

CHAPTER 2.5 SUPPORT AND THE COMMUNITY

Support and the community are crucial factors in the implementation of IT in education. This chapter will first focus on describing the obstacles and difficulties encountered by IT coordinators and teachers in using IT for teaching and learning in their schools. Then, measures on support from the schools and community are presented. Finally, measures in relation to the community-wide culture in schools will be discussed.

2.5.1 Obstacles and Difficulties Encountered

In the present study, both IT coordinators and teachers were asked to indicate from a list of potential obstacles or difficulties they perceived as affecting the use of IT for teaching and learning in their schools. IT coordinators were asked: Which of the following do you consider as major obstacles affecting the realization of your school's computer related goals? (Q18) Results are listed in Table 2.5.1. In examining the top three obstacles reported by the IT coordinators, the common obstacle across all school groups both in primary and secondary is "the lack of suitable instructional software". In secondary schools, "lack of teachers who are competent of using IT in teaching and learning" is a common obstacle reported in MMLC&ITC, MMLC, ITC, and QEF school groups. "Existing curricular is not adaptable to integrate computers in classroom instruction practices" is a common obstacle reported in Pilot, MMLC&ITC, MMLC and ITC school groups. The obstacle "not enough technical support available" was reported by Pilot and QEF schools. Only Other school reported concerns in lack of resources, such as "lack of space in the classroom" and "insufficient number of computers". In primary schools, all school groups expressed their concerns in lack of resources, such as "lack of space in the classroom", "insufficient number of computers" and "insufficient peripherals". Only Pilot schools reported the obstacle of "not enough technical support available".

Table 2.5.1 Which of the following do you consider as major obstacles affecting the realization of your school's computer related goals?
(1=Strongly disagree, 5=Strongly agree) (IT Coordinators' questionnaire, Q. 18)

Secondary							
*Mean(SD)	Pilot	MMLC&ITC	MMLC	ITC	QEF	Other	Overall
a. Not enough technical support available	4.0(0.0)	3.5(0.5)	3.5(0.8)	3.7(0.7)	4.2(0.6)	3.6(0.9)	3.7 (0.7)
b. Lack of teachers who are competent with the use of ICT for educational purposes	2.8(1.0)	3.9(1.0)	4.2(0.8)	4.1(0.5)	4.2(1.0)	3.8(1.0)	3.9 (0.9)
c. The teacher training courses available do not match the teachers' needs	3.2(1.2)	3.9(0.4)	3.3(0.5)	3.7(1.0)	3.4(1.3)	3.1(1.0)	3.4 (1.0)
d. Lack of interest / willingness of teachers to use computers	3.0(1.1)	3.4(1.2)	4.0(0.6)	3.5(0.7)	3.6(0.7)	3.5(1.2)	3.5 (1.0)
e. Insufficient IT knowledge of the teachers	2.5(0.5)	3.6(0.5)	3.7(0.8)	3.3(0.8)	3.5(0.7)	3.6(0.9)	3.4 (0.8)
f. Teachers lack knowledge of/skills in using computers for instructional purposes	2.8(0.8)	3.9(1.0)	4.0(0.6)	4.0(0.8)	3.7(0.7)	3.8(0.6)	3.8 (0.8)
g. Existing curricula is not adaptable to integrate computers in classroom instruction practices	4.3(0.8)	3.9(0.6)	4.2(1.0)	4.3(0.8)	4.0(0.7)	3.8(0.7)	4.1 (0.8)
h. Lack of sharing with regard to the use of ICT for educational purposes	3.5(0.5)	3.2(0.9)	3.7(0.8)	3.5(0.5)	3.3(0.7)	3.6(0.6)	3.5 (0.6)
i. Insufficient teaching rooms	2.5(0.5)	2.8(1.2)	3.8(0.8)	3.5(1.0)	3.8(1.4)	3.8(1.4)	3.5 (1.2)
j. Lack of space in the classroom	3.5(0.8)	3.6(1.1)	4.2(0.8)	4.0(1.0)	3.8(1.4)	4.4(0.9)	4.0 (1.0)
k. Insufficient number of computers	2.3(0.5)	3.1(1.0)	3.5(1.0)	3.6(0.8)	3.9(1.3)	4.1(0.7)	3.6 (1.0)
l. Insufficient peripherals (printers, scanners)	2.8(0.8)	3.0(1.1)	3.8(0.8)	3.5(1.0)	4.0(0.9)	3.9(0.9)	3.6 (1.0)
m. Insufficient computers with simultaneous access to the Internet/WWW	2.0(0.6)	2.6(1.2)	3.3(1.0)	2.8(1.1)	3.0(0.9)	3.1(0.9)	2.9 (1.0)
n. Slow network performance	3.8(1.2)	3.0(1.4)	3.5(1.0)	3.3(1.0)	3.3(1.2)	3.5(1.1)	3.4 (1.1)
o. Lack of suitable instructional software	4.2(0.4)	4.2(0.5)	4.7(0.5)	4.4(0.6)	4.6(0.5)	4.5(0.6)	4.5 (0.6)

Primary mean(SD)	Pilot	ITC	QEF	Other	Overall
a. Not enough technical support available	3.3(1.2)	3.3(1.0)	3.8(0.7)	3.9(0.7)	3.8 (0.8)
b. Lack of teachers who are competent with the use of ICT for educational purposes	3.2(1.0)	3.6(1.0)	4.1(0.6)	4.0(0.7)	3.9 (0.8)
c. The teacher training courses available do not match the teachers' needs	2.8(1.3)	3.6(1.1)	3.1(0.7)	3.4(0.9)	3.4 (0.9)
d. Lack of interest / willingness of teachers to use computers	3.7(1.0)	2.9(1.1)	3.4(1.0)	3.3(1.1)	3.3 (1.0)
e. Insufficient IT knowledge of the teachers	3.0(0.9)	3.0(1.1)	3.3(0.7)	3.5(0.9)	3.4 (0.9)
f. Teachers lack knowledge of/skills in using computers for instructional purposes	3.7(1.0)	3.1(1.0)	3.5(0.9)	3.7(0.8)	3.6 (0.9)
g. Existing curricula is not adaptable to integrate computers in classroom instruction practices	3.7(1.4)	3.7(1.0)	3.7(0.9)	3.9(0.8)	3.8 (0.9)
h. Lack of sharing with regard to the use of ICT for educational purposes	3.2(1.2)	3.1(1.1)	3.6(0.9)	3.5(0.8)	3.4 (0.9)
i. Insufficient teaching rooms	2.3(0.5)	3.3(1.3)	3.3(0.9)	3.6(1.0)	3.4 (1.1)
j. Lack of space in the classroom	2.7(0.8)	4.1(1.1)	3.8(1.1)	4.1(0.9)	3.9 (1.0)
k. Insufficient number of computers	3.3(1.4)	3.8(1.2)	3.5(1.0)	4.2(0.9)	4.0 (1.0)
l. Insufficient peripherals (printers, scanners)	3.2(1.5)	4.1(1.0)	3.5(1.1)	4.1(0.9)	4.0 (1.0)
m. Insufficient computers with simultaneous access to the Internet/WWW	2.5(1.4)	3.4(1.0)	3.1(1.0)	3.5(1.1)	3.4 (1.1)
n. Slow network performance	2.8(1.7)	3.3(1.2)	3.4(1.2)	3.2(1.1)	3.2 (1.2)
o. Lack of suitable instructional software	4.3(0.5)	3.9(1.0)	3.8(1.0)	4.2(0.8)	4.1 (0.9)

Teachers were asked: Do you encounter any difficulties in integrating information technology into teaching? (Q15) Results are reported in Table 2.5.2. In examining the top three difficulties reported by the teachers, "not enough copies of software for instructional purposes" and "insufficient IT knowledge of self" were the two common difficulties reported by all teachers. In secondary schools, the difficulty of "insufficient professional knowledge to integrate IT into teaching" was found common among teachers, teachers from QEF and Other groups also expressed resource concerns, such as "insufficient number of computers" and "insufficient peripherals", and the Pilot schools in primary, instead they found "frequent failure of computer" as a major difficulty.

