

Adapting Education For School Librarianship: Addressing The Needs Of The Part Time Student.

James Henri, Sandra Lee, Sue Trinidad,
Alvin Kwan, Ming Lai and Felix Siu
University of Hong Kong.

Over the past few years repeated calls have been made by teacher librarian educators for evidence based practice by teacher librarians. This study is an attempt to provide evidence for the adoption of innovative practice in a post-service, part time Bachelor of Education program. Part time tertiary students undertaking studies in education at the University of Hong Kong are often heard to voice the opinion that the demands of university study are excessive. While it is generally accepted that the Hong Kong lifestyle is hectic, that teachers have a heavy schedule, and that travel to and from the university campus is time-consuming, little useful data exists to allow university professors to better understand the plight of the students or to provide evidence from which action could be taken to better tailor courses to the needs of students. Likewise many assumptions are made about tertiary student motivation but these assumptions are probably not grounded in any research findings. This exploratory study was undertaken to determine the factors affecting the full-time teacher's progress in their tertiary part-time study in school librarianship. The findings will better enable instructors to tailor teaching and learning to meet the needs of the part-time participant. Findings will also be informative for other part-time undergraduate programs.

Introduction

Education for school librarianship is typically offered to teachers in part-time programs and is therefore delivered after work hours when the students are suffering from fatigue. In many countries this education is primarily offered in a traditional face-to-face environment, which often means that students have to travel long distances to attend lessons. Other countries have chosen to follow a predominantly, distance education or online education pattern of delivery. This requires the adoption of technology and a learning environment that is often without the reassurance of face-to-face contact with instructors and peers.

The demand for programs necessary to revitalise and reform education in Hong Kong with particular emphasis on learning to learn and life long learning arose out of a series of education reports that highlighted the need for transformation in schooling (CDC, 2001; HKSAR, 2001). Significant funding has been provided to the school sector to enhance Information and Communication Technology (ICT) and information services, including the provision of computer labs, and libraries and the employment of IT coordinators and teacher librarians.

Responding to this demand the Hong Kong University commenced a three year part time BEd in Information Technology in Education (ITE) and Library Information Science (LIS) in 2000/2001. This program was initially a partnership between the School of Professional and Continuing Education (SPACE) and the Faculty of Education. The program was offered to teachers and teacher librarians wanting to up-grade their skills in the area of ICT and information management. The BEd (ITE/LIS) program prepares students in the various aspects of leadership and information management within schools. The program is delivered using an online course-room Interactive Learner Network (ILN) to supplement face-to-face classes and therefore attempts to provide the best of the online and face-to-face traditions.

Instructors in the program have regularly commented on a perceived significant variation in motivation among students. This is evidenced by such indicators as late attendance, evidence of lack of reading and out of class activity, and reluctance to participate in class group work or to initiate questions. This was surprising since the students are

required to pay significant fees to undertake the course. It also seemed counter-intuitive that teachers would show signs of lack of motivation when their study was optional. Were these teachers who were at the forefront of the education reform so steeped in the current culture that there was, at least subconscious, apathy to learning to change?

The instructors were very mindful of the reality that they did not have the data that could enable them to fully understand the impact that university study was having on student's lifestyle. To address this deficit, members of the program team sought funding to undertake a research project named, Innovative Pedagogical Practice Online (IPPO). IPPO commenced in 2003 and was undertaken to better understand and enhance the motivation and performance of part-time students studying in these programs. This research gathered qualitative and quantitative data from students undertaking the BEd program. Using an action research methodology, the instructors were able to tailor teaching and learning environments through technology to meet part-time student's needs and make more informed judgments with respect to workload, assessment modes, and delivery options. This has enhanced the instructor capability to better provide a sound metacognitive learning environment within which students are able to construct and build knowledge to become lifelong learners.

IPPO is an ongoing research project. This paper does not address parts of the project that involved the BEd (ITE) modules and presents only preliminary findings from the BEd (LIS) modules for the purpose of this paper. Further findings, especially those from the innovative practices that were used in the BEd (LIS) program, will be discussed in Durban at the conference.

Project Objectives

Some of the issues that IPPO was designed to address were:

- What are the characteristics of full time teachers enrolling in the part-time BEd programs?
- What adjustments do students make to their lifestyle on entering and progressing through the program?
- What are these students' perceptions towards using various modes of flexible delivery compared to a traditional face-to-face approach?
- How does the introduction of variations in content delivery and pedagogy impact on performance and motivation?

Survey of the Literature

Universities are currently grappling with a shift in paradigms where learning is being reconceptualised to embrace the potential of ICT as society makes the move from an industrial age to an information age. University students are expected to be more self-directed in their learning, think critically and solve problems in a rapidly changing world. With the advent of web-based learning students are being encouraged to take an active role in their own learning. Learner-centred education works on the premises that, in an information age, the learner is involved in his/her own research and learning, the outcome being they manage their own developments. Universities, in order to keep abreast with the information age, must develop courses and use delivery modes that reflect learner-centred education and life long learning for an increasing population of students who are mature students studying part-time (Amour, Cheng & Talpin, 1999; Kember, Lee & Li, 2001).

The BEd (LIS) program uses a combination of online and traditional approaches, making use of the in-house platform (ILN) developed for delivering materials and synchronous and asynchronous communication between students and instructors. Face-to-face lectures are enhanced with the integration of ICT. The current study intended to identify the learning styles of students enrolled in the BEd (LIS) program. Self-directed learners are better able to adjust to their learning environments by juggling busy work and study lives.

