Students' natural use of language

for academic library concepts

by

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IMPORTANT DISCLAIMER

with respect to a MLIS Research Project (INFO 580)

"Students' natural use of language for academic library concepts"

(hereafter referred to as 'The MLIS Research Project')

being undertaken by

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Abstract

Library jargon is a barrier to users in their interactions with library staff and systems. Comprehension testing has shown that many students do not understand common library jargon. Usability testing and preference testing have successfully sought user feedback in order to develop more user-friendly interfaces.

In this study into language preferences, a questionnaire was based on 20 concepts taken from New Zealand university library websites. Participants were asked to label these concepts with terms of their own choosing. New Zealand university summer school coordinators were asked to forward a URL for the web-based questionnaire to students in their classes. Fifty valid responses were received.

Concepts that were central to students' library experiences were labelled with as few as 4 different terms, while less central concepts were labelled with more than 30. Library jargon was an important influence on students' choice of terminology. For many concepts, however, students used terms that had not been found on library websites.

Further research is recommended into a broader range of concepts, and into whether user-derived terminology outperforms library jargon in whole-library context usability testing.

Keywords: library jargon, preference testing, academic libraries

1. Introduction

Academic libraries are increasingly concerned about the loss of users to information competitors which may not provide resources as authoritative as libraries can. Many researchers have seen this decline in library usage as a problem caused by unsuccessful communication between library and users. Communication plays a role in how students use, or fail to use, all academic library services, including websites, library guides, signage, reference interviews, and library training.

The problem is most concretely exemplified by library jargon, which, despite performing useful functions, can also confuse or alienate the user (Jackson, 1984, p. 488). While some studies have investigated students' comprehension of this jargon (Chaudhry & Choo, 2001; Hutcherson, 2004; Naismith & Stein, 1989; Redfern, 2004), little is known about the language students would prefer in its place. Discovering the language that students themselves would naturally use would help libraries describe their services in more user-friendly ways.

1.1. Purpose statement

The purpose of this study was to investigate the natural use of language to describe a range of library-related concepts by summer school students at New Zealand universities. Such user-derived terminology could be used to improve communication with students, in order to create a user-centered academic library where students can feel comfortable searching for information.

The study focused on two questions:

- What is the range of natural use of language by students in labelling library-related concepts?

- To what extent are terms used by students similar to terms used by academic libraries, and to what extent are they different?

1.2. Definitions

In this report, 'natural use of language' will refer to the words and phrases that students choose to use, or create, without cues from the researcher or influence from library jargon.

'Library jargon' will refer to terminology used by libraries to refer to library-related concepts.

2. Literature review

2.1. A brief history of library jargon

Some of the earliest articles about library jargon were simple glossaries. In the jubilee year of the American Library Association, Compton (1926) listed three pages of common library terminology and definitions. Fifteen years later, Cook (1941) contributed a two-page supplement, explaining that this jargon was most often used in non-public service departments, and particularly between departments. These articles were both targeted to philologists, whereas later works such as Shapiro (1989), along with fuller glossaries such as the *ALA Glossary of Library and Information Science* (Young & Belanger, 1983), were aimed at library professionals. None of these works discussed the impact of library jargon on users.

In the meantime, other authors began to take positions on the desirability or otherwise of jargon. Crawford (1987) pointed out that library jargon has three functions: firstly, to increase precision in allowing librarians to talk about concepts for which no specific word exists in standard English; secondly, to allow abbreviation, saving time in both speech and writing; and thirdly, to exclude those not familiar with the jargon. Crawford maintained that the first two functions are both useful and important. The third, however, is an unwelcome side-effect, which excludes users and colleagues alike.

Without condemning the use of jargon for these first two functions, Pemberton and Fritzler (2004) addressed its exclusionary nature. They demonstrated that library jargon can be as impenetrable to students at academic libraries as MTV and physics

jargon are to many librarians. They then asked why students should be burdened with learning library jargon when they are already bogged down with new terminology in their classes (Pemberton & Fritzler, 2004, p. 155).

2.2. Theoretical approaches

2.2.1. Library anxiety

Pemberton and Fritzler's (2004) concern about the burden of library jargon on students is reminiscent of the literature on library anxiety, introduced to the field two decades ago by Mellon (1986). In this qualitative study, Mellon found that 75-85% of students describe their initial feelings about the library in terms of fear or anxiety. She quotes one student as writing:

> When I first entered the library, I was terrified. I didn't know where
> anything was located or even who to ask to get some help. It was
> like being in a foreign country and unable to speak the language.
> (Mellon, 1986, p. 162)

Although this metaphorical reference to language is not unique, the field of library anxiety has produced little literature discussing library jargon itself. The Library Anxiety Scale (LAS) developed by Bostick only addresses this issue tangentially: one question reads, "The directions for using the computers are not clear." (Onwuegbuzie, Jiao, & Bostick, 2004, p. 312)

Language qua language, by contrast, has been investigated on a number of occasions. In a study of students at two American universities, Jiao and Onwuegbuzie discovered that native language was an important influence on three

of the five factors they studied: barriers with staff, affective barriers, and mechanical barriers (Jiao & Onwuegbuzie, 1997). On the other side of the world, Shoham and Mizrachi (2001) ran a study in eight teachers' colleges throughout Israel, modifying the LAS for local conditions. As English is required to access many library resources, they expected language to be an important factor in library anxiety in Israel. Indeed they found that language dominated over the other six factors studied, and that "for Israeli B.Ed. students the most debilitating library task is searching and using English-language materials and resources." (p. 307)

Although these authors did not study library jargon specifically, it is reasonable to assume that jargon would only increase the effects of the language barrier. Indeed, Kamhi-Stein and Stein (1999) write that "[f]or [second-language] students, library-related terminology is a third language" (p. 174). Surely, then, for students whose first language is English, it could be said that library jargon is a second language – with all the implications for library anxiety that go with that.

2.2.2. Linguistic and communication theories

If the issue of library jargon is seen in terms of communicating with users, approaches from the linguistics and communications fields may also be illuminating.

A fundamental tenet of modern linguistics is the descriptive approach to language and communication. Whereas the prescriptivist view focuses on how a perceived authority claims language should be used, the descriptive approach is interested in discovering and understanding how language is used naturally (Finegan, Besnier, Blair, & Collins, 1992, pp. 424-425). This approach therefore relies on intuitive judgements by native speakers, and frequently requires collecting samples of

language as naturally spoken.

In both linguistic and philosophical fields, communication is widely considered to involve a speaker (in this context, library staff), a message (library concepts), and a listener (library users). Following this model, Winograd (1977) discusses issues in both the design and the comprehension of an utterance. In order to comprehend an utterance, a listener attempts to establish points of correspondence between the speaker's and the listener's world models, and draws inferences about the state of the speaker and the intended message. The message communicated is influenced among other factors by the listener's own knowledge, and may be understood only partially or not at all as intended.

2.2.3. User-centered theory

Budd (1995) takes a different approach from Winograd's (1977), but reaches a similar conclusion. He employs the reader-centered theory of literary criticism as a metaphor for a user-centered library theory. In this manner, the library is a whole, a text which the user attempts to "read" and interpret.

> The key here is that just because the library is a product of a
> particular intention, a determinate interpretation does not
> necessarily follow that intention. For one thing, between ideation
> and expression intention may be lost, at least partially. For another,
> the creator's intention is not the only one at work. (Budd, 1995, p.
> 491)

According to Budd, part of the reference librarian's job is to act as a mediator, or

translator, between the library and the user. Ideally a librarian would do this based on knowledge of the library and exploration of the user's point of view. Instead, however, the librarian presents another verbal "text" which is sometimes no easier for the user to interpret (p. 494).

The practical relevance of the user-centered approach to libraries is further developed by B. Allen (1996), who notes that students who have no trouble using ATMs without two-hour training sessions remain perplexed by OPACs even after training. It is not the fault of the system's complexity, Allen says, but rather that it has not been designed from a user's perspective. Libraries have traditionally been data-centered, and typically use the language of experts, which is opaque to users. This forces users to adapt their tasks and their language to the system. Allen argues that library systems should be user-centered first and data-centered only second, and that they should be designed to focus on the user's needs, the tasks the user performs, and the resources the user employs towards those tasks.

2.3. Research studies

Three broad types of study bear relevance to the subject of library jargon. Some researchers have focused on testing users' understanding of library jargon. Others have focused on testing websites for usability, and drawn conclusions relevant to jargon along the way. A third, smaller, group have engaged in asking users directly what terms they would prefer to be used. All three strands of research illuminate the subject in their own way.

2.3.1. Jargon comprehension testing

Most of the research focused on library jargon has been aimed at testing users' comprehension of library terminology. Typical results were found in part of a University of Canberra Library survey about natural language subject keywords in a thesaurus (Redfern, 2004). 20 students of all levels were asked to identify the terms "search term", "subject heading", "descriptor", and "keyword". On average, 52% of answers were correct, and 48% incorrect. 80% of the students did not understand "descriptor", and 15% did not even understand an apparently simple term such as "keyword".

Redfern's methodology used open-ended questions, but most other studies have used multiple-choice tests. In an influential study, Naismith and Stein (1989) administered a multiple-choice test based on jargon taken from reference interviews and popular library handouts. Correct answers were selected from the 1983 *ALA Glossary of Library and Information Science*, while incorrect answers were chosen from a sampling of freshmen's answers, or created where necessary. 100 freshman English students at the Carnegie Mellon University Libraries took the test, and, as in Redfern (2004), 48.7% of questions were answered incorrectly.

A similar study was carried out by Chaudhry and Choo (2001), using jargon extracted from email reference communications. Their respondents were users of the National Reference Library of Singapore, and acquaintances of staff of the Library Support Services of the National Library Board of Singapore. They received 40 responses, a response rate of 12%. More promisingly than Naismith and Stein's (1989) results, Chaudhry and Choo found that 77% of answers were correct. They

acknowledged, however, that a number of their clients are frequent users of the library. It is also possible that Chaudhry and Choo's methodology allowed a self-selection bias towards respondents more comfortable with the jargon. Whether or not these were factors in the results, Chaudhry and Choo pointed out that 65% of the participants had difficulties with at least one of the common terms.

A survey at California State University has more closely mirrored Naismith and Stein's (1989) results. Hutcherson (2004) investigated a range of common library jargon with two different sets of multiple-choice questions. 297 first- and second-year university students responded, and 62.3% of all answers were correct. The results were comparable between the two sets of questions used in the study, and were also similar to the results found in Naismith and Stein.

From his results, Hutcherson (2004) distinguished three broad groups of terminology: commonly used terms, library- and computer-specific terms, and familiar words with special meanings in the library field (such as abstract, authority, citation, precision). Commonly used terms mostly had high levels of recognition, whereas library- and computer-specific terms did not. As for the third group, Shapiro (1989) had also pointed out that "[t]he vocabulary of the profession consists for the most part of words of common meaning slightly adapted to a specialized library usage" (p. 97). As an example of such terms causing users difficulty, Naismith and Stein write that, familiar with the concept of a traffic citation, "the majority of subjects, forty-four, defined citation as 'a notice of overdue library materials.'" (1999, p. 551)

Most recently, Caña et al. (2005) conducted a study of 447 college students in the Phillipines. They found two statistically significant relationships: firstly that females

(43%) are more likely to recognise library jargon than males (41%), and secondly that users of online catalogues (43%) performed better than users of card catalogues (38%). Tellingly, they also write that "[r]espondents are more likely to use layman's terms, rather than library terms." (p. 200)

These studies clearly highlight the fact that a problem with library jargon exists: libraries and students do not understand the same things by the same words, and may not use the same words for the same concepts. Otherwise, however, the studies are limited in scope. In linguistic terms, they tend towards a prescriptivist point of view, with terminology defined by the library as authority; in B. Allen's (1996) terms, their approach is essentially library-centered. Students are tested on how many 'correct' answers they get, and no attempt is made to address whether it might rather be libraries that are using the wrong language.

2.3.2. Usability testing

The user-centered approach, on the other hand, is mirrored by the growing trend towards the usability testing of systems. Usability testing is not new, nor is it inherently limited to computer systems. Indeed similar testing has been recommended for library signage (Reynolds & Barrett, 1981, p. 23). Usability testing in the library literature, however, became most prominent only this decade, in the context of library websites.

In such tests, a small number of library users are asked to navigate a preliminary website design to determine how attractive, navigable, and usable users find the site. Respondents are asked to perform some ordinary tasks on the site while their movements are observed, and may also be asked to explain their train of thought as

they go. Their views on problems and potential improvements are actively solicited.

Although most of these usability tests have not focused primarily on library jargon, jargon has almost always been raised as an issue to some extent. M. Allen carried out an early study at the University of South Florida Libraries which provides an example (2002). The link to the library catalogue had originally been labelled "WebLUIS", which "almost no-one" understood (p. 41). The "Databases" link was arguably even less understood (p. 48).

A second round of testing, with "find a book" and "find an article" links, had more success (p. 50). M. Allen concluded that "plain, straightforward language almost always produces better results than using jargon" (2002, p. 52). Cobus, Dent and Ondrusek (2005) employed similar task-oriented solutions following their own usability testing, while Morgan and Reade (2002) replaced acronyms such as OPAC (Online Public Access Catalog) and CAM (Current Awareness Management) with "Catalog" and "New Titles".

Usability testing has also provoked other revelations. Travis and Norlin (2002) ran a usability test of two university websites and two commercial websites in the USA, asking nine students to find information using the sites. They discovered that students looked for keywords rather than reading the whole page, so that problems caused by unfamiliar terminology were exacerbated. They also noticed that "not one student used the info, help, or tips screens on any of the Web sites" (p. 442).

In all these surveys, researchers found usability testing vital to discover not only the best design and layout of websites, but also what terminology should be used on the pages. Paying attention to difficulties users encountered with library jargon ensured

a system that was user-centered and easy to navigate.

2.3.3. Preference testing

Whereas jargon studies have tested comprehension, and usability studies have investigated how users navigate systems, relatively few studies have investigated what terminology would be preferred by the people using the system. Preference testing not only marries the focus on jargon with the user-centered approach, but the extent of its user-centered approach improves even on usability studies. Where they begin with a (library-created) system and modify it based on user comments, preference testing begins with user comments and creates a system to suit their needs.

