Skills for Future University Librarians

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Abstract

Purpose – The purpose of this paper is to examine present librarian skills in academic libraries and to propose possible directions of future libraries on skill requirements. This study provides a most valuable methodology to understand the current demands of employers for library staff. It also begins to highlight trends in how the skill set and outlook for future employees are currently being viewed. There has been a combination of these understandings with the Scenario Planning technique to draw threads anticipating skill requirements in three to five years. These approaches create a powerful analysis.

Design/methodology/approach – An examination of recent library position advertisements and job descriptions in four countries showed broad communication and technology skills required in academic libraries. The key terms of skills were ranked according to the frequencies used in the advertisements and descriptions.

Findings - A exploration of the expected skills for the future librarian.

Originality/value – Original research based on data from the United States, Australia the United Kingdom and Hong Kong. The results are harmonised with predicted future trends from scenario planning exercises.

Keywords University libraries, Librarians, Skills, Scenario planning, Future, Staff development, Employees

Paper type Viewpoint

Skills for future university librarians

Introduction

There is a word in Chinese 'Wei Ji' (危机). This word means 'crisis'. On closer analysis, the first portion of the word means 'danger' while the second part means 'opportunity'. This is entirely appropriate for the circumstances in which libraries find themselves at the opening of the twentieth first century. Libraries are in a crisis of identity and purpose. They are not facing extinction but are certainly confronting a situation in which they can be by-passed or made to seem irrelevant as the scholarly publishing business model allows direct access between authors and readers. Many corner-stones of the traditional library business model are being questioned and even abandoned. The library business model is no longer consistent across the wide range of academic libraries whether they are small or large. The medium and small university library structures are facing real identity crises; real problems with direction and purpose. Even the large academic libraries need to conduct their business differently. They need to establish different work patterns amongst their colleagues; they need to adjust their management styles requiring a style which is more inclusive of other library systems(and colleagues), of other information agencies in order to be able to deliver results for their own clientele. They cannot maintain management styles which once might have been relevant for the powerful university librarian in a prestigious university. They need to partner, they need to exhibit skills of persuasion at the highest levels across colleagues at equal levels both inside or outside their own professional groupings. The world has changed. In balancing the traditions of the library profession and the need to manage and indeed lead change, Colin Storey highlights five personal attributes for the librarian working in our future:

- 1. The need for an "outgoing personality";
- 2. They need to be "brave and persistent";
- 3. They need to be "quick-thinking and articulate of speech";
- 4. Their "political sense needs to be very sharp";
- 5. They need to "possess a yin-yang combination of steadfastness and humility" (Story, 2007).

This paper has already moved very quickly across the world in which academic libraries exist and has noted many changes. It is the purpose of this paper to review the skills required by the librarian in this changed and changing world. In tertiary educational institutions the staffs of the University Library would have included only professional library staffs qualified as librarians. It is becoming clear now that the library staffs will include professional computer people, web designers and professionals with other

skills. They will rely much more on para-professional people. Why are all the changes occurring and what is the skill required by the librarian into the future? The argument in this paper will argue from the local to the global professional dimension. In this way, the generation of a future statement for one library is used to then examine the skills which librarians have now and what they might be expected to offer employers.

Literature Review

The rapid advancements of information technology in the last three decades have greatly changed traditional library operations in many ways. The impact of these developments on academic libraries worldwide has been investigated by many researchers starting in the late 1990s and continuing today. All articles address the changing roles of academic librarians in response to new technology as well as the need for librarians to reinvent themselves and adapt to shifting information media.

