B Evidence Based Library and Information Practice

Conference Paper

A Training Needs Analysis Case Study at Legal Aid Queensland

Claudia Davies Library Manager Legal Aid Queensland Brisbane, Queensland, Australia Email: <u>cdavies@legalaid.qld.gov.au</u>

Richard Vankoningsveld Librarian Legal Aid Queensland Brisbane, Queensland, Australia Email: <u>richard.vankoningsveld@legalaid.qld.gov.au</u>

Received: 18 Aug. 2015

Accepted: 27 Nov. 2015

© 2015 Davies and Vankoningsveld. This is an Open Access article distributed under the terms of the Creative Commons-Attribution-Noncommercial-Share Alike License 4.0 International (<u>http://creativecommons.org/licenses/by-nc-sa/4.0/</u>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly attributed, not used for commercial purposes, and, if transformed, the resulting work is redistributed under the same or similar license to this one.

Abstract

Objective – Legal Aid Queensland Library Services plan, design and deliver a training program comprising seven individual components including induction training, individual instruction, group training, and regional office training. The program is guided by a formal, detailed training plan developed by experienced library trainers. Training needs assessment however has been informal and infrequent. Library Services commenced a formal training needs analysis (TNA) in 2014. It was designed to gather evidence for decision making around future training activities.

Methods – The TNA was comprised of five quantitative and qualitative components: analysis of catalogue and knowledge management database usage statistics; analysis of paid subscription usage statistics; analysis of library reference and research request data; work shadowing library clients; and interviews with selected team managers.

Results – Each component revealed different aspects of our clients' training needs. The results of the TNA revealed gaps in current training and education services, and opportunities for

maximizing the effectiveness of our training program. The TNA also provided information about our products and services beyond implications for training.

Conclusion – As a result of the TNA the LAQ library has made changes to it training activities, which we believe are now more closely aligned with client needs and organizational objectives than they were in the past.

Introduction

Legal Aid Queensland (LAQ) provides legal help to financially disadvantaged Queenslanders in criminal, family and civil law matters. LAQ Library Services provides a full range of services to approximately 250 lawyers as well as social workers, executive management staff, policy staff and support staff across 14 locations. The library has the equivalent of 3.3 full time staff. Our two librarians and two library technicians all provide training services.

Training has been a part of the library's role for the last 30 years. A formal library training plan was first produced in 2008; a major revision was undertaken in 2014. The plan now consists of:

- the strategic plan which outlines training policy and the theoretical underpinnings and context of the library's training program;
- 2. the operational plan which outlines seven training components;
- 3. the training needs analysis methodology; and
- 4. the annual training schedule.

The seven current training components include:

 Induction training – new legal and support staff receive an introduction to library services from a library staff member as part of their induction process. The session with a library staff member is tailored to the specific role of the inductee within the organization and is delivered face to face or via screen casting depending on the staff member's location.

- Individual training provided to all library clients at point of need. It is the preferred method of library training. It includes face to face and remote training via screen casting, and typically involves working through a specific research problem with the client. It also includes several self-directed learning initiatives including factsheets and help guides, and video on demand continuing professional development (CPD).
- Group training formal training events are offered by the library including regular small group workshops, and occasional lecture style CPD presentations.
- Regional office training library staff visit regional offices once each year to provide face to face training to regional library clients, including formal group training and individual training as required.
- Library awareness raising awareness within the organization of the services and resources offered by the library. We achieve this through information sessions, blog items, web news updates, and emails about new resources to individual clients and teams. Daily emails alerting staff to new judgments and weekly legislation updates help lawyers keep up to date with developments in the law.
- External training raising awareness of the LAQ library and the broader organization within the legal library sector through staff presenting at conferences, writing articles and papers

and active participation in professional associations.

 Library staff professional development – increasing library staff capacity to provide quality services to our client through actively engaging with our own professional development activities, including self-directed learning, attending in-house training sessions, and external conferences and other professional development opportunities.

The training needs analysis process was designed to provide an evidence basis for developing future training activities and assessing the effectiveness of the current training program.

As this was the first structured TNA undertaken, it further asked whether evidence from library database usage logs, publisherprovided usage statistics, research request data analysis, and qualitative evidence from client stakeholder interactions could reliably be used to improve the relevance and effectiveness of our training program.

For the purposes of this first TNA we chose to analyse data from the 2014 calendar year only. The decision to limit our analysis to this period was taken because:

- it was the most recent complete set of data we had for all the components of the analysis;
- we determined that it provided a dataset large enough to give meaningful results; and
- it was a manageable dataset given the time constraints on completing the analysis.

