Abstract

Several studies in Hong Kong have examined the learning behaviours of Hong Kong part time students. This paper presents findings from a larger study completed at the University of Hong Kong Bachelor of Education program. Data collected helped instructors in the program to gain insight into the busy life of the Hong Kong teacher working, post-service towards a BEd in Library and Information Science. The findings will be used in an action research cycle framing attempts to continually improve teaching practice by meeting the needs of part-time students. Impact of the study on part-time students prefer a combination of flexible and face-to-face teaching. Findings will also be informative for other part-time program using a combination of flexible and traditional teaching and learning models.

Introduction

Education for school librarianship in Canada has been in a state of flux for many years. Long ago Burdenuk (1990) painted a grim picture of the state of school librarianship in Ontario and noted the cutbacks in the staffing of education for librarianship programs. The challenges associated with maintaining a program are significant and complex. Education for school librarianship across Canada is typically offered to teachers in part-time programs and is therefore delivered after work hours when the students are suffering from fatigue. Often 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. Some providers such as the University of Alberta 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. Even in this case the student, who is almost always also a full time teacher, is interacting with the program outside normal working hours and is, therefore, unlikely to be in prime condition for learning!

The world of education for school librarianship is small and it is essential that lessons learned in one setting be considered as input into decision making in other settings. Oberg and Henri (2002) provide a picture of how such global thinking effected collaborative developments in Australia and Canada. The purpose of this paper is to offer insights from a project in Hong Kong that are not significantly dissimilar to issues that may arise in Canada.

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?

It was also noted by instructors that Hong Kong education reform intentions are to encourage learning to learn. Within this context, as a post-service program, students need greater encouragement in self-directed learning. It became evident, given the paradox of student motivation and behaviour that instructors needed data to for continuous improvement in teaching the program. 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 about students undertaking the BEd program. Using an action research methodology, the instructors were able to tailor teaching and learning environments through technology to evaluate workload, assessment modes, and delivery options.

**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**

Expectations of University students commonly include self-direction in learning, critical thinking and ability to solve problems. As well, with the advent of web-based learning
students are 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. Our students are teachers themselves and it is reasonable to assume that these concepts of best practice are well known. Underlying our commitment to lifelong learning is a recognition that students are mature, a majority of whom are working full-time and have lives and priorities as demanding as their studies. It makes sense, then, that universities must develop courses and use delivery modes for the part-time student of this demographic. (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 IPPO study intended to identify the learning styles of students enrolled in the BEd(LIS) program. It was posited that self-directed learners are better able to adjust to their learning environments by juggling busy work and study lives. Instructors involved in the study designed innovative teaching and learning situations or approaches to test better delivery modes to suit busy students.

Information technology skills and self-directed learning were essential for completing the materials and assessment. Our students are not unique in facing this type of learning in Hong Kong. A 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. Li’s study found that some students felt a degree of self-direction was necessary. The study also noted a passive approach to learning, reinforced by years of spoon-feeding in schools. Adjustments are thus required 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.

The focus of this paper is the module Information Literacy a required module for both LIS and information technology in education (ITE) students. The innovative practice here, facilitated by SARS and subsequent cancellation of face-to-face classes on campuses across Hong Kong was that the module was delivered entirely online.

Armed with various hunches about student learning behaviour and a robust and flexible in-house Web course room platform, instructors delivered the Information Literacy course online. 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. Attention was paid to using the technology to incorporate pedagogical innovations as well. Because the instructors and this module were part of a larger study (IPPO), the same online questionnaire used by the project group was administered. Data was collected and in the analysis of the data and focus group interviews, some interesting lessons were learned.

The literature 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.

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, 1996; 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. Flexible learners also proved to perform as well on assessment. They 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 (Smith et al, 2000).

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 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.

![The Action Research cycle](image)

Figure 1 The Action Research cycle

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*.

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 was 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?

