



IFLA National Libraries Section

STANDING COMMITTEE

73rd General Conference and Council, Durban

Agenda

1st MEETING, 11.30-14.20, Saturday August 18th 2007

Members present

Jasmine Cameron, Australia
Genevieve Clavel-Merrin, Switzerland (Secretary/Information Officer)
Antonia Ida Fontana, Italy
Zhan Furui, China
Magdalena Gram, Sweden
Andrew M.W. Green, United Kingdom
Kristiina Hormia-Poutanen, Finland
Galina Kislovskaya, Russian Federation
Colette O'Flaherty, Ireland
Ingrid Parent, Canada (Chair/Financial Officer)
Lucien Scotti, France
Vigdis Moe Skarstein, Norway
John Kgwale Tsebe, South Africa
Tiiu Valm, Estonia
Martyn Wade, Scotland
Vladimir Zaitsev, Russian Federation

Apologies

Martin Bossenbroek, Netherlands
Kai Ekholm, Finland
Victor Fedorov, Russian Federation
Graham Jefcoate, Netherlands
Zoran Krstulovic, Slovenia
Deanna Marcum, United States
Elisabeth Niggemann, Germany
Araceli Sánchez-Piñol de Anta, Spain

Absent

Osvaldo Avallone, Italy
Renée Herbouze, France
Evgeny Kuzmin, Russian Federation
Georgios Zachos, Greece
Celia Ribeiro Zaher, Brazil

Observers

Alenka Kavčič Čolić, Slovenia
Maria Inês Cordeiro, Portugal
Fariborz Khosravi, Iran
Ngian Lek Choh, Singapore
Irina Lynden, Russia
Chhoun Mony, Cambodia
Erland Kolding Nielsen, Denmark
Shafikullah Shafie, Malaysia
Ingiborg Sverrisdóttir, Iceland
Fadhilah Aini Yusof, Malaysia
Bin Wu, China

1. Opening of the meeting

The Chair convened the meeting at 11:35, presented the apologies and invited all present to briefly introduce themselves.

2. Adoption of agendas for SC I and SC II

The agendas were adopted

3. Approval of minutes from Seoul meetings (<http://www.ifla.org/VII/s1/annual/s1-SCminutes2006-1.pdf> , <http://www.ifla.org/VII/s1/annual/s1-SCminutes2006-1.pdf>)

The minutes were approved with thanks to Genevieve Clavel and Jasmine Cameron.

4. Results of elections

The Chair reported that 16 candidates stood for election to the 11 vacancies and thanked all who had participated. She welcomed the new and returning members and thanked those outgoing, presenting a certificate of appreciation in absentia to Victor Fedorov who had served the full two terms on the Standing Committee. The new list of Standing Committee members is annexed to the minutes.

5. Election of Chair and Secretary

The following were candidates for the position of Chair and Secretary:

- Ingrid Parent, Chair
- Jasmine Cameron, Secretary

The candidates were elected unanimously. The Chair thanked the outgoing Secretary, Genevieve Clavel, who expressed her appreciation at the excellent cooperation over the past four years.

6. Officers' reports

Professional Committee

Delegates must wear their badges at all times in the Convention centre and when boarding the shuttle buses that are available for transport to and from hotels and events.

Just over 3'000 delegates are registered, including 900 from South Africa, representing 120 countries.

Open meeting policy: the GB has adopted an open meeting policy, except for special circumstances (e.g. meetings in which the performance, pay or contracts of IFLA staff are discussed are closed, as are those in which statements of a controversial nature are prepared).

The following IFLA language centres have been opened:

- The IFLA Centre for Arabic Speaking Libraries and Information Institutions, based at the Bibliotheca Alexandrina, Alexandria, Egypt
- The IFLA French Language Centre for Africa, based at the Bibliothèque Centrale Université Cheikh Anta Diop in Dakar, Senegal
- The IFLA Russian Language Centre, based at the Russian State Library in Moscow, Russia

After IFLA's Regional Office for Africa had been hosted by the University Library of Dakar, Senegal, for some twenty years, it was closed at the end of 2006. After a call for interest among African members and consultation of IFLA's Africa Section's Standing Committee, The Library of the University of South Africa (UNISA) at Pretoria was selected to succeed Dakar.