Preference testing can address narrow questions as well as broad ones. In the medical field, Mulhall, Ahmed, and Masterton (2002), surveyed 100 people presenting to a hospital clinic, asking for their opinions on the terms "patient", "client", "customer" and "dependent". An overwhelming 98 respondents preferred to be referred to as a "patient". Mulhall et al. concluded that, despite changes in hospital business models, the traditional term "patient" should be used, according to patients' own wishes.

In the library setting, Brophy (1993) carried out a study at the University of Central Lancashire Library, asking staff and users which terms they used to refer to various concepts. The sample was small and nonscientific. However, the study did show a range of terms used by both staff and users for a number of concepts, including 10 different terms used to refer to the desk where books are issued.

A limitation of both these studies was to use multiple-choice rather than open-ended questions (P. Brophy, personal communication, December 17, 2005; Mulhall et al., 2002). Although this makes a survey much simpler to perform and analyse, it does cut down on the possibility of serendipitous findings.

Open-ended questions, by contrast, allow participants to give answers that the researcher did not have any reason to expect. However, such surveys can be more complicated to perform and to act upon. Dickstein and Mills (2000) provides a clear example of both the problems and benefits with such an approach. Their comprehensive study employed three methods. They began with an initial design of a website, followed by a usability test by students. Finally they ran a card-sorting exercise to test student preferences of how subjects and indexes should be grouped. Students were asked to sort and group cards bearing the names of the subjects and indexes.

Although interviewers had hoped to get ten groups or fewer, students preferred to sort the cards into 13-37 groupings, and disagreed on what to label these groups. The interviewers therefore ignored the students' advice, created the page they wanted with broad subject categories – and noticed, after several months, that students were confused. When they belatedly applied the results of the card-sorting exercise, however, they found a 59% reduction in homepage hits relative to secondary page hits, and concluded that students were now able to perform searches more efficiently and with fewer false leads. This provided Dickstein and Mills (2000) with a satisfactory solution to a problem that Travis and Norlin (2002) had only been able to partially solve, namely the confusion caused by five conflicting taxonomies of knowledge in their institution: Library of Congress subject headings,

the discipline list, the library website, university departments, and the schedules of courses.

In another study, selected library users were asked to choose or create a term to describe a new virtual reference service at the University of Saskatchewan (Duncan & Fichter, 2004). The two options most preferred were then used in usability testing. Although participants of the usability test had not been told of the new service, four out of five participants noticed one of the links, and three chose this option when they needed help. Duncan and Fichter considered this indicative of a successful procedure.

Preference testing may be time-involving, but its benefits are proportionate to the effort spent. By centering a system primarily on user needs and preferences, libraries have found – just as B. Allen (1996) had argued – that users are better able to use the system, and will therefore use it both more often and more successfully.

2.4. Literature gap

It is interesting to note that studies testing users comprehension of library jargon have generally had reference services in mind, while usability tests have focused on websites: apparently nothing falls in between. So it is with the broader themes of the studies. Jargon comprehension tests have typically failed to consider a user-centered approach. On the other hand, usability testing of websites has rarely even acknowledged other areas of the library context. Preference testing goes a long way to bridging the divide, but it is still a young field. It also has limitations: due to its cost, preference testing projects are often limited in scope.

Research is needed that combines the user-centered approach of usability and preference testing with the focus on jargon of comprehension testing, while recognising that jargon is an issue in all areas of library communications with users. The study of jargon in signage and library guides has been too neglected in favour of the trend towards electronic portals and sources, as if no-one visited the physical library anymore. The present study was intended to fill this gap.

3. Methodology

While the greater part of the present study was intended to focus on students' language use, a preliminary survey of present library jargon was considered necessary for purposes of comparison. Therefore the study was divided into two main activities: first a survey of library jargon, and then the main survey of students.

A study based at only one institution could go more in depth, but the results would be limited in applicability. Therefore it was decided for this study to include libraries and students from all New Zealand universities.

3.1. Survey of library websites

A full study of current university library jargon should include websites, signage, printed guides, and both verbal and written directions and instruction given by each library. To carry out such an investigation at every university library in New Zealand, however, would be impractical in the time available for this project.

Therefore the present study examined only the websites of New Zealand university libraries for library-related terminology (Auckland University of Technology Library, 2005 [AUT]; The University of Auckland Library, 2005 [Auckland]; University of Canterbury Library, 2006 [Canterbury]; Lincoln University Library, 2005 [Lincoln]; University of Otago Library, 2006 [Otago]; Victoria University of Wellington Library, 2005b [Victoria]; Massey University Library, 2006 [Massey]; University of Waikato Library, 2005 [Waikato]).

Since there are only 8 universities in New Zealand, sampling was not required. However, pages examined for terminology were limited to each library's home page, catalogue, and a subject guide page. The subject guide page used was that most relevant to psychology in each case, in order that the pages be comparable. Psychology was chosen as all libraries had a page relevant to this subject. These pages provided sufficient terminology to be studied, without providing so much as to be overwhelming. Additional pages were sometimes viewed in order to find the terminology used for an important concept that was not referred to on one of these pages.

Common concepts underlying the terminology were chosen to allow data to be coded. For example, <request> was used to encode the concept variously referred to as "Request Copy" (Canterbury), "Request Item" (Otago, Lincoln, Victoria, Waikato, Auckland University of Technology [AUT]), "Recalls/reserves" (Auckland), and "Request" (Massey). Data was entered into a spreadsheet using Microsoft Excel X for Mac. Rows and columns were used for each university and concept respectively. Data was then analysed to determine the range of terminology: that is, the number of different terms used for a given concept, as well as the relative popularity of each of these terms.

3.2. Survey of students

There are a great variety of potential methods for surveying students' natural language use, each with its advantages and disadvantages. Focus groups or one-on-one interviews would, as usability testing does, allow an in-depth qualitative view not available through other methods. These methods, however, would only allow

the views of a small number of students in one location.

Jargon comprehension testing has most frequently made use of printed questionnaires. These allow a broader population to be targeted. Unless administered by mail, however – an operation too time-consuming for the purposes of this project – printed questionnaires would also limit the population to one location.

It was decided instead to use a web-based questionnaire which could be easily accessed by students from any university in New Zealand. Course coordinators from each university were asked to forward survey information to students via their class email distribution lists. Information included a participant information sheet and the URL for the questionnaire.

3.2.1. Advantages of web-based surveys

A web-based questionnaire retains the advantage of allowing a large population, and additionally allows this population to span a broad geographic area. Granello and Wheaton cite additional advantages of web-based surveys as including "reduced time, lowered cost, ease of data entry, flexibility in format, and ability to capture additional response-set information" (2004, p. 387). While the last is not relevant to the present study, the first four are important advantages:

3.2.1.1. Reduced response time

Most responses to web-based surveys are received within 1-3 days (Granello & Wheaton, 2004, p. 388), allowing plenty of time for reminder emails. In the present study, most responses appeared to come on the first day of questionnaires being

made available, fewer on the second day, and only a few on subsequent days. Table 1 shows the number of survey responses received, along with the dates on which classes were known to be sent survey information.

Table 1: Dates on which classes were known to be sent survey information (asterisked), along with the number of survey responses received.

	Mon 16	Tue 17	Wed 18	Thu 19	Fri 20	Sat 21	Sun 22
Survey sent	*				*		
Responses	8	7	2	0	1	1	1

	Mon 23	Tue 24	Wed 25	Thu 26	Fri 27	Sat 28	Sun 29
Survey sent		*					
Responses	2	17	5	3	1	0	0

Note: Some classes may have been contacted on other dates. January 23 was a public holiday in Wellington.

3.2.1.2. Lowered cost

Material costs were negligible as no printed instruments needed to be made. Some time was required to format the questionnaire for the web. In addition, time was required to locate and communicate with course coordinators. However, costs of time were significantly reduced compared to focus groups or one-on-one interviews.

3.2.1.3. Ease of data entry

Data could be imported directly from the online survey software into a spreadsheet, with minimal editing to remove ISP addresses and to format the file. This further significantly reduced time required, as no transcription from written or recorded

verbal answers was necessary.

3.2.1.4. Flexibility in format

The online survey software allowed the survey to be broken into several pages. This made it easy to require participants to click a button, located at the bottom of the participant information sheet, to signify informed consent.

In addition, participants could be prevented from returning to earlier questions, so that answers to a later question could not influence answers to earlier questions. For example, a reference to the concept of <reference librarian> could not influence the answer a participant gave with respect to the concept of <librarian>.

A third useful feature was the ability to choose which questions would have mandatory, and which would have optional, answers. It was decided to make the five demographic questions mandatory, but to leave the remainder optional. This would allow participants to easily skip questions they could not immediately answer. It was not considered desirable to force participants to answer a question that was too hard for them, as this would induce stress which would make future answers less natural. It might also lead to participants abandoning a survey part-way through. A partially completed survey was seen as more useful than nothing.

3.2.2. Limitations of web-based surveys

According to Granello and Wheaton, limitations of web-based surveys include "difficulties in obtaining a representative sample, low response rates, and problems with technology" (2004, p. 387).

3.2.2.1. Difficulties in obtaining a representative sample

The present survey attempted to contact an equal number of course coordinators, teaching a variety of subjects, for each university. However, this did not translate into an equal number of students having an opportunity to participate, for a number of reasons:

- Many course coordinators did not respond to the email contact, whether because they were on leave or for some other reason. In addition, four course coordinators responded after the survey had concluded.

- Some coordinators had no easy electronic means of communication with students.

- Although an effort was made to run the survey in a week (January 16-20) when all universities ran courses, some courses finished earlier than others.

- Lincoln University had fewer summer school courses than other universities, so that classes contacted had some student overlap.

- A class at another university was already participating in a focus group.

In addition to these factors, the survey methodology made difficulties with self-selection inevitable. The average response rate was approximately 3.7%, but the highest was 11.2% at the University of Otago, while no responses came from Auckland University of Technology or Lincoln University (see also Table 2).

Responses would necessarily be weighted towards those who use email more frequently. It is not easily knowable what effect this might have on results, as a

familiarity with technology does not necessarily imply a familiarity with library jargon.

Responses might also be weighted towards those more interested in the subject due to personal experience with library jargon. This might affect the naturalness of responses, so that terminology offered might be partially influenced by the jargon used by the respondent's library. This was addressed to some extent in data analysis by comparing participants' answers with the terms used by their libraries.

3.2.2.2. Low response rates

The expected low response rate was planned for, by ensuring that many more students were invited to participate than responses were required. Three course coordinators at each New Zealand university were contacted by email on January 9 to inform them of the upcoming survey. Coordinators contacted taught a level one accounting, computing or education summer school course. If one of these courses was not offered by a university, a course from a similar discipline was chosen. On the January 16, the participant information sheet and the URL for the survey was emailed to these coordinators, who were asked to forward the email to students of these courses.

It was an aim for this email to reach about 200 students, and to gather about 20 usable responses, from each university. However, only a third of the course coordinators responded – fewer than expected – and only 17 usable questionnaire responses were received from students over the first three days (approximately 3.2% of students contacted). As per Granello (2004, p. 388), most of these responses arrived promptly on the first day, almost as many on the second day, and only two

on the third day. None were received on the fourth.

Since coordinators had already been contacted twice each, it was considered that a third email would not be effective. Therefore eight department secretaries, as well as an additional twenty-four coordinators of a variety of course subjects, were contacted on January 20 and 23. As a result, an additional 33 students participated in the survey. However, the only university with more than 20 usable responses was the University of Otago.

Table 2: The number of coordinators and secretaries who agreed to forward survey information to their classes; the approximate number of students contacted as a result; and the number of students who responded.

	coordinators participating	approximate no. students contacted	students responding
Auckland	1	110	8
AUT	2	100[a]	0
Waikato	3	120[a]	1
Massey	1	120	2
Victoria	4	230	8
Canterbury	4	270	3
Lincoln	2	140	0
Otago	4	250	28
TOTAL	**21**	**1340**	**50**

Note: In total, six coordinators and one department secretary at each university were contacted.

[a] Estimate only.

3.2.2.3. Problems with technology

Poorly designed websites might not run correctly on some browsers or operating

systems. This would exclude some potential participants. Indeed, the software used to create the present survey did not create html to W3C standards. Therefore the survey was pretested in multiple browsers in Windows, Macintosh, and Linux systems to ensure maximum possible compatibility. It performed correctly in all platforms tested:

- Windows XP: Mozilla Firefox 1.0.7 and 1.0.5

- Windows XP Professional: Internet Explorer 6

- Windows ME: Firefox 1.5 and 1.7.12

- Windows 2003 Server: Firefox 1.0.4, Opera 7.54u2, and Lynx 2.8.5 (a text-based browser)

- MacOS X: Safari, Firefox, Internet Explorer, and iCab

- KUbuntu Linux 1.3: Konqueror 3.4.3

- SuSE Linux 10: Firefox 1.5

A more basic problem with technology arose in that some classes did not have an email distribution list. Three coordinators instead displayed the survey information on a class website or software such as Blackboard. Three others very kindly printed the information out and distributed it to students in class. However, at least two coordinators decided not to participate as a result, and this may have been a reason for the non-participation of some coordinators who had been contacted but did not reply.

3.2.3. Population

The survey population was students attending degree-based summer school courses at New Zealand universities. Summer school students were targeted due to the time limits of the project. The study was confined to students of degree-based courses, as opposed to interest-based stand-alone courses such as photography, as this group was considered to be higher users of the library, and to be more similar to semester one and two students.

Initially only first-year courses were targeted, and it was planned to discard responses by non-first-year students. It was felt that first-year students were less likely to have been trained into familiarity with 'official' library jargon. They would therefore be most likely to use terms naturally, and to give answers uninfluenced by library jargon. These students are also most likely to benefit from a user-centered approach to library communications. Being new to academic studies, they are learning new terminology, concepts, and worldviews in their classes. Having to learn new terminology in order to navigate the library is an additional burden which could be eased if libraries made an effort to use students' own terminology.

However, only 5 responses from first-year students were received in the first three days, and 12 in total. As a result it was decided to include responses from all levels of study.[1] An unintended benefit of this approach was the ability to investigate whether level of study was a predictor of terminology used.

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[1] Due to the small number of summer school classes at Lincoln University, some non-first-year courses were also contacted directly. However no responses were received from any Lincoln University students.

