
Anonymous

Overall Results

Total Number of Received : 12

1. What fraction of your teaching hours is allocated for using IT?

Less than 10%	1 (8%)
11%-30%	3 (25%)
31%-50%	1 (8%)
51%-70%	3 (25%)
More than 70%	4 (33%)

2. What kinds of IT software have you used in teaching?

Presentation Software

0-Never	0 (0%)
1	1 (8%)
2	9 (75%)
3-All of the time	2 (17%)

Graphics / Multimedia software

0-Never	1 (8%)
1	5 (42%)
2	6 (50%)
3-All of the time	0 (0%)

Homepage design software

0-Never	8 (67%)
1	3 (25%)
2	1 (8%)
3-All of the time	0 (0%)

Spreadsheet

0-Never	4 (33%)
1	5 (42%)
2	3 (25%)
3-All of the time	0 (0%)

Word Processing software

0-Never	0 (0%)
1	1 (8%)
2	7 (58%)
3-All of the time	4 (33%)

Browser (e.g. I.E., Netscape)

0-Never	1 (8%)
1	2 (17%)
2	8 (67%)
3-All of the time	1 (8%)

Communication software (e.g. E-mail /ICQ / MSN /...)

0-Never	3 (25%)
1	1 (8%)
2	6 (50%)
3-All of the time	2 (17%)

Others: please specify Nil

3. What is/are the main reasons for using IT in teaching?

To facilitate teachers' explanation / demonstration

0-Never	0 (0%)
1	0 (0%)
2	5 (42%)
3-All of the time	7 (58%)

To provide suitable teaching materials and activities and thus enhance the understanding of knowledge

0-Never	0 (0%)
1	0 (0%)
2	8 (67%)
3-All of the time	4 (33%)

To provide opportunities for creative work in order that students can learn better

0-Never	3 (25%)
1	3 (25%)
2	5 (42%)
3-All of the time	1 (8%)

To let students analyze problems and search for information in small group

0-Never	3 (25%)
1	4 (33%)
2	4 (33%)
3-All of the time	1 (8%)

To provide drills and practice exercises by using computers

0-Never	1 (8%)
1	5 (42%)
2	6 (50%)
3-All of the time	0 (0%)

To let students learn interactively using IT

0-Never	0 (0%)
1	4 (33%)
2	7 (58%)
3-All of the time	1 (8%)

To let students learn through communication with people over the world

0-Never	5 (42%)
1	2 (17%)
2	5 (42%)
3-All of the time	0 (0%)

4. Do you use the eClass

Yes	11 (92%)
No	1 (8%)
If yes, in what way have you used eclass? (you can choose more than one)	
Deliver / Receive announcements	8 (67%)
Forum	2 (17%)
Online teaching	1 (8%)
Online tests	3 (25%)
Deliver / Collect assignments	9 (75%)
Campus Mail	7 (58%)
Others: Please specify	
	11 (92%)
Deliver self-test exercises	1 (8%)

5. What is the major subject that you teach?

Confidential data not to be reported

6. Have you used IT more frequently in your teaching in the second term than in the first term?

Yes (Answer question #7)	11 (92%)
No (Answer question #8)	1 (8%)

7. What is(are) the reason(s) that make(s) you use IT more frequently in teaching? (You can choose more than one from the following list)

a/ More effective in delivering a lesson	9 (75%)
b/ Using multimedia can make a lesson more interesting	6 (50%)
c/ Students learn better when IT is used in lessons	7 (58%)
d/ This is the policy of the school	8 (67%)
e/ There are many resources available on the Internet	7 (58%)
f/ The IT support is better	2 (17%)
g/ The school provides me with a notebook computer	8 (67%)
h/ IT facilitates communication with people over the world	4 (33%)
i/ More efficient in delivering and receiving assignments on eclass	5 (42%)
j/ Others Please specify:	0 (0%)

Amongst the reason(s) you choose from the list above, arrange them in order of importance.