Literature Review

McGehee and Thayer (1961) first observed that training should be underpinned by systematic

research into training needs. They introduced a model framework of organizational, operational and individual analyses that needed to be assessed as a whole to inform effective training. Examples of librarians using training needs analyses can be found in the literature though most provide little insight to their methodology. Additionally, most take a less holistic approach, often relying solely on written self-assessment instruments. For example, Johnson refers to a database training needs [self] analysis form (2005), and surveys were used in a study reported by Bresnahan and Johnson (2013) and Turner, Rosen and Wilkie (2003). Interviews with management can complement survey data (Oldrovd, 1995). Allred (1995) guestioned the validity of self-assessment as a basis for planning training in his report on a seemingly unsuccessful attempt at a training needs assessment for librarians which employed surveys and a training audit.

Beaumont (2002) analysed search-tracking logs at the State Library of Victoria to describe the searching behaviour of visitors to the library and determine the extent to which they were able to learn from unsuccessful search results and rephrase queries.

Rossett (1987) postulated that TNAs should use a range of techniques and tools including: extant data analysis, needs assessment and subject matter analysis, interviews, observations, group discussions and surveys. Employing a variety of methodologies can shed light on different aspects of the TNA including optimal performance, actual performance, the causes of sub-optimal performance, feelings about tasks and potential solutions.

Drawing on the work of Beaumont's search log analyses and Rossett's variety of methodologies, the library set out to use the empirical data available to produce a multifaceted view of training needs within LAQ though a variety of techniques and tools – while avoiding selfassessment instruments.

Methods: The Five Components of LAQ's TNA

Catalogue and Knowledge Management Database Usage Statistics

The first component of the TNA was an analysis of query logs generated by our library catalogue and internal knowledge management (KM) databases. The logs provided empirical data about the searching behaviours of LAQ staff when using these resources.

The query logs are automatically generated by our LMS system and are enabled for our catalogue and all client facing internal KM databases. The logs capture the following information:

- date of search;
- start and end time of search;
- IP address of searcher;
- database searched;
- search string; and
- number of results returned

Logs were analysed monthly. The data was imported into an MS Excel spreadsheet which used a number of formulae to determine where and when the databases were being used, and what information clients were searching for. The monthly data was subsequently copied into an annual MS Excel spreadsheet for the final analysis.

The IP address data revealed whether a user was located in a Brisbane or regional office. For users in our Brisbane office, we were able to identify the floor in the building that the search originated from. Regional users connect to these databases via a VPN connection and consequently IP address data for these users did not reveal any usable information about their location.

A search resulting in zero results being returned was classed as a 'failed' search for the purpose of the TNA.

Subscription Database Usage Statistics

The LAQ library purchases subscription access to a number of database products provided by three principle external suppliers, as well as a range of other products from various suppliers. Usage statistics provided by two principle suppliers, LexisNexis and Thomson Reuters, were selected for the TNA as they provided the largest datasets.

LAQ uses IP-fixed access to these databases and consequently statistics could only be obtained for the organization as a whole. The statistics provided by each supplier varied in scope, range and quality, but typically included information about the number of searches, document views and downloads for each individual subscription over a period of time. Unfortunately, deeper search-level information was not available.

Given the variation in data provided by each supplier, statistics were analysed manually using MS Excel with separate findings for each supplier included in the results.

Library Reference and Research Request Statistics

A core role of the LAQ library is the provision of a reference and research service to its clients. The scope of this service ranges from simple reference queries through to complex legal research. An analysis of the number, complexity and type of requests received by the library provided insight into the legal research needs of our clients. Through this analysis some inferences were drawn about the legal research skills required of LAQ staff, and potential skills gaps that might currently exist.

A record of each reference/research query the library receives is captured in the library's reference database. Library staff enter these records following completion of the request categorising them by complexity (ready reference, simple or complex) and type (e.g., case law research; document delivery). The analysis looked for commonality and variation in request frequency, type and complexity across organizational units and geographic locations (regional offices). Individual clients were de-identified in the data and were not included in the analysis.

MS Excel was again used to analyse the raw data extracted from our research request database.

Work Shadowing Library Clients

Library staff shadowed library clients in two different organizational units as they performed their normal duties, providing qualitative data about: their information use and needs; the resources they used; the potential gaps between their needs and skills; problems they encountered when researching; and opportunities for developing training or services for staff in those organizational units.