LIS students: Most common characteristics

**Travels** 45-60 minutes to get to HKU and 61-75 to get home

**Works** 46-50 hours per week

**31-35 years** of age

**Spends** 2-4 hours preparing for university class each week

**Spends** 5-8 hours per week on leisure

**Spend** 5-10 hours per week managing home and family

**Has** zero children

Time spent preparing for class per week

Regular requirements are two courses per week during fall and winter semesters. Typical classes are three hours in length on evenings or Saturday afternoons. 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. (Henri, Lee, Trinidad, Kwan & Siu, 2003)

Time spent travelling to and from classes

Although Hong Kong is small and transportation within the city is convenient, commuting is a way of life in the crowded city. Students in the program are typical Hong Kong residents, travelling long distances to homes on the outskirts where housing is more economical. As well, recent housing developments in outlying areas of the New Territories also include thousands of schools where our students are employed. Yet the University of Hong Kong is located centrally on Hong Kong Island and can take some time to reach.

Time spent in school per week and leisure time

The data also confirms the idea that the typically teacher in Hong Kong has a heavy teaching and marking load. Expectations for hours of work are long in local schools. Teachers also take school business home, and this may explain lack of outside or recreational pursuits.

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.
Internet Access at Home

Students demonstrated a typical Hong Kong home—wired, online and owning a computer. The majority of respondents (94%) had Internet access at home and 35.8% had sole access; they did not have to share with another person. Furthermore, broadband access to the Internet was 81%. It can be concluded that our students experienced few access problems to the ILN online course-room.

Level of IT Competence

Access to the Internet does not mean students had intellectual or psychological barriers. However, as part of the larger IT in Education specialization in this BEd, students have completed some IT classes. As well, as part of a recent Hong Kong government initiative, students have had to qualify for IT training. Most of the LIS students have achieved intermediate level where they have learned searching skills, file transfer functions and newsgroup and listserv use.

However, again, further study allowed the project team to determine that access to resources plus IT skills were in fact used and practiced as part of study. Almost 85% of the responses indicated the Web to be the primary source of information. Even these LIS students were not using the myriad of abstracting and indexing tools, full-text databases and library materials and e-books, which are far more reliable resources.

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

Feedback for the module delivered entirely online, revealed some enthusiasm for this mode of delivery and one student said,

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.

Some students raised concerns about the mode of delivery and noted isolation as a problem. This echoes what Oberg also discovered in the University of Alberta’s first group of online learners in their distance education course for teacher librarianship. ‘They missed being able to see their classmates and instructor, and they missed being able to interact with them directly and regularly in discussions.’ (Oberg & Henri, 1999, p. 5)

Students in the Bed LIS program at HKU incorporate a strong social element into their class work. They meet for dinner before class and work on group projects. Eating itself is a major activity in Hong Kong. In Cantonese, people greet each other by asking if they have eaten!

Some students also hinted that they paid for face-to-face lectures, indicating there was less value in online delivery. As well, despite the connectedness and IT proficiency of the cohort, some raised concerns about their access to hardware/software.

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 that online courses.
And another student expressed the same concerns:

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!

The information literacy module, issues raised and lessons learned

Student concerns about the online delivery confirms what Oberg and Henri noted in their literature survey investigating distance education programs for teacher librarians. Although performance in distance education programs is the same or better than programs using traditional delivery, student satisfaction is lower. (Oberg & Henri 1999)

In the Information literacy module, structured virtual discussion was created for group learning and the ILN is well suited to this, via synchronous and asynchronous communication functions. The structured task for the Information literacy modules was a group discussion resulting in a reflective and reactive paper. Students could elect to meet and discuss face to face, over the phone, on the ILN forum or chat or via e-mail. The technology and ILN supported many options. This follows research indicating that guided and collaborative work is imperative for success in online learning. Opportunities for sharing amongst students are required but needs structure and support to achieve outcomes (Li et al, 2000; Smith et al, 2000; Benfield, 2002; Vogel et. al, 2002; Curry, 2003).

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 research in Hong Kong in the area of part-time students and online learning (Li et al, 2000; Smith et al, 1996; Vogel et. al, 2002).

Some of the lessons learned were surprising. Students expressed, very clearly, that there was not enough face-to-face interaction with classmates. They expected scheduled face-to-face classes for opportunities to work on group projects. Compulsory attendance on campus meant group work could be done without having to schedule meetings. Thus instructors imposed the framework for meetings, saving students from this awkward position.

