A. SERVICES

1. Use of libraries

More than 2.3 million users visited NTU libraries during the AY2009-10. This is an increase of 2% over the previous year. The distribution of visitors to the 7 libraries in 2009 and 2008 is shown in Fig. 1. Business Library and ACRC Library had fewer visitors due to partial closure resulting from major renovation works carried out during the year.

2. Use of library materials & resources

The Library Portal provides users with remote access to a wide range of electronic resources such as databases and e-journals. Usage of the various platforms to access resources remains There was a drop in usage of the Federated search system (-33%), possibly due to the inherent slower speed of retrieval. The Endnote, (the personal bibliographic software)
high, with 2,439,528 sessions logged for database access (similar to the previous year), 1,400,070 for the Library catalogue (16% increase) and 2,759,490 sessions for the Library Portal. Download increased by 5% to 15,618. Access statistics for the other areas such as subject guides and DR-NTU are not stable due to changes in the respective systems.

Fig. 3 (opposite) shows the statistics on sessions recorded for each of the resource platforms, with comparative data from the previous year.

<table>
<thead>
<tr>
<th>Resource</th>
<th>No. of sessions recorded</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AY09</td>
</tr>
<tr>
<td>Library portal</td>
<td>2,759,490</td>
</tr>
<tr>
<td>Database access via Ezproxy</td>
<td>2,439,528</td>
</tr>
<tr>
<td>Library catalogue</td>
<td>1,400,070</td>
</tr>
<tr>
<td>Journal title search (A-Z)</td>
<td>220,953</td>
</tr>
<tr>
<td>Federated search</td>
<td>24,216</td>
</tr>
<tr>
<td>Endnote download</td>
<td>15,618</td>
</tr>
<tr>
<td>Subject guides</td>
<td>10,876</td>
</tr>
<tr>
<td>DR-NTU</td>
<td>9,378</td>
</tr>
</tbody>
</table>

Use of journal articles

An indication of the very high use of the library electronic resources is given by download statistics provided by vendors and publishers. Data available from vendors indicated that at least 3,099,819 articles were downloaded in total. Based on a user population of 30,717 students, faculty and research staff (except students from NIE), each would have downloaded an average of 101 articles during the year.

Use of e-books

Use of e-books increased over the last year in terms of sessions carried out (9%) as well as number of searches made (43%) (see Fig. 4).

Collections that were highly accessed include e-books published by Springer (134,823), reference titles published by CRC Press (27,339), and Elsevier books and book series (11,565). These collections focused largely on Science and Engineering.

Loans of library materials

Loans of library materials increased by 13% from 495,470 in AY08/09 to 560,571 in AY09/10. This is despite the greater availability of remotely accessible e-resources. The loan rate (number of books borrowed per visitor per visit) was highest in Humanities & Social Sciences Library (HSSL) (0.473) followed by Art, Design & Media Library (ADML) (0.455), Business Library (BUSL) (0.306), Chinese Library (CHNL) (0.304), Asian Communication & Research...
Centre (ACRC) (0.301), Wang Gungwu Library (WGWL) (0.249) and Lee Wee Nam Library (LWNL) (0.175) (see Fig. 5 above).

Interlibrary loans & article procurement services

The interlibrary loan and document delivery services provide access to materials that are not available in our libraries. The number of requests gives an indication of the adequacy of the library collection. In AY09/10, staff from College of Humanities & Social Sciences (CoHASS) requested for the most number of books from other libraries, followed by College of Engineering (COE). Most of the requests for books were fulfilled by other local libraries, with only 4 books being requested from overseas libraries. The Library also supplied 326 books on interlibrary loan to other local libraries and 7 to overseas libraries.

In August ’09, the document delivery service was revamped to deliver articles electronically as much as possible to speed up the turnaround time. The Library also started subsidising requests for students and staff who had no access to research/teaching materials funds and needed to use requested documents for their research, teaching or project work. This improved service was publicized via postcards, posters, e-mailers and the library website. As a result, requests increased by 44.6% from 329 in AY08/09 to 594 in AY09/10. Requests for document procurement came largely from CoE followed by CoS. Document delivery requests were fulfilled through purchase from overseas vendors for 99.6% of requests due to a change in suppliers which helped us to meet our turnaround time targets (see Fig. 6).

3. Reference services

The Library answered 76,906 queries (excluding those at IT Help Desk at LWN Library). 1,909 (2.5%) were in-depth reference queries requiring more time to answer and are mostly dealt with by professional staff while other enquiries are mostly questions on library services, facilities and administration (see Fig. 7).