"Developing academic library skills for the future" written in 1996, "provides a personal view of the key skills required of the academic librarian in the foreseeable future" (Morgan, 1996). He notes that IT-related skills will continue to be very important assets in the future as new technology develops, but also points out essential management skills that allow librarians to function effectively in large organizations. Bates (1998) also presents a personal take on academic librarians' basic skills during the new information age. Librarian should not only know how to catalogue a book or compile a bibliography, but also understand how to evaluate an information source with proficiency in online services and internet skills. Feret and Marcinek (1999) analyze questionnaire responses by 23 key library experts focusing on the skills and characteristics of twenty-first century librarian. They find that a librarian of the new millennium should wear a number of hats, they "must be a researcher, counsellor, planner, manager, assessor, team member, problemsolver, and computer printer repairman" (Feret & Marcinek, 1999). They must also be armed with advanced IT skills in addition to very good interpersonal and communication skills. From these three commentaries we can see that academic librarians need a wide variety of skills to survive in an everchanging environment, with a particular interest in developing computer related skills.

Zhou (1996) and Lynch and Smith (2001) both performed large-scale content analysis of job advertisements from the seventies to the nineties. It is interesting to note that both studies draw different conclusions. On one hand, Zhou (1996) identifies a trend in the growing demand for computer-related skills in job advertisements for academic librarian positions. On the other hand, Lynch and Smith (2001) find that all academic library positions require

computer skills but communication skills have also emerged as new job requirements. Technical skills continue to be important but there is a specific demand for librarians with strong oral and written communication skills. Librarians need to be able to communicate effectively and educate students and faculty members about the changing formats of information and the new ways of accessing information.

Beile and Adams (2000) also use content analysis to compare requirements and benefits among various positions in academic libraries in 1996. Their results reveal a growing number of systems and automation librarian positions in the job market by comparing data from 1988 and 1996. They also show that academic library positions are becoming increasingly specialized, with computer skills being one such area of growing request. Margaret Foote (1997) specifically analyzed the requirements for systems librarian positions and found that good interpersonal skills are as important as the requisite computer skills. Systems librarians "must be able to work equally well with technology and people, and above all, facilitate between the two" (Foote, 1997).

In a more recent study, Croneis and Henderson (2002) trace the dramatic increase in demand for electronic and digital technological skills from 1990 to 2000. They also show that specialized job responsibilities have emerged to handle resources, such as electronic and digital librarian positions. They believe that librarians are very much influenced by technology and the new information resources it brings. In another study, Clyde (2002) emphasizes the importance of user education and training. The study shows that academic libraries are looking for skills in bibliographic instruction, user education, and information literacy development. The library professionals should have knowledge and skills related to education and information literacy instruction.

The academic librarian of the twenty-first century must have very good interpersonal and communication skills as well as much-discussed computer skills. Teaching and training skills are also becoming more and more important for the librarian of the future. Brian Schottlaender (2007) delivered a presentation to the Academic Librarians conference which was held in Hong Kong in April 2007. He sought to describe identity of future staff. He based his deductions on the recruitments for his own university library. He did not draw conclusions as to the future identity of the staff who might be employed at his university. Missingham (2006) also explores the skills for the twenty-first century librarian using sporting analogies. These skills cluster around Mountain climbing, Jumping, Orienteering and Endurance.

Background to a University Library Future

The University Library at the Hong Kong Polytechnic was already a very successful library when it was decided early in 2007 to engage in a scenario planning exercise. It was believed that normal strategic planning processes would only delivery extensions of the present future and would not fundamentally address the changes which were evident in the educational and publishing environment in which the library operated. The strategic planning processes delivers increments in planning based on where the organisation had been placed previously. On the other hand, the scenario planning process enables the library to use imagineering to create a picture expressed in words of a series of futures which the library might have in 3 years time. Because this imagined future was detached from the past and indeed the present it was free to indulge in options and opportunities which might otherwise had been rejected. The rejected futures can provide clues or seeds to new possibilities. All possibilities need to be examined if new target futures are to be properly examined. A fuller examination of the scenario planning process for libraries is explored in other places (O'Connor, 1997; O'Connor and Au, 2008).

The resulting *Preferred Library Scenario* for the University Library drew inspiration and vision from many sources. It involved very wide consultation amongst the target users for the library, as well as close analyses of future trends in the publishing and educational environments. It also involved a process to construct and then evaluate a range of scenarios before establishing the *Preferred Library Scenario*. This scenario is included in this article as an appendix.