The two units were chosen on the basis that the library staff knew little about their day-to-day work. Team 1 provides telephone advice to LAQ clients across many areas of law; Team 2 represents LAQ clients in summary matters in the Magistrates Court.

Support for the shadowing was obtained from the relevant team managers and the participating library clients, and permissions were gained from LAQ clients prior to each session.

Four library staff participated in the shadowing, with a total of five shadowing sessions taking place (two with Team 1, and three with Team 2). Each shadowing session lasted between 2-4 hours.

Library staff took notes during the sessions and discussed findings with the library client at the conclusion of the session. Notes were later collated into an MS Word document, allowing for further analysis.

Interviewing Team Managers

Face to face interviews with six team managers were carried out by library staff to obtain qualitative data on the training needs of the staff in each manager's team. Each interview ran for approximately 15 minutes and was attended by the team manager and two library staff.

Managers were emailed two questions to consider prior to the interview so that they could reflect on their team's requirements.

Within a context of services provided by the library:

- 1. What 3 things do you really want your team members to be able to do?
- 2. Which of these, if any, do they currently struggle with most?

The manager's responses to the questions were discussed in the face to face interview. Where required, follow-up questions were used during the interviews to clarify or expand on answers given, and to discover whether the manager could provide recommendations on the preferred format and timing of future library training.

Library staff made notes during each interview which were then collated into an MS Word document, allowing for further analysis of responses.

Results

Catalogue and Knowledge Management Database Usage Statistics

General

The full dataset for the TNA comprised 40,389 searches across our catalogue and 11 KM databases. Time and date analysis showed fairly constant usage throughout the working day but some seasonal variation during the year. Ninetyeight per cent of searches were conducted

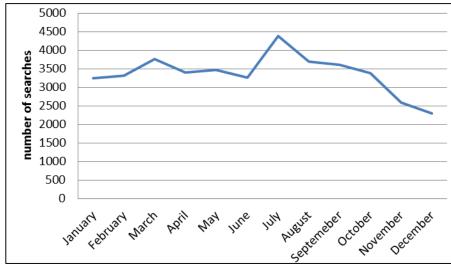


Figure 1 Total searches logged (2014).

between 7am and 7pm. Of the remaining 2%, searches were performed in all hours except from 2-3am. Monthly usage varied from 2,299 searches in December to 4,376 searches in July.

Usage did not correlate with school terms – July and September, which contain school holidays, were busy months; November – which does not contain school holidays – gave the second fewest number of searches (see Figure 1).

Seventy per cent of searches originated from the Brisbane offices, where 70% of LAQ lawyers are located.

For the Brisbane searches logged, 85% originated from the 3rd and 4th floors which house the criminal division and in-house counsel (barristers), the smaller executive and policy units, and the library – see Figure 2. The remaining 15% of searches were dispersed across three floors in the main Brisbane office and two annexes (North Quay and Markerston Street). These locations house LAQ's family and civil law divisions, and other administrative units.

Interpretation of training issues. There was considerable variation in search numbers

between months. If trends appear over time, consideration should be given to scheduling training for the quieter months of the year. Monthly usage figures challenged our perception that school holidays are our quietest periods. However, further analysis of a larger dataset would have to be analysed to confirm usage trends over time.

The 30% of legal staff located in regional offices executed 30% of searches of the library's databases. This indicates that there is a continuing need for library staff to provide training and point-of-need support to regional offices through appropriate and convenient channels. Training priorities need to be aligned with the needs of teams and divisions which use library resources the most, i.e. the criminal practice and in-house counsel. However, low usage by other teams must be interpreted in the context of the relevance of our knowledge management databases to their areas of practice. For example, we would expect the use of our KM databases to be much higher for the criminal appellate specialists, who make detailed submissions in higher courts, than for duty lawyers appearing in the Magistrates Court who have minimal time to prepare for their appearances.

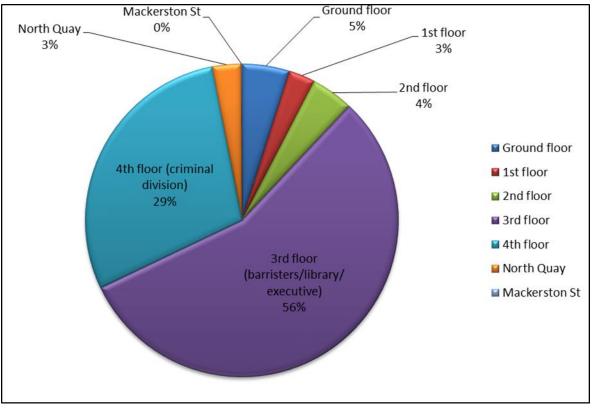


Figure 2 Location of users - Brisbane offices.