IFLA vouchers: the exact number of vouchers in circulation is unknown. The GB has decided to recall all vouchers (October 2008) and re-issue them with an expiry date (2013). Then in future new vouchers issued will be valid for five years.

The IFLA president elect, Claudia Lux, will continue to maintain the Working Committee on the Information Society during her term of office and encourages members to attend the Presidential working session during the WLIC.

Following difficulties with the planned IT migration, it has been decided to set up a working group to advise HQ on requirements. Potential members need to know open source content management systems, and have experience moving from legacy systems. A small group of 5-7 members meet to review the scope document and advise on the company to be selected; familiar with web site development including multilingual and disabilities access requirements. IFLA can pay travel expenses for the meeting(s) but no per diem. Names of candidates for the group should be sent to Peter Lor by the first week of September 2007.

The Standing Committee members should be encouraged to use the new membership tool kit, now available on IFLANET, to help recruitment of new IFLA members.

The GB had considered the request for Standing Committees to hold only one meeting per conference during a non-election year. It is permitted, but depends on the ability of the SC to carry

out all their business in one meeting and should be discussed in the sections. The point will be discussed at the second SC meeting.

Financial report

The Section reported no expenses for the previous year. A request was made for project money to set up a list of national libraries. The Professional Committee did not approve the request and asked for more information on the project and its potential benefit to libraries other than national libraries.

Section Review

The Chair and Secretary responded to a questionnaire about the activities of the NL section: no formal reply was received but it seems that the Section's structure and activities are not in question. The general outcome of the Section review is a proposal to change the structure of the divisions: all are encouraged to attend the special meeting on August 19th to discuss the proposals.

[Strategic Plan]: moved to meeting 2

7. Information activities

Newsletter, list and leaflets

The Secretary reported that two issues of the newsletter were published in the past year and thanked all those who sent in items and photographs. She encouraged all to use the discussion list. After the adoption of a new strategic plan, the section leaflets will be updated and members are encouraged to translate them.

Representation at IFLA Booth

After studying the impact of section representations at the IFLA booth, HQ has decided to stop this activity. The booth remains but there is no call for representatives to attend.

8. Review of programmes at Durban and procedure for selecting papers to be published

The Chair reminded all that the National Libraries' session is on Sunday, with four papers from four continents. Ian Wilson (LAC-BAC) and Lise Bissonette (BNCQ) are unable to attend, Ingrid Parent and Hélène Roussel will replace them.

13.45-15.45, Sunday 19th August, National Libraries: The future of national libraries: convergence and partnerships

- New institutions, new landscapes: two models of convergence in Canada / IAN WILSON (Library and Archives Canada, Ottawa, Canada) and LISE BISSONNETTE (Bibliothèque et Archives nationales du Québec, Montréal, Canada)
- Managing National Libraries in an interconnecting future: insights on an inclusive reference service and networking - the Singapore experience / FAUZIAH SOERATMAN (Research & Service Innovation, National Library of Singapore), NGIAN LEK CHOY (National Library of Singapore, Singapore) SOH LIN LI, (INVENT, National Library Board, Singapore, Singapore)
- From beer halls to public library: the story of Naivasha Community library, Kenya IRENE MUTHONI KIBANDI (Kenya National Library Service, Nairobi, Kenya)
- Webarchiving Internationally: Interoperability in the future GRETHE JACOBSON (Danish Royal Library, Copenhagen, Denmark)

The section co-sponsored two other sessions:

10.45-12.45, Monday 20th August, Bibliography with National Libraries and Classification and Indexing: Re-thinking national bibliographies in the digital age