Implementation of Scenario

The University Library has already commenced the process of implementing the Preferred Scenario. The inspiring set of targets and actions now arising in the Implementation Plan provide evidence of the value of creating a challenging and robust future target rather than accepting incremental extensions of the existing situation. What is clear however is that a new and fresh understanding is needed of the staff skills required to implement the Preferred Library Scenario? At the minimal level, each of the people who comprise the University Library staff needs to understand and emphasise with the new directions. Each member needs to be able to relate the Scenario to their work duties as presently constructed, and as perceived into the future. Each member will need to examine what they are to do and the skills and attitudes they will need to complete their new duties. The training which many of the staff received in library schools has not prepared them for the future. This is true in that for many it is sometime since they graduated from University. For the majority of the staff, they have acquired skills and duties 'on the job'. It will take a mental shift of some significance to be able to reconceptualise how they relate to this new future. Many of the day-to-day routines may not change much but the way in which the library relates to its users will. This will make that mental shift even more profound.

To begin the process

The examination which follows from the range of newspaper advertisements will reflect the skills which are being sought at this time. Later in the paper an effort is made to predict the skills which might be required for the future academic librarian.

In beginning to understand the skills required for this new future, a detailed analysis of over 138 position advertisements and descriptions were included in a database. The positions were drawn from five countries, from different library sectors, from different levels of seniority. Academic libraries from Australia, America, United Kingdom, New Zealand and Hong Kong were included in this study. The research focused on library job advertisements posted in seek.com, which is Australia's No.1 job site (Seek), jobs.ac.uk, where you can search for library jobs in the UK and abroad (Jobs.ac.uk.), and HigherEdJobs.com, which posts faculty and administrative positions at colleges and universities (HigherEdJobs.com). It was hypothesised that these advertisements were dealing with the present and that there would need to be a shift over the next three years in the required skill set if the *Preferred Library Scenario* were to be achieved.

The position descriptions have been analysed for personal attributes and for required task skills. The personal attributes include terms by which the employer communicates the characteristics which it is believed are required in the successful candidate. The job advertisements include a wide range of positions to be employed in various sections of the library. No effort was made to select one range of positions or another. The set of advertisements chosen for this exercise is a reflection of those which appeared in the time period of this study.

The emphasis of the terms used in the selected position descriptions is task orientated and skill based, as presently perceived. To some extent this is natural considering that the documents are describing the skills perceived to be presently required. The word 'future', 'future thinking' or similar such terms are not used as a skill. The emphasis is on present skills, such as computer skills, specific training, or skills acquired in reference or cataloguing.

The analysis of the terms used in the job advertisements as well as the job descriptions required considerable manipulation in order to ascertain an understanding of the current requirements for staff library positions. All

these job advertisements appeared from July to November 2007. After gathering all the terms, the most commonly used terms were extracted (such as prepositions and other linking words) and then terms with a similar spelling or meaning were grouped. This still gave the study well over 5,000 terms. Listed were ranked alphabetically and numerically. The top fifteen terms in the study were as follows:

Library 928 service 489
experience 330 management 330
librarian 275 development 270
skill 227 collection 187
professional 165 electronic 164
technology 160 system 146
team 145 responsibility 140

communication 137

A similar study conducted sat 10 years earlier would have shown a different set of terms. There is, of course, no substitute for 'experience' (330). In some ways it is difficult to speculate about that mix, except to say that it would have been different and that the mix of terms will be quite different into the future. The researchers in this study were surprised, for instance, that the term 'computer' did not rate a mention in this group and was only ranked at position 45 with 34 instances. This reflected a changed emphasis in the past ten years from a specific emphasis on computing to one focused on 'service'. If anything one could argue that there has been a widening of emphasis on 'technology'. Where this emphasis goes into the future is a matter of speculation later in this article.