The ratio of reference queries to routine enquiries in a library indicates the intensity of effort required

<table>
<thead>
<tr>
<th>Library</th>
<th>Reference</th>
<th>Enquiries</th>
<th>Total</th>
<th>Ratio of Reference Queries / Enquiries</th>
</tr>
</thead>
<tbody>
<tr>
<td>LWN</td>
<td>622</td>
<td>56119</td>
<td>56741</td>
<td>0.011</td>
</tr>
<tr>
<td>ACRC</td>
<td>133</td>
<td>1670</td>
<td>1803</td>
<td>0.079</td>
</tr>
<tr>
<td>HSS</td>
<td>145</td>
<td>3473</td>
<td>3618</td>
<td>0.042</td>
</tr>
<tr>
<td>OTHERS</td>
<td>493</td>
<td>0</td>
<td>493</td>
<td>NA</td>
</tr>
<tr>
<td>CHINESE</td>
<td>114</td>
<td>5818</td>
<td>5932</td>
<td>0.019</td>
</tr>
<tr>
<td>BUSINESS LIB</td>
<td>348</td>
<td>6911</td>
<td>7259</td>
<td>0.05</td>
</tr>
<tr>
<td>ADM</td>
<td>51</td>
<td>872</td>
<td>923</td>
<td>0.058</td>
</tr>
<tr>
<td>WGW</td>
<td>3</td>
<td>134</td>
<td>137</td>
<td>0.022</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1909</td>
<td>74997</td>
<td>76906</td>
<td>0.101</td>
</tr>
</tbody>
</table>
LWN Library received the most reference queries but ACRC has the highest reference to enquiries ratio (0.079). This is followed by ADM (0.058) and Business Library (0.05). WGW Library (0.022), Chinese Library (0.019) and LWN Library (0.011) have the 3 lowest ratios.

Reference queries were received by phone, email or walk-in modes. Most of the reference queries were asked via email (40.40%) as well as by walk-in users (40%). (Fig 8)

4. Instructional Services

A total of 285 classes were conducted for 5,484 students in the AY. Figure 9 shows the distribution of users who attended library classes. There was an increasing demand for librarians to conduct information literacy and research workshops for international bridging students, participants from the Global Leadership Programme and students from RSIS.

The library also conducted several workshops on citation counting for research administrators of NTU as well as training sessions for librarians from around Singapore. This group makes up the “others” category (the highest number, 793) in the chart. This is followed by staff and students from MAE with 768 participants.

Classes conducted by the library cover 4 areas – awareness of library resources, using resources on specific subjects, research methods (e.g. literature review) and tools (e.g. using EndNote).

A matrix of courses is designed around these areas. The majority of participants (45%) attended the basic courses where they were introduced to library and information resources. This is followed by sessions on EndNote (16.83%) as shown in Fig. 10.
Personal bibliographic software, EndNote

EndNote X3 was rolled out to the university community in September 2009. This was followed by EndNote X4 in August 2010. These initiatives ensured that our faculty and staff have the most updated tools to assist their work in research and academic writing.

In the last AY, the team was also busy experimenting with use of different media for producing instructional materials. This includes a spectrum of instructional videos that can be used to inform users on different aspects of seeking information. Posters on different aspects of information research and information evaluation were developed and displayed around the Library Instructional Commons (see Fig 11).

Fig. 11. Example of a library poster

B. RESOURCES

1. Library materials

The distribution of library materials and resources available to users as of April 2010 is given in Fig. 12.

Print and electronic books

33,525 new books and 12,457 e-books were acquired and added to the Library collection in the financial year. This is an increase of 4.8% and 8.0% respectively over the last FY (excluding donated items).

Fifty-five percent of the new acquisitions went to the Humanities and Social Sciences collection, 20.62% to Science and Engineering collection and less than 8% to the Business collection. Books are selected by subject librarians and the collection profiles are approved by representatives of schools. The collection development policy for book selection is available in the Library website.

Library materials (April 2010)

<table>
<thead>
<tr>
<th>Material type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Books</td>
<td>738,848 volumes</td>
</tr>
<tr>
<td>E-books</td>
<td>161,855 titles</td>
</tr>
<tr>
<td>Audio visual materials</td>
<td>30,941 items</td>
</tr>
<tr>
<td>Journals</td>
<td>48,000 titles</td>
</tr>
<tr>
<td>Databases</td>
<td>205 titles</td>
</tr>
<tr>
<td>Repository (DR-NTU)</td>
<td>39,778 items</td>
</tr>
</tbody>
</table>

Fig. 12. Library materials available to users

AV materials

1,600 audio-visual titles were added to the collection. Most of the titles were purchased for CoHASS - HSS (28.19%), ADM (24.82%) and ACRC (9.5%). General titles accounted for 25.13%.

Fig. 13. A selection of AV materials in ADM Library
Databases

A database provides a collection of bibliographic, full-text or multimedia records and documents related to a subject, discipline or some other aspects or scope defined by its publisher. It provides a range of features to enable users to search by specific fields such as author, title, subject, classification and other characteristics. Databases also have tools to interrogate and make full use of the records. They are usually provided as a distinct product or service by a publisher. Based on this definition, the Library has 205 databases across all disciplines taught or covered in NTU schools and divisions.

Journals

There were about 48,000 e-journal titles available to users. These include subscriptions to individual titles as well as to journal packages. The count is approximate as a proportion also comes from databases which provide full text access from publishers which do not provide full information on their journal coverage.