3.2.4. Survey design

The questionnaire was created with the School of Information Management web-based survey tool, using NSurvey 1.8.0.0 software, and hosted on Victoria University of Wellington web space.

The instrument was divided into a number of pages. The first page explained the purpose of the survey and obtained informed consent. Following this, basic demographic data was gathered. This followed a study cited by Granello and Wheaton (2004, p. 388) showing that dropout rates decreased where a study begins rather than ends with demographic data collection. Demographic data requested included:

- university enrolled in;

- primary level of study;

- whether English is a first or second language;

- how often the student has visited the university library;

- whether the student has attended any library instruction.

No personally identifying data was collected, and the questionnaire was anonymous. NSurvey automatically collected IP addresses, and this feature could not be turned off. However, as participants were informed prior to participating in the survey, this information was not used in any way, and was permanently deleted from the gathered data before any analysis was performed.

The remaining pages of the questionnaire were based on concepts from the survey of websites. Seventeen concepts were chosen from the results of the website survey, and three basic concepts (<librarian>, <user>, and <lend>) were added which were not found in the website survey results. In particular, <librarian> was chosen as an easy introduction to the type of question and answer pattern used throughout the survey.

Each concept was described in a sentence which did not include any of the words used as jargon by libraries. Generic words such as "place" were used rather than more specific words such as "desk" or "room". This was done in order to avoid influencing participants. In addition, sentences were written as simply and clearly as possible so as to be understood by students of varying English abilities.

Participants were asked to "write a word or words that you think describes each concept". This was put in the context of a casual conversation, and participants were asked to just use the first word or words they thought of.

The questions were pretested informally by friends and family prior to HEC approval being sought. A number of questions were modified as a result of issues raised during this process. For example, pretesting found that a question phrased as "A person who works in a library is..." was ambiguous, as it was unclear whether participants should reply with a noun (e.g. "a librarian") or an adjective (e.g. "very helpful"). As a result questions were rephrased to "is a" in order to inclue that a noun was desired. It was hoped that this would not unduly influence participants against answers beginning with a vowel.

The final questionnaire, formatted for the web, can be seen in Appendix A.

Data was downloaded from the web-based survey tool and converted into spreadsheet format using Microsoft Excel. This spreadsheet was similar to that used in the survey of websites, with rows and columns for participants and concepts respectively. Data was then similarly analysed to determine the range of terminology used by participants and popularity of recurring terms.

4. Results

4.1. Website survey

The library websites of each New Zealand university were initially surveyed between December 12 - 16. From the three pages studied on each site, approximately a hundred concepts were drawn. For most of these concepts, however, terms were only found on a few, or even just one, of the library websites. In addition, many of these concepts were not suitable for further study. Therefore 36 of the most popular and most library-specific concepts were chosen. For those which still lacked a term on the webpages studied for one or more libraries, further webpages were searched to fill in the gaps. This was done between January 9 - 23. Some gaps still remained due to the concept not being used at that library, however.

During the time of the website survey, the University of Canterbury Library twice changed some of the terminology used: in its catalogue interface due to user feedback, and on its home page due to a merger with the Christchurch College of Education Library. The newer terms were used for this study. It was encouraging to see a library adapting its terminology and interface to meet user needs.

Four libraries were part of the LCONZ consortium, and shared a catalogue interface. These were AUT, Waikato, Victoria, and Otago. Where terminology in other catalogues frequently varied, terminology in LCONZ catalogues was generally constant (see Table 3). Some variation still remained, however (see Table 4).

Table 4 also shows how terminology used can vary within one library. In some cases, three or four terms can be used by one library for a single concept. For

Table 3: Terminology used by libraries in their catalogues to describe the status of items. LCONZ terminology is invariant.

	\<available\>	\<on loan\>	\<renewed\>	\<overdue\>	\<returned\>
Auckland	Available	On loan	Renewed	Overdue	Discharged
AUT	**Available**	**On loan**	**Renewed**	**Overdue**	**Just returned**
Waikato	**Available**	**On loan**	**Renewed**	**Overdue**	**Just returned**
Massey	Available	Due			Recently returned
Victoria	**Available**	**On loan**	**Renewed**	**Overdue**	**Just returned**
Canterbury	In library	Due			Recently returned
Lincoln	In library	On loan		Overdue	Recently returned
Otago	**Available**	**On loan**	**Renewed**	**Overdue**	**Just returned**

Note: Libraries in bold are members of LCONZ.

example, the University of Auckland Library referred to "current awareness", "current contents", "auto alerts" and "email alert service" on different pages of its site. Victoria referred most prominently to "course reserve", but its "Closed reserves" page began with an almost comical:

> The Closed Reserves Desk looks after Closed Reserve or Restricted Loan material. You can find these in the catalogue under Course Reserve.

> Academic staff can request material to be placed on restricted issue. (Victoria University of Wellington, 2005a)

The remainder of the page made the nuances of each of these terms somewhat clearer. Nevertheless, the confusion of students encountering this plethora of terms

can be imagined – and no library was immune to this phenomenon.

Table 4: Terminology used by libraries in their catalogues. Some LCONZ terminology varies.

	<call number>	<held>	<new books>
Auckland	call number	On hold	On the new books display
AUT	**call number**	**On hold[c]**	
Waikato	**call number[a]**	**On hold at**	**New books display**
Massey	call no.[b]	1 hold	New books
Victoria	**call number**	**On hold**	**At new books display**
Canterbury	Call number	Item held	New book display
Lincoln	call number[a]	On holds shelf	On display
Otago	**call number[a]**	**On hold**	**Recent arrivals**

Note: Libraries in bold are members of LCONZ.

[a] "classification" was used elsewhere on library website

[b] "Dewey number" was used elsewhere on library website

[c] "reserved" was used elsewhere on library website

In addition, while some terminology such as "renew" or "reference" remained constant from library to library, some varied greatly from place to place (see Table 5). This has the potential to cause more confusion for students transferring between universities: they would need not only to learn new vocabulary when coming into the new library, but to unlearn the vocabulary learnt from their old institution.

4.2. Survey of students

The survey of students began on the 16th January. Due to a lower than expected response rate, additional participants were solicited on the 20th and 23rd January.

Responses were accepted until midnight on the 29th January.

Table 5: Terminology used by libraries on their websites, showing terminology varying from library to library.

	<short loan>	<storage>	<reference librarian>
Auckland	short loan collection	storage	subject librarian
AUT	course reserve; high demand		liaison librarian
Waikato	course reserve	off campus storage	subject librarian
Massey	reserve collection	book storage	liaison librarian
Victoria	course reserve; closed reserve; restricted loans	stackroom; closed stack	subject librarian
Canterbury	restricted loans	warehouse; basement storage	information librarian
Lincoln	restricted loan	book archive; serials stack	librarian
Otago	reserves collection	storage	

4.2.1. Demographics

During the two weeks the survey was open, 51 responses were received, including 1 invalid response (no questions other than mandatory demographics were answered) and 50 valid responses. The average time taken to complete the survey was 9 minutes. The range was from 3 minutes to 36 minutes.

Most participants (56%) were from the University of Otago. Auckland and Victoria followed with 16% each. Canterbury (6%), Massey (4%), and Waikato (2%) had fewer respondents. Disappointingly, no responses were received from Lincoln or AUT during the survey run.

Although first-year level classes had been contacted, participants were from a range of year levels (see Table 6).

Table 6: Participant responses to demographic questions.

	no.	%			no.	%
Auckland	8	16%		**1st year**	13	26%
AUT	0	0%		**2nd year**	10	20%
Waikato	1	2%		**3rd year**	16	32%
Massey	2	4%		**other**	11	22%
Victoria	8	16%		**TOTAL**	50	100%
Canterbury	3	6%				
Lincoln	0	0%			no.	%
Otago	28	56%		**native English**	42	84%
TOTAL	50	100%		**non-native**	8	16%
				TOTAL	50	100%
	no.	%			no.	%
0 library visits	0	0%		**0 workshops**	27	54%
1-9 visits	9	18%		**1 workshop**	14	28%
10+ visits	41	82%		**2+ workshops**	9	18%
TOTAL	50	100%		**TOTAL**	50	100%

The majority of participants were native English speakers, but 16% spoke English as a second language. Interestingly, though unsurprisingly, non-native English speakers gave more non-responses throughout the survey. The three highest rates of non-response (75%, 60% and 45%) were from non-native English speakers. Fifty percent of non-native English speakers gave some non-responses, compared to 33% of native English speakers. The average non-response rates were 24.4% for non-native speakers, and 5.6% for native speakers. This may suggest that the questions were not as comprehensible as intended, or that non-native English speakers found it harder to remember or create terms for the concepts than native English speakers. In any case, it should be borne in mind that responses from non-native English

speakers are underrepresented in the survey as a result.

No participants had never visited their university library, but 18% said they had only visited it 1-9 times. The remainder (82%) had visited it at least 10 times. Over half (54%) had never participated in a library workshop. 28% had taken one workshop, and 18% had participated in two or more.

4.2.2. Preferred terminology

As the open-ended questions were all optional, there were gaps in the data throughout. Only three questions were answered by every participant: <librarian>, <short loan>, and <request>.

In the tables following, spelling and capitalisation of responses has been normalised. Nearly identical terms for which some students have included words that do not affect the meaning have been represented with the additional words in parentheses, e.g. "issue (it)" or with alternatives separated by a backslash, e.g. "journal/search database". Verbatim responses are included in Appendix C.

Where a participant has offered two or more alternate answers, these have been treated as separate answers. Therefore the total number of responses may add to greater than 50.

Where appropriate, data from previous studies has been provided for purposes of comparison. It was expected that results would vary according to location and time. Students now can be expected, for example, to be much more familiar with electronic resources than in Naismith and Stein's early study (1989). On the other hand, there are now a great many more electronic resources for students to be

familiar with.

It should be noted, in addition, that these previous studies have used different methodologies from each other and from the present survey. This will affect results in different ways. Of particular importance is the difference between passive vocabulary, which is the language people can recognise and understand, and which is generally much larger than the set of active vocabulary, the language which people use themselves. Jargon comprehension testing studies the former, while the present study is more interested in the latter.

4.2.2.1 A person who works in a library is a…

Table 7: <librarian>

Term	no.
librarian	43
(library) assistant	2
administrator	1
bookworm	1
helpful	1
helpful and knowledgeable	1
very helpful person	1
tidy, conscientious person who knows a lot about library systems, cataloguing, and how to use computers.	1
an information resource on the library's contents	1
no answer	0

The purpose of this question was primarily to make participants more comfortable with what was expected of them. Pretesting had suggested the necessity of adjusting questions to encourage participants to respond with nouns: that is, "A person who works in a library is a…" rather than a plain "is…". Despite this

precaution, several participants responded with adjectives – some with entire job descriptions! Although such responses were not the aim of the survey, they were too universally flattering to displease any information professional. The majority of responses (86%), however, included the expected "librarian", while 6% acknowledged other positions.

4.2.2.2. A person who visits a library is a...

A number of librarians have been displeased with the tendency to refer to "users", believing this term to connote primarily drug users (Intner, 2003, p. 8). Brophy found in his multiple-choice questionnaire, on the other hand, that this term was not so objectionable to users at his own library: the majority of 17 preferred to be called a "user", followed closely by "borrower" at 16 votes (1993, p. 28).

Table 8: <student> with selected data from Brophy's (1993) study included for comparison.

Term	no.	Brophy (1993)
(dedicated) student(s)	14	
(library) visitor	10	
(library) user	7	17
person (seeking information; etc)	7	
patron	3	
customer	3	2
researcher	2	
borrower	1	16
reader	0	2
other	9	
description or no answer	4	

Answers in the present study were more varied. They included another handful of descriptions such as "hardworking", and the coinage "librenter". Other answers

given by 1 participant each included "consumer," "book lover", "library member", "public", "teacher", "academic", and "enquirer".

"Visitor" was suggested by 10 participants, but this may have been influenced by the verb "visit" in the question. This seems more likely since the two blank answers and the large number of vague "person"s suggests participants may have been at a loss for exactly how to describe this concept. One participant summarised this difficulty with "student, teacher, etc. anyone really". In any case, the majority answer, from 14 of the (student) participants, was "student".

4.2.2.3. The computer system you can use to find out if the library has the book you want is a...

Previous studies have studied this concept with varying terminology. Naismith and Stein (1989) found that 68% of participants in their study understood the terms "catalog screen" and "online catalog", while 61.62% of Hutcherson's participants understood "catalog" (2004). Chaudhry and Choo (2001) asked about the term "OPAC (Online Public Access Catalogue)" and optained 95% correct responses. Caña et al. (2005) found 84% understood "OPAC" by itself.

In Brophy's preference study (1993), "catalogue" (36.11%) edged out other options, and proved much more popular than "OPAC".

In the present study, all university library websites used the word "catalogue" in their links. Three used "catalogue" alone, four used "library catalogue", and the University of Auckland used "Voyager - Catalogue".

In the questionnaire results, it was particularly interesting that, while the majority, 33

participants, used some variation on the term "catalogue", 8 suggested "database". These included 2 participants who had suggested "catalogue" first, but for 6 (12% of participants) "database" was their only answer. None of the demographics collected distinguished these 8 participants from the rest of the population. See section 4.2.2.4. (below) for further discussion of this group.

One participant offered "OPAC", but only as a second term after "catalogue".

Table 9: <catalogue> with selected data from Brophy's (1993) study included for comparison.

Term	no.	Brophy (1993)
(library) catalogue (tool)	33	13
(library) database	8	
(library) search(ing) system/engine	3	
OPAC	1	2
computer	1	10
directory	1	
electronic index	1	
reference	1	
terminal	1	
library information system	0	11
description or no answer	5	

While some participants again responded to this question with adjectives, these were less flattering than those used for <librarian>: "useless" and "piece of ----" (sic) contrasted with "informative" and "extremely helpful system".

4.2.2.4. A computer system you can use to find articles about your area of study is a...

When asked to select a definition for "online database searches", 53% of Naismith

and Stein's (1989) respondents chose the correct one. Other jargon comprehension testing has not reported results for the concept.

Usability testing, however , has frequently noted the difficulty students have with the term "databases". M. Allen discussed "the request to 'Locate the link(s) you would click on to research journal or magazine articles'. In the first group of participants, 12 out of 12 chose the link labelled 'E-journals' rather than the proper 'Databases'" (M. Allen, 2002, p. 48).