Computing and Technology

The earlier emphasis ten years ago would have been on computer literacy (3) where now it is on information literacy (22) and 'teaching' (63). So there has been a shift of emphasis from a focus on computing and the skills associated with computers to a broader and as yet not entirely determined emphasis for the future. In the current study there is a small demand for knowledge of particular programs such as 'Photoshop' (1), spreadsheet (3), 'xml' (9) 'Dreamweaver' (1) and even 'word-processing'(2). There was one notable exception with 'database' recording 68 instances. As libraries have made the transition from using computing as strangers to being more intimately involved so too there has been a change in what is expected as basic skills for position applicants to that which it is felt necessary to describe.

Interpersonal and Intrapersonal

Howard Gardner (1985; 2006) has identified seven intelligences when analyzing leadership. In themselves they are well worth understanding and

pursuing. Of these intelligences, the Interpersonal and the Intrapersonal are too often underrated in assessing candidates for employment and their potentiality for future performance. Terms such as 'communication' (137), 'leadership' (94) and 'interpersonal' (39) were seen to be important. Other more specific aspects of these intelligences which emerged are 'independent' (27), 'innovative' (61), 'confident' (9), 'judgement' (12), 'energetic' (20), and 'enthusiasm' (20). It is unclear what the term 'high ability'(13) means for an applicant, assuming that all applicants should have this attribute. The working approach is clear with the term 'team' (145). This is the way future staff will be expected to work.

Service approaches

There is clearly a diversity of view in this study between 'client-centered' (62), 'customer-centered' (56) and 'user-centered' (48) approaches to service. The use of one term or another does not seem to be linked to differences based on geography. It is interesting to note that aggregating each of these approaches (166) with the term 'service' (489) reveals that, apart from the term 'library', service approaches dominate the demands of employers for their prospective employees. Another observation is that the library employers in this study are moving away from the term 'cooperation' (18) to 'collaboration' (74) very strongly. This would imply both a very different approach to that which existed ten years ago when collaboration scarcely existed but also that there is a change of the style and skill of the prospective employee required for the future. The library profession in this regard is moving very sharply away from approaches which saw the sharing of resources as a 'good thing' to establishing programs and even contractual arrangements for the provision of new services to benefit the users in participating libraries. The skills required in this future employee will be quite different to existing employees. What it means to be able to collaborate will need to be more clearly understood. The current generation of library managers often struggle with their management styles outside of their employed environment. The real successes which they are achieving and will achieve lie in utilizing the combined resources of different libraries working in collaboration rather than on their own.

The further interesting development from this study is the mergence of 'language' (20) as a requirement. This is reinforced with the terms 'bilingual' (3) and 'Putonghua' (3) perhaps implying a wider language skill base into the future. Part, but by no means all, of this emerges from the inclusion of Hong Kong in the study. It would be valuable to look at the skill requirements for China, for instance, to see emerging trends there.

The use of the term 'consortia' (64) is also an impressive emergence.

Traditional approaches to libraries

The traditional requirements for library employees certainly was strongly directed 'cataloguing' (54) and 'classification' (5) but now there is the strong emergence of 'metadata' (36) and 'dublin core' (4). This trend has been observed in other studies (Warren, 2007). There was also use of 'circulation' (10) but no mention of 'acquisitions'. The use of the term 'collection' (187) directs our attention to a focus not so much on building but understanding the nature of our existing and future collections, regardless of form. Allied to this is the emergence of 'repository' (72) as a new area of collecting and presentation of content. 'Reference' (87) was a strong requirement along with terms such as 'literacy' (44), 'teaching' (63) and 'training' (69). On a slightly different aspect is the term 'outreach' (28) which links the work of reference, the training aspects and the mode of outreach to the clients.

Predictive directions

If the first part of this study was to examine the present range of advertisements and their stated skill requirements, then the second part of this study was to try and extrapolate those skills which might be required for the future. This second part of the study would extrapolate from the the job advertisements and filter them through the fabric of the scenario planning outcome: *The Preferred Library Scenario*.

The scenario planning methodology used in this library researched various sources of trend data. It was not easy however to work with the skill and attribute trends for library staff. This was especially difficult as the planning methodology did not assume a linear approach to progress which strategic planning techniques predicate. Other trend aspects for the library assumed changes would occur in timeframes often considerably inside expectations. The nature of change is such that most who try to predict or describe trends underestimate the rate of change. A classic example of this is the observation that it was scarcely ten years since journal content was made available on the internet. Predicting the present state of development from that timeframe would have been almost impossible. So it is difficult but perhaps not impossible to see the nature of employer expectations in say three to five years.