Most important

a	4 (33%)
g	3 (25%)
More effective in delivering a lesson	1 (8%)
d	1 (8%)
	3 (25%)

Second

c	3 (25%)
a	1 (8%)
Students learn better when IT is used in lessons	1 (8%)
g	1 (8%)
	3 (25%)
b	1 (8%)
i	1 (8%)
b,a	1 (8%)

Third

g	1 (8%)
d	2 (17%)
h	1 (8%)
More efficient in delivering and receiving assignments on eclass	1 (8%)
	4 (33%)
c	1 (8%)
e	1 (8%)
e,i	1 (8%)

8. What is(are) the reason(s) that discourage you from increasingly use IT in your teaching?

i/ It takes much longer time to prepare for a lesson using IT	6 (50%)
ii/ It makes no difference using IT or not in a lesson	2 (17%)
iii/ It wastes time in setting up comptuer systems in lesson	5 (42%)
iv/ I am not confident in using IT in teaching	0 (0%)
v/ There is not sufficient support when using IT in teaching	2 (17%)
vi/ Students do not like me using IT in teaching	3 (25%)
vii/ It is more difficult to deliver a lesson using IT	0 (0%)
viii/ The school does not require us to use IT in teaching	0 (0%)
ix/ There is no such need	1 (8%)
x/ Other reason(s) Please specify	0 (0%)

Amongst the reason(s) you choose from the list above, arrange them in order of importance.

Most important

	5 (42%)
i	1 (8%)
vi	2 (17%)
It takes much longer time to prepare for a lesson using IT	1 (8%)
ix	1 (8%)
1	1 (8%)
a	1 (8%)

Second

	7 (58%)
iii	3 (25%)
3	1 (8%)
ii, i	1 (8%)

Third

	8 (67%)
ii	1 (8%)
v	1 (8%)
4	1 (8%)
iii	1 (8%)

10. Please indicate whether you allow these data to be used in my personal research work or not.

Yes	10 (83%)
No	2 (17%)

Appendix TY3 – P.1

Start Date2007-07-27

End Date2007-08-31

TitleSurvey on use of IT in Teaching and Learning in 2006-07

DescriptionThis is a survey on the use of IT in Teaching and Learning in the school year 2006-07. The purpose is to see the progress of implementing the use of IT in teaching and learning. This survey is almost the same as the one issued in July 2006. Please indicate whether you are a new teacher in 2006-07 in the last question. Your name will not be shown with the survey answers. P.S. The data collected from this survey may be used for my personal research work upon your approval. Please indicate it in question number 10. Thank you for your cooperation.

CreatorTeacher 教師

Target Group(s)Teacher 教師

Anonymous

Overall Results

Total Number of Received : 23

1. What fraction of your teaching hours is allocated for using IT?

Less than 10%	3 (13%)
11%-30%	2 (9%)
31%-50%	8 (35%)
51%-70%	5 (22%)
More than 70%	5 (22%)

2. What kinds of IT software have you used in teaching?

Presentation Software

0-Never	2 (9%)
1	3 (13%)
2	9 (39%)
3-All of the time	9 (39%)

Graphics / Multimedia software

0-Never	4 (17%)
1	7 (30%)
2	9 (39%)
3-All of the time	2 (9%)

Homepage design software

0-Never	17 (74%)
1	1 (4%)
2	3 (13%)
3-All of the time	0 (0%)

Appendix TY3 – P.2

Spreadsheet

0-Never	9 (39%)
1	6 (26%)
2	4 (17%)
3-All of the time	1 (4%)

Word Processing software

0-Never	2 (9%)
1	3 (13%)
2	9 (39%)
3-All of the time	8 (35%)

Browser (e.g. I.E., Netscape)

0-Never	2 (9%)
1	2 (9%)
2	14 (61%)
3-All of the time	5 (22%)

Communication software (e.g. E-mail /ICQ / MSN /...)

0-Never	6 (26%)
1	8 (35%)
2	6 (26%)
3-All of the time	3 (13%)
Others: please specify	Nil

3. What is/are the main reasons for using IT in teaching?

To facilitate teachers' explanation / demonstration

0-Never	0 (0%)
1	1 (4%)
2	8 (35%)
3-All of the time	14 (61%)

To provide suitable teaching materials and activities and thus enhance the understanding of knowledge

0-Never	0 (0%)
1	2 (9%)
2	15 (65%)
3-All of the time	5 (22%)

Appendix TY3 – P.3

To provide opportunities for creative work in order that students can learn better

0-Never	2 (9%)
1	7 (30%)
2	11 (48%)
3-All of the time	3 (13%)