Some libraries have included the keyword "article" in links to draw students' attention to the desired link. Of New Zealand university libraries, three have employed this tactic: two using "article databases" and one "database & article searching". Four others used the plain "databases", and one used "LibraryLink databases".

In the questionnaire, students again offered mixed judgements on the technology, describing it as a "piece of ----", "another useless one", "hard to find", and "blessing". One participant complained that the question was vague and three others did not respond. The majority (23) wrote "database", 5 wrote a variation on "journal search engine", 2 offered "network" or "intranet", and 2 gave specific examples: SciFinder and Medline.

However, 9 wrote "catalogue" and several other answers suggested that participants saw these two systems as comparable. Indeed, of the 8 who had answered "database" to the previous question, in this question 4 repeated the answer, while 2 used the variants "search database" and "journal database". By contrast, of the 9 who answered "catalogue" to this question, 7 had answered the

same to the previous question.

Table 10: The number of students responding with each
<catalogue>/<database> pairing.

<catalogue>	<database>	no.
catalogue	database	17
catalogue	catalogue	5
catalogue	catalogue with [description]	2
catalogue	[other]	8
database	catalogue	1
database	database	4
(library) database	search/journal database	2
database	[other]	1
[other]	catalogue	1
[other]	database	2

This confusion is not entirely surprising. In addition to the usability testing results mentioned above, Roca and Nord found that students "could not distinguish between, for example, library catalogs and databases." (2001) It is not uncommon for students to attempt to find article titles in the library catalogue (Cockrell & Jayne, 2002, p. 129; Griffiths & Brophy, 2005, p. 547). Students, used to finding information through Google, expect to retrieve all relevant results by typing keywords into a single search box.

Libraries are beginning to be aware of this trend, and to consider ways to respond to it. One option is to provide links between catalogue and databases. Catalogue records can be created for electronic journal titles, letting students access these journals directly from the catalogue. Additionally, technology such as "Article Linker" allows students to move easily from a citation found in one database to the full text held in another database, or to a catalogue record of a journal held in print.

However these solutions do not at present allow students to search directly for article titles in the catalogue, or to find library holdings of books via a database.

Another possibility is federated searching. AUT has been piloting "multisearch", which simultaneously queries the library catalogue and databases. If this pilot is a success, other New Zealand libraries can be expected to follow up on it. It is possible to foresee a time when, for the casual researcher, there is no difference between catalogue and databases, and therefore no need for different terminology.

In the meantime, 17 participants (34%) did use both "catalogue" and "database" as most librarians would expect. While these technologies remain separate, these words are how the majority of students express the concepts.

4.2.2.5. The code on a book that tells you where it should be shelved is a...

This had been a hard question to compose due to different classification systems and varying placements of call numbers from library to library. The word "code" probably influenced some of the answers. The adjectives some students used were "undecodable", "confusing", "helpful in finding the book".

This is an example of terminology varying from place to place: Brophy (1993) considered "call number" to be an American term, and many of the participants in his survey preferred "classification number" – which had almost no responses here. "Call number" is the term used in most jargon comprehension testing. In the USA, Naismith and Stein (1989) found an 83% comprehension rate while Hutcherson (2004) found 81.48%. Chaudhry and Choo (2001) also found 85% in Singapore, but by contrast, Caña et al. (2005) found only 59% of their respondents in the Phillipines understood the term.

In the present study, "dewey decimal number" or some variation thereof – even "d-code" – was used by 13 participants (26%). For comparison, Chaudhry and Choo (2001) had found 72.5% of their respondents gave the correct answer to "DDC (Dewey Decimal Classification)". Due to the low numbers of non-native-English speakers participating (and fewer still responded to this question) it may not be significant that everyone who answered with "dewey" was a native English speaker. This group was also weighted somewhat towards first year students: while first year students made up 26% of the sample population, they were 7 of the 13 who answered with "dewey", or 54%. It seems likely that these students are remembering the classification system used at their previous school libraries.

Table 11: <call number> with selected data from Brophy's (1993) study included for comparison.

Term	no.	Brophy (1993)
Dewey (decimal) number/system	12	8
d-code	1	
call number	10	7
call sign	1	
(catalogue/book) code	5	
barcode	4	
reference number	4	
ISBN	3	
index	2	
number	2	
class number	0	3
classification number	1	13
shelf mark/number	0	7
description or no answer	4	

University libraries all used "call number" in their catalogue interface – but three

(Waikato, Lincoln, and Otago) used "classifications" or "classification number" in other areas of the website, while Massey used both "call number" and "Dewey number" in different areas of its website.

4.2.2.6. A regular publication containing articles on a particular subject is a…

Students had different understandings of this concept, describing it as "up-to-date and full of previous information about the topic" on the one hand and "just a general overview" on the other.

In the jargon comprehension testing literature, Hutcherson (2004) had found that 74.5% of respondents correctly recognised "journal". Answers in the present questionnaire were clearly in favour of "journal", with 74% of participants using this term. A partially overlapping 18% of participants included the term "magazine".

Table 12: <journal> with selected data from Brophy's (1993) study included for comparison.

Term	no.	Brophy (1993)
(scientific) journal	37	16
(branch/specialised) magazine	9	2
series	1	
periodical	1	11
newspaper	1	
database	1	
serial	0	1
description or no answer	6	

Although three of the eight university libraries (Auckland, AUT, and Lincoln) used the jargon "serials" prominently on their websites, not one student did. Although the nuances of this term are of importance to librarians, perhaps it is not sufficiently

useful to students to warrant inclusion on a website where space – and a user's attention – is limited.

4.2.2.7. The collection of dictionaries, encyclopaedias, atlases, etc, that cannot leave the library is...

Participants described this collection as "expensive", "likely to be stolen" (one pointed out the big difference between 'cannot leave' and 'should not leave'), and "great as you know they are there somewhere in the library".

Seventy-five percent of participants in Hutcherson's (2004) study recognised the term "reference books". "Reference" in one form or another was used prominently on all New Zealand university library websites: "quick reference", "general reference", "reference collection", or "reference" alone.

Reflecting both this unanimity of terminology and the centrality of the collection to the concept of libraries, participants in the present survey gave a resounding 76% vote for "reference".

Table 13: <reference>

Term	no.
reference	38
(library) reserve	3
restricted item	1
not for loan items	1
description or no answer	7

The alternate terms "reserve" and "restricted item", used by four participants, are often used by libraries to refer to course material on short-term loan. The choice of these terms is understandable: the short-term loan collection is similar to the

reference collection in that both are kept in special areas of the library, and neither can be borrowed for normal periods.

4.2.2.8. The collection of textbooks that you can only borrow for a few hours or a few days is...

This was clearly a familiar concept, as every single student answered the question in some way. A trace of frustration was clear with this collection described as "mean spirited", "always not there", "guttering thing"[2] and "annoying as there may not be enough time to get all the information you want out of the book in such a short time span".

While the LCONZ libraries all had a "course reserve(s)" tab in the catalogue interface, the location shown on catalogue records, and the term used in other areas of the website, often varied. AUT's location showed as "high demand", Waikato's as "course reserve", Victoria's as "closed reserve" or "3-day (loan)" according to the type, and Otago's as "reserve". Non-LCONZ libraries added "short loan" and "restricted loan(s)" to the list of possibilities.

One participant from Otago reflected on the profusion of library jargon for this collection by writing: "close reserve item, (this may actually be 'course reserve'- I've never figured it out". Another merged two common terms to form "short reserve".

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[2] This term initially caused some bewilderment. However, some thought suggested that it might be related to the idiom "to feel gutted". Indeed, a cursory search on Google (at February 10, 2006, approximately 6:30pm) produced 833 hits for the phrase "feel gutted" and 163 for the mis-spelling/reanalysis "feel guttered". A final search on "guttering thing" produced, among pages about roofs and gutters, two relevant quotes: "the most guttering thing i've ever read", and "[the] guttering thing was a question i got wrong".

However, for the most part the terminology chosen by participants matched that used by their respective libraries (see Table 14). Even the mild confusion of the participants from Victoria mirrored the profusion of terms used on that library's website (see discussion, section 4.1.).

Table 14: Terms used for <short loan> at each university.

	close(d) reserve	course reserve	reserve	short (term) loan	3-day loan	restricted (loan)	other
Auckland	1			_7_			
Waikato		_1_					
Massey			_1_				1
Victoria	_3_	_0_	1	2	_1_		1
Canterbury						2	1
Otago	13	_3_	_6_	1		1	4

Note: Terms used on each library's website are underlined.

It was not clear why so many participants from Otago answered with "closed reserve". However, a search on the Otago library website discovered six pages which used "close reserve" in reference to Otago's law library. Although no law classes at Otago had been invited to participate in the questionnaire, it is possible that the same term is in use verbally in other branch libraries at Otago.

4.2.2.9. The collection of books that aren't used often, which someone working in a library can get for you if you need one, is...

This question had a particularly high rate of non-responses. Those who answered with adjectives described the collection as "old", "unused", "unpopular", "useless" – or "handy as you know they are usually well looked after".

The most popular response was variations on "in storage". Indeed, "storage" was

used by five of the eight universities in their catalogues, or by five of the six universities whose students participated in the questionnaire. However, of the 9 participants who gave this response, 8 were from Otago. The remaining 1 was from Victoria, whose catalogue referred users to "closed stack (ask at reserves)". This phrase explains why 3 other participants (of 6 valid responses) from Victoria used "closed reserve" to describe this concept.

Another popular suggestion was "archive". This word was used to describe the concept by Lincoln, but 4 of the 6 participants who suggested this term were from Otago, and the other 2 were from Massey and Victoria.

Canterbury's catalogue used "warehouse" and "basement storage". Only a small number of participants were from Canterbury, and only 1 gave a valid response for this question: "interloan". The option "warehouse" was not suggested by participants from any university, but "basement" was suggested by 3: 2 from Auckland and 1 from Otago.

Table 15: <storage>

Term	no.
stored/storage	9
archive(d)	6
special (collection)	4
basement	3
closed reserve	3
(back) stacks	2
rare (collection)	2
other	7
description or no answer	19

The other suggestions were "attic material", "backlog", "books behind the desk",

"interloan", "loan from other campus", "non-shelved", and "send-out-for books".

4.2.2.10. If you want to take a book home, the library can...

This was the first question where all respondents answered as had been hoped, in this case with a verb. Answers were straight-forward, with 50% preferring "issue", 36% preferring "lend" or "loan", and 2% – 1 participant – who used both "lend" and "issue". There did not seem to be any correlation between term preferred and any of the demographics. One possible exception was that, of the 8 participants from Victoria, 6 preferred "issue".

Table 16: <issue>

Term	no.
issue (it) (to you) / have it issued	26
lend (it) (to you)	15
loan (out)	4
check (it) out	2
borrow it	1
allocate it	1
rent it out to you	1
no answer	1

Two participants included telling caveats with their answers: "depending what type of book it is" and "if you have your student ID".

4.2.2.11. If the library expects the book back on Monday, but you need to keep it until Friday, you can...

Although every library's website used "renew" for this concept, slightly more participants suggested "extend the loan" (38%) than "renew it" (36%). This latter appeared least popular at Victoria, where of 8 participants only 1 said "renew" and

another 1 said "extend the issue period through renewing the book."

Another 20% (all native English speakers) said "reissue" it. For 3 participants the only option was to return the book late and/or pay the fines, while 2 others suggested this (and in one case apologising!) as an alternative to extending the loan.

Table 17: <extend>

Term	no.
extend (the loan)	19
renew (it)	18
reissue (it)	10
return late / pay fines	5
borrow it again	1
no answer	1

4.2.2.12. If someone else has a book you want, you can...

This was the third question to which all participants gave an answer.

Library websites surveyed had all used the word "request" in their catalogue interfaces, with the exception of the University of Auckland, which used "recall", or "reserve" for short-term loans. Reflecting this, of the 7 participants who answered "recall", 4 were from Auckland. These 4 constituted half of the participants from Auckland. Of the others from Auckland, 3 participants responded with "reserve" and 1 participant said "place a hold".

The most popular term by far for this concept was "reserve", or "make a reservation" (42% of participants). This was despite the fact that only the University of Auckland Library used the term prominently in its catalogue interface. Use of this term did not correlate with any of the demographics.

In order to determine what else might have influenced the term, catalogue interfaces for six New Zealand public libraries were checked (Auckland City Libraries, c. 2005 [Auckland City]; Christchurch City Libraries, c. 2006 [Christchurch]; Hamilton Libraries, c. 2006 [Hamilton]; Dunedin Public Libraries, 2006 [Dunedin]; Palmerston North City Library, c. 2006 [Palmerston North]; Wellington City Libraries, 2006 [Wellington]).

However, only two public libraries used "reserve" (Hamilton and Wellington), while two used "request" (Auckland City and Palmerston North), and two used "place (a) hold" (Christchurch and Dunedin).

Another possible influence might have been school libraries, but surveying school libraries was beyond the scope of the project. However, if this was the influence, it might be expected that use of the term would trail off as students spent longer in the university library system. This did not seem to be the case: the term was used by proportionate numbers of participants from different year levels, as well as by proportionate numbers of participants who had visited the library more or less frequently, or attended more or fewer library classes. Nor did native language appear to be a factor.

Another possibility is that students might have chosen this term simply because it is more intuitive to them than the alternatives. Like another popular suggestion, "book it", "reserve" is in common use in normal spoken language in other situations, such as buying movie or airline tickets. It would be natural for students to use this common word for a similar situation in the library context. If this is the case, there might be important implications for libraries striving for more user-

friendly terminology.

Table 18: <reserve>

Term	no.
reserve/reservation	21
(make a) request	8
recall	7
book it	6
(place a) hold	3
(wait in) queue	2
(go on the) waiting list	2
borrow it	2
other	6

Other options paricipants suggested were "call-back the book" or "order". More fatalistically two participants said, "try other libraries" or even "can do nothing, just wait", and two others joked: "steal" and "hunt them down".

4.2.2.13. If the library at your university doesn't have the book you want, but another library has it, you can...

Brophy's (1993) study asked whether users preferred the term "interlibrary loan" or the abbreviation "ILL". Unsurprisingly, 35 voted in favour of the former, and none for the latter. However no other options were available for users to choose in that study.

