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AARL

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Collaborative Re-imagining: accelerating the rate of change in National and State Libraries A report from Kate Irvine

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Editorial

here have been a few interesting conferences since the last issue of AARL. In November last year, in Hobart, a day-long seminar was held in conjunction with the Libraries Australia meeting the following day, focusing on the National and State Libraries *Reimagining Library Services* Project. For many of our major institutions, involvement in these projects is a key activity for the coming year and the Executive Officer of NSLA, Kate Irvine, provides a good overview of the work and associated outcomes expected from this impressive cooperative venture. A number of the papers presented at this seminar will feature in later issues of AARL during 2010.

Following from this was the RAILS (Research Applications in Library Science) conference, held in Canberra in January. This was the sixth RAILS and attracted around 70 participants from students, educators, and practitioners, with ALIA sponsoring a student attendee. The number of speakers meant a packed program and a wide range of offerings – something for everyone! Some of the papers are included in this issue and over the coming months a number of other papers initially presented at RAILS will also be published in AARL.

For this issue, as well as the overview of *Reimagining*, there is a range of papers that I think illustrates the depth and diversity of research and interests in our field. The first two were presented in summary form at RAILS 6, with Peter Macauley and his colleagues continuing their research into Australian PhD theses, looking at their production, accessibility, and related issues of titling and cataloguing. This is followed by research from two more educators, Mary Carroll and Janet Murray, looking at the concept of 'reverse articulation' – students with undergraduate or higher degrees choosing to do TAFE studies in LIS rather than taking the more conventional or typical step of undertaking a Graduate Diploma or Masters degree in the field. Following, is an internationally focused research paper taking a comparative look at the e-reading habits of academics in Australia, Finland, and the US, and examining what this portends for university libraries in particular.

The final two papers provide an interesting balance with a wide-ranging introduction to a research project (just getting underway) looking at new arrivals in Australia and the way in which information practice can assist in their social inclusion, with a particular focus on those in regional communities. This is followed by Sue Reynolds' investigation into 150 years of the Supreme Court Library in Victoria and the influence that actions and decisions taken a century or more ago can still have today.

I hope you agree that it all makes for a good range of stimulating and interesting reading.

Bob Pymm Editor

CLASSIFYING AUSTRALIAN PHD THESES: LINKING RESEARCH AND LIBRARY PRACTICES

Peter Macauley, Terry Evans, and Margot Pearson

This article draws on the findings from, and the methods and approach used in the provision of a database of Australian PhD thesis records for the period 1987 to 2006, coded by Research Fields, Courses and Disciplines (RFCD) fields of study. Importantly, the project was not merely the creation of yet another database but something that constitutes a valuable research resource in its own right. The database is significant as it can be used to track knowledge production in Australia over a twenty year period and contains approximately 54,000 bibliographic records. Recommendations for practice relate to university libraries, doctoral candidates, and the coded database.

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INTRODUCTION

This article draws on the findings from, and the methods and approach used in the construction of a database of Australian PhD thesis records for the period 1987 to 2006, coded by the Research Fields, Courses and Disciplines (RFCD) schema. The project was undertaken for the Research Excellence Branch of the Australian Research Council (ARC) and culminated in a report (Macauley, Evans & Pearson, 2009). The database constitutes a valuable research resource in its own right as a source of data about research training with a focus on actual PhD research outputs (theses), rather than on numbers of people enrolled or completing. The database is significant as it can be used to track knowledge production in Australia over two decades. This period spanned some major policy changes in higher education and research training, most notably the abolition of the Colleges of Advanced Education (CAE) and the creation of new universities under the Unified National System, and also the implementation of the Research Training Scheme (RTS). The project also relates to two current Australian Research Council Discovery Projects by the authors: *Research capacity-building: the development of Australian PhD programs in national and emerging global contexts* by Evans, Macauley and Pearson; and *Australian doctoral graduates' publication, professional and community outcomes* by Evans and Macauley. Both these research projects involve coding the bibliographic records of Australian PhD theses. However, where these Discovery Grant projects differ is they were coded by Australian Standard Classification of Education (ASCED) classification (ABS 2001). In each case, the database has been constructed from downloaded bibliographic records of PhD theses from the National Bibliographic Database, Libraries Australia.