2. Book donations

The Library added 11,264 volumes of books and 171 non-book items donated by well-wishers to the collection. Notable donations included:

- National University of Singapore Chinese Library – 8,928 titles on Chinese studies, published from 1950 to 1990.
- Mdm Qui Huiying - 1,439 titles from the collection of local author, Mr Peng Shizhou. The collection included classic and modern texts by well-known authors from Hong Kong, Taiwan, China and Singapore.

3. Institutional repository

DR-NTU is the institutional repository of the University which aims to collect and archive the intellectual output of staff and students and make it accessible to the public through the Internet as much as possible. DR-NTU has 2 versions. The Open Access repository focuses primarily on collecting conference papers and journal articles by NTU faculty & researchers for which publishers permit self archiving in open access repositories. The full-texts of these works are publicly available through Internet connections. The Restricted Access version comprises student submissions such as theses, work attachment reports and final year project reports that require user authentication to access the full text.

Active submission to the Open Access Repository began in Jan 2009. There are currently 4,128 items in the Repository comprising contributions by NTU faculty, RSIS staff, Library and a collection of AMIC conference papers.

The Restricted Access Version contains mainly the full-text of student theses, applied research reports and school examination papers. This collection is accessible only by NTU staff and students. To-date, the Restricted Access Repository has a total of 38,927 items.
A number of useful features were implemented with the help of external vendors. Working together with CITS and RSO, the Research Information and Management System (RIMS) was integrated with DR-NTU (Open Access). This allows academic staff to submit their publications to DR-NTU at the same time as they submit their publication records to RIMS. Once a publication is submitted to RIMS, the backend web services generate metadata records and attach source files to the DR-NTU workflow. On publication in DR-NTU, the persistent URL assigned for every record will be automatically passed back to RIMS. For staff publications that are selected for listing in their Research Directory profile, the publication links will point back to DR-NTU, thus allowing users to retrieve the full text of the publication. Other enhancements implemented are:

1. Auto-generation of a cover page with the citation information to accompany the full text download. This is to ensure that users who have downloaded the articles from DR-NTU will have the complete information for their reference at all times.

2. Subject taxonomy system for browsing by subject terms.


4. Upgrade of repository software to the Dspace Manakin version for ease of customising/incorporating new features.

5. Batch metadata editing tool for Bibliographic Services Division (BSD) staff to improve editing work.

C. OUTREACH

1. LIBQUAL Survey Follow up

During this AY the Library took action or is continuing with programmes to particularly address the top 10 items our users most wanted us to improve as indicated during the LibQUAL+ survey of the previous AY.

Quiet spaces

The Library opened a few small sections in some of our libraries and the top floor in Lee Wee Nam Library as designated quiet areas.

Spaces that inspire

Many university libraries have spaces and ambience which users treasure during their time at the university and remember fondly throughout their lives. The Library continued its incremental refurbishment programme for all libraries to improve the potential in what we already have in order to inspire the feelings we wish users to retain in later life.

Community spaces for group learning

As group learning is becoming more and more important to users the Library has developed and supports a Learning Commons in Lee Wee Nam Library with state-of-the-art facilities for small group work. In the Humanities & Social Sciences Library, an outdoor “café” option for group discussion was opened just outside the Library.

Spaces that are inviting

The Library noted all the defects users told us about, from air-conditioning inadequacies to a lack of hot/cold water and remedied what we could. We have continued our programme to re-paint and re-carpet tired areas of the libraries, and upgraded the Asian Communication Resource Centre.
A refuge from outside

We know from our statistics that almost half of our users need to spend some time in a library environment every day. A certain standard needs to be maintained for users to continue to choose the library as part of their daily routine. Small additions in opening hours, late pre-exam opening and “anti-hogging” procedures all seek to provide equitable access.

More print materials

Some users pointed out specific gaps in our collection. The allocation of special purpose grants and the dedication of a larger proportion of the book vote to the newest and most book oriented disciplines were small steps taken in response.

Better access tools

We have improved the library catalogue to make it faster, clearer and more interesting. We have re-vamped the database pages to incorporate social networking tools such as embedded tutorials, RSS alerts and sharing to Facebook.

Online and print journals

Two-thirds of our materials budget is spent on databases and e-journals. Despite rising costs, the number of subscribed databases and e-journals increased last year. At present we provide over 34,000 journal titles. For the articles we do not subscribe to we have improved our document delivery service to deliver to user desktops within 24-36 hours from around the globe.

A website easier to navigate

We have improved the user interface of the website, added new information pages including a new journal title alert, pages for alumni, a site for the NTU Museum, etc.

Easier anywhere access

Upgrades to Ezproxy have been installed to make access faster and more reliable. We are currently working to ensure that basic library functions can be accessed through mobile devices, so users can access their favourite Library things anywhere, any time.

2. Outreach and promotion activities

Creating awareness in the University community of the rich collection of library resources and the availability of a wide array of services is an important step towards helping staff and students to maximize the use of the collective cumulated knowledge in all bodies of knowledge. All subject librarians participate actively in outreach programmes and activities such as blogging, orientation tours, presentations, and organizing events and exhibitions. The Library Promotion Division, working with all subject libraries initiated and implemented many awareness and outreach activities, some of which are described in this section.