Jargon comprehension testing has studied both the terms "interlibrary loan" and "document delivery" – both inconclusively. Results for the comprehension of "interlibrary loan" have ranged from 75% (Naismith & Stein, 1989) to 55% (Chaudhry & Choo, 2001) to even 27% (Caña et al., 2005). Similarly, while Chaudhry and Choo found that 70% of their respondents understood "document delivery"

(2001), only 26% of Caña et al.'s study did. It is not clear if the different countries or different times these studies were performed in might have affected the results, or if some other factor was involved.

In the present study, the majority answer for this concept was "order", with 13 votes. Four of these specified that the order would be from the holding library, so at least these students were not intending that it be ordered for purchase from a publisher. The next most popular answer, however, with 11 votes, was to go and borrow the book directly from the second library. The New Zealand term "interloan" came in only at third-place with 8 votes, barely ahead of the more generic "request it", "ask to get it", and "transfer". No-one suggested "document delivery".

Table 19: <interloan>

Term	no.
order	13
(go to) that library	11
interloan	8
request (it)	6
ask to get it	5
transfer	5
other	3
no answer	2

Other suggestions were "hold", "inter borrow", and "inter-university delivery". The latter was an Auckland student's coinage, presumably based on that library's "inter-campus delivery" system.

"Inter-borrow" in particular points up the fact that much library jargon is implicitly from the library's point of view. In the interloan transaction, it is the library which

loans and the user who borrows – and it is the verb from the library's side of the transaction, "loan", that is traditionally used to form the library jargon, "inter(-library) loan". This implicitly denies the user's role, and point of view, in the process. Another example occurs in the next section.

4.2.2.14. If the library has put aside for you a book you wanted, the book is...

Every library surveyed used "on hold", or "item held", in its catalogue interface. In addition, of the six public libraries whose catalogues were viewed, four used a variation of "on hold". This is another example of library jargon being implicitly from the library's point of view, rather than the user's. The library is holding the item – but there is nothing in the word to hint to a user where, or why, or for how long the item is to be mysteriously detained. The jargon entirely ignores the user for whom the book is being kept.

Perhaps as a result, only 12 participants in the survey answered with this term. By contrast, almost three times as many, 32 participants, suggested "reserved". This was 50% higher even than the number of participants who had suggested the verb "reserve" for the related concept (discussed in section 4.2.2.12.) The term "reserved" refers to an action the user has performed in reserving the item and thereby hints at what is going to happen to the item next. In this way it is both more user-centered and more informative.

Two public libraries (Hamilton and Wellington) used a variation of "reserved" in their online catalogues. These were the same libraries which had used "reserve" for the concept discussed in section 4.2.2.12. As for that concept, these libraries' terminology did not appear to have had any significant effect on participants'

responses: 6 of the 9 participants from Waikato and Victoria used "reserved", a similar proportion (66.67%) to those in the whole population who had used the same term (64%).

No other answer was suggested by more than one participant. One participant suggested "requested (kept aside for you)". Another tentatively wrote "closed reserve?", showing some possible confusion about library jargon for short-term loans for course material. Other answers were "there", "yours", and the explanation that "the book was either at another library or was on loan as it was in high demand".

Table 20: <reserved>

Term	no.
(on) reserve(d)	32
held / on hold	12
other	2
description or no answer	6

4.2.2.15. Someone working in the library who can answer specific questions or help you find resources in your area of study could be called...

In the first question, "Someone working in a library is a...", 43 participants answered "librarian"; in this question 28 gave the same answer. Other replies were more varied (see Table 21).

Participants did not seem to use terms specific to their library. While Canterbury used "information librarian" on its website, the 4 participants who answered "information (person/centre)" studied at Auckland and Otago. "Subject librarian" was used on websites at Auckland, Waikato and Victoria, but again was suggested

by only 2 Auckland and 1 Otago participants.

Table 21: \<help desk librarian\>

Term	no.
librarian	28
help desk person	5
information (person/centre)	4
library (research) assistant	3
subject (librarian)	3
(resource) specialist	3
(library) tutor	2
other	6
no answer	3

No participant use the term "reference librarian", even though Hutcherson (2004) found that 94.6% of the participants in his study understood the term "reference services". Nor did "liaison librarian", used by AUT and Massey, occur at all in the data. However it should be noted that there were no AUT participants, and only 2 Massey participants, in the sample.

Other replies, given by 1 participant each, included "helper", "mate", "researcher", "scholar", "technician", and even "archivist".

Some reference librarians have been concerned about what to call themselves, in order to project to users a professional, approachable, and accurate image of their specific role. However, this question showed that many participants, even when implicitly asked to distinguish one type of librarian from others, did not want to do so: "librarian" was specific enough for them.

This should be neither surprising nor disheartening. Most people do not use different words to distinguish between different types of lawyers either. When

people have a medical complaint, they are not expected to go directly to a doctor specialising in the appropriate area of medicine, but rather begin by seeing their regular doctor and then following a referral, if necessary. Likewise, as long as users can approach someone in the library and if necessary be smoothly referred to the person who can best answer their question, they are unlikely to care about these "librarians'" official job titles.

4.2.2.16. A class that teaches you how to use the library or how to find resources could be called...

Most answers to this question could be subdivided into two parts, the first consisting of the topic of the class, and the second consisting of what the class itself was called. The most popular topic was the plain "library", with 20 votes, followed by a variation of "how to use the library" or "learn to use the library" (7 votes). The most popular term for the class was "class" (9 votes, but possibly influenced by the terminology of the question), followed by "tutorial" (8 votes).

Table 22: <library tutorial>

Topic term	no.	Class term	no.
library	20	class	9
(how to) use the library	7	tutorial	8
information	3	tour	6
intro(duction)	2	course	4
resource (understanding)	2	workshop	3
other	4	guide	2
		seminar	2
		session	2
		orientation	1
description or no answer		5	

A synthesis of these responses might suggest "library class" or "library tutorial". These phrases were in themselves offered by 4 participants each. "Library course" was the term used on the Auckland website, while "(library) tutorial" was used by Waikato, Canterbury and Lincoln.

"Information skills workshops" and "information literacy" were used by AUT and Massey respectively. By comparison, 3 participants each used the words "information" and "workshop". The simple link used by Otago, "classes and tours", was composed of two popular words, but no participants had used either of the words in Victoria's "instruction and support".

Other options suggested included "i-class" and "library 101". Four participants did not answer this question, and one replied with "repetitive".

4.2.2.17. A pamphlet or website specifically for your area of study which tells you where to find resources could be called...

Again the question wording seemed to influence some responses. "Pamphlet" and "website" were used by 7 and 4 participants respectively, while "resources" was used by 8.

An equally popular term for "pamphlet" was "guide". This word was also used by libraries: 5 of the 8 surveyed used "subject guide". Two more used "subject portal", while Auckland used "resources by subject".

This universal use of the word "subject" was not picked up on so strongly by participants. Only 1 participant used the word itself in "subject specific guide", while a second used a synonym in "a single-discipline research supplement" and a third

used the name of their own subject in "library tips for computer science students".

"Reference" was unique in being used both as a topic term (e.g. "reference guide") and as a pamphlet term (e.g. "a resource reference").

Table 23: <help guide>

Topic term	no.	Pamphlet term	no.
resource	8	guide	7
help	4	pamphlet	7
(library) information	3	(web)site	4
how to find (…)	2	reference	2
library	2		
reference	2		
other	4	other	7
"helpful"		2	
other answers		6	
no answer		10	

A synthesis of the most popular words not used in the question gives "help guide". This complete term was suggested by 2 participants. Other complete terms suggested by 2 participants each were "help guide" and "library information pamphlet".

Other answers included the slogan-like phrases "your custom library", "just what you need", "get it from here", and "start here". Another participant answered "catalogue - close reserve" – which would in fact fulfill the criteria of the question.

4.2.2.18. A web service which lets you update your personal details, see what books you have out, etc, could be called...

So many instances of "PIMS" or a term recognisable as a variant on "personal

information management system" was a surprise, especially as this term had not been found on any of the university library websites during the survey of libraries. Further analysis showed that all 9 of these answers were given by participants from Otago. The University of Otago uses the PIMS, and students were clearly familiar with this. Possibly they expect basic library functions to be included in the same system as other university functions, or perhaps they think "PIMS" would be an appropriate name for a similar library system.

The word "personal" in combination with other words was popular at a range of universities. There were two examples each of "personal service", "personal record" and "personal details", as well as one each of "personal journal", "personal section" and "personal account". This may have been influenced by the question wording.

The terms libraries used for their own systems had only a small influence. Auckland's "patron" was used by 1 participant. "My details", used by five libraries, was suggested by 4 participants, though only 2 of them studied at a library which used the term.

"Borrower account information" (Waikato) and "my library account" (Canterbury) was echoed in variants from 6 participants – though not from any actually studying at Waikato or Canterbury. Similarly, neither of the 2 participants who offered "personal (lending) record" were from Massey, the library whose term was "your lending record". The fact that students, apparently independently, came up with the same terms as those used by some libraries suggests that these terms are relatively intuitive for students.

Finally, 6 participants gave answers such as "library website" and "online

catalogue". This suggested that, even though they may not have a name for the system, they are still familiar with where they can access it in the library interface.

Table 24: <library account>

Term	no.
PIMS / Personal Information Management System	9
personal [other]	9
(library) account (manager)	6
(my) details	4
my library	2
library online	2
library website	2
online catalogue	2
intranet	2
other	7
description or no answer	10

Other possible names given were "e-library", "webrary", "i-web", and "lib-e-niz".

4.2.2.19. An instant messaging service where librarians answer questions could be called...

Duncan and Fichter's (2004) preference testing (discussed in section 2.3.3.) resulted in their new live reference service being named "Ask a librarian". This was the same name as their older email reference service, but it was found to be the term preferred by the students they surveyed, and was successful in usability testing.

Currently only Canterbury, of the eight New Zealand university libraries, runs a live web-based reference service, which it calls AskLive. The other libraries have web-forms for questions, and generally aim to respond by email within 24 hours. Of these seven, three are called "Ask a librarian". The other four are "Enquiry online"

(AUT), "Virtual reference desk" (Waikato), "Ask a question (AskLib)" (Massey), and the explanation "Send a reference question to a library of your choice" (Otago).

In the present study, different participants interpreted the question differently: 4 referred explicitly to cellphones and text messaging, 5 to email, 4 to chatting or specific services such as IRC or MSN, and 9 in a more general form to other electronic/online services.

The one word most often repeated in answers was "librarian" (9 participants) followed closely by "help", "library", and "messaging/messenger" (7 participants each). The rest of the responses were extremely varied, which made analysis difficult. Combining some of these with the most popular "librarian", however, 2 participants each suggested "online librarian", "ask a librarian", and "text a librarian".

Table 25: <ask a librarian>

Word	no.
librarian	9
help	7
library	7
messaging / messenger	7
email	4
online	4
ask	3
instant	3
service	3
text	3
question	2
chat	2
desk	2
live	2
other	13
description or no answer	14

Other possible names included "i-site", "lib MSN", and "Q@L (questions @ library)".
The concept was generally seen positively: "handy", "helpful", and "potentially useful", although 1 participant said "don't like cellphones, i'd call it "un-subscribe":))".

4.2.2.20. A service which sends you regular updates about books or articles in your area of study could be called...

Library jargon for this tends to focus on the currency of the updates: "current awareness", "current contents", "staying current". Another theme runs through "auto alerts" and "email alert service".

Questionnaire participants focused on other aspects of the service. "Subject specific", "course specific", and "computer science" formed part of the response of 5 participants. "Update" was the most popular word, from 14 participants, though it (like "service" from 7 participants) had been part of the question and might have influenced answers. The next most popular word was "newsletter", with 7 participants.

Table 26: <subject newsletter>

Topic	no.	Service	no.
course/subject specific	5	update	14
new books/articles	3	service	7
i(nformation)	2	newsletter	7
personal	2	email	4
reference	2	list	2
other	6	other	2
other		4	
description or no answer		19	

Again, the remainder of the responses were varied, althought a little less imaginatively than the previous question. Some of these were "reference tool", "study buddy", "focus of learning update", and "subscription service".

Participants who commented on the service were split on its desirability. While 3 participants saw it as "handy", "useful", and "very helpful", another 3 viewed it as "annoying", "spam" and "unsolicited mail".

5. Discussion

In response to the <help guide> question, one participant wrote, "a lot of these things just exist - I know what I mean and my friends do, but I wouldn't say they actually have common-use names. More "the-pamphlet-that-tells-you-where-to-find-stuff", and that goes for a lot of the questions, do the names NEED changing when nobody knows what they are anyway?" (see Appendix C) This study would argue that the names might need changing precisely because nobody knows what they are.

In an article comparing the reference interview with medical consultations, Naismith (1996) discusses the evidence that jargon affects not only a patient's or user's comprehension, but also their recall, compliance with instructions, and ultimate satisfaction. More intuitive names for library services would make it easier for students to recognise those services when seeing them mentioned – and easier to remember, when needing them later, that they exist.

Academic libraries increasingly recognise that educating students in library techniques will have limited success while library systems are not based on students' needs. The same is true of library jargon. A librarian can spend all year explaining to students why the library refers to "course reserve" in its catalogue but "close reserve" elsewhere on the catalogue, but at the beginning of the next academic year another class of first-year students will arrive, just as confused as the previous years' classes. Surely the most effective way to ensure students understand what a librarian is talking about is for the librarian to use language that is immediately intuitive to students.

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This is not an easy task. Librarians are used to their jargon to such a degree that they often do not recognise it as jargon. By contrast, librarians are often unfamiliar with students' own language: even in this study, "guttering thing" and "PIMS" were two examples of responses from participants that initially bewildered the researcher! It is hoped that this study has provided a view of how students see and talk about the library world.

This study looked at two major research questions. Firstly, "What is the range of natural use of language by students in labelling library-related concepts?" It was found that this varied greatly depending on the concept. While answers were close to unanimous for some concepts such as "librarian" (86% of participants), for other concepts hardly 2 participants agreed on a term (for example <resource guide> and <subject newsletter>).

The second research question was, "To what extent are terms used by students similar to terms used by academic libraries, and to what extent are they different?" Again this varied depending on the concept.

Three of the concepts surveyed in the questionnaire – <librarian>, <student>, and <issue> – had not been surveyed on the library websites. However the participants' terms for these were not surprising.