The aforementioned Discovery Projects involved downloading bibliographic records of all PhD theses produced in Australian universities for the period 1948 to 2008 from Libraries Australia. To date, there are a total of approximately 76,000 PhD records in the full database (1948–2008) and 53,715 records for the two decade period related to this paper (1987-2006). The PhD records were downloaded from the Libraries Australia catalogue in bar delimited format which enabled importation into an Excel spreadsheet. A complex search strategy was constructed to determine the relevant records for downloading. The search strategy was modified a number of times to find the greatest number of relevant PhD records and reduce the number of false drops and duplicated records. Once in the spreadsheet, the records where sorted, checked, and any duplicates or false drops were removed. Ten people were employed to code the records and, where possible, the records were distributed to coders according to their expertise. The ten coders chosen for the project demonstrated a wide range of relevant expertise between them. One RFCD code (at six digit level) was allocated to each of the bibliographic records which enabled bibliometric analyses of the 53,715 thesis records provided in the database. The result is the most comprehensive database available of Australian PhD thesis records.

After brief discussion of the recent higher education context, the approach and methods are presented, followed by a discussion of the implications for libraries and Libraries Australia. Then some recommendations are discussed relating to university libraries, doctoral candidates, and the coded database.

AUSTRALIAN HIGHER EDUCATION CONTEXT 1987–2006

This article is based on the production and analysis of a database of PhD thesis records from all Australian universities during the twenty-year period from 1987 to 2006. This twenty-year span covers the period when the binary system of higher education comprising universities and Colleges of Advanced Education (CAEs) was reformed into a Unified National System (UNS) of higher education (Dawkins, 1988). The consequence of which was that by the early 1990s the

sector was composed almost entirely of universities and a few university affiliated institutions some of which offered PhDs. Very few institutions remained untouched organisationally during this period. Many of the pre-1987 universities merged with CAEs or campuses of CAEs, some CAEs became universities, and some CAEs merged with others and became universities. There were also a few mergers with other types of colleges and institutions—including TAFE (Technical and Further Education)—as the process of 'unification' unfolded. This eventually produced a university system comprising up to 38 large and small universities, many multi-campus, some multi-city, and even multi-state. An important change was that the UNS expanded both the demand for, and the supply of, PhD programs in Australia at a time when there had already been enormous growth in PhDs from their inception in Australia in the mid-1940s (Evans, Evans & Marsh, 2008).

The ex-CAEs and ex-CAE campuses in the UNS sought to fulfil their research and 'research training' missions as part of being universities. It was clear that key aspects of this were both the recruitment of new staff with PhDs, and the support of existing staff without PhDs to obtain the degree (Evans, Evans & Marsh, 2008). In addition, over the preceding years there had been a gradual shift to degree entry for many careers, many of which degree programs were provided in the CAEs (Macauley, Evans & Pearson, 2009). The new incorporation of these degree programs into universities intensified the pressure for their departments to become engaged in research and in training new researchers through PhDs. It is no coincidence, therefore, that the HDR enrolment numbers increased from about 15,000 to over 40,000 from 1990 to 2006.

In late 2001, the Australian Government introduced the Research Training Scheme as part of a package of reforms initiated in 1999 by the then Minister for Education (Kemp, 1999). The intentions were to focus higher degree by research (HDR) places in areas of research strength and to reduce completion times and increase completion rates. The RTS significantly changed the way domestic HDR places were allocated and funded by capping places and allocating them on the basis of previous HDR completions and university research performance, and by reducing the funded period for PhDs from five to four years (full-time equivalent) (see, Evans, Evans & Marsh, 2008, 191–2, 195–9). The other major change has been the increase in international HDR candidates enrolled at Australian universities. Although, due to the impact of the RTS, domestic HDR enrolments have had little growth in recent years, international enrolments have doubled from approximately 4000 in 1998 to about 8000 in 2006 (Evans, Evans & Marsh, 2008). Almost all of these candidates are enrolled full-time on-campus, whereas about forty percent of domestic candidates are enrolled part-time and are (effectively) off-campus.

APPROACH AND METHODS

The database of Australian PhDs has been constructed primarily from downloaded bibliographic records from the National Bibliographic Database, Libraries Australia. To ensure the most comprehensive coverage, where possible, individual library catalogues from Australian universities were also searched and any records not listed on Libraries Australia have been included. The National Library has provided significant assistance throughout the projects. Eventually, a copy of the completed database will be provided to the National Library providing the most comprehensive record of PhDs produced from Australian universities. In addition to the initial searches for the foundation database, quarterly updates were provided of new bibliographic records of Australian PhD theses uploaded from the respective university libraries into the national database. To date, a total of approximately 76,000 PhD records for the database (1948–2008) and 53,715 records for the period 1987–2006 upon which this paper is based, have been uploaded.

To enable the relevant bibliographic records to be downloaded from Libraries Australia, a complex search strategy was constructed. The search strategy was modified a number of times to find the greatest number of relevant PhD records and reduce the number of false drops and duplicated records. This has been a very challenging task, as differing interpretations of the Anglo American Cataloguing Rules by individual libraries and librarians can result in valid records not being picked up in the searches. Hence the reason for the strategy being revised a number of times. A result of these cataloguing inconsistencies is that it cannot be categorically stated every PhD thesis record produced from Australian universities has been located. If libraries were not cataloguing theses and/or not uploading the bibliographic records to their respective online catalogues, the records will not exist or will remain invisible.