Interpretation of additional issues. The

relatively even spread of queries across business hours indicates that reference staff must always be available to assist and advise clients during business hours.

While the bulk of searches occur between 8am and 5pm, consideration should be given to whether we can provide after-hours support without compromising the library staff's work/life balance.

Catalogue Searches

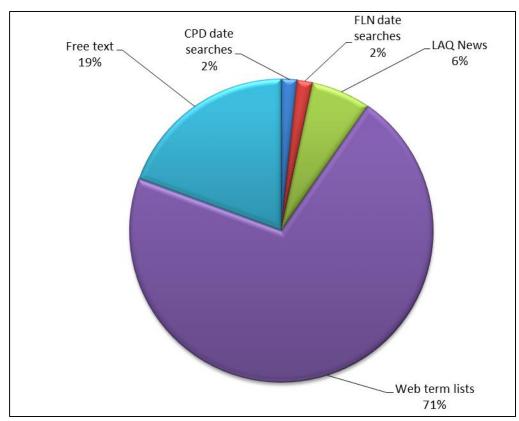
The dataset of catalogue searches comprised 21,490 queries.

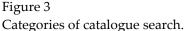
These searches fall into five distinct categories, including:

• free text using a traditional catalogue search form on the LAQ Intranet;

- predefined searches via web term lists (130 links on the library's Intranet pages to collections of key resources by topic, and curated by library staff);
- predefined searches for continuing
- professional development (CPD) resources;
- predefined searches for our Family Law Notes (FLN) current awareness service; and
- predefined searches for specific catalogue records via an LAQ News feed on the homepage of the organisation's Intranet (see Figure 3).

Predefined searches. Eighty-one per cent of all catalogue searches were performed using predefined methods as described above. The majority of these (71%) were searches using web term lists. A further 10% were comprised of other pre-defined searches such as LAQ news items.





Of the web term list searches, 28% were to legislation topics and 25% to case law topics. Sixteen of the 130 web term lists were not searched at all in 2014.

Free text searches via catalogue search form.

Our catalogue search form has four main fields – Global Search, Title, Author and Subject, and three other limiting fields – Date, Type (e.g. book, journal) and Format (e.g. electronic, paper). When users performed a free text search using the Intranet search form 96% used a single search field only. Overall, free text searches produced a 15% failure rate (i.e. searches returning no results). The Author field yielded a 2% failure rate while title and subject proved less successful with 27% and 30% failure rates respectively. When two fields were searched the failure rate reached 31%. The ability to do a global search was introduced in October 2014 and was used in 247 searches with a failure rate of 19% to the end of 2014.

In February 2015, the database search forms were rewritten to comply with current web standards and overcome some UX issues. Following this change the overall failure rate dropped from 15% to 3.5%.

Interpretation of training issues. The dramatic fall in failure rates for searches following recoding of search pages, coupled with the relatively low usage of the catalogue search form suggests that training in effective searching of the library catalogue should be a low priority.

Interpretation of other issues. The popularity of predefined searches suggests that the users are relying on web term lists to access library

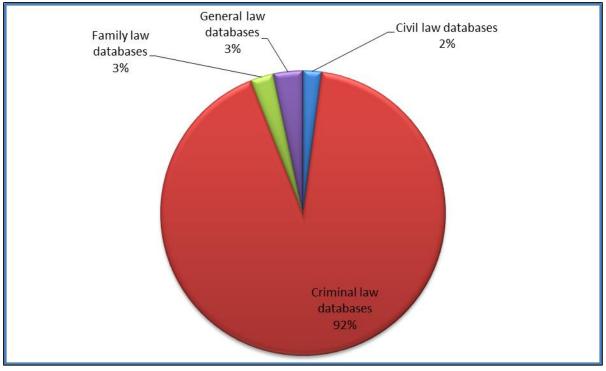


Figure 4 KM database searches by area of law.

resources in preference to searching the catalogue manually. These topics need to be reviewed systematically to ensure they remain relevant and current. Additionally, the time the library invests in current awareness emails and web news items is worthwhile since we can clearly demonstrate that staff access library resources via these routes.