There were seven concepts for which a majority of students used a term, or a synthesis of student answers formed a term, that was identical to a term used by at least two libraries (see Table 27).

For four concepts, participants had chosen an entirely different term than libraries

used. This can be seen as indicative of areas where libraries might wish to reconsider the jargon they use when communicating with students. It should be noted however that further study is required, particularly to determine local conditions and preferences.

Table 27: Terms used by participants that were identical to terms used by at least two libraries.

Term	no. participants	no. libraries
catalogue	33	8
database	23	8
journal	37	8
reference	38	8
storage	9	4
library tutorial	(20/8) 4	3
ask a librarian	(3/9) 2	3

Note: For compound terms, numbers in brackets show the number of participants who used each component word.

The first of these terms was "order" (13 participants) for interloaning an item; another 8 participants used the term "interloan". This would be an awkward term to change, since "order" is currently used when purchasing new books for the library collection. Other terms are less problematic, however. When talking about renewing an item, 19 participants talked about "extending" a loan. A similar number, 18, used the term "renew" – but as this was used unanimously by libraries, it is likely that they had some influence on the participants' language: that "renew" is a learned term, rather than an intuitive one. If this is the case, then "extend" could be the more user-friendly term.

Although little was clear-cut in the final questions, due to a great variety of

responses, the same could be said for "help guide" (suggested by 2 participants, and its component words used by 4 and 7 participants respectively) and for "subject newsletter" (not suggested as a whole by any participants, but its component parts suggested by 5 and 7). In addition, these were both concepts for which libraries showed a significant variety of jargon, so there was no reason to think any of the library jargon was more compelling than any other term.

Several other terms chosen by participants were used by one library, though not always as the predominant term on the website. To "reserve" an item (21 participants) was used for short term loans on Auckland's website, while "reserved" for an item on the hold shelf (32 participants) was used by AUT on non-catalogue webpages. Lincoln, like 28 participants, used "librarian" by itself to refer to a reference librarian. Finally, 2 participants used "library account" (its component words chosen by 12 and 6 participants respectively), as Canterbury did on its homepage, though not in its catalogue.

This type of situation can be seen to indicate areas where it might be particularly practical to consider using these student-preferred terms on a wider basis, since the term is already working for one library. One exception was "Dewey number" (12 participants), which was used on Massey's website, but not in the catalogue. The term used in the catalogues of all libraries, "call number", was used by almost as many: 10 participants. Although more students used "Dewey number", using this term as a generic word would cause confusion when it was necessary to distinguish between the Dewey Decimal and Library of Congress classification systems.

Confusion was already evident for terminology referring to <short loan>. Most students appeared to use their own library's jargon for this concept. On the face of

it, therefore, there would not seem to be a need to change the terminology. However, the facts that different libraries used different terms, and that some libraries used more than one term, were mirrored by some confusion among participants. In addition, the most common terms for this concept – "close reserve", "course reserve", and "reserves" – were similar to the term used by most participants for requesting that an item be held for them, "reserve". Homonymous terminology is not unprecedented – compare "in the library's holdings" with "on the library's holdshelf" – but it can be confusing.

Another argument for reconsidering library jargon in this case is that the terms formed around "reserve" are not self-explanatory to someone who has never been in a university library before. "Short loan", by contrast (used at Auckland), is perfectly clear. In addition, it uses a parallel structure to more specific terms such as "3-day loan" and "3-hour loan". From another angle, "restricted loans" (used at Canterbury and Lincoln) and "closed reserve" (Victoria and Otago) are terms that focus unduly on negative aspects of the collection. While it may be impossible to entirely avoid this problem and retain truth in advertising, "short loan", or "short term loan", is certainly far less pejorative.

Finally, although the centrality of the short-term loan collection to university libraries has ensured that students quickly learn their library jargon, so they would quickly learn any new term introduced. New students and old alike would learn it even more easily if it were a term designed to be user-friendly.

5.1. Implications for further research

This study has found a range of terms used by some New Zealand library students

for library-related concepts, but it has had its limitations. Not all New Zealand university libraries were represented, and a more scientific sample – whether nationwide or focused on a single university – might provide more representative results. A study focused on one university could also investigate language used for a broader range of concepts. Language preferred by public library users would also be of interest.

For researchers wishing to conduct a similar survey, two observations should be particularly noted:

- Firstly, although an effort was made to explain what was wanted both in the instructions and in the questions by using "is a" rather "is" in order to inclue that a noun was desired, several participants still replied with descriptions. These led to a serendipitous insight into how some students view a number of library resources and services, however it meant that fewer data of the type desired were gathered. In future studies of this type it might be worth explaining in more detail what types of answers are wanted, or perhaps using a question and answer pairing as an example: the <librarian> one would be particularly suitable for this, due to the near unanimity of answers in this study.

- Secondly, it is especially important to ensure that words in the question are as generic as possible. Despite attempts to do so in the present study, there were numerous instances of participants using words from the question in forming their answers. This shows how flexible people are in picking up vocabulary from their environment, but it also made it harder to analyse results and determine which terms were genuine examples of natural

language use.

Further research could also build on the results obtained through open-ended questions, by asking participants to rank these terms in order of preference. Alternatively, terms might be used in a usability testing scenario to discover whether they work in the context of the full library system. Such usability testing should not be limited to library websites, but should also involve the physical building itself, including signage, pamphlets, and encounters with librarians.

5.2. Recommendations for libraries

Several New Zealand university libraries, recognising the existence of jargon in their environments, have created webpages to explain it to their students. Unfortunately the links to these may be buried in pages students rarely visit, hidden in an obscure corner at the bottom of the screen, or even, ironically, labelled with yet more library jargon: "glossary". Even if students do manage to find the page, the glossary may include terms that the library does not use or neglect terms the library does use, and definitions may have been written by librarians without any input from students as to whether the explanation is sufficient.

It is recommended that rather than attempting to teach students library jargon – or hoping that students will teach themselves – libraries should find out how they can adapt their terminology to be intuitive to students. In this context, the present study should be seen as a pilot study, rather than as providing any definitive results. Preferred terminology will vary according to geographical location, age of respondents, and culture.

Terminology will also vary according to situational context: even if all respondents in this survey had agreed on the use of some term, it would not necessarily be the preferred term in other situations. For this reason, it is recommended that libraries combine preference testing, in order to discover what terms students would use, with usability testing, in order to ensure that these terms will work in practice. They should take care to recognise that library jargon affects all library interfaces with users, from websites to the physical building and staff interaction with users.

There will be some jargon that cannot be changed, due to no satisfactory alternative existing. "Interloan", in the present survey, is one such example. For such words, a glossary of terms may prove useful. But again, students should be consulted both about what to include and about how to satisfactorily define these terms. A library that is trying to make its communications more user-friendly cannot proceed without significant input from the users it wants to communicate with.

6. Conclusion

The choice of using open-ended questions was found to have been justified, in its allowance for serendipitous discoveries. Participants regularly used terms that the researcher would not have thought to include in a multiple-choice questionnaire.

Although the questionnaire was not answered by a large or scientific sample, sufficient responses were received to answer the research questions. The range of answers from participants was found to be as low as 4 distinct terms for more basic concepts, and more than 30 distinct terms for more complex ones.

For many concepts central to students' interaction with the library, such as <catalogue>, <journal>, and <reference>, participants' and libraries' preferred terms were the same. It was especially clear in the case of <short loan> that the library most visited was significantly correlated with participants' chosen terminology. The other demographic data gathered had much less correlation with any response.

For many other concepts, participants used quite different terms than libraries. Most of these were less central to students' interaction with the library, but the effect was also very noticeable for the common concepts <extend> and <reserved>.

Further research could study terminology of users from libraries that could not be included in the present study, or a greater range of concepts. Usability testing of whether user-derived terminology performs better than library jargon is also warranted. It is hoped that knowing more about users' language preferences will help libraries develop more user-centered systems and environments.

7. References

Allen, B. L. (1996). *Information tasks: Toward a user-centered approach to information systems*. San Diego: Academic Press.

Allen, M. (2002). A case study of the usability testing of the University of South Florida's virtual library interface design. *Online Information Review, 26*(1), 40-53.

Auckland City Libraries. (c. 2005). *Auckland City Libraries - Home*. Retrieved January 25, 2006, from http://www.aucklandlibrary.co.nz/

Auckland University of Technology Library. (2005, December 20). *AUT - Library Home*. Retrieved January 23, 2006, from http://www.aut.ac.nz/library/about_us/publications/new_library_site.htm

Brophy, P. (1993). What's in a name? *New Library World, 94*(1108), 27-29.

Brophy, P., email, December 17, 2005.

Budd, J. M. (1995). User-centered thinking: lessons from reader-centered theory. *RQ, 34*(4), 487-496.

Caña, M. B., Cueto, Q. L. G. G., De Guzman, A. B., Fuchigami, K. B., Manalo, L. R. T., & Yu, J. C. U. (2005). Clientele recognition of library terms and concepts used by librarians: A case of an academic library in the Philippines. *Journal of Librarianship and Information Science, 37*(4), 195-204.

Chaudhry, A. S., & Choo, M. (2001). Understanding of library jargon in the information-seeking process. *Journal of Information Science, 27*(5), 343-349.

Christchurch City Libraries. (c. 2006). *Christchurch City Libraries*. Retrieved January 25, 2006, from http://library.christchurch.org.nz/

Cobus, L., Dent, V. F., & Ondrusek, A. (2005). How twenty-eight users helped
  redesign an academic library web site: A usability study. *Reference & User
  Services Quarterly, 44*(3), 232-246.

Cockrell, B. J., & Jayne, E. A. (2002). How do I find an article? Insights from a Web
  usability study. *The Journal of Academic Librarianship, 28*(3), 122-132.

Compton, N. J. (1926). Library Language. *American Speech, 2*(2), 93-95.

Cook, P. (1941). Informal Library Language. *American Speech, 16*(4), 310-311.

Crawford, W. (1987). Speaking the language. *LITA Newsletter, 30*, 19-20.

Dickstein, R., & Mills, V. (2000). Usability testing at the University of Arizona Library:
  How to let the users in on the design. *Information Technology and Libraries,
  19*(3), 144-151.

Duncan, V., & Fichter, D. M. (2004). What words and where? Applying usabiliity
  testing techniques to name a new live reference service. *Journal of the Medical
  Library Association, 92*(2), 218-225.

Dunedin Public Libraries. (2006, January 25). *Home - Dunedin Public Libraries*.
  Retrieved January 25, 2006, from http://www.dunedinlibraries.com/home/

Finegan, E., Besnier, N., Blair, D., & Collins, P. (1992). *Language: its structure and use*.
  Sydney: Harcourt Brace Jovanovich.

Granello, D. H., & Wheaton, J. E. (2004). Online data collection: strategies for
  research. *Journal of Counseling & Development, 82*, 387-393.

Griffiths, J. R., & Brophy, P. (2005). Student searching behavior and the web: use of
  academic resources and Google. *Library Trends, 53*(4), 539-554.

Hamilton Libraries. (c. 2006). *Hamilton Libraries -- Quick Selection Menu*. Retrieved
  January 25, 2006, from http://www.hpl.govt.nz/

Hutcherson, N. B. (2004). Library jargon: student recognition of terms and concepts commonly used by librarians in the classroom. *College & Research Libraries, 65*(4), 349-354.

Intner, S. S. (2003). Words I love to hate. *Technicalities, 23*(3), 7-9.

Jackson, W. J. (1984). The user-friendly library guide. *College & Research Libraries News, 45*(9), 468-471.

Jiao, Q. G., & Onwuegbuzie, A. J. (1997). Antecedents of library anxiety. *Library Quarterly, 67*(4), 372-399.

Kamhi-Stein, L. D., & Stein, A. P. (1999). Teaching information competency as a third language: A new model for library instruction. *Reference & User Services Quarterly, 38*(2), 173-179.

Lincoln University Library. (2005, June 30). *Library Home Page - Lincoln University*. Retrieved January 23, 2006, from http://www.lincoln.ac.nz/libr/

Massey University Library. (2006, January 19). *Massey University Library*. Retrieved January 23, 2006, from http://library.massey.ac.nz/

Mellon, C. A. (1986). Library anxiety: a grounded theory and its development. *College & Research Libraries*, 160-165.

Morgan, K. A., & Reade, T. (2002). Competing vocabularies and 'research stuff'. *Journal of Internet Cataloging, 5*(4), 81-95.

Mulhall, K. J., Ahmed, A., & Masterson, E. (2002). The "doctor-customer" relationship: Hippocrates in the modern marketplace. *International Journal of Health Care Quality Assurance, 15*(1), 9-10.

Naismith, R. (1996). Reference communication: Commonalities in the worlds of medicine and librarianship. *College & Research Libraries, 57*(1), 44-57.

Naismith, R., & Stein, J. (1989). Library jargon: student comprehension of technical language used by librarians. *College & Research Libraries, 50*(5), 543-552.

Onwuegbuzie, A. J., Jiao, Q. G., & Bostick, S. L. (2004). *Library anxiety: Theory, research, and applications*. Lanham: Scarecrow Press.

Palmerston North CIty Library. (c. 2006). *Palmerston North City Library*. Retrieved January 25, 2006, from http://citylibrary.pncc.govt.nz/

Pemberton, A., & Fritzler, P. (2004). The language barrier: Don't let library lingo get in the way of learning. *College & Research Libraries News, 65*(3), 154-155.

Redfern, V. (2004). Natural language thesaurus: a survey of student research skills and research tool preferences. *Australian Academic and Research Libraries, 35*(2), 137-150.

Reynolds, L., & Barrett, S. (1981). *Signs and guiding for libraries*. London: Clive Bingley.

Roca, J., & Nord, R. (2001). Usability study of the MnLINK Gateway. *OCLC Systems and Services, 17*(1), 26-33. Retrieved November 26, 2005 from ProQuest.

Shapiro, F. R. (1989). Contributions to the history of library terminology. *Library Quarterly, 59*(2), 95-115.

Shoham, S., & Mizrachi, D. (2001). Library anxiety among undergraduates: A study of Israeli B.Ed students. *Journal of Academic Librarianship, 27*(4), 305-311.

Travis, T. A., & Norlin, E. (2002). Testing the competition: Usability of commercial information sites compared with academic library web sites. *College & Research Libraries, 63*(5), 433-448.