Table 2.5.2 Do you encounter any difficulties in integrating information technology into teaching? (Teachers ' questionnaire, Q. 15)

Secondary

	Pilot		MMLC & ITC		MMLC		ITC		QEF		Other		Total		p-value
	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	
Yes	150	(72.5%)	332	(82.2%)	167	(88.4%)	405	(86.3%)	294	(83.0%)	517	(84.8%)	1865	(83.5%)	25.60***
No	57	(27.5%)	72	(17.8%)	22	(11.6%)	64	(13.7%)	60	(16.9%)	93	(15.3%)	368	(16.5%)	25.60***
Insufficient number of computers	8	(5.6%)	109	(33.3%)	43	(26.2%)	136	(34.2%)	133	(45.7%)	196	(39.3%)	625	(34.3%)	79.46***
Insufficient peripherals: printers, scanners, video projector	28	(19.6%)	126	(38.5%)	56	(34.1%)	164	(41.2%)	122	(41.9%)	215	(43.1%)	711	(39.0%)	29.68***
Frequent failure of computer	42	(29.4%)	53	(16.2%)	20	(12.2%)	57	(14.3%)	43	(14.8%)	88	(17.6%)	303	(16.6%)	21.73**
Software not adaptable for use in Window NT platform	21	(14.7%)	43	(13.2%)	43	(26.2%)	55	(13.8%)	55	(18.9%)	64	(12.8%)	281	(15.4%)	22.07**
Not enough copies of software for instructional purposes	89	(62.2%)	187	(57.2%)	102	(62.2%)	247	(62.1%)	152	(52.2%)	303	(60.7%)	1080	(59.3%)	9.38NS
English software is not suitable for use	6	(4.2%)	7	(2.1%)	8	(4.9%)	14	(3.5%)	12	(4.1%)	18	(3.6%)	65	(3.6%)	3.18NS
Insufficient knowledge to evaluate and select software	37	(25.9%)	83	(25.4%)	59	(36.0%)	129	(32.4%)	65	(22.3%)	163	(32.7%)	536	(29.4%)	18.11**
Insufficient computers with simultaneous access to the Internet/WWW	0	(0.0%)	12	(3.7%)	20	(12.2%)	16	(4.0%)	14	(4.8%)	33	(6.6%)	95	(5.2%)	28.84***
Slow network performance	24	(16.8%)	34	(10.4%)	29	(17.7%)	63	(15.8%)	31	(10.7%)	74	(14.8%)	255	(14.0%)	10.39NS
Access to the Internet must be scheduled within regular lessons	1	(0.7%)	0	(0.0%)	2	(1.2%)	4	(1.0%)	4	(1.4%)	5	(1.0%)	16	(0.9%)	4.15NS
Lack of technical support	34	(23.8%)	66	(20.2%)	48	(29.3%)	112	(28.1%)	68	(23.4%)	121	(24.3%)	449	(24.6%)	8.37NS
Insufficient IT knowledge of self	65	(45.5%)	155	(47.4%)	88	(53.7%)	226	(56.8%)	135	(46.4%)	247	(49.5%)	916	(50.3%)	11.78*
Insufficient IT knowledge of students	4	(2.8%)	27	(8.3%)	12	(7.3%)	31	(7.8%)	18	(6.2%)	43	(8.6%)	135	(7.4%)	6.56NS
Insufficient professional knowledge to integrate IT into teaching	48	(33.6%)	131	(40.1%)	84	(51.2%)	167	(42.0%)	121	(41.6%)	202	(40.5%)	753	(41.3%)	10.61NS

Primary

	Pilot		ITC		QEF		Others		Total		p-value
	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	
Yes	137	(60.6%)	451	(76.8%)	444	(83.8%)	1472	(84.5%)	2504	(81.2%)	30.34***
No	57	(25.2%)	136	(23.2%)	86	(16.2%)	301	(17.3%)	580	(18.8%)	30.34***
Insufficient number of computers	33	(20.9%)	146	(32.7%)	133	(30.3%)	522	(36.5%)	834	(33.7%)	17.68**
Insufficient peripherals: printers, scanners, video projector	40	(25.4%)	118	(26.4%)	158	(36.0%)	426	(29.8%)	742	(30.0%)	10.63*
Frequent failure of computer	62	(39.2%)	92	(20.6%)	121	(27.6%)	227	(15.9%)	502	(20.3%)	103.89***
Software not adaptable for use in Window NT platform	20	(12.7%)	36	(8.1%)	56	(12.8%)	193	(13.5%)	305	(12.3%)	14.40**
Not enough copies of software for instructional purposes	73	(46.2%)	204	(45.6%)	221	(50.3%)	716	(50.0%)	1214	(49.0%)	3.81NS
English software is not suitable for use	12	(7.6%)	26	(5.8%)	26	(5.9%)	72	(5.1%)	136	(5.5%)	3.30NS
Insufficient knowledge to evaluate and select software	37	(23.5%)	130	(29.1%)	125	(28.5%)	483	(33.8%)	775	(31.3%)	6.09NS
Insufficient computers with simultaneous access to the Internet/WWW	6	(3.8%)	23	(5.2%)	40	(9.1%)	103	(7.2%)	172	(7.0%)	7.04NS
Slow network performance	21	(13.3%)	55	(12.3%)	50	(11.4%)	154	(10.8%)	280	(11.3%)	3.63NS
Access to the Internet must be scheduled within regular lessons	1	(0.6%)	8	(1.8%)	15	(3.4%)	33	(2.3%)	57	(2.3%)	3.18NS
Lack of technical support	43	(27.2%)	95	(21.3%)	135	(30.8%)	355	(24.8%)	628	(25.4%)	16.53**
Insufficient IT knowledge of self	74	(46.8%)	246	(55.0%)	255	(58.1%)	833	(58.2%)	1408	(56.9%)	2.39NS
Insufficient IT knowledge of students	26	(16.5%)	48	(10.7%)	70	(15.9%)	241	(16.8%)	385	(15.6%)	9.85*
Insufficient professional knowledge to integrate IT into teaching	52	(32.9%)	197	(44.1%)	210	(47.8%)	636	(44.4%)	1095	(44.2%)	6.59NS

In the SITES-M1 study, technology coordinators and teachers were asked to indicate which were the obstacles they encountered in using IT for teaching and learning. The top three obstacles, perceived by technology coordinators in primary and secondary schools, in using IT for teaching and learning in schools are: "not enough technical assistance", "not enough copies of software for instructional purposes" and "insufficient number of computers". Teachers reported similar patterns of obstacles in implementing ICT in teaching and learning, with insufficient knowledge in IT as the most serious obstacle, followed by insufficient technical support and inadequate hardware and software. In contrast to the SITES-M1, the major concerns of the IT coordinators and teachers have been changed from support and resources to instructional software and teacher competence.

2.5.2 Support from the Schools and Community

This section presents a number of measures on support from the schools and community as perceived by students, teachers, IT coordinators and principals.

Students were asked: When you use computer in your learning, what is the assistance/support from the school (Q13) and from the external organizations (e.g. Education Department, Library, or HKEdCity etc.)? (Q14) The overall ratings of both questions are 3.0 and 3.3 respectively (Table 2.5.3 and Table 2.5.4). In general, lower grade students rated higher than upper grade students in both questions. Students were also asked: What sort of support/assistance do you want most with regard to the use of IT in learning? (Q16) Table 2.5.5 shows the results that "provision of computers by the government" (36.7%) and "increase time for using school computers after lesson" (19.1%) are top two answers.