To let students analyze problems and search for information in small group

0-Never	7 (30%)
1	9 (39%)
2	6 (26%)
3-All of the time	1 (4%)

To provide drills and practice exercises by using computers

0-Never	7 (30%)
1	6 (26%)
2	8 (35%)
3-All of the time	2 (9%)

To let students learn interactively using IT

0-Never	3 (13%)
1	12 (52%)
2	6 (26%)
3-All of the time	1 (4%)

To let students learn through communication with people over the world

0-Never	12 (52%)
1	7 (30%)
2	3 (13%)
3-All of the time	1 (4%)

4. Do you use the eClass

Yes	22 (96%)
No	1 (4%)

If yes, in what way have you used eclass? (you can choose more than one)

Deliver / Receive announcements	20 (87%)
Forum	2 (9%)
Online teaching	3 (13%)
Online tests	1 (4%)
Deliver / Collect assignments	14 (61%)
Campus Mail	19 (83%)

Others: Please specify Nil

Appendix TY3 – P.4

5. What is the major subject that you teach?

Confidential data not to be reported

6. Have you used IT more frequently in your teaching in the second term than in the first term?

Yes (Answer question #7)	8 (35%)
No (Answer question #8)	15 (65%)

7. What is(are) the reason(s) that make(s) you use IT more frequently in teaching? (You can choose more than one from the following list)

a/ More effective in delivering a lesson	10 (43%)
b/ Using multimedia can make a lesson more interesting	6 (26%)
c/ Students learn better when IT is used in lessons	6 (26%)
d/ This is the policy of the school	3 (13%)
e/ There are many resources available on the Internet	5 (22%)
f/ The IT support is better	1 (4%)
g/ The school provides me with a notebook computer	7 (30%)
h/ IT facilitates communication with people over the world	1 (4%)
i/ More efficient in delivering and receiving assignments on eclass	2 (9%)
j/ Others	1 (4%)

Please specify:

to demonstrate complicate working procedures	1 (4%)
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Amongst the reason(s) you choose from the list above, arrange them in order of importance.

Most important

	14 (61%)
a	4 (17%)
More effective in delivering a lesson	1 (4%)
d	1 (4%)
c	2 (9%)
To demonstrate complicate working procedures	1 (4%)

Second

	14 (61%)
e	2 (9%)
The IT support is better	1 (4%)
c	1 (4%)
b	3 (13%)
Using multimedia can make a lesson more interesting	1 (4%)
a	1 (4%)

Third

	15 (65%)
b	1 (4%)
The school provides me with a notebook computer	1 (4%)
c	1 (4%)
a	2 (9%)
i	1 (4%)
More effective in delivering a lesson	1 (4%)
g	1 (4%)

8. What is(are) the reason(s) that discourage you from increasingly use IT in your teaching?

i/ It takes much longer time to prepare for a lesson using IT	8 (35%)
ii/ It makes no difference using IT or not in a lesson	2 (9%)
iii/ It wastes time in setting up comptuer systems in lesson	6 (26%)
iv/ I am not confident in using IT in teaching	2 (9%)
v/ There is not sufficient support when using IT in teaching	2 (9%)
vi/ Students do not like me using IT in teaching	1 (4%)
vii/ It is more difficult to deliver a lesson using IT	1 (4%)
viii/ The school does not require us to use IT in teaching	0 (0%)
ix/ There is no such need	2 (9%)
x/ Other reason(s) Please specify:	3 (13%)
	18 (78%)
I used IT most of the time (both in the first term and the second term)	1 (4%)
The frequence of using IT in the second term is same as the first term.	1 (4%)
I do not have classes in the second term	1 (4%)
Most Students do not know how to login elcass.	1 (4%)
Almost the same amount of IT is used in my teaching in both terms	1 (4%)

Appendix TY3 – P.6

Amongst the reason(s) you choose from the list above, arrange them in order of importance.