- The importance of national bibliographies in the digital age / INGRID PARENT (Library and Archives, Canada, Ottawa, Canada)
- The new "Guidelines for national bibliographies in the digital age." / MAJA ZUMER (University of Ljubljana, Ljubljana, Slovenia)
- More wine, not enough bottlers: selection and description of materials in national bibliographies / ALAN DANSKIN (British Library, London, UK) and BEACHER WIGGINS (Library of Congress, Washington USA)
- Best practices of indexing in national bibliographies / FRANÇOISE BOURDON (Bibliothèque nationale de France, Paris, France) and PATRICE LANDRY (Swiss National Library, Berne, Switzerland)

10.45-12.45, Tuesday 21st August, National Libraries with ICABS and Information Technology:

National libraries and resource discovery strategies - local, national and global

- Resource Discovery at the British Library: New Strategic Directions / CAROLINE BRAZIER (The British Library, Boston Spa, UK)
- Rapid and easy access: finding and getting resources in Australian libraries and cultural institutions / PAM GATENBY (National Library of Australia, Canberra, Australia)
- The European Digital Library - a resource discovery strategy for libraries, museums and archives / ELISABETH NIGGEMANN (Deutsche Nationalbibliothek, Germany)
- Libraries 2.0 and user-generated content: what can the users do for us? / PATRICK DANOWSKI (Staatsbibliothek zu Berlin, Berlin, Germany)

A workshop for national libraries in Africa is planned for Thursday. John Tsebe explains that its objective is to mobilise national libraries in Africa to work together, and discuss the creation of a regional group such as CENL or ABINIA.

The procedure for selection of papers for IFLA journal has been changed in order to leave room for unpublished papers. The number of papers has been reduced to one per division: until now, because of the high number of papers already presented at WLIC the leading indexing and abstracting services have not include IFLA journal in their services. Galina Kislovskaya and Kristiina Hormia-Poutanen volunteered to propose a paper to submit to the Division.

9. Hearing on professional structure review Sunday 19 August, 11.45-13.30, comments and questions

The Chair summarised the main changes proposed:

- reduction of the number of divisions from 8 to 4 in order to reduce bureaucracy, improve communications
- Division Chairs are no longer simultaneously the Section Chairs
- Sections need 50 members to be continued (NL section has 161). If the number is not reached within 2 years a section will be disbanded, merged with another or changed to a special interest group attached to a section. Discussion groups will be disbanded or changed to special interest groups
- Standing Committees need a minimum of 10 members

After a short discussion, it was clear that the consensus was that the SC welcomed the changes.

10. Update on performance measurement: Roswitha Poll (at 13:30)

Roswitha Poll presented the ISO project on performance indicators for national libraries to the SC (see annexes 2 and 3 to the minutes) and asked that feedback and examples be addressed to her at Roswitha Poll [pollr@uni-muenster.de]. She informed the SC that a new EU project to measure digitisation activities has been started (www.numeric.ws) and encouraged members to send any information on similar activities to numeric@ipf.co.uk

Clarification was requested on elements A1 and A2.

A1 aims to measure the percentage of legally required material deposited and acquired (not all national publications).

A2 measures the efficiency of a library in implementing legislation.

In response to a question concerning measurements for libraries with dual functions (e.g. national and university) Roswitha Poll clarified that indicators should just be used to measure the activities belonging strictly to the national library activities and agreed to add some text explaining that some national libraries also have other activities that are not measured using the indicators.

A request was made to specify more clearly the scope of rare material (B2)

In E: Digitization, digitally born material (e.g. web sites) is not included. Roswitha Poll agreed to indicate this to the workinggroup and asked for examples of web pages archived from E K Nielsen (netarchive.dk).

SC members expressed the need for libraries to indicate the methodology used to acquire indicators in order to avoid some comparisons or conclusions that might not be relevant. Roswitha Poll indicated that a rationale is available for each indicator and may be seen when the draft is circulated at the end of 2007.

On behalf of all SC members and observers, the Chair thanked Roswitha Poll.

11. CDNL

The Chair reported that unfortunately the CDNL Chair, Penny Carnaby, could not attend the SC meeting but that the SC Chair would attend the CDNL and that the Chairs and Officers would meet to discuss areas of cooperation. SC members strongly supported the need for the two groups to be complementary and to discuss ways to avoid duplicate effort, and share strategies.