University of Auckland Library. (2005). *LEARN - The University of Auckland Library*. Retrieved January 23, 2006, from http://library.auckland.ac.nz/

University of Canterbury Library. (2006). *Library - University of Canterbury*. Retrieved January 23, 2006, from http://library.canterbury.ac.nz/

University of Otago Library. (2006, January 19). *Library, University of Otago*. Retrieved January 23, 2006, from http://library.otago.ac.nz/

University of Waikato Library. (2005, April 23). *The University of Waikato Library - Te Whare Pukapuka*. Retrieved January 23, 2006, from http://www.waikato.ac.nz/library/

Victoria University of Wellington. (2005a, July 26). *Closed Reserves*. Retrieved January 31, 2006, from http://www.vuw.ac.nz/library/services/reserves.aspx

Victoria University of Wellington. (2005b, November 11). *The Library, Victoria University of Wellington*. Retrieved January 23, 2006, from http://www.vuw.ac.nz/library/

Wellingon City Libraries. (2006, February 10). *Wellington City Libraries: Website Homepage*. Retrieved February 12, 2006, from http://www.wcl.govt.nz/

Winograd, T. (1977). A framework for understanding discourse. In M. A. Just & P. A. Carpenter (Eds.), *Cognitive processes in comprehension* (pp. 63-88). Hillsdale, New Jersey: Lawrence Erlbaum Associates.

Young, H., & Belanger, T. (1983). *The ALA Glossary of Library and Information Science*. Chicago: American Library Association.

Appendix A: Questionnaire

Students' natural use of language for academic library concepts

Participant Information Sheet

Researcher: Deborah Fitchett: School of Information Management, Victoria University of Wellington

I am a Masters student in Library and Information Studies at Victoria University of Wellington. As part of this degree I am undertaking a research project leading to a thesis. The project I am undertaking involves investigating what terms students would naturally use to talk about library-related concepts. The aim is to discover what terms might be more intuitive and user-friendly. The University requires that ethics approval be obtained for research involving human participants.

I am inviting summer school students studying at a first-year level to participate in this study. Participants will be asked to complete a web-based questionnaire. The questionnaire includes 25 questions and should take about 5-10 minutes to complete.

The questionnaire will be anonymous. The software used to create the survey automatically logs the IP address of respondents' computers, but this information will be stripped from the data prior to analysis, and discarded. Responses collected will be grouped and analysed to form the basis of my research report. The report will be submitted for marking to the School of Information Management and deposited in the University Library.

If you have any questions or would like to receive further information about the project, please contact me at fitchedebo@student.vuw.ac.nz or my supervisor, Keith Webster, at the Library at Victoria University, P.O. Box 600, Wellington, phone 463 5247.

If you are willing to participate in this survey, please click on the button to continue. Completion of the questionnaire implies informed consent.

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Students' natural use of language for academic library concepts

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Demographic data
This information is needed in order to help analyse the information collected in other questions. Please check the appropriate box.

1. What university are you studying at?*
- ⚪ Auckland
- ⚪ AUT
- ⚪ Waikato
- ⚪ Massey
- ⚪ Victoria
- ⚪ Canterbury
- ⚪ Lincoln
- ⚪ Otago

2. Are you primarily a:*
- ⚪ first year student
- ⚪ second year student
- ⚪ third year student
- ⚪ other

3. Is English your first language?*
- ⚪ Yes
- ⚪ No

4. Have you visited the library at the university you're enrolled in:*
- ⚪ never
- ⚪ about 1-9 times
- ⚪ about 10 times or more

5. Have you attended a library class that taught you how to use any library service:*
- ⚪ never
- ⚪ 1 class
- ⚪ 2 or more classes

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Students' natural use of language for academic library concepts

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For the following questions, please write a word or words that you think describes each concept. Imagine you are having a casual conversation, and just write the first word or words that you think of.

6. A person who works in a library is a:

7. A person who visits a library is a:

8. The computer system you can use to find out if the library has the book you want is a:

9. A computer system you can use to find articles about your area of study is a:

10. The code on a book that tells you where it should be shelved is a:

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Students' natural use of language for academic library concepts

As before, please write a word or words that you think describes each concept. Imagine you are having a casual conversation, and just write the first word or words that you think of.

11. A regular publication containing articles on a particular subject is a:

12. The collection of dictionaries, encyclopaedias, atlases, etc, that cannot leave the library is:

13. The collection of textbooks that you can only borrow for a few hours or a few days is:

14. The collection of books that aren't used often, which someone working in a library can get for you if you need one, is:

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Students' natural use of language for academic library concepts

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As before, please write a word or words that you think describes each concept. Imagine you are having a casual conversation, and just write the first word or words that you think of.

15. If you want to take a book home, the library can:

```
[                    ]
```

16. If the library expects the book back on Monday, but you need to keep it until Friday, you can:

```
[                    ]
```

17. If someone else has a book you want, you can:

```
[                    ]
```

18. If the library at your university doesn't have the book you want, but another library has it, you can:

```
[                    ]
```

19. If the library has put aside for you a book you wanted, the book is:

```
[                    ]
```

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Students' natural use of language for academic library concepts

Page 5 of 5

As before, please write a word or words that you think describes each concept. Imagine you are having a casual conversation, and just write the first word or words that you think of.

20. Someone working in the library who can answer specific questions or help you find resources in your area of study could be called:

21. A class that teaches you how to use the library or how to find resources could be called:

22. A pamphlet or website specifically for your area of study which tells you where to find resources could be called:

23. A web service which lets you update your personal details, see what books you have out, etc, could be called:

24. An instant messaging service where librarians answer questions could be called:

25. A service which sends you regular updates about books or articles in your area of study could be called:

Please click the button below to complete the survey.

Submit form

Appendix B: Results of library website survey

	catalogue	database	call number (in catalogue)	journal
Auckland	Voyager - catalogue	database & article searching	call number	serials (includes journals)
AUT	catalogue	databases	call number	journals / serials
Waikato	library catalogue	LibraryLink databases	call number[a]	journals
Massey	library catalogue	article databases	call no.[b]	journals
Victoria	catalogue	databases	call number	journals
Canterbury	library catalogue	databases	call number	journal
Lincoln	library catalogue	databases	call number[a]	serials (journals etc)
Otago	catalogue	article databases	call number[a]	journals

[a] "classification" was used elsewhere on library website

[b] "Dewey number" was used elsewhere on library website

	reference	short loan	storage	renew
Auckland	reference collection	short loan collection	storage	renew
AUT	reference	high demand / course reserves		renew
Waikato	quick reference	course reserve	off campus storage	renew
Massey	reference	reserve collection	book storage	renew
Victoria	reference collection	closed reserve; course reserve; reserve	stackroom / closed stack (ask at reserves)	renew
Canterbury	reference resources	restricted loans	warehouse	renew
Lincoln	general reference	restricted loan	book archive / serials stack	renew
Otago	reference	reserves collection	storage	renew

	reserve	interloan	reserved (in catalogue)	reference librarian
Auckland	recall[a]	interloans	on hold	subject librarian
AUT	request	interloan	on hold[b]	liaison librarian
Waikato	request item	interloans	on hold at	subject librarian
Massey	request	interlibrary loans	1 hold	liaison librarian
Victoria	request item	interloan request	on hold	subject librarian
Canterbury	request copy / request title	interloans	item held	information librarian
Lincoln	request item	interloans	on holds shelf	librarian
Otago	request item	document delivery	on hold	
Auckland City	request	-	on holdshelf	-
Hamilton	reserve an item	-	on reserve shelf	-
Palmerston North	request item	-	item being hold	-
Wellington	place a reserve	-	reserved for pickup	-
Christchurch	place hold	-	on hold for someone	-
Dunedin	place a hold	-	being held	-

Note: Dashes indicate the term was not looked for on the site.

[a] "reserve" was used for short-term loans

[b] "reserved" was used elsewhere on library website

	library tutorial	resource guide	library account	ask a librarian[a]
Auckland	library course	resources by subject	patron	[ask a librarian]
AUT	information skills workshops	subject guides	my details	[enquiry online]
Waikato	library tutorials	subject portals	borrower account information (my details)	[virtual reference desk]
Massey	information literacy	subject guides	view your lending record	[ask a question (AskLib)]
Victoria	instruction & support	subject guides	my details	[ask a librarian]
Canterbury	library tutorial bookings	subject portals	my account, my library account	AskLive
Lincoln	tutorials	subject guides	my details	[ask a librarian]
Otago	classes & tours	subject guides	my details	[send a reference question to a library of your choice]

[a] Terms in brackets refer to webform/email-based reference services.

	subject newsletter	new books	available	just returned
Auckland	current awareness / Current Contents / auto alerts / email alert service	on the new books display	available	discharged
AUT	alerts		available	just returned
Waikato		new books display	available	just returned
Massey	email alerts / current awareness	new books	available	recently returned
Victoria	auto alerts	at new books display	available	just returned
Canterbury	staying current	new book display	in library	recently returned
Lincoln		on display	in library	recently returned
Otago		recent arrivals	available	just returned

	on loan	renewed	overdue	Catalogue interface system
Auckland	on loan	renewed	overdue	Voyager
AUT	on loan	renewed	overdue	LCONZ
Waikato	on loan	renewed	overdue	LCONZ
Massey	due			Kea
Victoria	on loan	renewed	overdue	LCONZ
Canterbury	due			iPac
Lincoln	on loan		overdue	WebVoyage
Otago	on loan	renewed	overdue	LCONZ

Appendix C: Results of questionnaire

ID	Start date	End date	AU	ATU	HU	PU	WU	CU	LIU	DU
239	1/16/06 11:44	1/16/06 11:51								1
240	1/16/06 11:54	1/16/06 12:06								1
241	1/16/06 12:21	1/16/06 12:27								1
242	1/16/06 12:28	1/16/06 12:34								1
243	1/16/06 16:48	1/16/06 17:00								1
244	1/16/06 16:52	1/16/06 17:00	1							
245	1/16/06 18:26	1/16/06 18:41	1							
246	1/16/06 19:04	1/16/06 19:09	1							
247	1/16/06 22:01	1/16/06 22:07								1
248	1/17/06 8:07	1/17/06 8:19	1							
255	1/17/06 13:14	1/17/06 13:25	1							
258	1/17/06 14:59	1/17/06 15:09								1
259	1/17/06 15:22	1/17/06 15:31						1		
260	1/17/06 16:29	1/17/06 16:36								1
261	1/17/06 17:23	1/17/06 17:31	1							
266	1/18/06 4:18	1/18/06 4:41	1							
269	1/18/06 15:08	1/18/06 15:14						1		
275	1/20/06 12:49	1/20/06 12:53								1
276	1/21/06 14:46	1/21/06 14:50	1							
277	1/22/06 16:50	1/22/06 16:56					1			
278	1/23/06 12:35	1/23/06 12:47			1					
280	1/23/06 14:22	1/23/06 14:30								1
281	1/24/06 9:16	1/24/06 9:21					1			
282	1/24/06 10:44	1/24/06 10:55						1		
284	1/24/06 12:14	1/24/06 12:26								1
285	1/24/06 12:23	1/24/06 12:28					1			
286	1/24/06 12:53	1/24/06 13:30								1
287	1/24/06 13:32	1/24/06 13:37								1
288	1/24/06 13:26	1/24/06 13:41								1
290	1/24/06 13:32	1/24/06 13:45								1
291	1/24/06 14:05	1/24/06 14:15								1
292	1/24/06 14:52	1/24/06 15:02								1
293	1/24/06 15:41	1/24/06 15:47								1
294	1/24/06 15:50	1/24/06 16:05								1
295	1/24/06 18:09	1/24/06 18:13								1
296	1/24/06 18:21	1/24/06 18:25					1			
297	1/24/06 18:23	1/24/06 18:44								1
298	1/24/06 19:52	1/24/06 20:09				1				
299	1/24/06 20:48	1/24/06 20:57								1
300	1/25/06 11:28	1/25/06 11:35								1
301	1/25/06 12:06	1/25/06 12:11					1			
302	1/25/06 12:41	1/25/06 12:47								1
303	1/25/06 14:22	1/25/06 14:27					1			
304	1/25/06 16:55	1/25/06 17:04								1
334	1/26/06 13:58	1/26/06 14:04								1
337	1/26/06 14:20	1/26/06 14:28				1				
340	1/26/06 14:35	1/26/06 14:39					1			
361	1/27/06 12:34	1/27/06 12:40								1
364	1/27/06 16:20	1/27/06 16:28					1			
368	1/27/06 18:03	1/27/06 18:11								1

ID	1st year	2nd year	3rd year	4th + year	native English	non-native English	0 visits	1-9 visits	10+ visits	0 class	1 class	2 + class
239			1		1				1		1	
240			1		1			1		1		
241			1		1				1	1		
242		1			1				1	1		
243				1	1				1	1		
244	1					1			1	1		
245				1	1				1		1	
246				1		1			1	1		
247			1		1				1			1
248	1				1				1			1
255			1			1			1			1
258			1		1				1	1		
259	1					1		1		1		
260				1	1			1		1		
261	1				1				1	1		
266		1			1				1		1	
269	1				1			1			1	
275				1	1				1	1		
276		1				1			1	1		
277				1		1			1	1		
278		1			1				1			1
280			1		1				1		1	
281	1				1				1	1		
282	1				1				1	1		
284		1			1			1			1	
285	1				1				1	1		
286				1	1				1		1	
287			1		1				1		1	
288			1		1				1	1		
290			1			1			1			1
291			1		1				1	1		
292				1	1				1		1	
293	1				1			1			1	
294	1					1			1		1	
295		1			1				1	1		
296	1				1			1				1
297			1		1				1		1	
298	1				1				1		1	
299		1			1				1	1		
300		1			1			1		1		
301		1			1				1		1	
302			1		1				1	1		
303		1			1				1			1
304				1	1				1			1
334				1	1				1	1		
337				1	1				1	1		
340			1		1				1	1		
361			1		1				1			1
364	1				1			1		1		
368			1		1				1		1	