Our analysis of web term list use showed that a number of key topics including legislation and case law were heavily used. There is scope to review the less 'popular' topics. This may involve reducing the number of topics, amalgamating and relabelling topics, and adding new topics.

KM Databases

Ninety-two per cent of the 16,984 searches of LAQ's KM databases were to criminal law databases. Searches of the library's Criminal Judgments and Comparable Sentences databases accounted for 79% of searches. A further 3% were to general databases e.g. legislation, and only 5% of traffic was to civil and family law databases combined – see Figure 4.

Of the 9,176 searches of the Criminal Judgments database, 42% were executed by users clicking on links to predefined searches such as current awareness emails sent to staff in the criminal law division.

Manual searches of the Criminal Judgments database via a search form on the library's Intranet page resulted in a total failure rate of 18%. Searches using specific fields had varying success rates. For example, the Court field had a surprisingly high 66% failure rate; Court Number 21%; and Decision Date 25%.

The Comparable Sentences database has a complex search form that allows users to perform searches matching very specific criteria. However, 90% of searches used only a small

number of the available fields including Charge, Age, Criminal record and Plea. Twenty-one per cent of searches were limited to appeal sentences (see Table 1).

Table 1

Adult Comparable Sentences Database - Search
Fields Used in Manual Searches

Field	% of total searches
	including this
	field
Charges	90%
Age of offender	41%
Under 25 - y/n	39%
Criminal record	34%
Plea	34%
Appeal sentences	21%
Court	20%
Particulars and	9%
comments	
Noncustodial	6%
sentences	
Full text	6%
\$ value of property	5%
Armed	5%
Alcohol/drugs	4%
Sentence date/range	3%
Offences in company	2%
Known to accused	2%
Gender	2%
Cooperation with	2%
authorities	
Employed	1%
Psych problems	1%
Dependants	1%
Previous convictions	1%
Judge	<1%
Aboriginal/TSI	<1%

The overall failure rate for the Comparable Sentences database was 33%.

Interpretation of training issues. There are clearly implications for training in the high failure rates when using the Comparable Sentences database, and to a lesser extent the Criminal Judgments database. Changes to database search forms implemented in 2015 saw a reduction in the number of failed searches, however the 2014 TNA results suggest that strategies to improve this situation should include more regular training in using the database, and further investigating search form UX/functionality changes to help eliminate specific searching errors.

While it is understandable that fields such as Charge, Age, Criminal record, Plea and Court would be the most-searched fields in the Comparable Sentences databases, low usage of other fields suggests that further training is needed in performing more complex searches.

Interpretation of other issues. In addition to extra training, the high failure rates for manual searches of the Comparable Sentences and Criminal Judgments database may be reduced further by exploring search form UX/functionality changes to help eliminate specific searching errors.

The high percentage of traffic to criminal law databases supports the library's policy of directing the largest proportion of our time to maintaining and developing databases in this area.

The high occurrence of predefined searches in our Criminal Judgments database indicates current awareness services to our criminal lawyers are widely used. Provision of these types of service should be continued. Consideration should be given to what improvements in the scope and relevance of such services might be made.

Subscription Database Usage Statistics

Thomson Reuters

The highest usage of Thomson Reuters was for accessing case law (55% of searches) and commentary (28%) – see Figure 5. Journal usage at 11% of the total was relatively low in comparison.

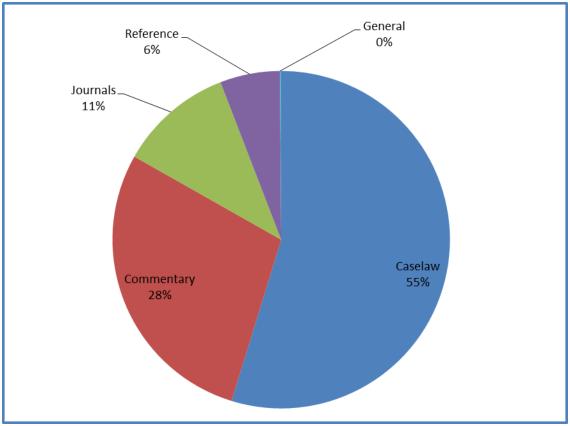


Figure 5

Thomson Reuters searches by content type.