It should be noted that some variation occurs in theses' 'publication' years, which slightly affects the number of PhD theses counted for a particular year. This causes a 'slippage' from one year to another due to differing interpretations. In many cases, libraries consider the publication date to be the thesis submission date for examination, while others use the date of doctoral confirmation from the academic board or senate, and a few use the date of graduation. The latter circumstance may result in the publication date differing from official university reporting of a PhD completion by one year.

RFCD CODES AND CODING

The RFCD classification was used to code the database of Australian PhD thesis records. The RFCD classification was released by the Australian Bureau of Statistics in 1998 (and revised in 2008) and it enables both research and development activity within the higher education sector to be categorised. The RFCD classification recognises academic disciplines and related major sub-fields taught at universities or tertiary institutions, major fields of research investigated by national research institutions and organisations, and emerging areas of study.

The classification is arranged in a hierarchical structure. It has 24 divisions, 139 disciplines and 898 subjects (ABS, 1998). This project allocated one RFCD code (at six digit subject level) to each of the PhD bibliographic records. Although allocating more codes to the records would have been useful, this would have

been very difficult for coders to do accurately and also add significantly to the budget for the project. Furthermore, the most suitable people to allocate multiple codes are the candidates and the supervisors, particularly where decisions need to be made regarding the percentage given for each code. The allocation of up to three RFCD codes is a requirement when submitting Australian Research Council and other grant applications. Comments from the coders suggested that, at times, restricting a thesis to one code was difficult and allocating multiple codes would provide a more complete coding of the research projects.

In March 2008, during the coding phase of this project, the revision of the RFCD classification coding was released. The new code, 'The Australian and New Zealand Standard Research Classification' (ANZSRC). replaced the RFCD classification (ABS, 2008). This new ANZSRC classification scheme provides a more finely detailed description of research areas. That is, 1238 fields as opposed to 898 subjects in the RFCD classification. The ARC is currently mapping the 1987-2006 records from RFCD to ANZSRC and it would be useful to translate the coding in the database (possibly back to the first Australian PhDs from 1948) to the new scheme.

THE CODING PROCEDURES

The PhD thesis records were downloaded from the National Bibliographic Database, Libraries Australia, in bar delimited format which enabled them to be imported into an Excel spreadsheet. Once in the spreadsheet, the records were sorted, checked, and duplicates and false drops were removed. While the search strategy was amended to reduce the irrelevant records, manual checks of the downloaded records were still required.

Where possible, the records were distributed to coders according to their expertise. It should be noted that the coders used the bibliographic records produced by librarians from all Australian universities rather than coding directly from the actual theses. The RFCD classification allocated to each thesis record is judged on a number of factors, including the thesis title, subject headings and call numbers (allocated by the institution's librarians), the Department/School/Faculty, and an abstract (where provided). Additional resources were used to clarify terms including specialist print and online dictionaries, and connecting online to Libraries Australia for relevant links. To ensure consistency, a number of processes were implemented. All coders were provided with training and a buddy system was initiated where by the newer coders were partnered with a more experienced coder. While there were some face-to-face meetings, most of the dialogue took place via email with all coders being involved. More urgent issues were resolved over the phone.

The ten coders chosen for the project demonstrated a wide range of relevant expertise between them. This is shown in Table 1 below. Three had PhDs and another four had postgraduate qualifications. Three were librarians. Another two, a real estate agent and a Wikipedia editor, were chosen due to their considerable general knowledge. While one could not expect ten people to be expert in all areas, together their expertise covered many disciplines. If a coder felt unable to code records in particular fields, they were referred to another coder. This was just one of a number of 'quality' checks and balances incorporated into the project and these are discussed in more detail below.

Coder	Qualifications	Areas of Expertise	Career History	Age	Gender
1	BA (Hons), PhD	English literature, literature	Editor, Research Fellow	37	Female
2	BSc (Hons) Dip Ed, GDIM, MEd	Psychology, mathematics, education, teaching, health education, information management	Secondary teacher University tutor, Research consultant, Managing editor of academic journal	49	Female
3	BSc (Hons), PhD	Botany and zoology, biological and agricultural sciences	Research scientist (ecology), Project officer (agriculture),	31	Female
4	Registered Nurse, Cert IV	Medical	Nurse, Computer Tutor	46	Female
5	BSc. (Hons) Metallurgy, MApp Sci. Metallurgy, MA Librarianship	Physical Sciences, Engineering and Technology, History (especially History of Science and Technology and Maritime History), Plant Sciences and Biology, Horticulture	Metallurgist, Lecturer in Metallurgy/Materials Science and History of Engineering, Librarian	68	Male
6	MSc, Litt B, BSc, Grad Dip Comp)	Numerical Analysis, Maths, Classical Physics, Computing	Science teacher, Lecturer Maths, Physics & Computing, Computer Systems Officer	68	Male
7	BSci, MEd, PhD	Higher Education and Engineering	Lecturer in Engineering, Researcher, Project Manager in Higher Education	49	Male
8	BSc, Grad. Dip. Dietetics, Grad. Dip. Arts (Lib & Info Studies)	Dietetics, Health, Science, Information Management	Dietician, Research Fellow, Librarian	51	Female
9	ВА	History, Australian Studies	Real Estate	52	Male
10	No formal qualifications	Linguistics	Wikipedia editor	43	Male