The study by Li et al (2000) of Hong Kong part-time students focused on self-management of learning and to a lesser extent, personal autonomy in learning. A major focus was how students coped with their courses. They found that the construct of self-direction was important. Li's study found that some students felt a degree of self-direction was necessary. Their study also recognized the culture of passive learning in Hong Kong and that this would require some

adjustments to help learners learn best. The study did find though, despite student's past learning experiences, they seemed to want autonomy in their study (Li et al, 2000, p. 25). Vogel et al (2002) found that Hong Kong students studying online needed to have self-motivation in the absence of more formal structure.

Another study by Sewell (2000) investigated mature-part-time students in higher education. The research examined characteristics of students and attempted to measure the application of skills in study and work. Students clearly understood the importance of applying what was learnt in their studies to real-world situations. Their responses indicated that self-direction and organization skills were important to both study and work. The research also strongly suggested providing more time for interaction between students -- an environment that already exists in the BEd (LIS) group where classes are smaller and study groups are formed without encouragement. BEd (LIS) students create networks for both social and study purposes. The literature shows that interaction between classmates becomes part of an important support network to cope with demands (Li et al., 2000, p.23). Students without families - and many in the BEd (LIS) program are not married - established cohesive relationships with classmates. They often work in the same small groups and as a class have established an informal collective for photocopying and communicating. A sense of belonging (Kember et al, 2001) and building a community of learners (Albon & Trinidad, 2002) are important characteristics of successful learning environments.

A self-directed learning environment is very different to that of the school system in which BEd (LIS) students grew up with in Hong Kong. It can be said that "Hong Kong students [and teachers] are often perceived as particularly exam-oriented in their study [and teaching] and that they prefer spoon-feeding to pass exam rather than learning for learning's sake" (TEHE, 2002). In the study by Li et al, (2000, p. 26) students demonstrated inefficient and time-consuming study habits. The reason for this might possibly lie in their experience as students in a system requiring memorization for exams. Yet, another study by Smith et al. (2000) found that students reported benefits from the flexible learning and the most significant outcome was improved time-management.

The literature indicates that self-directed learning requires opportunities for sharing amongst students but needs to be structured carefully and provide sufficient support to achieve outcomes (Li et al, 2000; Smith et al, 2000; Vogel et al, 2002). The BEd (LIS) program allows for ample opportunities to share in both the flexible and traditional environments. Smith et al. (2000) compared full-time students and part-time students in traditional, face-to-face learning environments performance and part-time students in a combination of these learning environments. The study measured performance and how personal characteristics contributed to life in and beyond university study. They found that in a flexible program students rated the learning support and materials better than those in traditional classrooms and proved to perform as well on assessment. The researchers also noted that flexible learning influenced the learning styles of students. Students experienced an improved ability to filter essential information. They were also more likely to use the Web for research purposes. Independent study was also improved. Students believed computer skills were also enhanced. However, they also reported information overload and frustration with learning the technology needed to participate in this flexible learning mode (Smith et al, 2000).

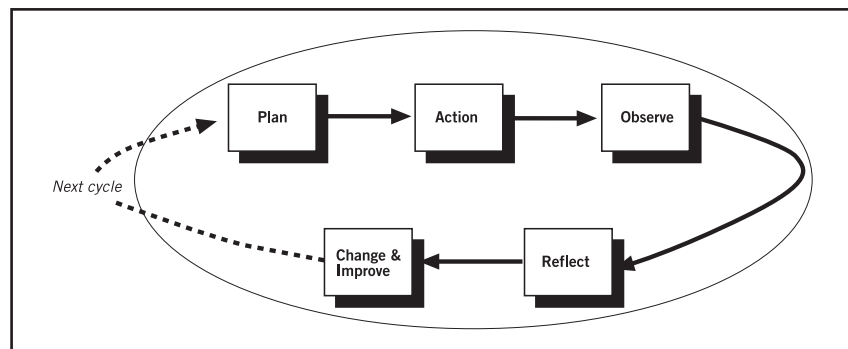
Students in the BEd (LIS) program are teachers with a fair amount of teaching experience as they are currently working, the program is essentially professional development. It is therefore worth noting studies in the literature that discuss distance or flexible professional development programs. Technology is a 'means of offering new forms of professional development' for teachers (Grant, 1996). Materials can be accessed for learning anytime and anywhere. The application of synchronous and asynchronous interaction allows for collaboration and peer teaching. Materials can link easily to research within library databases and on the Web. Grant's (1996) paper and case studies conclude that a combination of traditional and flexible learning provides the best model for professional development training. Students' gains through flexible learning include access to materials to guide best practice and immediate opportunities to return to schools to reflect and share with colleagues. University modules like that of the BEd (LIS) program are not the student's normal expected learning environments and hence skills of self-direction and autonomy need to be cultivated, as does a sense of community and belonging within a flexible learning environment. Continued studies of BEd (LIS) student's learning styles and expectations will provide more insight into the Hong Kong tertiary culture and how instructors might best use best practice to deal with this.

