HKUST Library's First Ten Years

This issue marks the tenth anniversary of the opening of the University and the Library. We are all glad to have been a part of it, and proud of what has been accomplished. In the past ten years, HKUST Library has been recognized world-wide for its progressive adoption and application of information technology, for its proactive and responsive services, and for its well-focused and cohesive collections. Inside we will highlight some of the significant events in the Library's short history. For more insight and details, you may wish to explore some of the back issues of this Newsletter, all of which are online at http://library.ust.hk/info/notes/, starting with Issue #1 in September of 1990.

SYSTEMS: XML - The Future of Electronic Information

At the recent 10th World-Wide Web Conference held in Hong Kong, Tim Berners-Lee, keynote speaker and the inventor of the World-Wide Web, emphasized the future of a semantic web, where web content can be manipulated meaningfully by computer programs. One of the core technologies to enable this is XML, which allows data to be marked up semantically in a standard language for interpretation by machines.

XML, the eXtensible Markup Language, is a World-Wide Web Consortium (W3C) standard completed in early 1998. XML permits a true separation of data structure from presentation - something which is not possible with HTML. This makes it a much more open standard for data interchange, processing, migration, etc. As a result, the adoption and implementation of XML systems has been widespread.

The HKUST Library has been closely monitoring the development of XML and has conducted experiments and studies on XML technologies for several years. In addition to electronic documents, bibliographic metadata (which is the core data stored in the library catalogs to describe library materials) is a particularly suitable candidate for XML markup. Once in XML format, bibliographic information can be easily analyzed, manipulated, disseminated and stored by openly available computer programs.

After several months of in-depth evaluation, the Library has now acquired a native XML database system to form the core component of the Library's XML infrastructure. The first application on this system is the E-Journal Database (http://library.ust.hk/res/ejournals/). Replacing the existing web page listing approach, this XML and Unicode-based application provides a user-friendly search interface for accessing all our electronic journal subscriptions. More XML-based databases are in the pipeline and will be available later this year.

For more information about XML, see http://www.w3.org/XML/. For an interesting discussion of the semantic web, read Tim Berners-Lee's article at http://www.scientificamerican.com/2001/0501issue/0501berners-lee.html
INTERNET: A Case Study of Quality Assurance - ILT

We have previously reported on our own Information Literacy Tutorial (ILT) - this article will describe our efforts to ensure the quality of the finished product. The ILT (http://library.ust.hk/serv/skills/infoliteracy.html) is designed to equip students with information search skills. We used 5 quality assurance strategies to make sure the final product would meet the needs of our students.

Project Management Website: Designing and managing an online tutorial for our students is a large project, and applying suitable project management techniques is essential to its success. We created a website to tie everything related to the project together, which helped maintain clear direction and communication among the project's group members.

Best Practice Benchmarking: We identified institutions around the world which have created excellent tutorials (best practice examples) that were similar to the one we planned to create, and used what they've done as our benchmark. We thus avoided the problem of re-inventing the wheel and shortened the development time tremendously.

User Needs Assessment: Understanding the needs of the target group is the first step in designing a user-centered tutorial. We solicited ideas from colleagues who have frequent contact with this group, and inter-viewed second- and third-year students about their information needs in their first year.

Usability Testing: We carried out two studies of how easy the tutorial is to use. Students were asked to "think aloud" while test-driving the tutorial. A project team member would observe the student and note down problems they encountered. Results of the studies helped us modify the tutorial to make it more user-friendly.

Formative Evaluation: Waiting until the product is complete before evaluating it is usually too late to make effective modifications. The five stages of our formative evaluation were: initial evaluation, design evaluation, content evaluation, product evaluation, and implementation evaluation. This involved evaluating the ILT at all stages of the development cycle.

Using these methods of Quality Assurance enabled us to design a tutorial with confidence that it would be a quality product which meets the needs of our users.

OUR WEB: Guide to Statistical Sources

What was the elderly suicide rate in Hong Kong in 1996? What was the average trade volume of British Telecom's stocks listed on the London Stock Exchange last year? How much did consumers in Korea spent on footwear from 1997-2000? In the process of searching for these or other statistical information, the first and usually the most difficult step is to locate the possible sources that contain the information. For this reason, the Library has recently developed a guide to socio-economic, financial and marketing statistical sources.

Available at http://library.ust.hk/guides/stats/, the guide covers over 380 electronic databases and printed resources at HKUST, as well as about 50 websites, mostly maintained by national statistical offices worldwide.

For easy access, these statistical sources are listed hierarchically - first by region or country, followed by format (electronic databases, printed resources, and Internet resources), and finally also by topic when needed.

The majority of the statistical sources included in this guide are classified under Global, United States,
China, Taiwan, and Hong Kong SAR, with the remaining ones under other countries and regions.

This guide enables you to locate relevant statistical sources with just a few mouse clicks. We hope that you will have a chance to use this guide and benefit from our efforts.

INFORMATION SERVICES: Document Supply

One of the Document Supply Service's main functions is to obtain items not held in our collections. In fact, 20% of the requests we receive are already in our Library.

For the remaining 80%, we try to find them from a local source first. In the past year, about 67% of our requests were filled by libraries in Hong Kong. From Monday to Friday, DHL routes ILL materials collected from all participating libraries.