Table 2.5.3 When you use computers in your school, the assistance from the school is ... (1=Very insufficient; 5=Very sufficient) (Students' questionnaire, Q. 13)

P6		F2		F4		F6		Total		p-value
Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	
3.3	(1.0)	3.0	(0.9)	2.8	(1.0)	2.7	(0.9)	3.0	(1.0)	213.72***

Table 2.5.4 When you use computer in your learning, the assistance from other organizations (e.g. Education Department, Library, etc.) is ... (Students' questionnaire, Q. 14)

P6		F2		F4		F6		Total		p-value
Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	
3.6	(1.4)	3.2	(1.3)	3.2	(1.4)	3.0	(1.4)	3.3	(1.4)	88.92***

Table 2.5.5 What sort of support/assistance do you want most with regard to the use of ICT in learning? (Students' questionnaire, Q. 16)

	P6		F2		F4		F6		Total		p-value
	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	
Provision of computers by the government	1210	(37.6%)	724	(38.0%)	631	(35.8%)	435	(33.7%)	3000	(36.7%)	467.26***
Provision of computer technical support after school	370	(11.5%)	290	(15.2%)	294	(16.7%)	240	(18.6%)	1194	(14.6%)	(ns)
Provision of information regarding the use of IT for learning purposes	325	(10.1%)	225	(11.8%)	249	(14.1%)	185	(14.3%)	984	(12.0%)	(ns)
Increase the time for using school computers after lessons	918	(28.5%)	328	(17.2%)	218	(12.4%)	100	(7.8%)	1564	(19.1%)	(ns)
Provision of IT courses/ training	364	(11.3%)	299	(15.7%)	333	(18.9%)	299	(23.2%)	1295	(15.8%)	(ns)

Regarding the utilization of resource centres, teachers were asked whether they visited/utilized the resource centres, such as ITERC and Teacher Centre (Q28). About 50-60% of primary and secondary teachers visited the ITERC and Teacher Centre (Table 2.5.6). ITC were asked whether they attended the courses on IT in education or used the resources/support services provided by the Education Department or related organizations (Q11). The top three services visited by ITC in secondary are HKEdCity, IT Education Web and TSS, in primary are IT Education Web, HKEdCity and TSS (Table 2.5.7). All ratings in general are greater than 3 i.e. medium satisfactory. HKEdCity was rated the highest (4.0) by both primary and secondary teachers.

Table 2.5.6 Which of the following providers of educational resources have you used? (Teachers' questionnaire, Q. 28)

Secondary:

		Pilot		MMLC & ITC		MMLC		ITC		QEF		Other		Total		p-value
		N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	
IT Education Resource Center	Yes	48	(51.6%)	93	(58.1%)	49	(57.0%)	116	(54.7%)	76	(46.9%)	162	(56.1%)	544	(54.3%)	5.40NS
	No	45	(48.4%)	67	(41.9%)	37	(43.0%)	96	(45.3%)	86	(53.1%)	127	(43.9%)	458	(45.7%)	
Others	Yes	14	(15.1%)	24	(15.0%)	13	(15.1%)	35	(16.5%)	27	(16.7%)	31	(10.7%)	144	(14.4%)	4.73NS
	No	79	(85.0%)	136	(85.0%)	73	(84.9%)	177	(83.5%)	135	(83.3%)	258	(89.3%)	858	(85.6%)	
Teacher Center	Yes	46	(49.5%)	65	(40.6%)	40	(46.5%)	97	(45.8%)	81	(50.0%)	141	(48.8%)	470	(46.9%)	3.93NS
	No	47	(50.5%)	95	(59.4%)	46	(53.5%)	115	(54.3%)	81	(50.0%)	148	(51.2%)	532	(53.1%)	

Primary

		Pilot		ITC		QEF		Others		Total		p-value
		N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	
IT Education Resource Center	Yes	68	(50.0%)	174	(55.4%)	216	(62.6%)	609	(60.9%)	1067	(59.4%)	3.59NS
	No	50	(36.8%)	140	(44.6%)	129	(37.4%)	409	(40.9%)	728	(40.6%)	
Others	Yes	14	(10.3%)	33	(10.5%)	27	(7.8%)	79	(7.9%)	153	(8.5%)	3.57NS
	No	104	(76.5%)	281	(89.5%)	318	(92.2%)	939	(93.9%)	1642	(91.5%)	
Teacher Center	Yes	55	(40.4%)	164	(52.2%)	172	(49.9%)	493	(49.3%)	884	(49.3%)	1.86NS
	No	63	(46.3%)	150	(47.8%)	173	(50.1%)	525	(52.5%)	911	(50.8%)	

Table 2.5.7 Have you attended the following courses on IT in education or used the following resources/support services of the Education Department or related organizations (e.g. QEF)? (IT Coordinators' questionnaire, Q. 11)

Secondary

		Pilot		MMLC & ITC		MMLC		ITC		QEF		Other		Total	
		N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)
a. 18 hours training courses designed for Primary and Secondary teachers who are in charge of IT coordination / training	Yes	3	(50.0%)	4	(50.0%)	1	(20.0%)	8	(53.3%)	8	(80.0%)	8	(50.0%)	32	(53.3%)
	No	3	(50.0%)	4	(50.0%)	4	(80.0%)	7	(46.7%)	2	(20.0%)	8	(50.0%)	28	(46.7%)
Satisfaction level (1=very unsatisfactory, 5=very satisfactory)	Mean*	3.3	(0.6)	3.5	(0.6)	5.0	(0.0)	3.2	(0.7)	3.3	(0.8)	3.4	(0.5)	3.4	(0.7)
b. Information Technology Education Resources Center (ITERC)	Yes	4	(66.7%)	3	(37.5%)	0	(0.0%)	6	(40.0%)	2	(20.0%)	5	(31.3%)	20	(33.3%)
	No	2	(33.3%)	5	(62.5%)	5	(100.0%)	9	(60.0%)	8	(80.0%)	11	(68.8%)	40	(66.7%)
Satisfaction level (1=very unsatisfactory, 5=very satisfactory)	Mean*	2.8	(0.5)	2.7	(0.6)	-	-	3.5	(0.5)	3.0	(0.0)	3.6	(0.5)	3.2	(0.6)
c. Individual teaching portfolio displays	Yes	3	(50.0%)	2	(25.0%)	0	(0.0%)	5	(33.3%)	1	(10.0%)	4	(26.7%)	15	(25.4%)
	No	3	(50.0%)	6	(75.0%)	5	(100.0%)	10	(66.7%)	9	(90.0%)	11	(73.3%)	44	(74.6%)
Satisfaction level (1=very unsatisfactory, 5=very satisfactory)	Mean*	3.3	(0.6)	3.0	(0.0)	-	-	3.2	(0.8)	4.0	(0.0)	3.8	(0.5)	3.4	(0.6)
d. Curriculum materials distributed by the ITERC or other sections of the Education Department (e.g. CDI, AID)	Yes	3	(50.0%)	6	(75.0%)	1	(20.0%)	7	(50.0%)	4	(40.0%)	10	(62.5%)	31	(52.5%)
	No	3	(50.0%)	2	(25.0%)	4	(80.0%)	7	(50.0%)	6	(60.0%)	6	(37.5%)	28	(47.5%)
Satisfaction level (1=very unsatisfactory, 5=very satisfactory)	Mean*	3.0	(0.0)	3.5	(0.5)	4.0	(0.0)	3.6	(0.5)	3.0	(0.8)	3.7	(0.5)	3.5	(0.6)
e. Online course materials/workshops hosted by the ITERC or other sections of the Education Department (e.g. CDI, AID)	Yes	3	(50.0%)	6	(75.0%)	0	(0.0%)	6	(40.0%)	3	(30.0%)	7	(43.8%)	25	(41.7%)
	No	3	(50.0%)	2	(25.0%)	5	(100.0%)	9	(60.0%)	7	(70.0%)	9	(56.3%)	35	(58.3%)
Satisfaction level (1=very unsatisfactory, 5=very satisfactory)	Mean*	3.0	(0.0)	3.3	(0.5)	-	-	3.7	(0.5)	4.0	(1.0)	3.9	(0.4)	3.6	(0.6)
f. Regional support service (RSS)	Yes	3	(50.0%)	3	(37.5%)	1	(20.0%)	4	(26.7%)	2	(20.0%)	8	(50.0%)	21	(35.0%)
	No	3	(50.0%)	5	(62.5%)	4	(80.0%)	11	(73.3%)	8	(80.0%)	8	(50.0%)	39	(65.0%)
Satisfaction level (1=very unsatisfactory, 5=very satisfactory)	Mean*	3.0	(0.0)	3.0	(0.0)	4.0	(0.0)	3.0	(0.0)	4.0	(1.4)	3.4	(0.7)	3.3	(0.6)
g. Technical support service (TSS)	Yes	5	(83.3%)	8	(100.0%)	5	(100.0%)	12	(80.0%)	9	(90.0%)	14	(87.5%)	53	(88.3%)
	No	1	(16.7%)	0	(0.0%)	0	(0.0%)	3	(20.0%)	1	(10.0%)	2	(12.5%)	7	(11.7%)
Satisfaction level (1=very unsatisfactory, 5=very satisfactory)	Mean*	3.2	(0.5)	3.8	(0.5)	3.0	(1.4)	3.7	(0.5)	3.9	(0.6)	4.2	(0.8)	3.8	(0.8)
h. The Information Technology Education web-site http://www.ited.ed.gov.hk	Yes	5	(83.3%)	8	(100.0%)	5	(100.0%)	14	(93.3%)	7	(70.0%)	15	(88.2%)	54	(88.5%)
	No	1	(16.7%)	0	(0.0%)	0	(0.0%)	1	(6.7%)	3	(30.0%)	2	(11.8%)	7	(11.5%)
Satisfaction level (1=very unsatisfactory, 5=very satisfactory)	Mean*	3.6	(0.9)	3.6	(0.5)	3.4	(0.9)	3.3	(0.5)	3.3	(0.5)	4.0	(0.4)	3.6	(0.6)
i. Resource website of the Quality Education Fund http://qcrc.qef.org.hk	Yes	4	(66.7%)	8	(100.0%)	5	(100.0%)	12	(80.0%)	4	(40.0%)	15	(88.2%)	48	(78.7%)