Methodology

This project employed both quantitative and qualitative methodology. The quantitative approach was used to enable benchmarking of existing student characteristics. Qualitative approaches were used to introduce variations to practice and to enable evaluation of the success of the innovations. **Four methods of data collection were used.**

1. An online questionnaire comprising closed and open questions was administered. This benchmarked learning style, motivation, work and lifestyle habits of the part-time students before undertaking further tertiary study and factors affecting studying such as time for travelling to and from lectures. In order to study whether students' learning styles and time usage was related to factors such as age, teaching position and teaching experience, a one-way Anova was applied to analyse the collected data. Reliability analysis based on Cronbach alpha was also adopted to study the consistency of measuring items. In both cases, SPSS 11.0 was employed to run the tests.
2. Interventions into practice, addressing the benchmarking, were conducted within an action research paradigm. Action research is a cycle of inquiry, whereby: 1) the present situation is analysed, 2) questions are raised, 3) factors are identified, 4) solutions are proposed, 5) interventions are developed and measured, 6) data are gathered and analysed, and 7) new questions are posed. Action research provides a systematic approach and encourages reflective decision-making (Farmer, 2000, p.1). The action research framework is most appropriate for researchers who recognize the existence of shortcomings in their educational activities and who would like to adopt some initial stance in regard to the problem, formulate a plan, carry out an intervention, evaluate the outcomes and develop further strategies in an iterative fashion (Hopkins, 1985). Action research is cyclical in nature and is intended to foster deeper understanding of a given situation, starting with conceptualising and particularising the problem and moving through several interventions and evaluations.

Figure 1: The Action Research eCycle



The pedagogical variations were introduced into selected core Modules in the BEd (LIS) part-time programs, offered to Year 1, Year 2 and Year 3 students. The modules were: *Concepts and Values in Education*, *Information Literacy*, *Introduction to Teacher Librarianship*, *Locating Information and Library Advisory Services*, and *Teacher Librarianship*.

Description of the innovative practices

Concepts and values in education

This is a core ten-week module for both BEd (LIS) and BEd (ITE) students. The innovative practices involved teaching the module within a computer lab, and providing a one week break from class for reflection, after five weeks. A resource pack containing all reference material was provided to the students and the length of assessment reduced to provide more time to focus on learning. A journal was used to track learning.

Information literacy

This module is a core module for both BEd (LIS) and BEd (ITE) students. The module was taught entirely online using a range of synchronous and asynchronous tools via ILN. The 'class' was comprised of both BEd (LIS) and BEd (ITE) students. Scaffolding was provided to students to enable them to adjust to the abolition of face-to-face time. Additional features were added to the ILN course room to enable small group work in Chat and to track conversations.

Introduction to Teacher Librarianship and Teacher Librarianship

These two modules incorporated a six-week out-of-class period within the curriculum. Therefore, after five weeks of 3-hour face-to-face sessions, and preceding the final two face-to-face sessions students were provided with a six week period of online and flexible learning in which they had to complete set tasks and record their learning on the ILN course room forum. The aim of this practice was to establish whether the out of class tasks affected the time spent on studying the module as compared to the traditional ten weeks of 3-hour sessions.

Locating information and library advisory services

Students were given a set of exercises and one hour at the end of sessions to complete the questions and independent learning tasks. The first was to be completed with the lecturer at the university. Attendance was mandatory. The remaining exercises could be completed during the last hour of the session or optionally on their own time sometime during the week. This was to use a flexible and independent approach to teaching reference skills using asynchronous peer/teacher feedback. The innovative practice also reduced time in lectures/sessions by one hour for at least six weeks to test the efficacy of flexible learning and if students preferred flexible learning.

3. Monitoring of motivation, participation, and performance was undertaken by the researchers who used this data as a basis of evaluation of the efficacy of the innovation. During the module the learning process was monitored and data collected to investigate the efficacy of flexible learning compared to conventional learning and other factors that influence pedagogical progress.
4. On completion of each module, interviews with representative focus groups explored the students' experience and whether their expectations were fulfilled. A series of questions were also used to further investigate student learning styles and profiles as a learner. This data were used to explore whether the innovative practices used in the modules had been effective. A focus group is a group of individuals selected and assembled by researchers to discuss and comment on a research topic from their personal experience (Powell et al., 1996) and benefit from interaction and group dynamics (Gibbs, 1997). Interaction enables respondents to ask questions of each other, as well as to re-evaluate and reconsider their own understandings of specific experiences (Kitzinger, 1995). Semi-structured interviews were conducted with a sufficiently open-ended framework to allow for focused, conversational, two-way communication. The flexibility of the interview schedule enabled re-ordering of content, encouraged digressions and expansions, revealed new topics, and identified any needed further investigation (Cohen et al., 2000). Focus groups, alongside semi-structured interviews, allowed the researcher to keep the session focused and at the same time they enabled focus groups to elicit information in a way which allows researchers to find out why an issue is prominent, as well as what is prominent about it (Morgan, 1988). As a result, multiple explanations of their behaviour and attitudes were more readily articulated when the respondents revealed their understandings and meanings (Lankshear, 1993).

Results

The results are discussed under four headings:

- What are the characteristics of students, who are mostly full-time teachers, enrolling in the part-time BEd (LIS) program?
- What adjustments do students make to their lifestyle on entering and progressing through the program?
- What are these students' perceptions towards using various modes of flexible delivery compared to a traditional face-to-face approach?
- How does the introduction of variations in content delivery and pedagogy impact on performance and motivation?

What are the characteristics of students, who are mostly full-time teachers, enrolling in the part-time BEd (LIS) program?

Respondents and their characteristics

From a total of 65 BEd (LIS) students, 53 students completed the questionnaire. The online questionnaire, delivered to students through ILN, aimed to investigate the impact that university study had on those part-time student's lifestyle and their adjustments in response.