Table 1: Qualifications and Expertise of Coders

Once coders felt they were competent to undertake coding, a comparative coding exercise was introduced. This involved all coders coding the same set of PhD records. This process was undertaken twice throughout the coding to ensure a level of consistency with the RFCD coding. In addition, a series of algorithms were designed using the Excel program to identify incorrect coding and these inconsistencies were subsequently corrected. Surprisingly for such a large database, there were very few incorrect codes input into the database (i.e. typographical errors). The quality check found an error rate of less than 0.2%.

To enable more consistent coding and to accelerate the coding process, a mapping program was devised. This mapped ASCED codes to RFCD and RFCD to ASCED. In principle it works both ways but in practice it is much more useful mapping RFCD codes to ASCED. As some theses had already been coded by ASCED for the two earlier mentioned ARC Discovery Grant projects, the mapping provided coders with an additional source of information to assist their coding. It also tended to be an additional check as frequently two people contributed to the coding of some bibliographic records. Where records had not previously been coded, the RFCD code was determined and then it was mapped automatically to an ASCED code. There were other advantages to having some

of the records already coded by ASCED. In some cases, records were distributed to coders according to their areas of expertise. Some coders sorted their allocated records by ASCED code and they focused upon specific fields of study at the one time, thus saving time when searching print and online dictionaries and other sources to assist their coding.

PhD THESIS RECORDS

Another check on the coverage of the database was to compare the numbers of thesis records with the data on doctorate by research completions published by Department of Education, Employment and Workplace Relations (DEEWR). Table 2 shows the number of doctorate by research graduates according to the figures from DEEWR (2008) compared with the number of PhD theses from the database for the corresponding years. The comparison cannot be made for earlier years as those figures, at that time, included Masters by research. It should be noted that the DEEWR figures are for doctorates by research, that is, PhDs and all research based professional doctorates. If the professional doctorate completions were excluded from the DEEWR statistics, the percentage of available PhD thesis records to graduates reported would increase, probably by 2–4%. It is also important to repeat that a few thesis 'publication' dates and the corresponding candidates' completion dates may vary by one year.

Table 2: Comparison of PhD thesis records in the database with number
of doctorate by research graduates (PhDs and Research-Based
Professional Doctorates) (DEEWR, 2008)

Year	PhD thesis record count	Doctorate by research graduates	Percentage of PhD thesis records to graduates
1987	1166	n/a	n/a
1988	1384	n/a	n/a
1989	1430	n/a	n/a
1990	1359	n/a	n/a
1991	1478	1519	97.3%
1992	1687	1522	110.8%
1993	1842	1793	102.7%
1994	2065	2201	93.8%
1995	2501	2437	102.6%
1996	2798	2905	93.1%
1997	3262	3346	97.5%
1998	3225	3446	93.6%
1999	3469	3665	94.7%
2000	3552	3793	93.6%
2001	3624	3933	92.1%
2002	3873	4295	90.2%
2003	3971	4722	84.1%
2004	4071	4900	83.1%
2005	3672	5244	70.0%
2006	3286	5519	59.5%
Sub total 1991 – 2006	48376	55240	87.6%
Total	53715		

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ISSUES IN CATALOGUING, UPLOADING, AND CODING

Several issues affected the construction of the database and have implications for further development of this resource and for Libraries Australia and Australian Research Online. It is noticeable that for the period 2003-2006 there appeared to be fewer thesis records lodged than in earlier years, and conversely it is noted that in 1992, 1993, and 1995 there are more PhD thesis records in the database than graduations reported to DEEWR's antecedent institutions. The reasons for the latter inconsistencies could be publication date slippage, as could variations in universities reporting doctorate by research completions to government. Reasons for such discrepancies also include:

- Recently submitted theses have yet to be catalogued
- Bibliographic records of recently catalogued theses were not uploaded to the Libraries Australia database

While cataloguing delays are inevitable, the issue is possibly exacerbated due to all theses requiring original cataloguing, and thus requiring more time and effort than the usual 'copy-cataloguing' techniques used for most cataloguing and classification. As one library stated in a response to an inquiry regarding possible under-reporting of theses on Libraries Australia, 'The lack of records [on Libraries Australia] is a result of reduced staffing and capacity to attend to these'.