To look forward is paradoxically, to look backwards. So the data from the present study we can begin to understand, from the present, what the future may demand. The Preferred Library Scenario developed by the Hong Kong Polytechnic University Library has eight broad themes driving it:

That the Library will be everywhere
That the focus of the Library will be on outreach
That the Library will create digital social spaces
That it will become more sustainable
That it develop digital lives
That it enhance the university's research performance
That it will integrate print and digital information for digital delivery
That it will remain integral to the University

Drawing on the headings used to analyse the job data in this study is a useful way to integrate the two approaches.

Computing and Technology

Clearly, technology will play a major role in the future of the Hong Kong Polytechnic University Library as it seeks to create more digital spaces working to meet its users where they 'live' on the internet. Where the literature past and present talk of either computer or information literacy, so this future would talk of a future literacy. This would require prospective employees to think of the future needs of their clients who are often years younger than themselves. They would need to engage in non-linear thinking, studying trends and being observant to the preferred communication modes of both the students, teachers and researchers. The Library will only be as relevant as the extent to which it is available to these users. "The thinking of the new library manager must be to understand the business of not what the library is in but what it can be, and should be " (O'Connor, 2006). creation of these spaces in a technical sense will require the employment of specialists with distinctive web and creative skills and sociologists who understand emerging patterns of communication in the internet environment. The presence in a library of library, web specialists and sociologists will necessitate the need to work together in ways in which they have not done so previously.

Interpersonal and Intrapersonal

Working in this future environment will require staff to regard their office space with disdain, in that they should be spending much of their time working closely with their clientele outside the physical library. They will need to do this in that they to empathise and understand their clients in a way which is different to the present. If most of the users have moved to the social, learning and creative spaces on the internet they will need to understand and be able to relate and plan for the information support of these groups of users. Their communication and listening skills will come to the fore. They will

need to understand their own strengths and weaknesses if they are going to be able to begin to design new systems and approaches to information provision.

The traditional description of librarians will be very seriously altered. The new skills will require a very strong skills to work positively with people often away from the physical library, without the props which the physical edifice might offer. In this environment the librarian's personal belief in self and self-purpose will need to be very strong. A good deal of their work will be done in a one-to-one set of interviews.

The strengthening of the intrapersonal position will be made stronger with strong self-knowledge and understanding of the new purpose of the library. The *Preferred Library Scenario* gives the new librarian a sharp articulation of the shape of the new role. The test beyond this is turning it into action; to realizing the future!!

Educative

It is clear from the present skill requirements that teaching is often required. This will continue into the future. It will be strengthened and needed more as Information Literacy courses are made more formal and are offered as credit-based courses. This formal aspect of the Literacy courses require a higher degree of understanding of curriculum requirements and Output Learning requirements. The discipline of structuring these curricula offers real opportunities for these librarians to work closely with academic colleagues across the campus. If there has been a perception that libraries are administration units, rather than part of the education program, then this change quickly.

Another new dimension to this role is the need to work in the digital social spaces. This will be a strong and imaginative challenge. How does the library extend its role educating its clientele in an environment where they are not physically present. Conceptual breakthroughs will be needed as well as other skills.

Service approaches

If there is a trend in libraries over the past ten to twenty years it is the strengthening of the service approach; of the move to sharpen the service end of the library's staffing profile; and the trend to employ other specialists to provide the services which they are qualified in rather than expanding the scope of the librarian role. A range of new roles for librarians into the future was explored by the OCLC environmental scan in 2003 (OCLC, 2003). The

move has been from 'cooperation' to 'collaboration' over the past ten years. The need to collaborate will be as strong but more intense. The move will colocate library services in clusters where they might have been once dedicated to individual libraries. The demand for professional staff in the traditional technical service areas will be defined by their capability to realise user need and to be able to work with others to meet it. This will mean re-defining and re-designing data records to meet real and not perceived informational need. Research strongly and consistently indicates that users use 'google-type' searches as the first step in an information search, and very rarely the library's catalogue. Systems will have to be re-analysed and thought through to new designs and structures. They may also have to work in different digital spaces meeting users where they are working rather than through library only spaces.