Some profiling data about the 53 respondents such as their sex, age range and highest academic qualification achieved, *etc.*, are given in Table 1. For each of the respondents' characteristics, the descriptors with the highest, the next highest and the least frequency of occurrences are tabled.

Table 1. Profiling data about the respondents (n=53).

Most frequently selected choice (Frequency / Percent)	Next most frequently selected choice (Frequency / Percent)		Least frequently selected choice (Frequency / Percent)
Sex	Female (48 / 90.6%)	Male (5 / 9.4%)	N/A
Age	31-35 (14 / 26.4%)	26-30 (13 / 24.5%)	20-25 (1 / 1.9%) 56-60 (1 / 1.9%)
Teaching Position	Teacher (45 / 84.9%)	Panel head (3 / 5.7%)	Principal (1 / 1.9%)
Years of teaching experience	6-10 (22 / 41.5%)	11-20 (16 / 30.2%)	< 2 (1 / 1.9%)
Academic qualification	Cert./Dip. (22 / 41.5%)	High cert./Dip. (18 / 34.0%)	Postgraduate cert./Dip. (6 / 11.3%)
No. of people to live with	Two (12 / 22.6%) Three (12 / 22.6%)	One (11 / 20.8%)	Zero (5 / 9.4%)
No. of children	Zero (24 / 45.3%)	Two (12 / 22.6%)	Three (1 / 1.9%)
No. of children below 15 (for those have children only)	Zero (10 / 18.9%)	Two (8 / 15.1%)	Three (1 / 1.9%)
School type (level)	Primary (306 / 56.6%)	Secondary (30 / 37.7%)	Others (1 / 1.9%)
School type (duration)	Whole-day (36 / 67.9%)	Half-day (15 / 28.3%)	N/A

Some additional remarks on the profiling data of the respondents are as follows:

- More than 35% of the female respondents were working mothers and 80% of the male respondents were working fathers.
- None of the respondents held a postgraduate degree.

What adjustments do students make to their lifestyle on entering and progressing through the program?

The core adjustments that students make to their lifestyle can be reflected by their time usage in studying, travelling for classes, and leisure.

Time spent preparing for class per week

Usually the students are required to take two modules per week in term time. Typically each module, entails a 3-hour class meeting every week. Table 2 shows that more than 60% of the students spared no more than 4 hours a week to prepare for their classes. Only 13% of the students spent more than 9 hours a week in non-class learning activities. The data appears to suggest that most students do not spend much time in their study on top of face-to-face class meetings.

Table 2. Time spent preparing for class per week (n=53)

Time spent (in hours)	Frequency	Percent	Cumulative percent
None	0	0%	0%
< 2	13	24.5%	24.5%
2 - 4	19	35.8%	60.4%
5 - 8	11	20.8%	81.1%
9 - 12	3	5.7%	86.8%
13 -16	3	5.7%	92.5%
> 16	4	7.5%	100.0%

Time spent travelling to and from classes

Although Hong Kong is small and transportation within the city is convenient, the time spent in travelling for face-to-face classes should not be underestimated because schools may be located in remote areas. Furthermore, the BEd students may reside in remote areas too as this can lower their accommodation costs. As the university campus is located at the edge of the downtown area of central Hong Kong, getting to the campus may be quite time-consuming for some students. The survey results revealed that 79.3% of the students took about 46-90 minutes to travel to the university and about the same range of time to get back home after class. Compared to the time that students spent preparing for class per week, the travelling time appears to be rather significant.

Time spent in school per week

Typically teachers in Hong Kong have heavy teaching and marking loads and need to work for long hours in schools. This can be reflected in Table 3 which shows that three quarters of the respondents needed to work at least 46 hours in school a week. Since many teachers also need to work on school business at home, this may partly accounted for their low participation in non-class activities.

Table 3. Time spent in school per week (n=53)

Time spent (in hours)	Frequency	Percent	Valid Percent	Cumulative percent
< 35	1	1.9%	1.9%	1.9%
35 - 40	3	5.7%	5.8%	7.7%
41 - 45	9	17.0%	17.3%	25.0%
46 - 50	23	43.4%	44.2%	69.2%
51 - 55	11	20.8%	21.2%	90.4%
> 55	5	9.4%	9.6%	100.0%
Not replied	1	1.9		

Time spent for leisure per week

As the respondents need to spend a lot of work at work, they should not be able to spare much time for leisure. This is confirmed with the data shown in Table 4 as more than half of the respondents spent less than four hours a week for leisure.

Table 4. Time spent for leisure per week (n=53)

Time spent (in hours)	Frequency	Percent	Valid Percent	Cumulative percent
None	6	11.3%	11.5%	11.5%
< 2	8	15.1%	15.4%	26.9%
2 - 4	13	24.5%	25.0%	51.9%
5 - 8	14	26.4%	26.9%	78.8%
9 - 12	7	13.2%	13.5%	92.3%
13 - 16	3	5.7%	5.8%	98.1%
> 16	1	1.9%	1.9%	100.0%
Not replied	1	1.9%		

What are these students' perceptions towards using various modes of flexible delivery compared to a traditional face-to-face approach?

Initial investigations of the qualitative data from the feedback for *Information Literacy*, the module delivered entirely online, revealed some enthusiasm for that mode of delivery due to modelling of real-world practice and foreseen benefits of saving time in travelling as illustrated by these comments from a student:.

It is my first [time] to have lecture through Internet. It is so surprising! What is this module about? Is it about searching engines or searching skills? It is useful for us.