In the latter stages of the coding phase, where possible, library catalogues from Australian universities were searched to establish how many PhD theses had been catalogued from the respective institutions. These were then compared to the thesis records contained in the master database. It was obvious from analysing the thesis records and cross checking 'university' and 'year' that some universities were less than timely in cataloguing and/or uploading their theses to the Libraries Australia database. This was particularly noticeable for the more recent theses.

Limits to coverage in all years include:

- Some theses may never have been lodged in the appropriate library.
- Some theses may never have been catalogued.
- Possibly some of the earlier theses that were catalogued using the traditional card catalogues and may not have been retrospectively converted to online catalogues.
- Mistakes in cataloguing, for instance cataloguing a PhD thesis as a masters thesis, meant the bibliographic records were not located by the search strategy.

There were also some records 'temporarily' missing from the PhD database due to differing interpretations of the Anglo American Cataloguing Rules. The critical issue was that some libraries did not include a 'publication place' as PhD manuscripts are not technically published, so that the search strategy did not retrieve those records in the MARC Fields 008 (provides coded information about the record as a whole and about special bibliographic aspects of the item being catalogued) and 260 (contains information relating to the publication, printing, distribution, issue, release, or production of a work). The search strategy needed to be modified to allow for these variations in cataloguing. As a result, approximately 5,000 additional records were found, added to the 1987-2006 database and subsequently RFCD coded.

An emerging issue relates to institutional repositories. If universities mandate that PhD theses must be deposited in their institutional repository, there may not be the incentive to upload the bibliographic records to Libraries Australia or for the full-text to be made available through the Australasian Digital Theses Program (http://adt.caul.edu.au/). The project identified institutions that appear to make their PhD theses available in electronic format through a repository and through their library catalogue but the bibliographic records are not being uploaded to Libraries Australia. As the institutional repositories will be harvested by Australian Research Online (ARO,) those data these repositories contain are not lost but they are dispersed on a national scale. This has adversely affected the comprehensiveness of the Libraries Australia database, and subsequently, the database on which this article is based.

In some cases, individual libraries were contacted to ascertain why bibliographic records were not located and/or uploaded on Libraries Australia. In one case, the records were promptly uploaded to Libraries Australia and subsequently coded by RFCD for the project. In another case, a library acknowledged the problem and promised they would upload their thesis records as a matter of urgency. Another library stated their thesis records were uploaded to Libraries Australia and suggested the search strategy did not locate them. At the time of completing this article they had not yet provided evidence to verify their claims.

A number of checks were undertaken comparing institutional catalogues with the Libraries Australia records, and downloaded any records found for coding, in some cases this proved problematic. Using institutional public access catalogues did not always enable searches to be undertaken by 'thesis'. There was not the funding to do this task manually (a task that it was expected would already have been done by the relevant libraries), and as the contract required downloading records from Libraries Australia, this had to be curtailed. Given the value of such a comprehensive database for researchers and doctoral candidates it is important that all efforts are made to facilitate uploading records to Libraries Australia. It appears ARO is now taking over as the destination of choice. While this is clearly a suitable option, the repository still needs to be comprehensive and up-to-date.

UNUSUAL AND SPECIALIST THESIS TITLES

There were many unusual thesis titles, some unintelligible to the non-specialist. Some provided light relief for those coding the 53,715 records but also added to the difficulty of the task. In addition, many subject headings allocated to the bibliographic records were insufficient. Some examples of unusual and/or highly technical thesis titles are listed in Table 3.

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Table 3: Examples of unusual	and specialist thesis titles
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Semelai
Effect of K2O, Cr2O3, H2O and CO2 on the partial melting behaviour of spinel lherzolite in system CaO-MgO- Al2O3-SiO2+/-K2O+/-Cr2O3+/-H2O+/-CO2 at 11 kbar
Automaticity, almost convexity and falsification by fellow traveler properties of some finitely generated groups
Ortholengths and hyperbolic Dehn surgery
The only place
L1 - optimal robust tracking
Shift actions on 2 –cocycles
Characterisation of the pterin molybdenum cofactor in dimethylsulfoxide reductase from Rhodobacter capsulatus and its biogenesis
The electrophilic cleavage of allyIsilanes: investigations into the mechanism of the electrophilic cleavage of allyIsilanes and the synthesis of optically active silicon centred allylic silacyclopentanes
God, woman and other eccentricities
The testicles of the universe: the United States Strategic Petroleum Reserve 1981 - January 1991
Application of birds in MT-MFSK signal set design for multiplexing bursty sources
Application of a new NARC sequence to the enantioselective synthesis of zaragozic acids (squalestatins) and stereoselective intermolecular oxymercurations of trisubstituted allylic ethers
The application of [beta]-amino acids in the design of conformationally constrained antagonists of integrin [alpha] [subscript IIb] [beta] subscript [3] and proteolytically stabilised inhibitors of Endopeptidase E.C. 3.4.24.15.