Most important

ix	1 (4%)
	11 (48%)
It takes much longer time to prepare for a lesson using IT	1 (4%)
v	1 (4%)
i/	1 (4%)
i	2 (9%)
1	1 (4%)
ii	1 (4%)
iii	1 (4%)
iv	1 (4%)
It takes much longe time to prepare for a lesson using IT	1 (4%)
4	1 (4%)

Second

	16 (70%)
It wastes time in setting up comptuer systems in lesson	1 (4%)
iii	1 (4%)
iii/	1 (4%)
3	2 (9%)
i	1 (4%)
ix	1 (4%)

Third

	19 (83%)
v/	1 (4%)
5	1 (4%)
ii	1 (4%)
1	1 (4%)

9. Have you ever answered this survey in 2006?

Yes	10 (43%)
No	13 (57%)

10. Please indicate whether you allow these data to be used in my personal research work or not.

Yes	20 (87%)
No	3 (13%)

Use of IT in Teaching and Learning
Overall Results of the THREE SURVEYS

End of Date for the Surveys	15-01-2006	31-07-2006	31-08-2007
Total Number of Received :	26	12	23

1. What fraction of your teaching hours is allocated for IT teaching?

Less than 10%	6 (23%)	1 (8%)	3 (13%)
11%-30%	7 (27%)	3 (25%)	2 (9%)
31%-50%	6 (23%)	1 (8%)	8 (35%)
51%-70%	3 (12%)	3 (25%)	5 (22%)
More than 70%	3 (12%)	4 (33%)	5 (22%)
More than 50%	6 (23%)	7 (58%)	10 (43%)
More than 30%	12 (46%)	8 (67%)	18 (78%)

2. What kinds of IT software have you used in teaching?

Presentation Software				
0-Never	1 (4%)	0 (0%)	2 (9%)	
1	12 (46%)	1 (8%)	3 (13%)	
2	5 (19%)	9 (75%)	9 (39%)	
3-All of the time	6 (23%)	2 (17%)	9 (39%)	
Frequent to All the time	11(42%)	11(92%)	18(78%)	

Graphics / Multimedia software

0-Never	8 (31%)	1 (8%)	4 (17%)	
1	11 (42%)	5 (42%)	7 (30%)	
2	5 (19%)	6 (50%)	9 (39%)	
3-All of the time	0 (0%)	0 (0%)	2 (9%)	
Frequent to All the time	5(19%)	6(50%)	11(48%)	

Homepage design software

0-Never	14 (54%)	8 (67%)	17 (74%)	
1	5 (19%)	3 (25%)	1 (4%)	
2	3 (12%)	1 (8%)	3 (13%)	
3-All of the time	0 (0%)	0 (0%)	0 (0%)	
Frequent to All the time	3(12%)	1(8%)	3(13%)	

Spreadsheet

0-Never		12 (46%)	4 (33%)	9 (39%)
1		5 (19%)	5 (42%)	6 (26%)
2		4 (15%)	3 (25%)	4 (17%)
3-All of the time		1 (4%)	0 (0%)	1 (4%)
Frequent to All the time		5(19%)	3(25%)	5(21%)

Word Processing software

0-Never		2 (8%)	0 (0%)	2 (9%)
1		5 (19%)	1 (8%)	3 (13%)
2		11 (42%)	7 (58%)	9 (39%)
3-All of the time		7 (27%)	4 (33%)	8 (35%)
Frequent to All the time		18(69%)	11(91%)	17(74%)

Browser (e.g. I.E., Netscape)

0-Never		3 (12%)	1 (8%)	2 (9%)
1		3 (12%)	2 (17%)	2 (9%)
2		12 (46%)	8 (67%)	14 (61%)
3-All of the time		5 (19%)	1 (8%)	5 (22%)
Frequent to All the time		17(65%)	9(75%)	19(83%)

Communication software (e.g. E-mail /ICQ / MSN /...)

0-Never		6 (23%)	3 (25%)	6 (26%)
1		6 (23%)	1 (8%)	8 (35%)
2		9 (35%)	6 (50%)	6 (26%)
3-All of the time		3 (12%)	2 (17%)	3 (13%)
Frequent to All the time		12(47%)	8(67%)	9(39%)

Others: please specify

Teaching materials and sources provided by history publishers, e.g. powerpoints, cartoons, worksheet, data-based questions, maps	1 (4%)			
visualizer	1 (4%)			

3. What is/are the main reasons for using IT in teaching?
To facilitate teachers' explanation / demonstration

0-Never	0 (0%)	0 (0%)	0 (0%)	0 (0%)
1	5 (19%)	0 (0%)	1 (4%)	
2	11 (42%)	5 (42%)	8 (35%)	
3-All of the time	8 (31%)	7 (58%)	14	

Frequent to All the time		19(73%)	12(100%)		22(96%)