12. Registry of national libraries on Wikipedia / National Libraries interactive website: short presentation by Suzanne Gyeszly

Suzanne Gyeszly presented the planned website documenting national libraries www.nationallibraries.org and asked SC members to check and contribute data for their own institutions. The SC expressed its appreciation of the work and Chair thanked her for this initiative and asked all to look at the site. She reminded the SC that other lists exist including an IFLA list, now outdated but to which IFLA members will be able to add when the new site has been developed. There is also a list on Wikipedia that libraries could check and update [but beware of conflicts of interest http://en.wikipedia.org/wiki/Wikipedia:Conflict_of_interest]. CDNL also has a list of members but not all information is public. It was agreed that the Chair resubmit the previous year's request for project money to collate and maintain a list with more information on the benefits for all libraries

13. Any other business

There being no other business, the meeting was adjourned at 14:20

Genevieve Clavel / August 28th 2007

Annexe 1: Standing Committee members

Martin Bossenbroek, Netherlands
Jasmine Cameron, Australia (Secretary/Information Officer)
Genevieve Clavel-Merrin, Switzerland
Antonia Ida Fontana, Italy
Zhan Furui, China
Magdalena Gram, Sweden
Renée Herbouze, France
Kristiina Hormia-Poutanen, Finland
Galina Kislovskaya, Russian Federation
Deanna Marcum, United States
Elisabeth Niggemann, Germany
Colette O'Flaherty, Ireland
Ingrid Parent, Canada (Chair/Financial Officer)
Araceli Sánchez-Piñol de Anta, Spain
Lucien Scotti, France
Vigdis Moe Skarstein, Norway
John Kgwale Tsebe, South Africa
Tiiu Valm, Estonia
Martyn Wade, Scotland
Vladimir Zaitsev, Russian Federation

ISO Technical Report 28118: Information and documentation - Performance indicators for National Libraries

Report 8/2007, IFLA Section National Libraries
Roswitha Poll

The project:

- ▶ Proposal of new work item June 2006
- ▶ Accepted September 2006
- ▶ First meeting January 2007
- ▶ Second meeting May 2007
- ▶ Next meeting November 2007
- ▶ Committee draft (CD) for voting planned end of 2007

The working group: ISO TC 46 SC8 WG 7

- ▶ 12 members and 2 guests
- ▶ 11 countries cooperating (Belgium, Canada, Finland, France, Germany, Japan, South Africa, Spain, Sweden, Switzerland, UK)

Goals of the project

- to cover all tasks of National Libraries
- to use existing indicators where applicable, especially from ISO 11620
- to collect additional indicators from National Libraries' websites (e.g. from service level agreements)
- to describe and test new indicators if needed
- to add examples of results for indicators wherever possible

List of performance indicators for National Libraries

(32 indicators)

Service, activity or Aspect measured	Performance indicator	ISO 11620 (adapted)
A. Building the national collection	A.1. Percentage of national publications acquired by the National Library	
	A.2. Percentage of required national imprint titles in the collection	B.1.1.2
B. Making the collection accessible: Cataloguing	B.1. Percentage of new entries in the national bibliography that refer to publications of the last 2 years	
	B.2 Percentage of rare materials catalogued - of those in web catalogues	
C. Making the collection accessible: Quick and easy access	C.1 Median time of document processing	B.3.2.2
	C.2 Shelving accuracy	B.1.2.1
	C.3 Median time of document retrieval from closed stacks	B.1.2.2
	C.4 Speed of interlibrary lending	B.1.2.3