IMPLICATIONS FOR FUTURE THESIS SUBMISSIONS AND RECORDS

This work on a database of Australian PhD thesis records permits analyses of doctoral theses from 1987 to 2006 related to RFCD divisions and disciplines, institutions, university groupings (as defined by current alliances) and by states. These data and analyses may prove to be an important basis on which to build a database of all doctorates in Australia. However, very few PhDs relate to one discipline or subject, and the 'multi-disciplinarity' of doctoral work and fuzziness of disciplinary boundaries is masked in the current database by the single coding. Interestingly, Brew (2008), in a study of experienced researchers, found that they negotiated within a particular context which disciplinary affiliation is appropriate.

For many she interviewed the emphasis was on relationships between areas, a 'coming together of academic areas', not on academic separateness or clear boundaries. Similarly doctoral candidates who are working at the frontiers of research and those in more applied areas will be most likely to be limited by single discipline coding. For example, a thesis undertaken in sociology using social research methods on the topic of industrial relations in the Fijian sugar industry, may use an approach from one (or more) discipline (sociology, industrial relations) and produce findings on another (or more) topic (industrial relations, Pacific studies). Confirming the problematic nature of single coding is the finding in a 2005 survey where doctoral students were asked to give their field of study/ discipline from a comprehensive menu of ASCED categories, the greatest number in the ASCED Broad Field of Study (BFOS) Health chose the narrow field 'Other Health' (Pearson, Cumming, Evans, Macauley & Ryland, 2008).

The potential of e-theses, university repositories and ARO would be greatly enhanced if doctoral candidates were required to code their theses on submission for examination, or on uploading of final copies to their university. It is suggested they do so in a similar way as applicants for national competitive grants and allocate a percentage weighting to each, and that a candidate and their supervisor(s) be asked to provide one to three codes for the discipline and one to three codes for the topic.

However, it is also important to recognise that the RFCD discipline codes represent a best estimate of a descriptor for a discipline at the time they were set. With each passing year the evolution and fluidity of new knowledge production, theories and areas of application, means that some of the codes become less useful in representing a classification of knowledge production. Eventually, a new classification becomes necessary when the usefulness of the comparative value of the classifications over time is reduced and a new classification scheme is required (hence, the ANZSRC).

RECOMMENDATIONS

To improve the dissemination and the ease of searching and using PhD thesis records, a number of recommendations are suggested. These include having a standard thesis 'publication' date for universities to use for reporting and cataloguing purposes, and, for Australian university libraries to consistently interpret the cataloguing of PhD theses according to the Anglo American Cataloguing Rules. This is particularly the case with the 008 and 260 MARC fields. Alternatively, PhD bibliographic records should be included in the respective institutional repositories and subsequently harvested by ARO. Additionally, this should be completed in a timely fashion to enable the dissemination of the significant and original research produced by doctoral candidates.

Importantly, it is recommended that PhD candidates, in consultation with their supervisors, allocate up to three ANZSRC codes both for the topic and for the approach to their theses upon submission for examination. This should become a university requirement. An important component—but sometimes a forgotten part—of undertaking a doctorate is the research training that it provides. Doctoral graduates will, in applying for grants and submission of their publications to universities and government bodies, need to acquire the skill of choosing appropriate codes and understand the rationale and consequences of the coding. Furthermore, this will greatly enhance the quality of the bibliographic records that librarians must create as the codes provide an extremely accurate guide to assist in assigning subject headings and classification numbers. In theory, one code should be sufficient, as is the case with librarians allocating a classification number to each bibliographic record. In practice, as the research has demonstrated, this is not always the most effective or descriptive process.

It is also recommended that PhD thesis records from 2007 are ANZSRC coded to enable a complete database from 1948 onwards to be maintained. The authors are currently pursuing this recommendation.

Finally, it is recommended universities require PhD candidates to use clear and communicative thesis titles to facilitate electronic searching and that a clear and communicative thesis abstract should be provided for inclusion in the bibliographic record. This will assist librarians to produce (even) higher quality bibliographic records and will help end-users find the information they require.