The same student responded to another ILN Forum posting:

I think it's a new way of learning in this information explosion age. It's so funny and save a lot of travelling time.

Although not all students were convinced that learning online is better as illustrated by this discussion that took place about the challenges of learning online. Two students voiced their preference for traditional lessons. A student responded to point out the benefits of online learning.

...for some of participants like learn in a campus, another like through internet. However, I have same feeling. especially "this module" I think we need more interaction and share (ideas) immediately.

Some students experienced difficulties in using home computers. The Chat function on ILN requires a Java plug-in. It takes time to download. A Web search exercise also required students to launch a second browser window if they wanted to work on the lesson and chat at the same time which demanded more than some student's computing resources could handle.

The students' responses raised some further issues to consider. Firstly, did the students have difficulties in accessing the Internet to facilitate online learning? Secondly, did they have enough knowledge to use IT to support learning online? Thirdly, did they have the practice of using online tools to aid learning? A number of questions were included in the questionnaire in order to help us develop a better understanding of what potential difficulties may be encountered in promoting online learning among the students.

Internet Access at Home

More than 94% of the respondents had Internet access at home (see Table 5). Regarding the degree of access to the computers, 35.8% had sole access, 28.3% needed to share the access with another family member whereas 20.8% needed to share the access with two other persons (see Table 6). From the tables, it seems that the students did not have an access problem to the ILN online course-room via the Internet, which is indispensable for online learning.

Table 5. Access of Internet at home (n=53)

Internet access at home	Frequency	Percent
Yes	50	94.3%
No	3	5.7%

Table 6. Share of access of computers (n=53)

Number to share with	Frequency	Percent	Valid Percent	Cumulative percent
0	19	35.8%	38.0%	38.0%
1	15	28.3%	30.0%	68.0%
2	11	20.8%	22.0%	90.0%
3 or more	5	9.4%	10.0%	100.0%
Not replied	3	5.7%		

Type of Internet Access

Slow Internet access can be a hindrance to online learning. In this regard, students were asked about the type of Internet access they had at home. The results, as shown in Table 7, indicate that most students had a broadband Internet connection installed at home. Thus for most students, there was no bandwidth problem when accessing the Internet.

Table 7. Type of Internet access (n=53).

Internet access at home	Frequency	Percent
Broadband	43	81.1%
Dial-up	6	11.3%
Not replied	4	7.5%

Level of IT Competence

It is reasonable to believe that people with a higher level of IT competence are more likely to accept the idea of online learning. In Hong Kong, the Education and Manpower Bureau has introduced a classification of technical IT skills for schoolteachers. As indicated in Table 8, more than 90% of the respondents had achieved an intermediate IT level (IIT). To achieve IIT, teachers need to be able to use some search engines for information search, download and upload files from FTP sites, and participate discussions in newsgroups, etc.

Table 8. Level of computer competence (n=53).			
IT Level	Frequency	Percent	Cumulative Percent
Advanced IT	1	1.9%	1.9%
Upper-intermediate IT	9	17.0%	18.9%
Intermediate IT	38	71.7%	90.6%
Beginning IT	3	5.7%	96.2%
None	2	3.8%	100.0%

The survey results suggest that the students are sufficiently equipped in terms of facilities and the skill set to allow them to use the Internet and online learning effectively. The remaining question is whether they really practice what they learn. In this regard, the students were asked in the survey a series of questions about how often they used e-resources.

Locating Relevant Resources Electronically

Tables 9-13 shows how often the respondents use different electronic resources to help them study. According to Table 9, about 84.6% of the respondents always or most of the time use the Web to locate information. The corresponding percentages sharply decrease to 36.5%, 26.9%, 21.2% and 31.4% for Internet communication tools, the university library system, mega databases and AskEric respectively (see Tables 10-13). This finding is interesting as the students used the Web and Internet communication tools more often than the university library system, mega databases and AskEric which are traditional tools for locating learning resources.

Table 9. Locating information and resources from Web (n=53).				
Usage	Frequency	Percent	Valid Percent	Cumulative Percent
Not at all	0	0	0	0
Once in a while	1	1.9%	1.9%	1.9%
Some of the time	7	13.2%	13.5%	15.4%
Most of the time	29	54.7%	55.8%	71.2%
Always	15	28.3%	28.8%	100.0%
Not replied	3	5.7%		

Table 10. Locating information and resources from Internet communication tools (e.g., e-mail, chatrooms, bulletin boards, newgroups, etc.) (n=53).				
Usage	Frequency	Percent	Valid Percent	Cumulative Percent
Not at all	4	7.5%	7.7%	7.7%
Once in a while	12	22.6%	23.1%	30.8%
Some of the time	17	32.1%	32.7%	63.5%
Most of the time	16	30.2%	30.8%	94.2%
Always	3	5.7%	5.8%	100.0%
Not replied	1	1.9%		

Table 11. Locating information and resources from the university library system (n=53)

Usage	Frequency	Percent	Valid Percent	Cumulative Percent
Not at all	1	1.9%	1.9%	1.9%
Once in a while	16	30.2%	30.8%	32.7%
Some of the time	21	39.6%	40.4%	73.1%
Most of the time	11	20.8%	21.2%	94.2%
Always	3	5.7%	5.8%	100.0%
Not replied	1	1.9%		

Table 12. Locating information and resources from mega databases (e.g., Emerald & ProQuest) (n=53).