	C.5 Direct access from the homepage	
D. Making the collection accessible: Usage	D.1 Usage of foreign publications acquired during the last 3 years	
	D.2 Cost per download per database	B.3.1.3
	D.3 Public seating occupancy rate	B.2.3.1
	D.4 Number of attendances per cultural event	B.2.2.5
	D.5 User satisfaction	B.2.4.2
E. Making the collection accessible: Digitization	E.1 Percentage of documents digitized per year per 1000 titles in the collection	
	E.2 Percentage of documents digitised per special collection	
	E.3 Number of content units downloaded per document digitized by the library	
F. Offering reference services	F.1 Correct answer fill rate	B.3.3.2
	F.2 Speed of reference transactions	
	F.3 Percentage of information requests submitted electronically	B.2.2.2
G. Building potentials for development	G.1 Percentage of library staff providing electronic services	B.4.2.1
	G.2 Number of attendance hours at formal training lessons per staff member	B.4.2.2
	G.3 Percentage of library means received by special grant or income generated	B.4.3.1
	G.4 Percentage of staff in national and international cooperation and projects	
H. Preserving the collection	H.1 Percentage of the collection in stable condition	
	H.2 Percentage of all materials needing preservation treatment that received preservation treatment	
	H.3 Percentage of all materials needing mass preservation treatment that received mass preservation treatment	
	H.4 Percentage of the collection in appropriate environmental conditions	
I. Managing efficiently	I.1 Staff costs per title catalogued	
	I.2 Staff costs per loan	B.3.1.1
	I.3 Employee productivity in media processing	B.3.3.4
	I.4 Employee productivity in lending and delivery services	

C. 5 Direct access from the homepage

Background

Most libraries today offer information about their services and access to their electronic resources and services via their website. This is especially important for national libraries, as primarily they do not serve a local, but a national and international clientele, and therefore remote access to their services will be a crucial issue.

The quality of a library website is determined by its fitness for use. Contents and structure, language and design, navigation tools and accessibility should reflect the needs and information seeking behaviour of the library's population to be served. All these issues taken together constitute the "usability" of the website. Usability is generally defined as "the extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of use" (ISO 9241-11, 1998).

The usability of a website can be evaluated with different methods:

1. Evaluation without user participation:

In a "heuristic evaluation" a small group of experts evaluates the website, based on the

principles of usability. A list of 10 such "heuristics" is shown by Nielsen (Nielsen, 1994). In a "cognitive walk-through" experts construct a "user scenario" and perform tasks of an imaginary user.

2. Evaluation with user participation:

Web surveys and focus groups try to assess user satisfaction and problems in using the website. For national libraries, online surveys sent to special user groups (e.g. libraries or publishers) might be most effective. It would be more difficult for national libraries to use tests or observation methods, as their website visitors will mainly consist of remote users. Transaction logs could help to identify most-used pages, ways of searching, etc.

In national libraries it is more difficult than in academic or public libraries to assess user needs, as they do not serve a specified homogeneous population, but have to consider the interests of considerably different client groups: the general public, researchers, libraries, publishers, and visitors of the library premises. These groups will have different interests and purposes when accessing the library website. While visitors might seek first for opening hours, ways to the library, and registration options, researchers will want to access the catalogues and electronic resources or the reference service, librarians might seek for central bibliographic services or document delivery, and publishers will probably be most interested in legal deposit regulations and services like standard numbers or cataloguing in publication. Websites of national libraries should therefore offer a "sign-posting" for the main user groups. This should consider at least researchers, visitors, librarians/professionals, and publishers, but could also include groups like the media (press), business firms, friends and supporters of the library, or disabled persons.

If English is not the native language of the country, it will be essential to offer an English version of the website, as the tasks of national libraries include the international presentation of the cultural heritage and international cooperation.

The homepage is the most important part of the website, the virtual entrance to the library. The design and contents of the homepage will be decisive for the success of the website visit. High-priority issues should be either visible directly on the homepage or accessible with at best only one click or key stroke. Therefore, quick access to the most-used services and resources via the homepage was chosen as indicator for website quality. It is an indicator that is applicable for every library homepage, easy to use, and with an informative content that enables the library to directly take steps for ameliorating access via the homepage.

Definition of the indicator

The availability of the most-used resources and services via the homepage of the library's website, measured by the number of clicks necessary and the comprehensibility of the terms used.