Library blogs

The Library has 7 subject blogs and a building news blog which are updated regularly to inform users of new resources and services and provide guidance to the use of tools and resources. From Jul 2009 to Jun 2010, the library blogs attracted 58,046 visits. The online visitors spent 1,828 hours reading our postings and chalked up 142,516 page views.

68% of the visits originated from Singapore while 32% are from outside of Singapore. The most popular blogs are Business Library and Engineering Library blogs. Compared to the previous year, the number of visits to our blogs and page views has significantly increased by 33% and 17.2% respectively.
NTU Library started its presence on Facebook during the AY. There were 1,346 fans as of Jun 2010. The Facebook page is an additional channel for keeping users aware of various outreach activities such as quizzes, new services and resources, exhibitions and other events.

Slightly more than half (55%) of the fans are between the ages of 18-24. 28% are from 25-34.

Exhibitions

63 exhibitions were held in various libraries during the AY. A number of exhibitions were jointly organized with academic schools, students and external bodies. Most of the exhibition materials, including bibliographies and further information on the topic of each exhibition are recorded and archived in the Library Exhibition Archive website:

http://blogs.ntu.edu.sg/library/exhibitions/

<table>
<thead>
<tr>
<th>Date</th>
<th>Title</th>
<th>Jointly Organized by</th>
</tr>
</thead>
<tbody>
<tr>
<td>21 Aug</td>
<td>Chinatowns in a Globalising Southeast Asia</td>
<td>Chinese Heritage Centre and Huayinnet</td>
</tr>
<tr>
<td>22 Sep</td>
<td>Singapore Youth Award Exhibition</td>
<td>National Youth Council</td>
</tr>
<tr>
<td>16 Nov</td>
<td>Project Sanitation Campaign and Social Research Exhibition</td>
<td>Nusantara Development Initiative</td>
</tr>
<tr>
<td>9 Apr</td>
<td>HARK! The Story Unheard Of Exhibition</td>
<td>NTU Welfare Service Club</td>
</tr>
<tr>
<td>10 Apr</td>
<td>Youth Olympic Games Exhibition</td>
<td>YOG Learning Centre</td>
</tr>
</tbody>
</table>

E-resource fair

The Library organized its 4th Annual e-Resource Fair on 12-13 Oct 09. The purpose of the Fair is to “bring the Library out” of the building to attract more users. Booths with PCs were set up outside LT1A. Altogether 10 vendors participated in the Fair. 1,567 people visited the vendor and library booths. The fair also included quizzes and an NTU Library Facebook photo activity. 757 people participated in the quizzes and 222 photos in the Library Facebook page were tagged.
Orientation for students and staff

Between 17 Aug and 18 Aug 2009, the Library organized various orientation activities such as talks, tea parties and quizzes for new students to make them aware of library resources, services and facilities. Some 4,372 students participated in these activities. In addition, the Library had a booth at the Student Union Welcome Week which was visited by 3,596 people.

Library orientation for new staff

In a collaboration between the Office of Human Resources and the Library, every new faculty and research staff member receives a welcome letter from the University Librarian and a library brochure. Subject librarians follow up with a personal email to invite the staff member to attend a library orientation briefing and tour. 218 new staff have attended library orientation briefings during the AY.

Talks

576 staff and students attended 8 talks organized by the Library. Most of the talks were for academic and research staff who are new to academic publishing. Some of the talks were of general interest to students.

<table>
<thead>
<tr>
<th>Year</th>
<th>Month</th>
<th>Talk Title and Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>Jul</td>
<td>Publishing Journal Articles - An Insider Speaks by Dr. Niambi O’Connor, Editor, RSC Publishing</td>
</tr>
<tr>
<td></td>
<td>Apr</td>
<td>Citations Matters: Realise Your Paper’s Full Citation Potential by Christine Low, Managing Editor &amp; Eddie Koo, Editor-in-Chief Asian Journal of Communication, Taylor &amp; Francis</td>
</tr>
<tr>
<td></td>
<td>Mar</td>
<td>-Surviving Peer Review &amp; Best Practices on Publication Ethics by Amanda Davis, Publishing Director, Wiley-Blackwell -Cultural Phenomenon in Taiwan Movie ‘Cape No 7’ by Association Professor J. Lo-fen, School of Humanities and Social Sciences</td>
</tr>
<tr>
<td></td>
<td>Feb</td>
<td>新闻与文学的爱恨情仇 by Ting Kheng Heng, Broadcast Journalist</td>
</tr>
<tr>
<td></td>
<td>Nov</td>
<td>Supporting Faculty Knowledge Production by Mary Lee Kennedy, Executive Director, Knowledge and Library Services, Harvard Business School</td>
</tr>
<tr>
<td></td>
<td>Oct</td>
<td>中国大陆中文图书出版情况介绍 by Zhang Hong Yuan, Assistant to the University Librarian of Wuhan University</td>
</tr>
<tr>
<td></td>
<td>Sept</td>
<td>Designing an ‘Unlibrary’ Insights &amp; Perspectives by Alvin Liu, Surbana International Consultants, Qin Wen Hao, National Parks Board, Cheong Yan Ling, DIC</td>
</tr>
</tbody>
</table>
Online quizzes and competition

To create better awareness and encourage the use of electronic resources, the Library partnered with several vendors to organize a number of online quizzes. A total of 2,908 staff and students participated in 16 quizzes during the AY.