Usage	Frequency	Percent	Valid Percent	Cumulative Percent
Not al all	8	15.1%	15.4%	15.4%
Once in a while	10	18.9%	19.2%	34.6%
Some of the time	23	43.4%	44.2%	78.8%
Most of the time	9	17.0%	17.3%	96.2%
Always	2	3.8%	3.8%	100.0%
Not replied	1	1.9%		

Table 13. Locating information and resources from AskEric (n=53).

Usage	Frequency	Percent	Valid Percent	Cumulative Percent
Not at all	6	11.3%	11.8%	11.8%
Once in a while	10	18.9%	19.6%	31.4%
Some of the time	19	35.8%	37.3%	68.6%
Most of the time	15	28.3%	29.4%	98.0%
Always	1	1.9%	2.0%	100.0%
Not replied	2	3.8%		

Apparently, the results suggest that the BEd (LIS) students might not have taken full advantage of the diversity of e-resources that are available for their access because about one third of them used Internet communication tools, the university library system, mega databases and AskEric only once in a while or even not at all. However, it remains to be investigated in subsequent focus group interviews why some students relied on the Web much more heavily than others.

How does the introduction of variations in content delivery and pedagogy impact on performance and motivation?

At the time of writing this paper a detailed response cannot be given because the post module interviews have not been completed. These findings will be reported in Durban. However, some interesting issues have been identified in the *Information Literacy* module.

Flexible online learning, beyond the innovative practice intended for this study, was also explored during the period of this study. As a result of the atypical pneumonia (or SARS) outbreak in Hong Kong, the University suspended classes

for public health reasons. The BEd students in this study were able to continue lessons using ILN. The Information Literacy module was set up entirely online thus avoided rescheduling make-up sessions in uncertain circumstances. Not all students were as equipped or prepared to work in this learning environment. While some students enjoyed the flexibility, some raised concerns about their access to hardware/software, isolation from lecturers and other classmates. Some students also felt they were not getting the same value for tuition without having in-person lectures as voiced by one disgruntled student:

You have said that we are learning an IT [course]. I really feel not comfort of using such forum... we have paid for the lesson. The main reason that most of us choose study in HKU rather [than other distance learning] courses is we enjoy...face-to-face lessons rather than online courses.

It became clear that despite the IT focus of the program and experience within their schools, students may have difficulty in very basic troubleshooting. It must be noted that these students are 1st and 2nd years in the BEd program and have not used online learning before. Lacking experience in online learning, they asked how attendance would be taken and expected to login to the course room at the regular class time and find something resembling a talking head. Some students raised questions about the lesson and task without reading or completing it.

The last lesson I haven't attend because when I login to the ILN at 6:30pm. I can't find any lecturers and tutors online. Therefore, I [quit] the ILN. I attended for the 1st online lesson, I can't find that [lecturers] are there, and really hard to follow the forum. Besides, not all our classmates have their pc at home. How do they do the online learning?

This initial qualitative data points to the conclusion that a combination of flexible online and traditional approaches would most likely meet the needs of the current students. This is supported by current literature in the area of part-time students and online learning in Hong Kong (Li et al, 2000; Smith et al, 2000; Vogel et. al, 2002). Scaffolding and training on learning platform features should be included in induction and repeated in regular lessons. Some students voiced a strong need for face-to-face lectures and said they enjoyed the social outing of university lectures and seeing their friends in class. Current research into cultural factors contributing to student concerns reveals the reasons why, despite long commutes and busy lives, students want classroom interaction where they feel a sense of belonging and community (Albon & Trinidad, 2002; Vogel, 2001). The new environment also presented some problems students found difficult to resolve. Homes in Hong Kong can be small and crowded with children and in-laws, yet students did not think to overcome these disruptions by using other facilities such as the University library or labs as evidenced by this student's comment:

We are psychologically and electronically not prepared. We enjoy face-to-face tutorials and lectures in the HKU campus. We meet our classmates on the way to HKU and have meals together before or after the lessons. It is a real personal touch. We can discuss about the assignments, our students (remember we are teachers too), our families...we paid for NOT having a lesson online with our family members fooling around!

Conclusion

The busy working life of the average Hong Kong professional is almost a cliché. After long and tiring workdays, students are entering our classrooms - both real and virtual - with the responsibilities of home and work hanging over their heads. Flexible learning, more adaptable to an adult's world, can hopefully accommodate demands for those enrolled in continuing education while working. The results from the current study provide information about the potential of flexible learning in relieving some pressure for part-time students in Hong Kong.

A significant issue for the researchers has been the difficulties associated with undertaking the research when many of the respondents do not feel particularly comfortable using English, which is a second or third language. Particular care has been taken in the construction of the questionnaire and it was pleasing to find overall a very high reliability. While all questions for the interviews were scripted in English they were administered in Cantonese. This entailed very labour intensive transcription and translation. English did not always translate well into Cantonese.

For example for the interview question “What are the biggest challenges for you in part-time tertiary study?” the word “challenge” while seen in a positive context in western society was translated to the word “problem” in Cantonese and the question used was “What are the biggest problems for you in part-time tertiary study?” Despite such difficulties, valuable data has been gathered to better enable the instructors to tailor teaching and learning to meet the needs of the part-time students studying at Hong Kong University. The IPPO project was undertaken to better understand the motivation and performance of part-time students completing a BEd in Library and Information Studies (LIS) in Hong Kong. This ongoing study has already been invaluable in providing base line data about the student cohort, their lifestyle, learning styles, adjustments and perceptions. It has provided a clear picture about the pressures of life faced by these teachers. Whether the pedagogical innovations are successful in meeting the needs of the students is at this stage uncertain. Certainly the early indications are that some students may be happier with flexible delivery that is a combination of both face-to-face and online learning not just entirely online due to the need for a sense of belonging and community. Further insights will be reported in Durban.