	No	2 (33.3%)	0 (0.0%)	0 (0.0%)	3 (20.0%)	6 (60.0%)	2 (11.8%)	13 (21.3%)
Satisfaction level (1=very unsatisfactory, 5=very satisfactory)	Mean*	3.2 (0.5)	3.6 (0.5)	3.8 (0.5)	3.6 (0.7)	3.5 (0.6)	3.4 (0.6)	3.5 (0.6)
j. HKEducationCITY.net http://www.hkedcity.net	Yes	5 (83.3%)	8 (100.0%)	4 (80.0%)	15 (100.0%)	8 (80.0%)	16 (100.0%)	56 (93.3%)
	No	1 (16.7%)	0 (0.0%)	1 (20.0%)	0 (0.0%)	2 (20.0%)	0 (0.0%)	4 (6.7%)
Satisfaction level (1=very unsatisfactory, 5=very satisfactory)	Mean*	3.8 (1.0)	4.0 (0.5)	4.2 (0.5)	3.9 (0.6)	3.9 (0.7)	4.1 (0.4)	4.0 (0.6)
k. Hotline and other enquiry services provided by related Education Department sections (e.g. the IS section)	Yes	3 (50.0%)	5 (71.4%)	5 (100.0%)	10 (71.4%)	4 (40.0%)	11 (68.8%)	38 (65.5%)
	No	3 (50.0%)	2 (28.6%)	0 (0.0%)	4 (28.6%)	6 (60.0%)	5 (31.3%)	20 (34.5%)
Satisfaction level (1=very unsatisfactory, 5=very satisfactory)	Mean*	3.0 (0.0)	2.2 (1.1)	3.0 (1.0)	3.1 (0.9)	2.8 (1.0)	3.3 (0.7)	3.0 (0.9)

Primary:

	*mean (SD)	Pilot		ITC		QEF		Others		Total	
		N	(%)	N	(%)	N	(%)	N	(%)	N	(%)
a. 18 hours training courses designed for Primary and Secondary teachers who are in charge of IT coordination / training	Yes	3	(42.8%)	9	(50.0%)	9	(56.3%)	43	(62.4%)	64	(58.2%)
	No	3	(42.9%)	9	(50.0%)	7	(43.8%)	27	(39.1%)	46	(41.8%)
Satisfaction level (1=very unsatisfactory, 5=very satisfactory)	Mean*	3.2	(1.0)	3.2	(0.4)	3.1	(0.9)	3.3	(0.7)	3.3	(0.7)
b. Information Technology Education Resources Center (ITERC)	Yes	2	(28.6%)	8	(44.4%)	11	(73.3%)	39	(56.5%)	60	(55.0%)
	No	4	(57.1%)	10	(55.6%)	4	(26.7%)	31	(45%)	49	(45.0%)
Satisfaction level (1=very unsatisfactory, 5=very satisfactory)	Mean*	3.0	(0.0)	3.5	(0.5)	3.3	(0.5)	3.3	(0.5)	3.3	(0.5)
c. Individual teaching portfolio displays	Yes	2	(28.6%)	7	(38.9%)	4	(26.7%)	31	(45.6%)	44	(40.7%)
	No	4	(57.1%)	11	(61.1%)	11	(73.3%)	38	(55.9%)	64	(59.3%)
Satisfaction level (1=very unsatisfactory, 5=very satisfactory)	Mean*	3.0	(0.0)	3.5	(0.5)	3.5	(0.6)	3.3	(0.6)	3.3	(0.6)
d. Curriculum materials distributed by the ITERC or other sections of the Education Department (e.g. CDI, AID)	Yes	2	(28.6%)	11	(64.7%)	12	(75.0%)	45	(65.3%)	70	(64.2%)
	No	4	(57.1%)	6	(35.3%)	4	(25.0%)	25	(36.2%)	39	(35.8%)
Satisfaction level (1=very unsatisfactory, 5=very satisfactory)	Mean*	3.0	(0.0)	3.5	(0.7)	3.5	(0.7)	3.5	(0.6)	3.5	(0.6)
e. Online course materials/workshops hosted by the ITERC or other sections of the Education Department (e.g. CDI, AID)	Yes	1	(14.3%)	4	(22.2%)	7	(43.8%)	23	(33.3%)	35	(31.8%)
	No	5	(71.4%)	14	(77.8%)	9	(56.3%)	47	(68.2%)	75	(68.2%)
Satisfaction level (1=very unsatisfactory, 5=very satisfactory)	Mean*	3.0	(0.0)	4.3	(0.6)	3.6	(0.5)	3.6	(0.5)	3.6	(0.5)
f. Regional support service (RSS)	Yes	4	(57.1%)	8	(44.4%)	9	(56.3%)	42	(60.0%)	63	(56.8%)
	No	2	(28.6%)	10	(55.6%)	7	(43.8%)	29	(41.4%)	48	(43.2%)
Satisfaction level (1=very unsatisfactory, 5=very satisfactory)	Mean*	3.2	(0.5)	4.0	(0.6)	3.6	(0.7)	3.5	(0.7)	3.5	(0.7)
g. Technical support service (TSS)	Yes	5	(71.4%)	14	(77.8%)	16	(100.0%)	61	(88.4%)	96	(87.3%)
	No	1	(14.3%)	4	(22.2%)	0	(0.0%)	9	(13.1%)	14	(12.7%)
Satisfaction level (1=very unsatisfactory, 5=very satisfactory)	Mean*	3.4	(1.5)	3.7	(0.6)	3.4	(0.7)	3.4	(0.8)	3.4	(0.8)
h. The Information Technology Education web-site http://www.ited.ed.gov.hk	Yes	6	(85.7%)	18	(100.0%)	16	(100.0%)	69	(101.5%)	109	(100.0%)
	No	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)
Satisfaction level (1=very unsatisfactory, 5=very satisfactory)	Mean*	3.7	(0.8)	3.8	(0.8)	3.5	(0.5)	3.8	(0.5)	3.8	(0.6)
i. Resource website of the Quality Education Fund http://qcrc.gef.org.hk	Yes	5	(71.4%)	14	(77.8%)	13	(86.7%)	55	(79.8%)	87	(79.8%)
	No	1	(14.3%)	4	(22.2%)	2	(13.3%)	15	(21.7%)	22	(20.2%)