Tał	ole	2
1	10	_

Thomson F	Reuters View	s as Perce	ntage of	f Searches

Subscription	Views as % of searches
Reference	128%
Laws of Australia	123%
Lawyers Practice Manual	138%
Commentary	145%
Criminal	149%
Procedure	157%
Civil	57%
Journals	138%
ADRJ	141%
Qld Lawyer	135%
Family law review	152%
Criminal law journal	129%
ALJ	192%
Caselaw	114%
Firstpoint	96%
Unreported judgments	239%
Law reports	107%

Usage figures (see Figure 5) show that for most products, users were likely to look at only one or two results following each search. Exceptions to this were *Unreported Judgements* searches where the average was over two cases, and civil law commentary publications, where only around half of the searches performed resulted in viewing of a document in the search results.

The rates at which users downloaded documents they viewed were generally low – 4% for case law and journals, 14% for commentary and 27 % for the legal encyclopaedia *Laws of Australia*.

No data was provided for searching verses browsing of publications on Thomson Reuters.

LexisNexis

For all types of publication except commentary services, searching accounted for greater than 90% of interactions. For commentary services searching was still dominant but was reduced to 62% – see Figure 6. The figures for searching verses browsing by subject were very similar, with searches accounting for 90% of behaviour for all subjects except criminal law. The library subscribes to 29 titles on LexisNexis yet *Carter's Criminal Law of Queensland* accounted for 26% of all interactions.

Interpretation of training issues. Usage figures for subscription services show that the most critical information needs of the library's clients are finding case law, and to a lesser degree legal commentary. Therefore, these should be the focus for training activities.

While journal use was significantly lower than for other resources, this was not unexpected given that the legal practice is focused on service provision rather than academic research. Journal usage should however be benchmarked against similar organisations.

Figures for viewing documents on Thomson Reuters show that, on average, users are finding one or two results per search worth further attention. This figure is reasonable for locating commentary on a particular section of

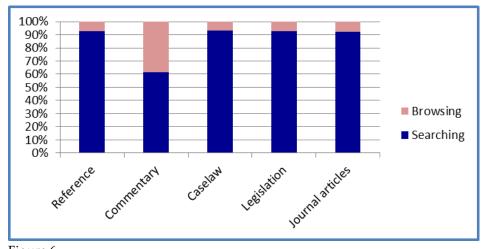
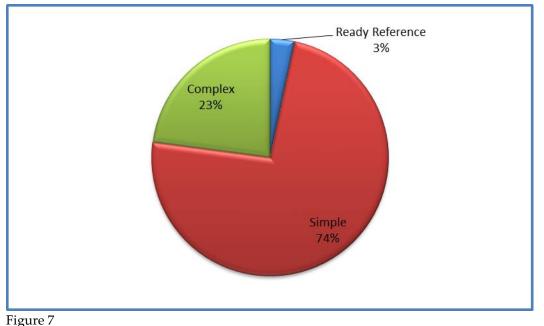


Figure 6 Searching vs browsing of publications on LexisNexis.



Percentage of research requests by complexity (2014).

legislation, or locating specific cases. The figure is low however for situations where users are looking for cases on a point of law, for example via *FirstPoint* or *Unreported Judgments*. This again suggests a need for providing more training in case law research.

Download rates on Thomson Reuters are quite low. Without past results for comparison, more investigation is needed to understand this figure. There may be issues with effective search techniques that could be addressed with training.

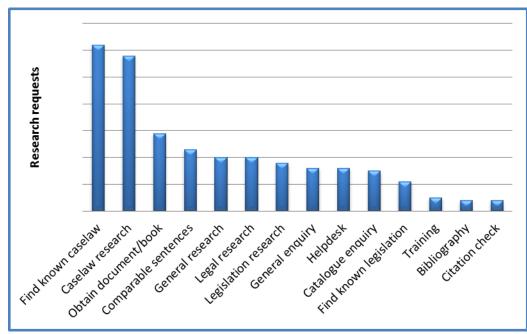
The LexisNexis data showed that users browse commentary services much more frequently than they do other kinds of online publications. One possible explanation is that users are less comfortable searching for commentary and continue to use online commentary services like print resources. This hypothesis needs to be tested through follow up research. Interviewees (in component 5 – Interviews with Team Managers) however also reported that they wanted more training in using commentary services, supporting this theory.

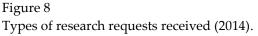
Library Reference and Research Request Statistics

Seventy-four per cent of research requests received in 2014 were classified as simple such as requests for specific legal cases or legislation, and simple catalogue or comparable sentences searches. Twenty-three per cent were classified as complex – see Figure 7.

A quarter of the requests came from regional offices, a quarter from the civil and family law divisions combined, a quarter from the criminal law division, and 15% from our in-house counsel. The 10 teams who used us most came from across all the legal divisions and the executive management team.