References

- Albon, R. & Trinidad, S. (2002, June). Building learning communities through technology. In K. Appleton, C. Macpherson, & D. Orr (Eds.), *International Lifelong Learning Conference: Refereed papers from the 2nd International Lifelong Learning Conference*, (pp. 50-56). Proceedings of the conference held at Yeppoon, Central Queensland, Australia.
- Armour, R. T., Cheng W. N. & Talpin, M. (1999). Some characteristics of the student experience in Hong Kong. In R. T. Armour, W. N. Cheng & M. Talpin (Eds.) *Evaluation of the Student Experience Project: Vol. 4. Understanding the Student Experience in Hong Kong Part 1: The Adaptation and Administration of a Questionnaire* (pp. 43-60). Hong Kong: City University of Hong Kong, Centre for the Enhancement of Learning and Teaching.
- CDC, Curriculum Development Council. (2001). The Learning to Learn: The Way Forward in Curriculum Development ~ Web Edition. Hong Kong. Retrieved March 30, 2003 from <http://cd.ed.gov.hk/report/sept/eindex.htm>
- Cohen, L., Manion, L. & Morrison, K. (2000). *Research methods in education* (5th Ed.). London: Routledge/Falmer.
- Farmer, L. (2001). Information literacy: A whole school reform approach. Paper presented at the 67th IFLA Council and General Conference, Boston, August 16-25. Retrieved March 30, 2003 from <http://www.ifla.org/IV/ifla67/papers/019-106e.pdf>
- Gibbs, A. (1997). Focus groups. In Gilbert, N. (Ed.) .). *Social research update*. Guildford, England: University of Surrey.,
- Grant, C M. (1996). Professional development in a technological age: New definitions, old challenges, new resources. *In Model Schools Partnership Research Monograph*. Retrieved March 15, 2003 from http://ra.terc.edu/publications/TERC_pubs/tech-infusion/prof_dev/prof_dev_frame.html
- HKSAR, Hong Kong Special Administrative Region. (2001). *Digital 21 Hong Kong: Building a digitally inclusive society. Hong Kong Government Report, September.* Hong Kong: Information Technology Services Department Hong Kong Special Administrative Region Government.
- Hopkins, D. (1985). *A teacher's guide to classroom research*. Philadelphia: Open University Press.
- Jarvis, P. (2000, June). Imprisoned in the global classroom-revisited: towards an ethical analysis of lifelong learning. Keynote paper presented at the lifelong learning. In K. Appleton, C. Macpherson, & D. Orr (Eds.), *International Lifelong Learning Conference: Refereed papers from the 1st International Lifelong Learning Conference*, (pp. 20-27). Proceedings of the conference held at Yeppoon, Central Queensland, Australia.

- Kember, D., Lee, K., & Li, N. (2001). Cultivating a sense of belonging in part-time students. *International Journal of Lifelong Education*, 20(4), 326-341.
- Kitzinger, J. (1995). Introducing focus groups. *British Medical Journal*, 3(11), 299-302.
- Lankshear A.J. (1993). The use of focus groups in a study of attitudes to student nurse assessment. *Journal of Advanced Nursing*, 18, 1986-89.
- Li, N., Lee, K., & Kember, D. (2000). Towards self-direction in study methods: The ways in which new students learn to study part-time. *Distance Education*, 21(1), 6-28.
- Morgan, D.L. (1988). *Focus groups as qualitative research*. London: Sage.
- Powell, R.A., Single H.M., Lloyd K.R. (1996). Focus groups in mental health research: enhancing the validity of user and provider questionnaires. *International Journal of Social Psychology*, 42(3), 193-206.
- Sewell, P. M. (2000). Mature students in part-time higher education—perceptions of skills. *Innovations in Education and Training International*, 37(4), 304-12.
- Smith, I. Choi, S. H. & Cairncross, S. (2000, September) Does on-line flexible learning fulfil students' needs and expectations? Paper presented at ALT-C 2000 Programme. IMIST, Manchester, England.
- Teaching Effectively in Higher Education in Hong Kong (TEHE) web site (2002). Functions & Effect of Assessment on Student Learning. Retrieved January 10, 2003 from <http://teaching.polyu.edu.hk/>
- Vogel, D., Shroff, R., Lee, F., Kwok, S. & Combes, J. (2002, September). Student e-learning intrinsic motivation: A qualitative analysis. Paper presented at PACIS2002 The Next e-What? for Business and Communities, Tokyo, Japan.

Biographical Notes

James Henri, Sandra Lee, Sue Trinidad, Alvin Kwan, and Felix Siu are academics in the Division of Information & Technology Studies; Lai Ming is a Research Assistant in the Centre for IT in Education; Faculty of Education, University of Hong Kong, Hong Kong. Email: ippo@cite.hku.hk

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Albert Chieng

From 1985-1994 Albert Chieng was employed as a Master teacher of Chinese in Darwin and Adelaide (Australia). In 1995 he was appointed as lecturer in language teaching methods and CALL at the University of New England (UNE) in Armidale (Australia). In 2000 he was appointed as the Founding Director and Senior Lecturer of the UNE campus in Wuxi China. The campus offered intensive English courses, and undergraduate programs. In late 2002 he was appointed as a lecturer in the Centre for Information Technology in Education (CITE) within the Faculty of Education, at the University of Hong Kong.