Satisfaction level (1=very unsatisfactory, 5=very satisfactory)	Mean*	3.7	(0.5)	3.6	(0.6)	3.2	(0.4)	3.5	(0.6)	3.5	(0.6)
j. HKeducationCITY.net http://www.hkedcity.net	Yes	6	(85.7%)	18	(100.0%)	15	(100.0%)	68	(98.5%)	107	(98.2%)
	No	1	(14.3%)	0	(0.0%)	0	(0.0%)	1	(1.5%)	2	(1.8%)
Satisfaction level (1=very unsatisfactory, 5=very satisfactory)	Mean*	3.7	(0.8)	4.1	(0.7)	3.8	(0.7)	4.0	(0.5)	4.0	(0.6)
k. Hotline and other enquiry services provided by related Education Department sections (e.g. the IS section)	Yes	5	(71.4%)	12	(66.7%)	11	(78.6%)	57	(82.6%)	85	(78.7%)
	No	2	(28.6%)	6	(33.3%)	3	(21.4%)	12	(17.4%)	23	(21.3%)
Satisfaction level (1=very unsatisfactory, 5=very satisfactory)	Mean*	2.8	(0.8)	3.4	(0.8)	3.3	(0.7)	3.3	(0.7)	3.3	(0.7)

Regarding Internet access after school, students were asked: In the previous week, did you access the Internet after school? Where did you get access to the Internet after school? (Q7) Overall 58.5% of students did access the Internet after school and most students accessed at home (Table 2.5.8). S6 (75.3%) is significantly higher than the other grades. S2 (24%) is significantly higher in getting access in school. S6 (94.4%) is significantly higher in getting access at home. P6 (8.1%) is significantly higher in getting access at community centre.

Table 2.5.8 In the previous week, have you accessed the Internet **after school**? (Students' questionnaire, Q. 7)

		P6		S2		S4		S6		Total		p-value
		N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	
Yes		1731	(44.2%)	1487	(64.1%)	1463	(65.1%)	1274	(75.3%)	5955	(58.5%)	596.83***
No		2183	(55.8%)	832	(35.9%)	784	(34.9%)	417	(24.7%)	4216	(41.5%)	596.83***
<i>If yes, where did you get access to the Internet after school?</i>												
School	Yes	339	(20.3%)	351	(24.0%)	219	(15.2%)	227	(18.0%)	1136	(19.5%)	38.55***
	No	1334	(79.7%)	1111	(76.0%)	1224	(84.8%)	1033	(82.0%)	4702	(80.5%)	
Home	Yes	1325	(79.2%)	1251	(85.6%)	1335	(92.5%)	1190	(94.4%)	5101	(87.4%)	197.37***
	No	348	(20.8%)	211	(14.4%)	108	(7.5%)	70	(5.6%)	737	(12.6%)	
Community Center	Yes	135	(8.1%)	24	(1.6%)	16	(1.1%)	10	(0.8%)	185	(3.2%)	185.17***
	No	1538	(91.9%)	1438	(98.4%)	1427	(98.9%)	1250	(99.2%)	5653	(96.8%)	
Other	Yes	95	(5.7%)	40	(2.7%)	32	(2.2%)	20	(1.6%)	187	(3.2%)	49.22***
	No	1578	(94.3%)	1422	(97.3%)	1411	(97.8%)	1240	(98.4%)	5651	(96.8%)	

Regarding support from the community, teachers were asked: In this academic year, did you participate in IT exhibitions or conferences? (Q33) About 35% of teachers attended IT exhibition or conferences. Pilot school teachers have the highest participation (49.7%) in secondary and QEF school teachers have the highest participation (41.7%) in primary (Table 2.5.9). Principals were also asked: In the past academic year (1999-2000), did you participate in any of the following activities or exhibition offered by other schools, offered by the Education Department or offered by commercial organizations? (Q7) Table 2.5.10 shows that the primary principals have the higher attendance than secondary in the activities or exhibition offered by all three kinds of organizations.

Table 2.5.9 In this academic year, have you participated in any IT exhibitions or conferences? (Teachers' questionnaire, Q. 33)

Secondary

	Pilot		MMLC & ITC		MMLC		ITC		QEF		Other		Total		p-value
	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	
Yes	97	(49.7%)	138	(37.7%)	47	(28.1%)	148	(33.5%)	95	(27.9%)	207	(36.5%)	732	(35.2%)	31.57**
No	98	(50.3%)	228	(62.3%)	120	(71.9%)	294	(66.5%)	245	(72.1%)	360	(63.5%)	1345	(64.8%)	*

Primary

	Pilot		ITC		QEF		Others		Total		p-value
	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	
Yes	70	(33.3%)	172	(32.1%)	201	(41.7%)	536	(33.2%)	979	(34.5%)	16.01**
No	108	(51.4%)	363	(67.8%)	281	(58.3%)	1107	(68.7%)	1859	(65.5%)	

Table 2.5.10 In the past academic year (1999-2000), did you participate in any of the following activities/exhibition? (Principals' questionnaire, Q. 7)

Secondary

7.		Pilot		MMLC & ITC		MMLC		ITC		QEF		Other		Total	
		N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)
A1. IT activities/exhibition offered by other schools	Yes	4	(80.0%)	6	(100.0%)	5	(100.0%)	5	(41.7%)	10	(100.0%)	14	(77.8%)	44	(78.6%)
	No	1	(20.0%)	0	(0.0%)	0	(0.0%)	7	(58.3%)	0	(0.0%)	4	(22.2%)	12	(21.4%)
How many times	Mean*	2.8	(1.0)	4.3	(2.0)	4.0	(1.6)	3.6	(1.3)	2.3	(0.7)	2.7	(1.5)	3.1	(1.5)
B1.IT activities/exhibition offered by the Education Department	Yes	4	(80.0%)	5	(83.3%)	4	(80.0%)	6	(50.0%)	10	(100.0%)	16	(88.9%)	45	(80.4%)
	No	1	(20.0%)	1	(16.7%)	1	(20.0%)	6	(50.0%)	0	(0.0%)	2	(11.1%)	11	(19.6%)
How many times	Mean*	2.0	(1.4)	1.8	(0.8)	3.2	(1.0)	2.2	(1.6)	1.5	(0.5)	2.1	(1.3)	2.0	(1.2)
C1.IT activities/exhibition offered by commercial organizations	Yes	2	(40.0%)	5	(83.3%)	4	(80.0%)	6	(50.0%)	3	(30.0%)	12	(66.7%)	32	(57.1%)
	No	3	(60.0%)	1	(16.7%)	1	(20.0%)	6	(50.0%)	7	(70.0%)	6	(33.3%)	24	(42.9%)
How many times	Mean*	1.5	(0.7)	2.2	(0.8)	2.2	(0.5)	2.2	(1.6)	1.3	(0.6)	1.8	(0.7)	1.9	(0.9)