![Fig. 23. Winners of the quizzes and vendors who sponsored the prizes](image)

Library Xpress

3 issues of the Library news bulletin, Library Xpress were published. Each issue is a mix of articles on news about the information world, tips on using databases and library resources and useful guides.

![Fig. 24. Library Xpress newsletter](image)

D. FACILITIES & INFRASTRUCTURE

1. Library renovations

Library spaces and facilities are popular with students as they provide much needed opportunities for group work as well as quiet study. Even though there are other reading rooms and facilities elsewhere on campus, the Library remains a focal point for study and work for many students. The Library constantly refurbishes and reconfigures library spaces and adds new equipment to cater to the changing learning needs of our users. Many instances of positive feedback from our users show the strong impact of our constant improvements to the facilities and ambience of our buildings. This section highlights some of the renovations and changes we have implemented during the AY.

![Fig. 25. Facilities in the Learning Commons - Learning pod with smart board](image)

Learning Commons at Lee Wee Nam Library

The Learning Commons, launched in Mar 2010 was conceptualised to improve the use of library spaces and ambience through the creation of a variety of conducive and collaborative spaces to meet the learning style of our students, the “millennial” generation. The computers, equipment and spaces are configured and designed to cater for group learning activities. These include 6 open and fully-equipped discussion pods, 4 x2-screen PC workstations, 4 x3-screen PC workstations, 3 touch-screen PC workstations, 1 recording room, 1 video wall and 3 digital touch screen newspaper kiosks.
**Instructional Commons**

The Media Resource Library at Basement 3 of Block N2 has been converted into an instructional area that will allow the library to increase the number of instructional classes. To facilitate changes and increased emphasis on interactive teaching and learning, the 3 rooms in Library Instructional Commons (LIC) are equipped with movable furniture to enable greater flexibility to accommodate different training styles and set ups.

**Renovation works and improvements in each library**

Refurbishing and renovation work was carried out in a number of libraries to improve the services provided and to create more space for the growing collection.

- **Asian Communication Resource Centre (ACRC) Library**
  AV Reserves collection shelving capacity has been increased by 60% to cater for the school’s increasing demand for AV resources.

- **Art, Design and Media Library (ADM)**
  The furniture for the AV viewing stations has been modified to cater for new AV equipment e.g. Blu-ray player requirements. The popular Database Access bench has also been extended to cater for more PCs and seating. The AV open-browsing shelving capacity has been increased by 25% to cater for the rapid growth in the AV collection. There is also more space for the expanding bound periodicals collection.
• **Business Library**
The AV and Reserves collections were integrated to optimise the use of common equipment. In response to student demand for individual study rooms, existing study rooms have been reconfigured to provide optimal capacity and a better user experience. Group discussion spaces are provided in the noisy zone while individual reading rooms are provided in the quiet zone.

• **Humanities and Social Sciences Library**
The air-conditioning system at the HSS Library was installed with a better dehumidifying unit after some parts of the collection were found to be infested with mould.

• **Chinese Library**
As the Chinese Library has reached its shelving capacity, preparation work commenced in May 2010 to reinforce the flooring for the purpose of replacing normal book shelves with a mobile compact shelving system to increase shelving capacity.

• **Lee Wee Nam Library**
The main entrance of the Library has been upgraded for a smoother, less obstructed and more integrated entrance cum exit.

The Lee Wee Nam Gallery has been created to consolidate the display of the memorabilia from Mr Lee Wee Nam as well as the bust. The original display case was at the former Research Assistance Desk. The artefacts had to be relocated due to the reconfiguration of spaces for the new Learning Commons at Level 2. The current periodicals collection was re-organised in terms of shelving display to encourage browsing through greater visibility.

Other improvement work included increasing the shelving capacity of the Science collection at Level 4 and absorbing the traditional Chinese medicine collection from the Chinese Library, which has already reached its shelving capacity.

3. **Technology infrastructure**
Rapid changes in information technology require libraries to constantly explore, adopt, plan and implement new technology to take advantage of new innovations. The Library Technology Group which is largely made up of librarians with good IT technical skills works closely with CITS and other libraries and divisions to coordinate all technological and system improvements to the Library infrastructure. This section highlights some of the useful enhancements and features which were implemented to serve our users better.
In Sep 2009, all 7 libraries were equipped with RFID book return chutes. This enables users to return and check in their borrowed books immediately, allowing them to continue to borrow up to their full loan entitlement.

600 computers in all the libraries were upgraded with updated software and plug-ins commonly used by students for their projects and assignments. With the new hardware, there has been a noticeable drop in technical problems logged.

The web based Facilities Booking System (FBS) was enhanced to achieve single-sign-on using the NTU network accounts. The enhancements also included booking of study room facilities at the Business Library and learning commons facilities at LWN Library. Users need not be at the Library to book these facilities as they are able to perform self-service booking, cancel or modify their bookings remotely.