CONCLUSION

It is important to note that this database constitutes a valuable resource in its own right. It provides a different source of data about research training with a focus on research capacity within particular disciplines. However, the real benefit of such databases comes in their continuation and maintenance. If Australia maintained a database of all its PhD theses records coded by discipline and approach it would enable government, academies, universities, industry, and others to monitor and assess research capacity in the disciplines. As a consequence, research capacity strengths and weaknesses can be identified and used in national and institutional planning for future research capacity building. Such data driven research capacity building would place Australia at the forefront of research capacity planning internationally and assist it to be globally competitive in knowledge-production planning and knowledge-production itself.

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ENTRY INTO THE LIBRARY AND INFORMATION INDUSTRY: CHOICES AND DECISIONS

Janet Murray and Mary Carroll

The reasons why students who already hold a tertiary qualification and wish to pursue a career in librarianship/ information management choose to undertake a VET LIS para-professional qualification in preference to a postgraduate qualification in LIS have received little formal attention. This paper reports the results of research undertaken to investigate the underlying motivation of such students. The methodology included a survey of current students undertaking VET LIS paraprofessional qualifications at Australian educational institutions and an analysis of statistical data from the VET sector. Recommendations will be presented on how the profession should address the entry points into the profession in light of changes to government funding of VET programs and the current economic climate.

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INTRODUCTION

his paper describes research undertaken to examine the motivation of students who were qualified to undertake postgraduate qualifications in the Library and Information Services (LIS) field, but who instead elected to undertake VET LIS vocational qualifications. The research aimed to identify any common themes, student characteristics, and motivation in this choice among students currently or recently enrolled in the VET *Diploma in Library and Information Services*. This study contributes to an understanding of education needs in the LIS sector and to a broader understanding of student motivation. It raises issues to consider with regard to pathways into the library and information industry and employer needs and expectations. The data analysed to date provides evidence of changing patterns of entry into the LIS industry and the factors underpinning such change.

OBJECTIVES OF THE STUDY

The study aimed to:

- develop an overview of the level of education, age, gender and employment status of those who already hold tertiary qualifications and are currently enrolled in the VET *Diploma and Advanced Diploma in Library/Information Services* in Australia;
- better understand the motivation of this group who could undertake a postgraduate qualification in LIS but chose not to;
- establish commonalities or differences between student characteristics in the LIS sector and other sectors which may inform the findings;
- identify any factors which may contribute to the understanding of educational choices made by students in the LIS sector and in the broader educational community.

METHODOLOGY

A literature review was undertaken to establish a broad understanding of the VET student body, concentrating on research which examines the composition of VET students and their educational background. Background statistical data was collected from in-house enrolment statistics of organisations delivering VET LIS programmes and from agencies such as the National Council for Vocational Education Research (NCVER).

A questionnaire was designed which sought information about:

- The age, gender, and first language of respondents;
- Current employment mode, and whether in a LIS or other workplace;
- Reasons for selecting the Diploma in Library and Information Services;
- Awareness of postgraduate courses in library and information management;
- Reasons why a para-professional rather than a professional qualification was preferred;
- The type of tertiary qualification respondents had undertaken prior to commencing the library technician qualification.

The targeted population for this study was graduates or current students of the *Diploma in Library and Information Services*, who had a tertiary qualification prior to commencing the Diploma. The questionnaire was piloted with seven students

who were undertaking the *Diploma in Library and Information Services* at Victoria University (Melbourne) and held prior tertiary qualifications. Minor adjustments were made to the layout and wording of the questionnaire as a result of the pilot.

A purposive sampling technique was used, by sending the questionnaire to Library Technician Educators in all Australian states and territories, with a request that it be distributed to all students that met the criteria for the sample under study. Fifty-four responses were received. The average intake of students into Diploma and Advanced Diploma LIS training courses has been around 2000 students annually throughout Australia (NCVER 2007). Given this figure, our responses represent approximately 3% of the total student body. As NCVER figures indicate that approximately 13% of LIS VE enrolments per annum are reverse articulators our sample represents approximately 20% of those who matched the research profile.

The study was limited by the distribution method used for the questionnaire. Although data on the numbers of students undertaking the *Diploma in Library and Information Services* can be obtained from NCVER, personal details of those students cannot be provided. Therefore the investigators had to rely on library technician educators in each state to distribute the questionnaire to students who they knew met the sample requirements.

THE BROAD EDUCATIONAL CONTEXT

To date, no extensive research has been conducted into the movement or transfer of students between the Vocational Education (VE) and the Higher Education (HE) sectors in the field of LIS education in Australia. Yet, aspects of the educational context for the LIS industry make the investigation of cross-sectoral transfer of particular interest. Areas of significance include the historical and long-term arrangements which have existed for VE to HE transfer, the presence of both undergraduate and postgraduate entry to the profession and the existence of industry accepted programs for library technicians. The limited information which is available associated with cross-sectoral transfer in LIS focuses largely on the movement or 'articulation' of VE library technician students into HE professional programs.