Primary

7. In the past academic year (1999-2000), did you participate in any of the following activities/exhibition?	*mean (SD)	Pilot		ITC		QEF		Others		Total	
		N	(%)	N	(%)	N	(%)	N	(%)	N	(%)
A1. IT activities/exhibition offered by other schools	Yes	5	(83.3%)	14	(87.5%)	13	(76.5%)	57	(86.4%)	89	(84.8%)
	No	1	(16.7%)	2	(12.5%)	4	(23.5%)	9	(13.6%)	16	(15.2%)
How many times	Mean*	3.0	(1.7)	3.2	(2.4)	2.6	(1.0)	2.8	(1.8)	2.9	(1.8)
B1.IT activities/exhibition offered by the Education Department	Yes	6	(100.0%)	15	(93.8%)	15	(88.2%)	54	(81.8%)	90	(85.7%)
	No	0	(0.0%)	1	(6.3%)	2	(11.8%)	12	(18.2%)	15	(14.3%)
How many times	Mean*	2.5	(2.7)	1.6	(0.7)	2.2	(1.5)	2.2	(1.5)	2.1	(1.5)
C1.IT activities/exhibition offered by commercial organizations	Yes	4	(66.7%)	10	(62.5%)	6	(35.3%)	45	(68.2%)	65	(61.9%)
	No	2	(33.3%)	6	(37.5%)	11	(64.7%)	21	(31.8%)	40	(38.1%)
How many times	Mean*	1.8	(1.5)	1.3	(0.7)	2.0	(1.5)	1.8	(1.2)	1.7	(1.2)

2.5.3 Community-Wide Culture

This section reports the measures on community-wide culture as advocated in the Five-year Strategy, "We need collaboration among the school management, teachers, students, parents, the business sector and other community bodies, in order to work towards our missions and ultimate vision on IT in education" (Five-year Strategy, p.32).

First, regarding collaboration outside the school, principals were asked: Did the school collaborate with any of the following organizations (from local, China, or overseas) with respect to IT? (Q11) In collaboration with local schools, organizations and tertiary institutions, secondary schools (48%, 34.6% and 36% respectively) have higher percentages than primary schools (24.2%, 23.4% and 28.4%). Among secondary school groups, pilot is the highest in collaboration with local schools, organizations and tertiary institutions. Among primary school groups, ITC is the highest in collaboration with local schools and organizations, whereas pilot is the highest in collaboration with local tertiary institutions (Table 2.5.11).

Table 2.5.11 Did the school collaborate with any of the following organizations with respect to IT? (Principals' questionnaire, Q. 11)

Secondary

		Pilot		MMLC & ITC		MMLC		ITC		QEF		Other		Total	
		N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)
a. Local Secondary and Primary schools	Yes	3	(100.0%)	2	(33.3%)	1	(20.0%)	8	(72.7%)	4	(50.0%)	6	(35.3%)	24	(48.0%)
	No	0	(0.0%)	4	(66.7%)	4	(80.0%)	3	(27.3%)	4	(50.0%)	11	(64.7%)	26	(52.0%)
b. Local community organizations/ commercial organizations	Yes	3	(75.0%)	1	(16.7%)	1	(20.0%)	6	(50.0%)	1	(12.5%)	6	(35.3%)	18	(34.6%)
	No	1	(25.0%)	5	(83.3%)	4	(80.0%)	6	(50.0%)	7	(87.5%)	11	(64.7%)	34	(65.4%)
c. Local tertiary institutions	Yes	4	(100.0%)	3	(50.0%)	3	(60.0%)	2	(20.0%)	1	(12.5%)	5	(29.4%)	18	(36.0%)
	No	0	(0.0%)	3	(50.0%)	2	(40.0%)	8	(80.0%)	7	(87.5%)	12	(70.6%)	32	(64.0%)
d. Schools in Mainland China	Yes	1	(25.0%)	1	(16.7%)	0	(0.0%)	1	(10.0%)	0	(0.0%)	2	(11.8%)	5	(10.0%)
	No	3	(75.0%)	5	(83.3%)	5	(100.0%)	9	(90.0%)	8	(100.0%)	15	(88.2%)	45	(90.0%)
e. Community organizations/ Commercial organizations in Mainland China	Yes	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	1	(12.5%)	1	(5.9%)	2	(4.1%)
	No	4	(100.0%)	6	(100.0%)	5	(100.0%)	9	(100.0%)	7	(87.5%)	16	(94.1%)	47	(95.9%)
f. Tertiary institutions in Mainland China	Yes	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	1	(5.9%)	1	(2.0%)
	No	4	(100.0%)	6	(100.0%)	5	(100.0%)	9	(100.0%)	8	(100.0%)	16	(94.1%)	48	(98.0%)
g. Overseas schools	Yes	2	(50.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	2	(4.1%)
	No	2	(50.0%)	6	(100.0%)	5	(100.0%)	9	(100.0%)	8	(100.0%)	17	(100.0%)	47	(95.9%)
h. Overseas community organizations/ commercial organizations	Yes	1	(25.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	1	(5.9%)	2	(4.1%)
	No	3	(75.0%)	6	(100.0%)	5	(100.0%)	9	(100.0%)	8	(100.0%)	16	(94.1%)	47	(95.9%)
i. Overseas tertiary institutions	Yes	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)
	No	4	(100.0%)	6	(100.0%)	5	(100.0%)	8	(100.0%)	8	(100.0%)	16	(100.0%)	47	(100.0%)

Primary

		Pilot		ITC		QEF		Others		Total	
		N	(%)	N	(%)	N	(%)	N	(%)	N	(%)
a. Local Secondary and Primary schools	Yes	2	(33.3%)	5	(41.7%)	2	(13.3%)	14	(22.6%)	23	(24.2%)
	No	4	(66.7%)	7	(58.3%)	13	(86.7%)	48	(77.4%)	72	(75.8%)
b. Local community organizations/ commercial organizations	Yes	2	(33.3%)	5	(35.7%)	4	(28.6%)	11	(18.3%)	22	(23.4%)
	No	4	(66.7%)	9	(64.3%)	10	(71.4%)	49	(81.7%)	72	(76.6%)
c. Local tertiary institutions	Yes	3	(50.0%)	5	(38.5%)	6	(40.0%)	13	(21.3%)	27	(28.4%)
	No	3	(50.0%)	8	(61.5%)	9	(60.0%)	48	(78.7%)	68	(71.6%)
d. Schools in Mainland China	Yes	0	(0.0%)	1	(7.7%)	0	(0.0%)	1	(1.7%)	2	(2.1%)
	No	6	(100.0%)	12	(92.3%)	16	(100.0%)	58	(98.3%)	92	(97.9%)
e. Community organizations/ Commercial organizations in Mainland China	Yes	0	(0.0%)	1	(7.7%)	0	(0.0%)	0	(0.0%)	1	(1.1%)
	No	6	(100.0%)	12	(92.3%)	15	(100.0%)	60	(100.0%)	93	(98.9%)
f. Tertiary institutions in Mainland China	Yes	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)
	No	6	(100.0%)	13	(100.0%)	15	(100.0%)	59	(100.0%)	93	(100.0%)
g. Overseas schools	Yes	0	(0.0%)	0	(0.0%)	0	(0.0%)	1	(1.7%)	1	(1.1%)
	No	6	(100.0%)	13	(100.0%)	16	(100.0%)	58	(98.3%)	93	(98.9%)
h. Overseas community organizations/ commercial organizations	Yes	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)
	No	6	(100.0%)	13	(100.0%)	15	(100.0%)	60	(100.0%)	94	(100.0%)
i. Overseas tertiary institutions	Yes	0	(0.0%)	0	(0.0%)	0	(0.0%)	1	(1.7%)	1	(1.1%)
	No	6	(100.0%)	13	(100.0%)	16	(100.0%)	58	(98.3%)	93	(98.9%)

IT coordinators were asked: Did your school host meetings in this academic year for sharing experience in implementing IT in education? (Q13) Overall 33.9% and 26.5% of secondary and primary schools responded “yes” respectively (Table 2.5.12). Pilot (66.7%) and ITC (70%) is the highest group among secondary and primary schools respectively. Then, ITC were also asked whether they participated in meetings held by other schools for sharing experience in implementing IT in education in this academic year (Q14). Overall 61.3% and 66.2% of secondary and primary schools responded “yes” respectively (Table 2.5.13). Pilot (83.3%) and QEF (88.9%) is the highest group among secondary and primary schools respectively.