The Learning Commons at LWN Library were equipped with a suite of technologies for users:
- LCD monitors and SMART boards for the Learning Pods
- Touch screen and multi-monitor workstations
- Audio and video recording facilities for the Recording room
- Video wall comprising four 46” LCD monitors with scheduled content
- Touch screen panels for users to flip pages and browse digital editions of newspapers

The Library Catalogue was enhanced with ‘LibraryThing for Libraries’ which provides web 2.0 features for a new user experience. This is a third party service which provides enriched information such as recommended titles, similar editions, tag clouds, patron reviews and a shelf browse feature.

ExLibris BX Recommender Service was implemented on the ezsearch service in September 2009. This feature automatically appears when a user retrieves an article from our databases and e-journal collection. It will recommend other relevant articles that are similar to what the user retrieved to alert him or her of other suitable documents.

Several additions to the Library home page were implemented, a new page on library facilities with a link to the booking system, introduction of “stamps” to highlight important library services, revamping and moving the Museum website to the campus content management system (CMS) on Microsoft Sharepoint and incorporating announcements of our library events in the email newsletter Campus Buzz to increase the channels for publicity to our students.

The information pages for the databases was enhanced with web 2.0 features such as embedded multimedia clips and ‘AddThis’ to enable sharing and bookmarking to social media tools such as Facebook and Delicious.

4. Organization of library materials

As part of the on-going effort to provide quality metadata via the Library Catalogue, a major exercise was carried out to review and amend authority records with the help of a vendor. Better authority records help to provide greater consistency in the name and subject headings in the Library Catalogue and help users to perform more comprehensive and accurate searches.

Fig. 35. Enhanced catalogue display using “The LibraryThing”
A major project was initiated during the year to build more than 30 vertical portals called subject rooms. Each of these subject rooms focus on providing comprehensive information and links to resources on a particular subject. For example, the subject room for Aerospace Engineering will provide links, guides, databases, e-journals, books, web resources and other useful tools and services on aerospace engineering so that users interested in this subject can have a one-stop portal to conveniently access them. All the subject rooms are expected to be completed by the beginning of 2011.

5. Blogs@NTU

The younger generation have grown up with and embraced social media as a way of life. Funded by the Cool Campus initiative, the Library led a cross departmental team, comprising of Library, CITS and CELT, to establish a programme, Blogs@NTU which coordinates the development of blogs campus wide. Blogs@NTU uses Wordpress MU. The aim was to leverage on new social media technology to support a social approach to learning, research and outreach. Blogs@NTU helped to set up several school blogs to assist them to reach out to target audiences and alumni so as to facilitate bonding and student recruitment. Several lecturers have created course blogs to encourage peer sharing and reflective learning. As the momentum gathers, the Library has been receiving requests from students, administrative staff and faculty to set up NTU blogs. In particular, Blogs@NTU designed the platform to connect to the myriad online communities in NTU and to

facilitate the discovery of student and research activities within the campus.

The main blog homepage connects users and communities by location, interest or popularity. All blogs are hosted internally and several privacy options are provided. Many attractive blog templates are available to suit different users and purposes. Even novice blog users will find it easy to get started. Launched in Jun 2010, the first phase will include blogs for Schools and Colleges, Research and Faculty, Admin Offices, Student Clubs and Halls.
E. MANAGEMENT

1. The University Library Committee

The University Library Committee (ULC) is a university-wide Committee chaired by the Senior Associate Provost to provide oversight on the direction and policies of the University Library system. ULC plays an important role in helping the Library align its plans and operations in support of the strategy and goals of the University. This is accomplished through approval and allocation of funds for procurement of library materials and by providing advice on academic and research needs of the university community.

The Committee met twice during the AY, on 13 Aug 09 and 5 Apr 10. The main items discussed in the agenda centred mainly on the provision of library buildings, approval of the Open Access Mandate proposals and endorsement of the library materials budget.

THE UNIVERSITY LIBRARY COMMITTEE
Chair: Prof Er Meng Hwa
Members and representatives
- Prof Schubert Foo (CoHASS)
- A/Prof Thirumany Sritharan (CoE)
- A/P Victor Yeo Chuan Seng (NBS)
- A/P Yoon Ho Sup (CoS)
- Mr Li Bo (Undergraduate student)
- Mr Chok Yew Keong (Graduate student)
- Mr Choy Fatt Cheong (University Librarian)
- Mrs Isabella Trahn, Secretary (Deputy University Librarian)

2. Organizational changes

The Library was organized into 5 groups as shown in fig. 38 (next page). The Scholarly Communication Group was created in Jan 2010 to develop an action plan to respond to changes in scholarly communication worldwide, particularly in the area of e-science, which is characterized by highly collaborative work and reliance on vast amounts of data. The Group will also work closely with Research Support Office (RSO) to help in the management of bibliometric reports. The Instructional Services Division was also moved to this Group for better synergy.

3. Student assistants

With increased funding from OAFA, the Library implemented an improved scheme for student assistant workers. The Library Student Assistant Scheme (LSAS) is more structured, systematic and holistic to dovetail with our Library staffing structure. Student assistants are critical to the operation of the Library and they perform a wide range of duties from supervising library facilities during after-office-hours opening to designing animations for library websites.