To provide suitable teaching materials and activities and thus enhance the understanding of knowledge

0-Never		0 (0%)	0 (0%)	0 (0%)	0 (0%)
1		4 (15%)	0 (0%)		2 (9%)
2		12 (46%)	8 (67%)		15 (65%)
3-All of the time		8 (31%)	4 (33%)		5 (22%)
Frequent to All the time		20(77%)	12(100%)		20(87%)

To provide opportunities for creative work in order that students can learn better

0-Never		0 (0%)	3 (25%)		2 (9%)
1		13 (50%)	3 (25%)		7 (30%)
2		9 (35%)	5 (42%)		11 (48%)
3-All of the time		2 (8%)	1 (8%)		3 (13%)
Frequent to All the time		11(43%)	6(50%)		14(61%)

To let students analyze problems and search for information in small group

0-Never		3 (12%)	3 (25%)		7 (30%)
1		11 (42%)	4 (33%)		9 (39%)
2		10 (38%)	4 (33%)		6 (26%)
3-All of the time		0 (0%)	1 (8%)		1 (4%)
Frequent to All the time		10(38%)	5(41%)		7(30%)

To provide drills and practice exercises by using computers

0-Never		2 (8%)	1 (8%)		7 (30%)
1		13 (50%)	5 (42%)		6 (26%)
2		8 (31%)	6 (50%)		8 (35%)
3-All of the time		1 (4%)	0 (0%)		2 (9%)
Frequent to All the time		9(35%)	6(50%)		10(44%)

To let students learn interactively using IT

0-Never			0 (0%)		3 (13%)
1			4 (33%)		12 (52%)
2			7 (58%)		6 (26%)
3-All of the time			1 (8%)		1 (4%)
Frequent to All the time			8(66%)		7(30%)

To let students learn through communication with people over the world

0-Never			5 (42%)		12 (52%)
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1					2 (17%)	7 (30%)
2					5 (42%)	3 (13%)
3-All of the time					0 (0%)	1 (4%)
Frequent to All the time					5(42%)	4(17%)

4. Do you use the eClass

Yes		24 (92%)	11 (92%)		22 (96%)
No		1 (4%)	1 (8%)		1 (4%)

If yes, in what way have you used eclass? (you can choose more than one)

Deliver / Receive announcements		21 (81%)	8 (67%)		20 (87%)
Forum		3 (12%)	2 (17%)		2 (9%)
Online teaching		5 (19%)	1 (8%)		3 (13%)
Online tests		3 (12%)	3 (25%)		1 (4%)
Deliver / Collect assignments		15 (58%)	9 (75%)		14 (61%)
Campus Mail		20 (77%)	7 (58%)		19 (83%)

Others: Please specify

Deliver self-test exercises					1 (8%)
Communication/Q&A session/Discussion		1 (4%)			
Hyperlink of useful websites		1 (4%)			
Provide supplementary notes and suggested answers of exam		1 (4%)			

5. What is the major subject that you teach?

English language		3 (12%)		1 (8%)	3 (13%)
Chemistry		1 (4%)		1 (8%)	
Principles of Accounts		3 (12%)		1 (8%)	
Economics		1 (4%)		1 (8%)	1 (4%)
Physics				1 (8%)	
Chinese language		3 (12%)		1 (8%)	3 (13%)
History		1 (4%)		1 (8%)	1 (4%)
Mathematics		2 (8%)		1 (8%)	3 (13%)
PE		1 (4%)		1 (8%)	
VA		1 (4%)			1 (4%)
Science		1 (4%)		1 (8%)	1 (4%)
Biology		2 (8%)			
Computer		1 (4%)		1 (8%)	2 (9%)

LS	1 (4%)		
Geography	1 (4%)		
Music	1 (4%)		
Chinese History		1 (4%)	
Design and Technology		1 (4%)	
N/A	1 (4%)	1 (8%)	6 (26%)

6. Have you used IT more frequently in your teaching in the second term than in the first term?

Yes (Answer question #7)		11 (92%)	8 (35%)
No (Answer question #8)		1 (8%)	15 (65%)

7. What is(are) the reason(s) that make(s) you use IT more frequently in teaching?
(You can choose more than one from the following list)