Table 2.5.12 Has your school hosted meetings for sharing information on your school's experience in applying ICT in education?
(IT Coordinators' questionnaire, Q. 13)

Secondary

13.		Pilot		MMLC & ITC		MMLC		ITC		QEF		Other		Total	
		N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)
	Yes	4	(66.7%)	2	(25.0%)	0	(0.0%)	10	(66.7%)	2	(20.0%)	3	(17.6%)	21	(33.9%)
	No	2	(33.3%)	6	(75.0%)	6	(100.0%)	5	(33.3%)	8	(80.0%)	14	(82.3%)	41	(66.1%)
Number of times	Mean	5.2	(3.6)	3.0	(2.8)	-	-	1.3	(0.5)	1.0	(0.0)	4.0	(1.7)	2.6	(2.4)

Primary

		Pilot		ITC		QEF		Others		Total	
		N	(%)	N	(%)	N	(%)	N	(%)	N	(%)
	Yes	1	(50.0%)	7	(70.0%)	2	(22.2%)	8	(17.0%)	18	(26.5%)
	No	1	(50.0%)	3	(30.0%)	7	(77.8%)	39	(83.0%)	50	(73.5%)
Number of times	Mean	3.0	(0.0)	1.9	(1.1)	4.0	(1.4)	1.1	(0.4)	1.8	(1.2)

Table 2.5.13 Have you participated in meetings held by other schools that involved the sharing of experience in applying ICT in education?
(IT Coordinators' questionnaire, Q. 14)

Secondary

		Pilot		MMLC & ITC		MMLC		ITC		QEF		Other		Total	
		N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)
	Yes	5	(83.3%)	6	(75.0%)	0	(0.0%)	11	(73.3%)	7	(70.0%)	9	(52.9%)	38	(61.3%)
	No	1	(16.7%)	2	(25.0%)	6	(100.0%)	4	(26.7%)	3	(30.0%)	8	(47.1%)	24	(38.7%)
Number of times	Mean*	2.4	(1.7)	2.8	(1.9)	-	-	2.0	(1.0)	2.4	(1.1)	1.7	(0.7)	2.2	(1.2)

Primary

	*mean (SD)	Pilot		ITC		QEF		Others		Total	
		N	(%)	N	(%)	N	(%)	N	(%)	N	(%)
	Yes	1	(50.0%)	7	(70.0%)	8	(88.9%)	29	(61.7%)	45	(66.2%)
	No	1	(50.0%)	3	(30.0%)	1	(11.1%)	18	(38.3%)	23	(33.8%)
Number of times	Mean*	1.0	(0.0)	2.4	(0.8)	1.9	(1.0)	2.1	(2.1)	2.1	(1.7)

Regarding sharing culture, teachers were asked whether they shared their experience with other teachers in the use of IT for educational purposes (Q27). Overall 76.4% and 73.8% of secondary and primary schools responded “yes” respectively (Table 2.5.14). Pilot (89.5% and 74.9% respectively) is the highest group among both secondary and primary schools.

Table 2.5.14 Have you shared your experience with other teacher regarding the use of IT for educational purposes? (Teachers’ questionnaire, Q. 27)

Secondary

	Pilot		MMLC & ITC		MMLC		ITC		QEF		Other		Total		p-value
	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	
Yes	180	(89.5%)	298	(77.0%)	133	(71.9%)	368	(76.8%)	259	(71.9%)	464	(75.2%)	1702	(76.4%)	25.91***
No	21	(10.4%)	89	(23.0%)	52	(28.1%)	111	(23.2%)	101	(28.1%)	153	(24.8%)	527	(23.6%)	

Primary

	Pilot		ITC		QEF		Others		Total		p-value
	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	
Yes	170	(74.9%)	454	(78.3%)	409	(77.8%)	1226	(71.0%)	2259	(73.8%)	51.17***
No	23	(10.1%)	126	(21.7%)	117	(22.2%)	536	(31.0%)	802	(26.2%)	

Apart from collaboration and sharing with other schools or organizations, how teachers and students view the impact of IT on themselves is also important in understanding of the community-wide culture. Teachers were asked: With the use of IT, what is the impact on you? (Q34) Table 2.5.15 shows the results. In general, the overall average scores are not high (less or equal 3.6), in particular, both primary and secondary teachers rated relatively low (less than 3) in the following items: “increases my social circle”, “increases opportunities to work with teachers from other schools”, “increase the opportunities to work with external organizations” and “enhances communications with parents”.

Table 2.5.15 With the use of ICT, what is the impact on you? (Teachers' questionnaire, Q. 34)

Secondary

	Pilot		MMLC & ITC		MMLC		ITC		QEF		Other		Total		p-value
	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	
a. IT can increase working efficiency on the whole															
Agreement (1=Strongly disagree, 5 = Strongly agree)	3.7	(0.8)	3.5	(0.8)	3.4	(0.8)	3.5	(0.8)	3.5	(0.8)	3.5	(0.8)	3.5	(0.8)	3.96**
b. There is too much information, and I suffer from an information overload.															
Agreement (1=Strongly disagree, 5 = Strongly agree)	3.3	(1.0)	3.4	(0.9)	3.5	(0.9)	3.5	(0.8)	3.5	(0.8)	3.5	(0.9)	3.5	(0.9)	1.98NS
c. Too much time is spent on IT; time for preparing teaching notes and materials decreases															
Agreement (1=Strongly disagree, 5 = Strongly agree)	3.6	(1.0)	3.7	(1.0)	3.7	(1.0)	3.6	(1.0)	3.7	(0.9)	3.6	(1.0)	3.6	(1.0)	0.63NS
d. Too much time is spent on IT, the time for communication with students decreases															
Agreement (1=Strongly disagree, 5 = Strongly agree)	3.3	(1.0)	3.4	(1.0)	3.4	(1.0)	3.4	(1.0)	3.4	(1.0)	3.4	(1.0)	3.4	(1.0)	0.88NS
e. It makes me more concerned about issues related to other parts of the World.															
Agreement (1=Strongly disagree, 5 = Strongly agree)	3.2	(1.0)	3.1	(1.0)	3.2	(0.9)	3.0	(1.0)	3.2	(0.9)	3.2	(0.9)	3.1	(0.9)	1.87NS
f. It makes me more concerned about issues related to Hong Kong and Mainland China															
Agreement (1=Strongly disagree, 5 = Strongly agree)	3.0	(0.9)	3.1	(0.9)	3.1	(0.9)	2.9	(0.9)	3.0	(0.9)	3.0	(0.9)	3.0	(0.9)	1.88NS
g. Increases my social circle.															
Agreement (1=Strongly disagree, 5 = Strongly agree)	2.7	(0.9)	2.7	(0.9)	2.7	(0.9)	2.5	(0.8)	2.7	(0.9)	2.6	(0.9)	2.6	(0.9)	3.54**
h. Increases opportunities for collaboration with in-house teachers															
Agreement (1=Strongly disagree, 5 = Strongly agree)	3.1	(0.9)	3.1	(0.9)	3.0	(0.9)	3.0	(0.9)	2.9	(0.9)	3.0	(0.9)	3.0	(0.9)	2.04NS
i. Increases opportunities to work with teachers from other schools															
Agreement (1=Strongly disagree, 5 = Strongly agree)	2.6	(0.9)	2.7	(0.8)	2.6	(0.8)	2.6	(0.8)	2.6	(0.8)	2.6	(0.8)	2.6	(0.8)	2.21NS
j. Increase the opportunities to work with external organizations															
Agreement (1=Strongly disagree, 5 = Strongly agree)	2.7	(0.9)	2.7	(0.8)	2.6	(0.8)	2.5	(0.8)	2.6	(0.8)	2.6	(0.8)	2.6	(0.8)	1.90NS
k. Enhances communications with parents															
Agreement (1=Strongly disagree, 5 = Strongly agree)	2.5	(0.9)	2.4	(0.8)	2.3	(0.8)	2.4	(0.8)	2.4	(0.8)	2.5	(0.8)	2.4	(0.8)	1.61NS
l. Enhances communications with students															
Agreement (1=Strongly disagree, 5 = Strongly agree)	3.3	(1.0)	3.0	(1.0)	2.8	(0.9)	3.0	(1.0)	3.1	(1.0)	3.0	(1.0)	3.0	(1.0)	4.81***