More students have been assigned complex work at higher pay levels. Training in basic customer service was also initiated during the year. The number of student assistants employed by the Library almost doubled over last FY to help meet the increased workload and to give library staff more time to implement new services and improve on existing functions. Currently over 220 students are on the payroll.
F. STAFF

1. Staffing situation

There are 103 staff members in the Library. Of these, 43 are professional librarians with Masters degrees in information studies/library science, 2 are museum curators, 8 are paraprofessionals with polytechnic diplomas while 50 are support staff. There was no increase in manpower positions during the AY.

Promotion

The following staff members were promoted during the year:

- Ms Samantha Ang to Deputy Director
- Ms Goh Su Nee to Senior Assistant Director
- Ms Phoebe Lim Choon Lan to Assistant Director
- Ms Shaniba Beevi d/o Zainuddin to Higher Executive Officer
- Ms Devavaram Stella to Executive Officer
- Mr Mas Romi Bin Mohamed Sukaimi to Higher Clerical Officer
- Mr Nurhazman Aziz, Ms Liu Yan and Mr Cheng Wei Yeow to Librarian

Staff resignations

The following staff left the Library on the date shown:

- 7 Aug 2009, Ms Joy Lynn Wheeler, Librarian, Library Technology Division
- 28 Feb 2010, Ms. Rashmi Lad, Head, Instructional Services Division
- 31 Mar 2010, Mr. Chew Weng Leong, Librarian, Library Technology Division
New staff

The following staff joined the Library on the date shown:

- 14 Sept 2009, Ms. Ng Mee Ling, Librarian, Library Technology Division
- 28 Nov 2009, Ms. Norlisa Binte Othman, Assistant Librarian, Bibliographic Services Division
- 1 Jan 2010, Ms. Liu Yan, Assistant Librarian, Bibliographic Services Division
- 8 Feb 2010, Ms. Janice Chia Ka Yin, Head, Instructional Services Division
- 1 Mar 2010, Ms. Ong Siew Chin, Librarian (part-time) Bibliographic Services Division
- 4 May 2010, Ms. Kala Devi d/o Pillay Valloo, Clerical Officer, Humanities and Social Sciences Library
- 1 Jun 2010, Ms Rashidah Binte Ismail, Library Officer, Humanities and Social Sciences Library
- 16 Jun 2010, Mr. Liu Ge, Eric, Librarian, Library Technology Division

2. Staff training & development

The Library places great importance on helping staff members to develop their knowledge, skills and expertise to enable them to provide the highest level of service to our users.

All professional staff members are required to gain sufficient professional development and training points to qualify as Practising Professionals (PP) awarded by the Library Association of Singapore. Members of staff who qualified are listed in the Association’s website. Many of them attend conferences locally and overseas to keep up-to-date on current developments in the Industry. Other Library staff also attend various training programmes provided by internal as well as external organizations.

There were 210 professional staff attendances at 86 local external events and 83 support staff attendances at 31 local external events. Internal library training is not included in these figures.

Participation at library and professional conference

25 professional staff attended 18 library and professional conferences during the year in Singapore and overseas.

<table>
<thead>
<tr>
<th>CONFERENCES AY/2009-10</th>
<th>DATES</th>
<th>No of STAFF</th>
<th>COUNTRY</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISES Inaugural Global Conference on Service Excellence</td>
<td>23-24 Jul 2009</td>
<td>2</td>
<td>SINGAPORE</td>
</tr>
<tr>
<td>Art Research Library &amp; Information Services (ARLIS) Conference</td>
<td>10-19 Jul 2009</td>
<td>1</td>
<td>UK</td>
</tr>
<tr>
<td>Northumbria International Conference on Library Performance Measurement</td>
<td>16-21 Aug 2009</td>
<td>1</td>
<td>ITALY</td>
</tr>
<tr>
<td>Technology for Education Conference T409</td>
<td>2-8 Aug 2009</td>
<td>1</td>
<td>INDIA</td>
</tr>
<tr>
<td>Workshop on Sinological Resources</td>
<td>11-22 Oct 2009</td>
<td>2</td>
<td>TAIWAN</td>
</tr>
<tr>
<td>Sirsi Dynix Conference</td>
<td>19-24 Oct 2009</td>
<td>1</td>
<td>AUSTRALIA</td>
</tr>
<tr>
<td>DSUG 09 (Dspace User Group Meeting)</td>
<td>12-17 Oct 2009</td>
<td>1</td>
<td>SWEDEN</td>
</tr>
<tr>
<td>Internet Librarian International</td>
<td>9-11 Oct 2009</td>
<td>1</td>
<td>UK</td>
</tr>
</tbody>
</table>
### 3. Conference papers and speaking engagements

- **Aug 2 2009**, **Ms Rashmi Lad** addressed the Karnataka State Library Association, Bangalore, India, on Information Literacy and the Work of the Instructional Services Division of NTU Libraries.