ID	librarian	student	catalogue	database
239	librarian	library user	Catalogue (OPAC)	??
240	Librarian	Consumer	Database	Database
241	Librarian	user	Catalouge	database
242	librarian	person wanting some info	library catalogue	library catalogue
243	Librarian	academic,	Catalogue	Database
244	librarian	students/visitors		
245	librarian	user	catalogue	medline, or more generally, a journal article search
246	librarian		cataloge	database
247	librarian	the student	catelogue	database
248	librarian	person	electronic index	research index
255	librarian	library visitor	catalogue	database
258	librarian	person at the library	catalogue	database
259	helpful	hardworking	informative	hard to find one
260	librarian	patron	catalogue tool	database
261	librarian	patron	catalogue	catalogue
266	librarian	library member/students/ public/etc	computerised catalogue	reference
269	librarian	visitor	catalogue	database
275	librarian	person	reference	course section
276	librarian		search system	
277	librarian	customer	database	database
278	very helpful person	person wanting to study or gain knowledge	library catalouge	library catalogue that includes options of the location (different University schools, subjects)where your articles of area of study maybe
280	librarian	visitor	database	catalogue
281	librarian	vistor	Catalouge	Database
282	librarian	student	catalogue	intranet
284	librarian, library assistant	student, library user	catalogue, library database	search database
285	bookworm	student	catalogue	database
286	librarian	patron	catalogue	catalogue
287	librarian	student	catalogue	e journal
288	librarian	customer	library catalogue/database	network
290	Libarian	student,teacher,etc.any onereally	Catalogue	Database
291	librarian	Dedicated student	Catalogue	Journal Search engine.(Scifinder)
292	librarian	library user, visitor, student	database	database
293	Librarian.	Visitor of a library.	Terminal. 'Catalogue'.	This question is vague.
294	librarian	visitor	library searching engine	catalogue
295	Librarian	student	catalogue	database
296	libarian	customer	piece of ----	piece of ----
297	Librarian	librenter	Catalogue	Article database
298	librarian	person seeking information	catalogue	database
299	library assistant	visitor	catalogue	catalogue

ID	librarian	student	catalogue	database
300	Librarian	guy in the library	Searching thing	Another searching thing
301	Tidy, conscientious person who knows a lot about library systems, cataloging, and how to use computors.	Student who is probably doing a last-minute essay.	Catalogue.	Database.
302	librarian, administrator,assistant	student, researcher	data base	data base
303	Librarian	Student, visitor	Directory, catalogue	Database
304	helpful and knowledgeable	hard worker who may want ot escape from her noisy and cold flat to work in the warmth and quietness of a library	extremely helpful system	blessing
334	librarian	person	catalogue	catalogue
337	librarian	book lover	online catalogue	online catalogue with search engine
340	librarian	borrower	useless one	another useless one
361	libarian	library user	catalogue	search engine or database
364	an information resource on the librarys contents	enquiror or researcher`	database	journal database
368	librarbian	user	computer	database

ID	call number	journal	reference	short loan
239	Call number	jounral	reference material	close reserve
240		Journal		Close reserve
241	call number	Journal	Reference	Close reserve
242	index	journal		course reserve
243	Call Number	Journal	Reference	Close Reserve
244	Bar Code		Reference Books	Short loan
245	dewey decimal code	journal	the reference section	short loan collection
246			reference	close reserve
247	ISBN number	journal	reference	closed reserve
248	reference number	journal	reference only	short loan
255	call number	journal	reference	short loan
258	code number	journal	reference section	close reserve
259	confusing	just a general overview	expensive	always not there
260	code	magazine	reference	short loan
261	dewey code	journal	reference collection	short loan
266	index	journals	reference	short loan
269	decimal system	journal	reference	restricted loan
275	call number	publication	reserve	reserve
276				short loan
277	code	branch magazine	referense material	on short term loan
278	dewey system??	newspaper, magazine	not for loan items??	course reserves
280	call number	journal	references	close reserve
281	Dewy number	Journal	Referance books	Closed reserve or 3 day loan
282	dewey decimal number	magazine/ journal	reference section	restricted loans
284	catalogue code	magazine, scientific journal	library reserve	restricted books
285	dewey someting	journal	referenece	reserve
286	ISBN or Dewy system	journal	references	close reserve
287	dewey number	journal	reference section	course reserve
288	barcode	journel	reference material	closed reserve
290	Call Number	Journal	Reference items	Close Reserve items
291	Reference number(QD)	Journal	Reference	On Reserve
292	book code, book discription	journal	reference book	close reserve item, (this may actually be "course reserve"- I've never figured it out
293	Dewey Decimal Number.	Journal.	The reference set. Though there is a great difference between CANNOT and SHOULD NOT.	Mean spirited?
294	reference number	journal	restricted item	reserve books
295	barcode	journal	reference	close reserve
296	call sign	periodical	reference	guttering thing
297	ISDN code	Journal	Reference	Reserve
298	call number	database	reference	reserve
299	number on the book	specialised magazine or journal	the reference collection	course reserve books
300	Barcode of some description	Magazine	Likely to be stolen	A library book
301	don't know	Journal	Reference material	3-day loan stuff
302	call number	journal	reference	reserve

ID	call number	journal	reference	short loan
303	Dewey decimal system..	Magazine, journal	Reference material	Closed reserve
304	helpful in finding the book	uptodate and full of previous information about the topic	great as you know they are there somewhere in the library	annoying as there may not be enough time to get all the information you want out of the book in such a short time span
334	reference No.	journal	reference	short reserve
337	d-code	series/journal	reference area	loan
340	undecodable one	magazine		closed reserve
361	call number	journal	refernce books? dont really know	close reserve
364	dewi? decimal system for classification	journal	reserve section	short term loan
368	number	journal	refernce section	reserve item

ID	storage	lend	extend	reserve
239	special collection	lend	renew	reserve
240		allocate it	Extend your period of time/renew	reserve/recall
241	back stacks	isssue it	reissue	reserve it
242		lend it to you	ask for an extention	request it is held for you when it is returned
243	Special reference	issue it	Extend Loan	book it
244		lend it to you	extend the date	recall it
245	the basement or the stacks,	issue it to you	renew it	reserve it
246			renew it	reserve
247	archieve	loan	get a extension	request it
248	rare collection	loan	extend	recall
255	basement	issue the book	renew the book	recall the book
258	dont know	check it out	renew it	reserve it
259	useless	lend me one	extend, hopefully	can do nothing, just wait
260	storage	lend it	renew it	recall it
261	unused books	issue it to you	renew it	place a hold on it
266	unpopular books?	loan out	extend	reserve
269	interloan	issue it	extend it	request it
275	old	loan	reissue it	hold it
276		lend it		recall
277	speical storage	lend it to you	borrow it again	make a reservation
278	??	issue you one if you have your student i.d	re-issue the book	call-back the book
280		lend it to you	extend the borrowing time	go on the waiting list
281		issue you it	have it reissued	Reserve it
282	don't know	have it issued	have it reissued	reserve the book
284	archives	issue it	reissue it	book it, reserve it
285	closed reserve	issue	reissue	borrow
286	storage	issue it to you	renew it	recall it
287		issue it	renew it	request it
288	storage books	issue	re-issue	book it, waiting list
290	in storage	issue it to you, depending what type of book it is	Renew it	book it
291	In storage	Issue it to you.	Pay your fines.	Request it
292	attic material, send-out-for books	issue it	renew it, keep it and pay the fines	reserve it, request it
293	Archived? Stored? Basemented?	Issue it to you.	Extend the loan period.	Reserve it.
294	books in storage	help me to check out the book	renew it	make an request order
295	archived	issue a book	extend the loan	reserve
296	closed reserve	issue it	neglect to tell them	hunt them down (jokes)
297	Special Collections	lend it to you	Renew it	put a request on it
298	archive	lend	extend your loan	reserve it
299	books behind the desk	issue it	renew it	reserve it
300	What?	rent it out to you	pay late fees	reserve it

ID	storage	lend	extend	reserve
301	rare or unusual books	issue it to you	extend the issue period through renewing the book.	book it for when they bring it back.
302		lend it to you, issue it	extend the loan	reserve it
303	Closed reserve	Issue a book to you	Renew	Reserve, steal
304	handy as you know they are usually well looked after	issue it	renew it	borrow or reserve it
334	non-shelved	lend you one	extend the borrowing time	reserve
337	loan from other campus	lend	extend loan	order (wait in queue)
340		lend you one	call them,and get it reissued	put it on hold
361	back log?	lend you it	get an extension	book it
364	archive	issue it	appologise and return it late or apply for an extension	try other libaries
368	stored book	borrow it	re-issue it	queue for it

ID	interloan	reserved	reference librarian	library tutorial
239	interloan	reserved	librarian	catalogue class
240	request	reserved	Librarian/Library tutor	Library tutorials
241	order it	reserved	a librarian	library tour
242	ask them to get it for you	reserved	librarian	how to use the library class
243	order it	on hold	librarian, information	tutor
244	ask the library to do a transfer service	Reserve	Information center	
245	interloan it	on hold, or reserved	the student-help Computer Science librarian	How to make the most of the library
246	hold			
247	interloan	reserved	librarian	How 2
248	request an inter-loan	reserved	library assistant	library guide
255	inter-university delivery	reserved	subject librarian	library course
258	request it	reserved	librarian	a library course
259	borrow there	on hold	librarian	i class
260	transfer it	holding it	help desk	library tutorial
261	ask for it to be transferred	on hold	librarian	introduction
266	go to the other library	reserved for you	information help desk librarian?	library class
269	interloan	reserved	specialist	drop in session
275	go get it	held	librarian	tour
276				
277	ask them to ship it	on hold for you	a librarian	a library course
278	either go to that library or get the library to order it so you may take it out	reserved	librarian	library tutorials
280		reserved for you	subject specialist	library use tutorial
281	request its transfer	Reserved		Lbrary studies
282	interloan the book	reserved	a librarian	intro library session
284	order it	reserved	a librarian, a help-desk person	a library education class, "how to use the library" tutorial
285	go to that library	reserved	librarian	library class
286	interloan it	on hold/reserved	librarian	class
287	request it	reserved	a librarian	a seminar
288	get it posted to the library	reserved	librarian	library101
290	enquire to get it into to the library that you are at	the book was either at another library or was on loan as it was in high demand	Libarian	Library Tour
291	Request it be sent to you.	Requested. (kept aside for you.)	Libriarian	Utilising the Library
292	request it	on reserve	librarian, technician	Learn to use the Library Class
293	Goto the other library.	Reserved.	A schoolar.	An library information session.
294	send request order to that library (via school system or libarian)	reserved	help desk	library workshop
295	transfer it	on reserve	librarian	library class

ID	interloan	reserved	reference librarian	library tutorial
296	go to that library	yours	a mate	repetitive
297	order it	reserved	Library Research Assistant	An Infomation Workshop
298	order it and get it sent to your library	reserved	librarian	workshop
299	order it	on hold	library assistant	library tour
300	go there	there	A tutor	An orientation kind of thing
301	go to the other library, or ask your library to get it for you.	on hold for you	researcher	library tutorial
302	request it		help desk assistant, librarian	library guide
303	Order	Reserved	Librarian	Library tour
304	go to that library or ask your library to order it in for you	reserved	librarian	tutorial opr seminar
334	order it	reserved	librarian	library class
337	order from other library	on hold	Resource specialist	Resource class
340	interloan	reserved	librarian	
361	order it in	reserved for you	a helper	a tour or ***** course
364	use that library	closed reserve?	archivist	an information session or resource understandin
368	inter borrow it	held	information person	tutorial

ID	resource guide	library account	ask a librarian	subject newsletter
239	pamphlet or website	My Details	Instant Help	Updates
240		Library Personal Information Management System	Library Instant Messanger	
241	help guide	personal info page	instant messaging service	info service
242	how to find what you want			
243	information manual	member details	instant help service	newsletter
244				
245	Library tips for Computer Science students	A my account/my details portal	txt-a-librarian	Computer Science new books/articles update
246				
247	get it from here	intranet	chatting	newsletter
248	resource index	members personal service	help desk	update service
255		patron		
258	Directory	Personal Journal	Q@L (questions @ library)	reference newsletter
259	help	e-library	i-site	i-updates
260	reference tool	personal service	library messaging service	reference tool
261	useful resources for students	online library desk	ask a librarian	student newsletter
266	course website/handbook	personal library details	Lib MSN	Paperback Updates
269	pamphlet	my library	live librarian	?
275	library site	webrary	library instant message service	study buddy
276				
277	information	a personal account page	quick-response librarian	newsletter
278	??	I-Web??	??	??
280	subject specific guide	My library'	text-a-librarian	subject specific updates
281				
282	a resource reference	an online database	live librarian messaging	the library email update service
284	resource guide	personal information management system (PIMS)	library online help-desk	subject area update
285			discussion board	
286	pamphlet	on-line catalogue	email	email list
287				
288	Your custom library	your library account	don't like cellphones, i'd call it "un-subscribe":))	subscription service
290	Catalogue - Close Reserve	Personal Details in the Catalogue system	Email	Library website
291	Library information pamphlet	Personal Library information	Online Librarian assistance	Course specific information

ID	resource guide	library account	ask a librarian	subject newsletter
292	(alot of these things just exist- I know what I mean and my friends do, but I wouldn'd say they actually have common-use names. More "the-pamphlet-that-tells-you-where-to-find-stuff", and thats goes for alot of the questions, do the names NEED changing when nobody knows what they are anyway?	Personalised Information System	Library-mail	Library Services updating you on new books or articles in your area of study
293	Helpful.	The library's website.	Electronic support.	Spam.
294	database	"My library account"	library E-help	Weekly book list (or monthly)
295	help guide	information system	online help	newsletter
296	guide	handy	handy	handy
297	a Single-Discipline Research Supplement	lib-e-niz	Queer-e	annoying
298	Just what your need, helping you and your needs	Library online, personal section	online librarians there to help you	Update to keep you intouch with your library
299	specialized resource site	personal record	email	personalized library update service
300	course information	PIMS might, I have not actually rented a book before	Potentially useful	Unsolicited mail
301	helpful	the library intranet	instant email	useful
302	study resource guide			
303	How to find resources for your study	The library website	Ask a librarian a question	Personal study material updates
304	information sheet	pims	ask me	email
334	a reference	account manager	irc	newsletter
337	Resource pamphlet	My account	chat	email
340				
361	start here	pims	internal messenger	very helpful, course informer
364	library information pamphlet	personal lending record	helpful	focus of learning update
368	reference guide	user page	text messenging	regular updates