Primary

34. With the use of ICT, what is the impact on you?	Pilot		ITC		QEF		Others		Total		p-value
	N	(SD)	N	(SD)	N	(SD)	N	(SD)	N	(SD)	
a. IT can increase working efficiency on the whole											
Agreement (1=Strongly disagree, 5 = Strongly agree)	3.7	(0.7)	3.7	(0.7)	3.6	(0.7)	3.6	(0.7)	3.6	(0.7)	8.72***
b. There is too much information, and I suffer from an information overload.											
Agreement (1=Strongly disagree, 5 = Strongly agree)	3.4	(0.8)	3.5	(0.9)	3.5	(0.8)	3.5	(0.9)	3.5	(0.9)	1.53NS
c. Too much time is spent on IT; time for preparing teaching notes and materials decreases											
Agreement (1=Strongly disagree, 5 = Strongly agree)	3.5	(0.8)	3.5	(1.0)	3.7	(0.9)	3.6	(0.9)	3.6	(0.9)	3.99**
d. Too much time is spent on IT, the time for communication with students decreases											
Agreement (1=Strongly disagree, 5 = Strongly agree)	3.2	(0.9)	3.2	(1.0)	3.4	(0.9)	3.3	(0.9)	3.3	(0.9)	3.99**
e. It makes me more concerned about issues related to other parts of the World.											
Agreement (1=Strongly disagree, 5 = Strongly agree)	3.4	(0.9)	3.4	(0.9)	3.3	(0.9)	3.3	(0.8)	3.4	(0.9)	4.81**
f. It makes me more concerned about issues related to Hong Kong and Mainland China											
Agreement (1=Strongly disagree, 5 = Strongly agree)	3.3	(0.9)	3.3	(0.9)	3.1	(0.9)	3.2	(0.9)	3.2	(0.9)	3.66*
g. Increases my social circle.											
Agreement (1=Strongly disagree, 5 = Strongly agree)	3.0	(0.9)	2.9	(0.9)	2.8	(0.9)	2.9	(0.9)	2.9	(0.9)	1.17NS
h. Increases opportunities for collaboration with in-house teachers											
Agreement (1=Strongly disagree, 5 = Strongly agree)	3.3	(0.9)	3.3	(0.9)	3.2	(0.9)	3.2	(0.9)	3.2	(0.9)	3.41*
i. Increases opportunities to work with teachers from other schools											
Agreement (1=Strongly disagree, 5 = Strongly agree)	2.8	(0.8)	2.8	(0.8)	2.7	(0.8)	2.7	(0.8)	2.7	(0.8)	1.53NS
j. Increase the opportunities to work with external organizations											
Agreement (1=Strongly disagree, 5 = Strongly agree)	2.8	(0.8)	2.8	(0.8)	2.7	(0.9)	2.7	(0.8)	2.7	(0.8)	1.93NS
k. Enhances communications with parents											
Agreement (1=Strongly disagree, 5 = Strongly agree)	2.7	(0.8)	2.6	(0.8)	2.6	(0.8)	2.6	(0.8)	2.6	(0.8)	2.60NS
l. Enhances communications with students											
Agreement (1=Strongly disagree, 5 = Strongly agree)	3.1	(0.9)	3.0	(0.9)	2.8	(0.9)	2.9	(0.9)	2.9	(0.9)	4.67**

Students were also asked: What is the impact on you after using computers? (Q17) Table 2.5.16 shows the results. In general, lower grade students are more positive. The overall two highest items are: “help learn new things” (average 4.1) and “know more about the world” (average 3.9). This seems that students have an open and global perspective in using IT.

Table 2.5.16 What is the impact of using computers on you? (Students' questionnaire, Q. 17)

	P6		F2		F4		F6		Total		p-value
	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	
a. Helps your studies (1=Strongly Disagree, 5=Strongly Agree)	3.8	(0.9)	3.7	(0.8)	3.5	(0.8)	3.5	(0.8)	3.6	(0.8)	57.59***
b. Helps learn new knowledge (1=Strongly Disagree, 5=Strongly Agree)	4.2	(0.8)	4.0	(0.7)	4.0	(0.7)	4.1	(0.7)	4.1	(0.7)	24.72***
c. Know more about the world (e.g. different cultures/world affairs etc.) (1=Strongly Disagree, 5=Strongly Agree)	3.9	(0.9)	3.8	(0.8)	3.9	(0.8)	3.9	(0.8)	3.9	(0.8)	14.52***
d. Know more about Hong Kong / China (1=Strongly Disagree, 5=Strongly Agree)	3.8	(0.9)	3.7	(0.8)	3.6	(0.8)	3.6	(0.8)	3.7	(0.8)	34.23***
e. Helps to communicate with foreigners (1=Strongly Disagree, 5=Strongly Agree)	3.3	(1.0)	3.5	(0.9)	3.6	(0.9)	3.5	(0.9)	3.5	(1.0)	51.17***
f. Increases my social circle. (1=Strongly Disagree, 5=Strongly Agree)	3.6	(1.0)	3.7	(0.9)	3.8	(0.9)	3.6	(0.9)	3.7	(1.0)	20.98***
g. Spend too much time on computers which lowers the ability to communicate with others (1=Strongly Disagree, 5=Strongly Agree)	2.8	(1.1)	2.8	(1.1)	2.8	(1.0)	2.9	(1.0)	2.8	(1.1)	4.65**
h. Spend too much time on computers and hence makes me neglect my studies. (1=Strongly Disagree, 5=Strongly Agree)	2.7	(1.2)	2.8	(1.1)	2.9	(1.1)	3.1	(1.1)	2.9	(1.2)	55.29***
i. Increases my interaction with the outside world and hence makes me neglect my studies. (1=Strongly Disagree, 5=Strongly Agree)	2.8	(1.2)	2.8	(1.0)	2.9	(1.0)	3.0	(1.0)	2.8	(1.1)	14.10***

2.5.4 Summary

From SITES-M1 to the present study, the provisions of hardware and resources have been apparently improved. It is perhaps not surprising the major obstacles or difficulties concerned by the IT coordinators and teachers have been changed from support and resources to instructional software and teacher competence.

The results clearly demonstrate that students want more provision of computer access though they, are generally satisfied with the existing support or assistance from the schools, libraries or Education Department, especially P6 students have the highest rating. Among all students, the percentage of P6 (8.1%) students are significantly higher than other grades in accessing the Internet after school at the community centre. One interpretation of this would be a number of primary schools are half-day which does not allow the students to use computers after school.

Over half of the primary and secondary teachers visited the ITERC or Teacher Centre. All ratings for the courses on IT in education or resource/support services provided by the Education Department or related organizations in general are satisfactory (greater than 3). The top three popular services that were attended or visited by secondary and primary teachers are HKEdCity, ITed Web and TSS, suggesting a certain demand in useful web-based resources and technical support services.

About one-third of teachers attended exhibition or conferences. Primary principals have the higher attendance than secondary in the activities or exhibition offered by other schools, the Education Department or commercial organizations. Regarding collaboration culture, it focuses only on local. In general, secondary schools have the higher rating than primary in collaborating with local schools, organizations or tertiary institutions. This points to the need of promoting such culture among schools.

Regarding sharing culture, over 70% of teachers reported positively in sharing their experience with other teachers in the use of IT for teaching and learning. However, in terms of the perception on the impact of IT, teachers have relatively low rating in the following items: “increases my social circle”, “increases opportunities to work with teachers from other schools”, “increase the opportunities to work with external organizations” and “enhances communications with parents”. The findings indicate that the teachers have a reserved view on the perceived impact of IT. On the other hand, the views of students seem to be more open and positive.