The home page is the page which serves as the visual unit that is displayed when accessing the library's website. It may appear after the redirection through an entry page.

Aims of the indicator

To assess whether the homepage leads directly or very quickly, with adequate terminology, to the most frequently needed information and the most-used services and thus serves as a virtual entrance to the library. Speed is measured by the number of clicks necessary to find the services.

Comparison will only be possible between libraries of similar mission and clientele, if a standardized set of resources and services is evaluated.

The indicator does not evaluate the design or navigation of the website or the overall contents of the website

Method

The method used is a kind of cognitive walk-through. A small group of experts simulates user behaviour when seeking for specified information via the homepage.

The first step is to define the services and resources that are most important for the library's clientele. This includes the decision what terms would be adequate and comprehensible to users when describing the services and resources on the homepage

National libraries are unique institutions whose mission and goals are influenced by national political issues. Their tasks and user groups may differ. But there are certain main tasks for national libraries (see the mission statement...) and certain services and resources that will be offered by most national libraries.

The set of main issues for the homepage of national libraries described here should be seen as a prototype that could be adapted to the special situation of a library. Information has been added as to the user groups that would be most interested in each of the issues.

The list was defined after searching 30 websites of national libraries. The survey showed that most national libraries group their information on the homepage as to:

- about the library
- collections
- catalogues
- services/use

But most libraries show more differentiated information directly on the homepage or when clicking on the broader group. "Catalogues" for instance might be differentiated into general catalogue, special catalogues, national bibliography, and external catalogues.

Methods for searching the website like search functions, FAQ (frequently asked questions), sitemap, or A – Z have not been included in the list, as the question is whether the most-used resources and services can be found directly, not via search functions.

15 main issues	Possible other terms	Possible general headings	Interested user group
Mission and legal bases	mandate, main commitments, role of the library, organization and policy, collection policy, legal acts, statutes, duties of the library	about the library	all; especially publishers and libraries
Way to the library	address, location, visit us, how to reach us, map to library	about the library, contacts, directions	visitors

Opening times	opening times, library hours	visit us	visitors
Online catalogue/s	catalogue/s, OPAC, search (with explanation)	how to find..., finding information, research aids	all
National bibliography		central bibliographic services, catalogue/s, how to find..., finding information, research aids	all
Lending services	circulation, loan service, borrowing, how to get a book	use, services	local users, visitors
Reference service	e-reference, reference questions, enquiries, ask a librarian, ask the library	information services	researchers, librarians
Registration for use	user card, library card, registering, membership, how to join	conditions for access, use, services	local and remote users
Interlibrary lending and document delivery	ILL, document supply, electronic delivery	how to get a book, how to get an article, services	local and remote users, libraries
Reproduction services	copying services, photographic service, digitization service, microfilming service	use, services	local and remote users, libraries
Electronic collection	electronic library, electronic resources, digital resources, online resources, documents available online	collection/s, find a journal or article, electronic services, online services	remote users, librarians
Subject areas	subject guides, subject resources, browse by subject, information resources by theme	collection/s, how to find..., finding information, research aids	researchers
Standards	standard numbers, ISSN, ISBN ...	services	publishers, librarians
User education	user training, courses, teaching, library tours, library instruction	help, services	visitors, researchers
Projects	cooperation	Expertise and development	libraries
News	events, forum, exhibitions		all

As a second step, the experts test the homepage as to the speed of finding the services/resources and as to the adequateness of the terminology to users. The rating could be like this:

Service/resource		Clicks	Points
	Direct information on the homepage, e.g. address, opening times, search box for the catalogue	0	10
	unmistakable term on the homepage	1	8
	unmistakable term on the homepage	2	6
	unmistakable term on the homepage	3	4
	unmistakable term on the homepage	> 3	0
	ambiguous term on the homepage	1	2
	ambiguous term on the homepage	> 1	0

Only part of the “main issues” will appear directly on the homepage, but they should be only “one click away”. It is irrelevant for the rating whether the topics appear on the homepage in systematic order or in a “quick links” list.