Because of the timeframe and isolation of the online environment. Instructors determined group composition. Instructors also took advantage of this to ensure a mix of students in each group. LIS students could help ITE students develop better searching and retrieval skills. Students wanted to choose their own groups and some were strongly opposed to the mandatory arrangements.

Students had limited experience with the online learning environment. Some thought that online harkened back to earlier delivery of distance education, meaning a talking head in some video or text form at the scheduled class time would deliver essentially the same as what would have been covered in the classroom. Students did not realize the delivery was flexible, that no attendance sheet was kept and that materials were there for their own self-directed learning and discovery. In fact despite the IT focus of the program, some students demonstrated beginner level difficulties with the technology.

Hong Kong homes are crowded, and students found the environment difficult for flexible study.
Instructors addressed the above issues. They spent much time online and on e-mail discussing problems with students. Undoubtedly doubling the workload of a traditional class communication. Administrative tasks were included in this because they also had to contact students to notify them their e-mail boxes were full and could not participate in group work without resolving these basic technology problems.

Most importantly, instructors added optional face to face classes in a computer lab. Students wanted this environment; we gave it to them.

And thus the most interesting discovery for instructors in responding to student needs was that not all were genuine needs. Some were superficial, or decoy issues. Optional classes were added, but students were not satisfied! They wanted compulsory classes so classmates would attend. In fact those that objected to the online delivery did not attend. It was not the face-to-face lecture they wanted. They wanted an outside authority creating meeting time for their group projects.

Students are economizing their time. They use the coffee breaks and likely, class time to work on group projects. Students also choose group mates for time management purposes, choosing those who live nearby. Even with the functionality of the ILN and a focus on technology training, there is a reliance on face-to-face meetings for group project completion.

It is also suspected that group arrangements mix talents and skills. This is not necessarily designed to enhance learning, but relationships and deals have developed over the students’ short careers and some are ‘carrying’ weaker students. A weaker student, faced with new group mates would indeed be disgruntled.

Students displayed some alarming difficulty in solving problems and using higher order thinking skills. For example those who found it difficult to work at home with in-laws and small children did not solve the problem by using alternate computing facilities. Students craving social outings did not arrange these on their own. SARS suspended classes but there were no restrictions on their ability to plan their own meetings.

In focus group interviews, students were asked if all class materials were online and face-to-face classes were optional, would they attend?

One student reiterated a reliance on class attendance to ‘enforce’ meeting attendance to complete group work as evidenced by this response:

Yes, because it’s more direct. And it will be more efficient for doing...group work...members have some common time to meet. For the online case, it’d take a long time to come up with a time to go to the chat room. So I think for this kind of learning, it should either be that all people are required to go to the platform at the same time, or to go back to the lectures.

This small sample of students interviewed also indicated that online learning was not a bad approach, but needed to be mixed with online delivery. All agreed that 100% online, flexible delivery was not preferred. Rather, a combination was favoured ranging from 30-50% online.
To encourage more self-directed learning—central to this project—students need more scaffolding and induction. The literature emphasizes the need for this support, increasing satisfaction and improving learning experiences. (Benfield, 2002; Curry, 2003)

**Conclusion**

Conditions for a trial of innovative teaching practice at the University of Hong Kong BEd LIS existed for instructors involved in a larger action research project to improve teaching and learning. These conditions include widespread faculty use of an in-house developed Web course platform and a desire to better meet the needs of part-time students. The suspension of face-to-face classes due to SARS was also instrumental.

Data collected indicated that BEd LIS students are busy, like any typical Hong Kong resident. These students are completing studies in tandem with excessive work expectations and responsibilities at home. It is hoped that flexible learning, can be moulded by the adult’s world accommodating lifelong learning work and home. The results from the current study provide information about the potential of flexible teaching and learning.

Base line data about the student cohort, their lifestyle, learning styles, adjustments and perceptions has been enormously insightful for BEd instructors. The study has contributed to important improvements flagged and underway for the next Information Literacy module and many others.

Reflections on the teaching experience in information literacy and the impact of the larger study (IPPO) findings indicate some students learn well in flexible delivery but feel a combination of both face-to-face and online learning, encourages a sense of belonging and community.

**References**


Contact details

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The authors invite others interested in flexible learning and higher education to contact them. Information about the Web platform used at the Faculty of Education is also available.

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