Drawing the threads...

The direction for skill employment is already moving toward teaching, communication and outreach. The trend will continue with the library being the base rather than the working environment for the librarian of the future. The library will continue to exist physically but will have a stronger and less defined role across the internet. The librarians who succeed will be able to think more broadly, be able to research, to perceive and to anticipate how their services will be required. Their knowledge of information sources both commercial and open access will be finely tuned and current.

Clearly the job advertisements only go so far in nominating the skills required for new positions. They mainly focus on the interpersonal and knowledge skills. They do delineate the current drive for 'service' and the skill sets which are being seen as important to go with it. The scenario planning process, in itself, is a political and creative process to sell a story about where the library should be in a few years time. It begins to describe the skills necessary for this future. The PolyU Library now needs to understand those skills and to be able to inculcate them into new positions and in the descriptions of the duties of existing staff as they are prepared for the future. Training will be an essential part of that movement from the present to the future.

It is also worthwhile while looking at both the job analyses conducted here and the work of the scenario planning and to offset them against the comments recorded earlier in this paper by Storey. This thoughtful and experienced librarian saw the need for five attributes in the future leader: "outgoing personality", "brave and persistent", "quick thinking and articulate of speech", "political sense needs to be very sharp" and "possess a yin-yang"

combination of steadfastness and humility". Most of Storey's attributes are intrapersonal in nature but have a sharper and focused edge which experience in the 'chair of leadership' gives. As such much of what he discusses is not reflected in the analyses of this paper but is crucially important in order to prepare the leader of the future who will, in turn, drive the skills for his or her staff. The ACRL in 2002 identified the Recruitment, education and retention of librarians as being one of the Top issues which they developed (Hisle, 2002). It still is the major issue as the number of retirements from the generation of Baby Boomers reaches a peak. A study for a group of Australian University Libraries commented:

"What is ... needed are strategic thinkers, people who see and understand the big picture and the environment within which their library operates. These people also need the ability to be adaptable, flexible, to take risks, to embrace innovation and to be realistic about what can be done" (Whitmell & Associates, 2004).

Conclusion

This study provides a means of understanding the demands of current employers for library staff and filtering these through future scenarios of what the library will be. This study has used the Scenario Planning technique to draw threads anticipating skill requirements in three to five years. These approaches create a powerful analysis for those who recognise change is inevitable but find it difficult to establish priorities for action..

In many ways the attributes of the librarian of the future will be that of a professional who has strengthened the capacity to understand and interpret information wherever it is located. They will be able to look outside the confines of the profession to establish the context. Critically different to today's roles is that they will need to be solid communicators, strategic thinkers and listeners working where the users are located and able to analyse the new ways in which they are working and using information. They will be essential members of research teams but will not necessarily be co-located with them. The Library in this future will not be tempted to grow all the necessary skills in their existing or future librarians but will create multispecialist teams. Not all these people will be employed on a full-time basis but may be contracted for specific tasks.

Working as a Librarian in this environment will be working as one of many specialists who are drawn together to create new and exciting information print and digital spaces.

These analyses have highlighted that the intrapersonal attributes are not represented in the selection approaches by most position advertisements. Selecting for leadership positions however will require further analysis and understanding for different attributes.

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Appendix

PREFERRED POLYU LIBRARY SCENARIO The 'LEARNING HUB'

The PolyU Library in 2011 continues to be located on a land-locked campus, in the middle of one of the most densely populated parts of the world, but is now everywhere else at the same time. Its strong reputation for being busy is still true but it has successfully fused the information and study worlds; fused the physical and digital into one; fused locally produced and the commercially produced information for the benefit of the University research community. This is a seamless world of quality information from the web, large sets of digital books and journals as well as great collections of books. The information is now even more digital and wherever possible print materials are delivered digitally. This is what is now called the LEARNING HUB for the students and researchers. The Library has focused its services more on outreach than previously. In reaching out it is both visiting the University community wherever it is and also bringing more of that same community to the re-vitalised Pao Yue-kong Library building. In this future, the traditional functions of the Library have been re-defined and re-focused to facilitate the growth of knowledge, collaborative learning, reflective thinking and institutional visibility.