- **Aug 18 2009**, **Ms Isabella Trahn** presented a paper “Library Service Perceptions from a Small Island: Data Relevance Questions from a Singapore Academic Library” at the 8th Northumbria International Conference on Performance Measurement in Libraries, held in Florence, Italy.


- **Dec 17-18 2009**, **Mr Choy Fatt Cheong** delivered the keynote address “Approaches to Digital Libraries” at the Workshop on Digital Library organized by the Vietnam National University, Ho Chi Minh City.

- **Jan 13 2010**, **Mr Choy Fatt Cheong** presented a paper “Digital Library Services : Towards Mobile Learning” at the Seminar on E-books as Learning Resources in Chinese Libraries in Asia, organized by National Kaohsiung University of Applied Science at Kaohsiung, Taiwan.

- **Mar 11-12 2010**, **Mr Choy Fatt Cheong** delivered an invited paper “From Library Stacks to Library-in-a-Pocket: Will Users Be Around?” at the Academic Librarian 2 Conference, organized by Hong Kong Polytechnic University.

- **April 2-17 2010**, **Ms Goh Su Nee** presented a number of papers to audiences in Wuhan, China, during her tenure as Visiting Librarian at Wuhan University Library.

- **Apr 23 2010**, **Mr Choy Fatt Cheong** gave a talk to library staff of the City University of Hong Kong on “Development of Library strategic plan and implementation” on invitation by the University Librarian.
G. EXTERNAL RELATIONS

1. International Collaboration

The Library worked with a number of partners overseas in collaborative projects for mutual benefit as well as to contribute actively to regional development of the information profession. Some of these collaborations are highlighted below:

- The Library started a pilot programme in collaboration with WKWSCI to showcase student academic papers in the Outstanding Academic Papers Scheme (OAPS), an international project with participation from Tsinghua, Shanghai Jiao tong, City University of Hong Kong, University of Southern California and others to promote student academic writing.

In the first phase of the project 6 best works were selected and highlighted in the Library website and also in the Institutional Repository, DR-NTU.

- Mr Zhang Hong Yuan, the Assistant to the University Librarian of Wuhan University and an expert in Chinese book publishing who spent one month as Visiting Librarian in the Library gave several talks to staff and students and external parties.

- An online forum (on Ning.com) for sharing professional matters with the professional staff at TUM (Technical University of Munich) Library was established with conversations on quality, reference and document delivery amongst other topics.

- The Joint Seminar on e-Science in Hong Kong was successfully organized in collaboration with the Hong Kong Polytechnic University. Experts from Germany, Australia and Canada shared their insights on the development of e-science and their implication for libraries. It attracted more than 50 senior academic librarians from the region.

2. Visits by other librarians

The Library received 147 international professional librarian visitors during the reporting period. 31% were from Thailand, 22% from China, 11% from Vietnam and the rest (36%) from other countries.

3. Staff attachment

Three overseas librarians were attached to the NTU Library for 1 to 2 months during the year.

<table>
<thead>
<tr>
<th>Date</th>
<th>Name &amp; Position</th>
<th>Organization</th>
</tr>
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<tbody>
<tr>
<td>Oct 2009</td>
<td>Mr. Zhang Hong Yuan (Assistant to the University Librarian)</td>
<td>Wuhan University Library (China)</td>
</tr>
<tr>
<td>Mar 17-21 2010</td>
<td>Ms. Nhung Quynh (Librarian, Banking Institute)</td>
<td>Hanoi Polytechnic University (Vietnam)</td>
</tr>
<tr>
<td>May-Jun 2010</td>
<td>Mr. Song Denghan (Vice Head, Information Resource Division)</td>
<td>Wuhan University Library (China)</td>
</tr>
</tbody>
</table>

Ms Goh Su Nee, Senior Assistant Director, Bibliographic Services & Facilities Planning spent 2 weeks at Wuhan University Library as Visiting Librarian, in accordance with the current Memorandum of Understanding between the Library and Wuhan University.
4. Community work

The following staff members served on committees of various professional bodies:

- **Choy Fatt Cheong**, Board Member, IATUL (International Association of Scientific & Technological University Library); Chairman, Working Committee on Professional Development Scheme, Library Association of Singapore

- **Goh Su Nee**, Member, SILAS Steering Committee on RDA Implementation

- **Tan Leng Yan, Catherine**, Council Member and Chair of Business Development, Library Association of Singapore

- **Isabella Trahn**, Council Member and Chair, Training and Development Committee, Library Association of Singapore

- **Hazel Loh**, Member, Awards Committee, Library Association of Singapore

- **Frank Seah**, Member, Business Development Committee, Library Association of Singapore

- **Ong Juey Ming**, Secretary, PDS Working Committee, Library Association of Singapore

- **RamaRavikumar Ramakrishnan**, Member, Web Committee, Library Association of Singapore

- **Lina Wang**, Member, Programs and Social Committee, Library Association of Singapore

- **Balbindar Kaur**, Member, Publications Committee, Library Association of Singapore

- **Phoebe Lim Choon Lan**, Member, Membership Committee, Library Association of Singapore

- **Luo Biming**, Member, Programs and Social Committee, Library Association of Singapore