Figure 8 shows the types of requests received in 2014. Nearly half related to case law research; 10% were legislation related; and 7% were more general legal research requiring a mix of primary and secondary legal sources.





Interpretation

Training issues. The high percentage of simple reference queries indicates that there is still a need for training in basic library and research skills. Further, the majority of requests involved case law and comparable sentences research, again indicating that we should be concentrating our training efforts in these areas.

Other issues. Analysis of reference queries by teams shows that teams which use us the most come from all divisions and locations confirming that we need to provide training and convenient communication channels across the organization. Additional promotion of library services could increase the use of the library's research services amongst low use teams including regional offices.

Work Shadowing Library Clients

Library staff performed five work shadowing sessions with library clients in two different organizational units. All four library staff members expressed a desire to participate in work shadowing both teams selected for the 2014 TNA. Sessions were organized following the shadowing where library staff could discuss their observations and impressions.

The responses from clients in both teams were similar. Lawyers in these teams have limited time for legal research. Observation of interactions between the lawyers and their clients confirmed that they rely heavily on experience and prior knowledge of the law to provide efficient quality advice and assistance to their clients. Clients in the telephone advice team identified a need for current awareness services which covered State and Commonwealth legislation and case law relevant to their practices.

Interpretation

Training issues. The responses from the shadowing sessions made it clear that there is little need for library training for clients in these particular teams, other than the need for relevant current awareness services.

The level of engagement and enthusiasm the library staff showed for this exercise however indicated that work shadowing is a worthwhile professional development opportunity for library staff. It increases the staff's knowledge of the business of the organisation and therefore should be included in annual performance agreements.

Other issues. The shadowing sessions showed that lawyers in these teams need up-to-date skills and knowledge to provide advice and representation. The range of legislation and case law alerting services from commercial and government sources however is overwhelming and few are sufficiently customisable.

The Library identified legislation updates as a service we could provide to our clients, and consequently created a database of recently updated legislation of relevance to LAQ's areas of practice. Updates containing a link to a predefined query of the legislation database are emailed to library clients each week. Access to the database is also available from our Intranet. The email alerts summarize the changes to relevant legislation, and provide links to primary sources such as the Bill and Act as Passed, and secondary sources such as history of the legislation.

Interviewing Team Managers

Six team managers (approximately 10% of legal team managers) from across the organization were interviewed, and the findings from these interviews were subsequently analysed.

All the interviewees expressed a requirement for case law training, and half mentioned comparable sentences training specifically. Some interviewees also suggested training in researching legislation; basic general research skills; and effective searching of commentary services was also needed. Most managers reported however that their teams were already competent at researching legislation. One manager reported that they would rather come to the library for help with complex research than getting training in advanced research skills.

Other issues raised included knowing what resources were available from the library and the need to keep legislation and case law knowledge current.

Managers were also asked about their teams' preferred mode of delivery. None of the interviewees expressed an interest in self-paced web-based training videos, such as webinars.

All interviewees indicated that CPD points were an incentive to attend training, and 15 minute sessions within team meetings were also requested. Additionally, managers provided information about the times of day that would result in higher participation rates.

Interpretation

Training issues. The library should provide regular training on case law and comparable sentences research in a mixture of formats from 15 minutes to 1 hour to cater to all teams' schedules. Additionally, basic skills training in legislation and commentary services should be made available regularly.

Library staff need to liaise with team managers when scheduling training and provide sufficient notice of future training sessions.

Consideration should be given to tailoring course content to specific teams, rather than the current tendency for generic training.

Discussion

Through the TNA process the library was able to elicit data about the actual searching and browsing behaviour of staff; their skills levels and research needs; and to identify gaps between actual and ideal performance by using a range of data sources. These included a mix of empirical data (database usage statistics), subject matter analysis (research requests) and observational evidence (job shadowing and interviews). The combination of these techniques provided a more complete and accurate analysis than could have been achieved through any single methodology.

Some components provided unique insights into training and other issues. For example, Catalogue and KM database usage analysis revealed the scale of a usability issue with the library's database search forms for which we were subsequently able to develop a technical solution. Client interviews provided very specific data about optimal skill requirements and scheduling of training programs that would otherwise have been unknown to library staff planning future training.

Certain themes recurred throughout the components. Effective case law research was shown to be the most important skill for lawyers. In-house counsel and criminal law teams were shown to be our biggest users and their research tools the most frequently accessed.