Recent publications are:

- Chieng, A. (2001). *A Handbook for Modern Languages Teachers*. Armidale, NSW: UNE Press.
- Chieng, A. (2001). *Technology-enhanced Language Teaching for Modern Language Teachers*. Armidale, NSW: UNE Press.

He is a life member of the International Society of Chinese language Teaching (Beijing), member of Australian Council of Education, a member of the Applied Linguistic Association of Australia, and a member of the Association for the Advancement of Computing in Education (AACE, USA).

Alvin Kwan

Dr. Kwan received his MSc and PhD degrees in Computer Science from University of Essex (U.K.) in 1989 and 1997 respectively. He started his teaching career in 1990. Currently he works as a lecturer and teaches subjects concerning the use of IT in education at University of Hong Kong. His research interests concern the application of artificial intelligence techniques in education and school administration. Dr. Kwan has published in refereed journals and international conferences, mainly in the areas of artificial intelligence and its applications in timetabling. In late 2001, he was invited to provide consultancy services to National Computer Systems Pty. Ltd. (NCS), a wholly owned subsidiary of Singapore Telecom, for the development of the school timetabling module for the WebSAMS project launched by Education and Manpower Bureau of Hong Kong SAR Government. WebSAMS is an integrated web-based school administrative system that will be installed to virtually all government funded primary and secondary schools by the end of 2004.

Felix Siu

From 1989-1999 Felix Siu was employed by La Trobe University (Australia) and assisted with the management of the Information Services in the Faculty of Health Sciences and implemented strategies to promote the efficient and appropriate use of Information Technology. In 2000 he took up the position of Lecturer in the Division of Information Technology and Studies, Faculty of Education, at the University of Hong Kong. Felix Siu has extensively experience in running workshops for students and teaching staff in the use of Information Technology. He has been the chief software engineer and designer in a number of awards winning educational multimedia courseware e.g. A Sound Judgement Program, Protecting the Health Professionals, and Fluid Exchange. His recent research involves the creation of a multimedia program for the intervention of developmental phonological processes. He is currently Secretary of Hong Kong Association for Educational Communications and Technology <http://www.hkaect.org> and a Committee Member of the Centre for Information Technology in Education <http://www.cite.hku.hk> within the Faculty of Education, at the University of Hong Kong.

James Henri

From 1981-2001 James Henri was employed by Charles Sturt University (Australia) and coordinated their programs in teacher librarianship and information literacy. In 2001 he took up the position of Deputy Director of the Centre for Information Technology in Education within the Faculty of Education, at the University of Hong Kong. James Henri has written extensively on issues that relate to teacher librarianship. He is known internationally for his seminal work on the information literate school community, including an extensive research agenda with colleagues Lyn Hay (CSU) and Dianne Oberg (University of Alberta). Recent monographs are:

- Henri, J., Hay, L., & Oberg, D. (2002). *The school library-principal relationship: Guidelines for research and practice*. (IFLA Professional Reports, No 78.) The Hague: IFLA.
- McGregor, J., Dillon, K., & Henri, J. (Eds.), (2003). *Collection management for school librarians*. Lanham, Maryland: Scarecrow Press.

He is currently Vice President of The International Association of school Librarianship <http://www.iasl-slo.org/officers.html> and a Standing Committee Member: International Federation of Library Associations (IFLA), Section of School Libraries and Resource Centers <http://ifla.org/VII/s11/ssl.htm>.

Ming Lai

Ming Lai is a Research Assistant in the Centre for Information Technology in School and Teacher Education. He has a Bachelor of Social Sciences from the University of Hong Kong, and a Master of Philosophy in Psychology from the Chinese University of Hong Kong. Ming Lai has supported a number of projects in the field of education and psychology and is proficient in the use of quantitative and qualitative tools.

Sandra Lee

Sandra Lee was employed in Canada as a youth services librarian and information specialist. In 2000 she relocated to Hong Kong and taught library and information studies in a paraprofessional program. She currently teaches in the Faculty of Education at the University of Hong Kong. Sandra Lee's research interests include teacher librarianship, knowledge management and information retrieval. She is currently Director, East Asia, The International Association of School Librarianship <http://www.iasl-slo.org/officers.html>

Sue Trinidad

Sue Trinidad currently teaches technology education modules within CITE to post-service teachers completing the BEd [ITE] and MSc [ITE] programs in Hong Kong with the Faculty of Education. Previously Sue was with the Faculty of Education, Curtin University of Technology, Western Australia from 1986-2002. Sue began her teaching career in outback Western Australia as a primary school teacher with the Western Australian Education Department then moved into university teaching in 1986 training pre-service and post-service teachers in technology education. Sue has been involved in many projects in Australia and presents regularly at technology conferences. To date Sue has presented nine keynote addresses and 64 conference papers: <http://www.cite.hku.hk/people/strinidad/>

Sue is a member of the editorial panel and editorial board of *Australian Educational Computing*, the *Journal of the Australian Council for Computers in Education* (ACCE) (1996-present) and editorial board member for the *Australian Journal for Educational Technology* (AJET) (2000-present) *International Electronic Journal for Leadership and Learning* (IEJLL) (2001-present). She has commented regularly in the media on current technology directions and issue, and was co-editor of various issues of LOGIN for the Educational Computing Association of Western Australia (ECAWA) journal for teachers (1990-1996). She has been awarded a life membership for her service to the Western Australian computing community.