Terms named “possible general heading” in the lists above and leading to the requested information are rated as adequate language, but the necessary clicks from the general headings should be counted..

The availability of the most-used services/information is then calculated by dividing the total number of points by the number of main issues on the list

Interpretation and use of results

A high score would be considered as good. The following actions could be taken in order to achieve a better score:

- Put a link to the most-used services directly on the homepage.
- Change library jargon into user-friendly language: Task-based links like “find books” or “find articles” have proved to be easier to understand than terms like “databases” or “e-journals” (Kupersmith, 2006a). Users probably would not click on a link if they do not know what to make of the term.
- Avoid abbreviations the users are not familiar with, e.g. “ILL”.
- Use a consistent set of terms, e.g. not “periodicals” beside “e-journals”.
- Evaluate frequently asked questions and place the topics on the homepage. If a question occurs frequently (e.g. “How can I become a user” or “Where can I find articles”), it may be more effective to have a link on the homepage than to refer the user to “FAQ”.

If the library sees that it takes too many clicks to find the main services, or that the services are not clearly labelled, the indicator could be followed up by a user survey in order to find more details about the usability of the homepage.

The problem in offering quick access to the main services via the homepage for all user groups will be that the homepage must on the one side offer all relevant information, on the other side must not be overloaded and confusing. This can be a tightrope walk between conflicting wishes. Information on the homepage should be limited to the necessary.

Examples and further reading

Literature on library website design and usability tests is extensive, and several projects in academic libraries have concentrated on the effort and time needed to find specified topics via the homepage.

The number of clicks necessary to find an information, starting from the homepage, was counted in a project at the State University of New Jersey, US (Jeng, 2005, p.104). Students were given specified tasks, and the study measured as well the time needed as the number of keystrokes, clicks, or movements necessary for completing the task. As the tasks included finding certain journal or encyclopedia articles, students on average needed between 2 to 4 minutes and between 7 to 13 clicks.

The “minimum number of moves” to complete a task was also counted in a usability study at Louisiana State University Libraries (Robins and Kelsey, 2002). The study differentiated between “correct” and “incorrect” moves, where 65% were rated as correct moves. An interesting result was that for most of the assigned tasks the project staff identified more than one way to navigate to the desired information. “In some cases, it was possible to navigate various paths from the libraries' home page to the desired page and still complete the task in the minimum number of moves.”

A usability test in the University of Hull, UK, graded the test results by the number of attempts made to find a specific resource or information (Holland, 2005). 49% of the participants found the information at the first attempt. Library jargon was found to be the main barrier.

A study at the University of Calgary Library, Canada, using the “think aloud” method with 10 test questions, asked also for users' comments on the usability of the website (Hayden et al., 2004). One of the results was that the participants wanted “the most important and most

commonly used resources accessible with one click from the first page, ideally from a page that is tailored to their subject needs”.

Hayden, A. et al., (2004), University library website usability study report, University of Calgary Library website usability study team, available at: <http://hdl.handle.net/1880/43524>

Holland, D. (2005), Practical experiences of using formal usability testing as a tool to support website redesign, *SCONUL Focus* 36 Winter, pp.31-35

ISO 9241 (1998), Ergonomic requirements for office work with visual display terminals (VDTs) -- Part 11: Guidance on usability

Jeng, J. (2005), Usability assessment of academic digital libraries: Effectiveness, satisfaction, and learnability, *Libri* 55, pp. 96 – 121

Kupersmith, J. (2006), Library terms that users understand, available at: <http://www.jkup.net/terms.html>

Nielsen, J. (1994), 10 usability heuristics, available at: [http://www.useit.com/papers/heuristic/heuristic_list.html](http://www.useit.com/papers/ heuristic/heuristic_list.html)

Robins, D, and S. Kelsey (2002), Analysis of web-based information architecture in a university library: Navigating for known items, *Information Technology and Libraries* 21,4, pp.159-170, available at: <http://www.ala.org/ala/lita/litapublications/ital/2104robins.htm>

Genevieve Clavel / 28th August 2007, revised October 1st