Why don't we fax them? In 1999/2000, we obtained over 10,200 articles through ILL. If each article averaged 15 pages, this would come to about 153,000. With this volume, using fax as the primary delivery method would be extremely wasteful. Also, the print quality of fax is not as good as a photocopy.

Requests that cannot be filled in Hong Kong will be sent overseas, predominantly through the OCLC resource-sharing service, which includes a union catalog with over 46 million records contributed worldwide.

We also send requests to the Canada Institute for Scientific & Technical Information (CISTI) and the British Library. CISTI is especially efficient, sending documents to us via the Internet the day after we request them.

Depending on the method of delivery, some items may need from 2 weeks to over 2 months to arrive. If you need something soon, please specify a "need before" date. This will help us choose the most cost-effective supplier. Rush service is 2-3 times more expensive than regular service and should only be used when absolutely necessary.

We will exhaust all possible sources before giving up on a request. Our success rate is over 96% and requests have been filled by many places around the world, including India, Mongolia, Poland, Serbia, South Africa, and Russia, in addition to obvious culprits from Australia to the United States.

While no library can own everything ever published, we can meet our users' information needs efficiently with a well-developed ILL system and a team of dedicated and experienced staff.
Service Changes

During the past 2.5 years, the Library has lost 16 staff to attrition, and we have just lost 5 more to the Voluntary Redundancy Scheme. Given this, and recent additional budget reductions, we have had to make some changes to Library services:

- The Library's staffed Photocopy Service has been shut down. All of these services are available elsewhere on campus.
- The Document Supply Service has become a cost-recovery operation.
- The Media Resources Circulation counter will open from 9am to 7pm, Monday-Saturday - 2 hours less than before.
- Development of the Digital Library projects will slow down.

Highlights - 10 Years of Growth and Achievement

1991 - First Library Online Catalog with Full Chinese Capability

HKUST Library was instrumental in bringing INNOPAC out of the USA and in providing expert knowledge to assist them in enhancing the system to support Chinese characters. We also served as the only beta site for debugging and product testing. Since then all academic libraries in Hong Kong and many others in Asia have adopted INNOPAC.

1992 - Bringing Art to Campus

To enrich the cultural life on campus, the Library organized the first art exhibition featuring works of prominent artists Huang Miaozhi (黄苗子) and Yu Feng (郁风).

1993 - Introducing Cutting Edge Technology

Through the years, the Library has introduced many new technologies to the Hong Kong Library Community. In 1993, the Library worked closely with a US-based system vendor to develop an innovative "Image Management System". This system scanned faculty's handwritten notes, images, assigned reading materials etc; and provided sophisticated searching capabilities. It was the first of its kind.
1994 - Accessible Compact Shelving

The Library installed the largest and most advanced Compact Shelving System in Asia. It is safe, elegant, electronically operated and user accessible.

1995 - First Library Web Server in Hong Kong

When the web technology was first unveiled, the Library responded enthusiastically by developing its website immediately. This server allows users seamless access to library information and collections and provides a gateway to electronic resources worldwide.

1996 - Establishment of the University Archives and Special Collections

Functioning as the institutional memory, the University Archives was formally opened to the university community. The Special Collections, under development since 1991, include Landmarks in Science and Technology, Antique Maps of China and other valuable items which were now available to researchers for the first time.

1997 - OVID Mirror Site

The Library undertook the responsibility of providing efficient access and retrieval capabilities for a large number of premier full text databases to Hong Kong libraries. The mirror site was the only alternative to access a large body of information as the data transmission rate from USA to Hong Kong was slow.

1998 - The Digital Library

Digital Archives, Electronic Theses and HKUST News Clippings were the first digital libraries developed in-house. They provide sophisticated searching and instantaneous full text display. Digital Archives allows users to search and retrieve University documents and publications online; Electronic Theses contains dissertations of our graduate students; and HKUST News Clippings include all university-related full text news online.

1999 - Chinese Social Sciences Citation Index Database (CSSCI)

Partnered with Nanjing University in the production of the first electronic Chinese Social Sciences Citation Index Database.
2000 - Collaboration with and honors received from Mainland Universities

The Library has close exchanges with many libraries in the mainland. In recognizing her contributions, our University Librarian was conferred Guest Professorship (客座教授) by Peking University (北京大學) in 2000, Nanjing University (南京大學) in 1999, and Jilin University (吉林大學) in 2001. She was appointed Library Advisor in 1996 by Tsinghua University (清華大學).

2001 - PNC Conference

The Library has organized 9 international symposia and conferences in the past ten years. The latest one being the 2001 Pacific Neighborhood Consortium (PNC) Annual Conference co-hosted with City University of Hong Kong, Academia Sinica in Taipei, and the California Digital Library of the University of California at Berkeley. PNC is an international body formed by institutions of higher education on the Pacific Rim to explore issues of information and technology exchange and interdisciplinary collaboration.

You can also access A PDF VERSION of these Highlights [1.7MB].

revised 5 September, 2001
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The Library’s First Ten Years

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- First OCLC CJK cataloging installation in Asia
- First academic library in Hong Kong open to the public

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- First in Asia to provide digital catalogue searching in Chinese
- First and only academic library in Hong Kong to provide a full-fledged online analogue of its print materials
- First academic library in Hong Kong to set up a full-fledged academic library website

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