		11	8
a/ More effective in delivering a lesson		9 (82%)	10 (100%)
b/ Using multimedia can make a lesson more interesting		6 (55%)	6 (75%)
c/ Students learn better when IT is used in lessons		7 (64%)	6 (75%)
d/ This is the policy of the school		8 (73%)	3 (38%)
e/ There are many resources available on the Internet		7 (64%)	5 (63%)
f/ The IT support is better		2 (18%)	1 (13%)
g/ The school provides me with a notebook computer		8 (73%)	7 (88%)
h/ IT facilitates communication with people over the world		4 (36%)	1 (13%)
i/ More efficient in delivering and receiving assignments on eclass		5 (45%)	2 (25%)
j/ Others		0 (0%)	1 (13%)

Amongst the reason(s) you choose from the list above, arrange them in order of importance.

Most important

a		4 (33%)	4 (17%)
b			
c			2 (9%)
d		1 (8%)	1 (4%)
e			
f			
g		3 (25%)	
To demonstrate complicate working procedures			1 (4%)

More effective in delivering a lesson		1 (8%)	1 (4%)
		3 (25%)	4 (61%)

Second

a		2 (17%)	1 (4%)
b		2 (17%)	3 (13%)
c		3 (25%)	1 (4%)
d			
e			2 (9%)
f			
g		1 (8%)	
h			
i		1 (8%)	
j		3 (25%)	
Students learn better when IT is used in lessons		1 (8%)	
The IT support is better			1 (4%)
Using multimedia can make a lesson more interesting			1 (4%)
			14 (61%)

Third

a			2 (9%)
b			1 (4%)
c		1 (8%)	1 (4%)
d		2 (17%)	
e		2 (17%)	
f			
g		1 (8%)	1 (4%)
h		1 (8%)	
i		1 (8%)	
j			1 (4%)
More effective in delivering a lesson			1 (4%)
The school provides me with a notebook computer			1 (4%)
More efficient in delivering and receiving assignments on eclass		1 (8%)	
		4 (33%)	15 (65%)

8. What is(are) the reason(s) that discourage you from increasingly use IT in your teaching?

Total		11	8
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i/ It takes much longer time to prepare for a lesson using IT		6 (55%)	8 (100%)
ii/ It makes no difference using IT or not in a lesson		2 (19%)	2 (25%)
iii/ It wastes time in setting up computer systems in lesson		5 (45%)	6 (75%)
iv/ I am not confident in using IT in teaching		0 (0%)	2 (25%)
v/ There is not sufficient support when using IT in teaching		2 (19%)	2 (25%)
vi/ Students do not like me using IT in teaching		3 (27%)	1 (13%)
vii/ It is more difficult to deliver a lesson using IT		0 (0%)	1 (13%)
viii/ The school does not require us to use IT in teaching		0 (0%)	0 (0%)
ix/ There is no such need		1 (9%)	2 (25%)
x/ Other reason(s)		0 (0%)	3 (38%)
I used IT most of the time (both in the first term and the second term)			1 (13%)
The frequency of using IT in the second term is same as the first term.			1 (4%)
I do not have classes in the second term			1 (4%)
Most Students do not know how to login elclass.			1 (4%)
Almost the same amount of IT is used in my teaching in both terms			1 (4%)

Amongst the reason(s) you choose from the list above, arrange them in order of importance.

Most important

blank		5 (42%)	11 (48%)
i		2 (17%)	3 (13%)
ii			1 (4%)
iii			1 (4%)
iv			2 (9%)
v			1 (4%)
vi		2 (17%)	
vii			
viii			
ix		1 (8%)	1 (4%)
x			
It takes much longer time to prepare for a lesson using IT		1 (8%)	2 (9%)
a		1 (8%)	

Second

Blank			7 (58%)	16 (70%)
i			1 (4%)	1 (4%)
ii			1 (4%)	
iii			4 (33%)	4 (17%)
ix				1 (4%)
It wastes time in setting up computer systems in lesson				1 (4%)

Third

			8 (67%)	
iii			1 (8%)	
v			1 (8%)	
4			1 (8%)	
iii			1 (8%)	

9. Have you ever answered this survey in 2006?

Yes				10 (43%)
No				13 (57%)

10. Please indicate whether you allow these data to be used in my personal research work or not.

Yes			10 (83%)	20 (87%)
No			2 (17%)	3 (13%)

**End of
Appendices**