A more comfortable and dynamic learning environment has been created to achieve the best problem-based learning situation whereby students can relax in lounge-type chairs to learn in relative comfort. These new facilities also encourage discussions and interactions between students in the same and differing discipline groups. It is a meeting place of 'people and minds' which now includes both a quality coffee shop and small bookstore. This has created a new sense of energy and excitement. Exhibitions, performances and events also make this area a cultural hub of the campus. The Library's merging of information and people has made the campus a more vibrant place.

The lighting in many study carrels has now been tailored for the individual, thus creating a personalized study environment. Previous complaints about noise have been addressed in 2011 with the creation of more targeted discussions and interactive spaces. The study patterns and habits of each discipline are encouraged and supported in a library environment which has been architect re-designed with as many of the study needs in mind as possible. In all of this the Library has sought to be carbon-neutral, reducing its use of energy in many ways including programs to reduce the consumption of paper and genuinely staying electronic. The Library and its users are leaders in this movement and have adopted and embraced the motto: 'Reduce, Reuse, Recycle'.

Not content with only the physical meeting spaces the Library has created new 'Facebook'-type social spaces on the net in which information is being communicated and exchanged. Like its commercial cousin, the 'PolyU Library-book' digital site has proven to be enormously popular as a space in which to navigate through in search of information. It is very relevant and in tune with the emerging groups of students

who think, study and communicate very differently to the previous cohorts of students. Through this new style of library the students are finding masses of information which are both exciting and assisting their studies. The Library serves as an information gateway to staff, students, alumni and the wider community. It is difficult not to recognise the extent of the Library presence across the University. Virtual Librarians or avatars 'roam' the Library web presences providing instant assistance. These 'Avatar Librarians', fluent in Putonghua, English and Cantonese, are instantly available to users on computer screens both on campus and remotely in the digital virtual information world. They have taken up the important role as information mentors. Information Literacy programs, delivered both in physical and virtual space, prepare students for research at the University level, and to become successful life-long learners.

The Library has succeeded in creating boutique web spaces for each Faculty which are friendly and responsive to discipline interests. This has been especially well received in the lead-up to the creation of the 3-3-4 program. The users from each discipline feel that they have a space or a place to go to where they will be directly understood as they can speak their discipline language. The physical spaces in the Library have been made more personal, more conducive to learning and less anonymous.

The Library is very cognisant of the new students and has adjusted its systems to meet these new fluencies. A reputation has been gained by the Library for its anticipatory use of future technology, communication systems and devices. The LEARNING HUB lends itself now to a more active role in assisting learning and in partnering with different learning agencies on campus such as the Educational Development Centre. Informal discussions and collaborative group work are also more effective for the different study zones which have been created within the physical fabric of the Library building with the enhancement of Level 7. Those with learning disabilities find even more support.

The information available through the Library continues to be in both print and digital although the digital resources have grown very sharply from 2007. Support of the University's research effort has been focused more in close consultation with Faculty and University policy makers. As a knowledge hub, the Library also collects all the research output of the University's Faculties and, in turn, highlights this work digitally to the University and importantly the World. The scope and richness of the important but lower-use research materials have increased markedly with the development of JURA as a HUCOM jointly-owned research repository. PolyU Library has strongly contributed to this important research centre. Hong Kong has maintained its strategic position as the regional information lighthouse. No country in this part of the world is able to match the academic resources now so readily accessible to Hong Kong academics.

This LEARNING HUB Library in 2011 is very much the kind of Library which was needed and sought by the members of the University community. They are proud of this new style of Library and the leading example it provides in Hong Kong and internationally.