The evidence provided by the TNA supported some assumptions the library had, for instance that the in-house counsel's primary need was for high quality case law research and that the criminal law practice needs ongoing training in case law, comparable sentences and commentary services. It showed us we were underestimating some user behaviours such as how much users searched online subscriptions (compared to browsing). It also gave some unexpected results such as how difficult users find searching particular internal database fields.

The TNA relied on data that was readily available to us. However, it took considerably more time to complete the analysis than was estimated at the project's outset. Subsequent TNAs however will be simpler and quicker because the development work has now been done including:

- determining appropriate TNA components and documenting methodologies;
- designing spreadsheets to automate query log and research query analyses; and
- retrospectively classifying research requests to allow TNA analysis.

The analysis of 2014 data was distilled into a training needs analysis report, the first of an annual series. The annual report will provide a sound evidence base for developing a training program in 2015 and beyond.

There have been a great number of other benefits beyond the library's training program, including:

- senior management awareness of library services;
- evidence for demonstrating the library's value to the organization;
- improved reporting of library usage statistics;
- improved relationships with library clients;
- highlighting of UX issues with internal databases; and
- professional development for library staff.

Future Developments

The TNA has produced results that we can translate into action. Our next step is to review our training schedule and develop and deliver training activities based on the results of the TNA. We will also continue with a program of internal database redevelopment to improve the manual searching experience for library clients.

The 2014 TNA has provided sufficient value to schedule it for the first quarter of every year. The library however is not sufficiently resourced to perform every component of the TNA each year. Including fewer components per year will allow us to analyse the selected components more deeply. For instance, analysis of 'failed searches' or individual subscription titles usage could be included some years.

Query logs are harvested every month. They produce meaningful data through automatic analysis, and therefore will be included in the TNA each year. The statistical spreadsheets will be updated to accommodate changed search parameters and measure their impact.

Work shadowing provided an opportunity for developing a new service but revealed little about how lawyers use information resources on the job. Future shadowing should include teams with more complex legal research needs.

Future TNAs may include online user surveys. Future annual training reports will also include trend analysis across years. Of particular interest are:

- trends in database usage including predictability of monthly peaks and troughs;
- changes to search failure rates and sophistication of search behaviours;
- changes to subscription usage patterns; and
- changes to the rate or types of reference queries especially in subjects targeted by training.

Further, we should experience an increase in participation in training sessions if we can better target and schedule training sessions.

Conclusion

The process developed for a multi-component TNA successfully met the objective of describing training needs within LAQ as an evidence basis for developing training activities. The five components provided a mix of empirical, observational and anecdotal evidence and produced a multi-faceted picture of training needs at LAQ. The library will use the results to develop a program of training aligning with our client groups' needs and skills gaps. The process will be repeated annually to describe trends and provide insight into the effectiveness of training efforts.

References

- Allred, J. (1995). Co-operative training, open learning and public library staffs: interim report November 1992 and final report February 1994. *Library Management*, 16(4), 46.
- Beaumont, A. (2002). The 3 bears not too big, not too small, just right or how search access logs can be used to improve success rates for searchers. In *Proceedings from E-Volving Information Futures,11th Biennial Conference & Exhibition* 1. (pp. 229-254). Port Melbourne Vic: Victorian Association for Library Automation.
- Bresnahan, M. M., & Johnson, A. M. (2013). Assessing scholarly communication and research data training needs. *Reference Services Review*, 41(3), 413-433. <u>http://dx.doi.org/10.1108/RSR-01-2013-0003</u>
- Johnson, A. (2005). Training the trainees: developing effective programmes and partnerships in legal practice. *Legal Information Management*, 5(1), 34–41. <u>http://dx.doi.org/10.1017/S147266960400</u> <u>2324</u>
- McGehee, W., & Thayer, P. W. (1961). *Training in business and industry*. New York: John Wiley & Sons.
- Oldroyd, R. (1995). Staff development and appraisal in an "old" university library. *Librarian Career Development*, 3(2), 13-16. <u>http://dx.doi.org/10.1108/0968081951008</u> <u>3435</u>

Rossett, A. (1987). *Training needs assessment*. Englewood Cliffs, NJ: Educational Technology Publications.

Turner, A., Rosen, N., & Wilkie, F. (2003). Joining forces: developing a network to raise awareness of digital library resources in health care. *VINE*, 33(4), 161-167. <u>http://dx.doi.org/10.1108/0305572031051</u> 0873