This reflects the broader educational context which has been underpinned by a traditional education and training paradigm which assumed a person would move from school to work, to university, or into a trade or vocational training with these pathways considered largely discrete. It also assumed that vocational training was 'terminal' and not pre-professional, and training and education occurred also within discrete post-secondary institutions. Over the last two decades, changes have occurred in the extent to which education and training is being accessed by the community, and also in the ways in which people access it, including a growing understanding of the way people move between educational sectors. These changes seem to reflect the changing expectations and needs of the Australian workplace and its workforce. Increased access and industry requirements for formal education and training have meant that education and training now has a much larger footprint in the preparation of all types of workers for employment. In 2009, it is possible to undertake part of your vocational training at secondary school through programs such as VET in schools, perhaps undertake a traineeship while working or at school, and undertake vocational education at a VE provider such as a Technical and Further Education (TAFE) college while working or by studying full-time. It is possible to use this study and work towards accessing university programs and undertaking professional level qualifications possibly at an institution which provides both VE and HE programmes.

Research into articulation and transfer by those such as Moodie (2004), Harris, Rainey and Sumner (2006), and Curtis (2009) also indicates that the movement between the sectors is not a simple, linear, and continually upward progression in terms of education and/or employment as commonly has been perceived. In fact, movement between the sectors is complex and multi-directional, influenced by a variety of factors including age, employment status, and field of study. Many students show patterns of inter-sectoral transfer involving either reverse articulation, defined by the NCVER as the 'movement of students from higher education into vocational education and training' (NCVER 2009), or as participating in a continuous process of 'swirling' back and forth throughout their work lives between the sectors. Of participants in the Australian education and training arena today, Curtis states

Throughout their careers, individuals acquire skills that are relevant to their needs. For some this means further study in the same sector as a first qualification, while for others it means enrolling in the other tertiary sector (1)

The issue of the extent of reverse articulation across the VE sector has been contentious, with figures about such movement varying from 6% to 25% depending on cohort, age, and industry (Moodie, 1-3). Both statistically, as is indicated by NCVER findings (NCVER 2007), and anecdotally, it would seem that in LIS VE programmes in Australia there are many library technician students who fall into the category of reverse articulators. NCVER figures indicate that while there has been some variation in the figures over time, approximately 13% of VE LIS students held a Bachelor's degree or higher, with a total of 33% having some prior form of qualification (NCVER 2007). This reflects the previously discussed broader concept of a dynamic and 'swirling' dimension to education and training in Australia. It also raises interesting questions about the validity of conventional perceptions of Australian LIS educational structures and pathways.

NCVER statistics are further supported by the findings of the 2008 Nexus survey into the Australian LIS workforce, which found that 13% of those respondents to the survey who had library technician qualifications also held a previous university degree and 3% a Master's level qualification (Hallam 2008, 33). Figures such as these indicate that the issue of reverse articulation is relevant for any investigation into the LIS workforce and suggest that the LIS industry may not only reflect the broader trends towards reverse articulation but in fact may do so more strongly. Given that it is possible for students with HE qualifications to undertake postgraduate professional education to enter the LIS industry this raises the question of why students who could access postgraduate education choose instead to undertake VE library technician training.

The link between place of employment and studying in the field is one possible reason to be explored. It may be, as was suggested in research into factors influencing upward articulation by Carroll (2007, 209), that working in the industry appears to be a strong motivator in undertaking study in the LIS discipline. If so, then some of those graduates identified as reverse articulators may first find employment in the industry and then choose, or be directed to undertake, industry-based study. The current research will address such underlying motivations and the reasons why this qualification path was chosen. Such research is necessary if the industry is to fully understand the complex motivations, aspirations, and needs of its future student body and workforce.

In the wider context, a major study of the Australian vocational sector conducted in 2005 found there were some distinguishing characteristics, which are of note when examining the VE sector across all industries. Such examination assists in increasing knowledge and understanding of articulation (Harris, Sumner and Rainey, 2005). Findings of this study and other similar research include:

- reverse articulation has been increasing rapidly for at least a decade and is three times the rate of VE to HE articulation;
- reverse articulation is more common amongst women; .
- over 50% of such reverse articulators were between 30-49 years of age;
- a large proportion of those in the Harris, Sumner and Rainey study • had moved between sectors more than once, with about 25% of the VE study participants having moved from VE to HE then returned to VE;
- the majority were re-training for a career outside their prior qualification; and
- the choice of VE training was made by the majority because it provided • practical skills, enhanced employability, and improved career prospects in a current employment situation, provided a vocationally specific education, or was motivated by the request of an employer.

Underlining the relevance of such research to the LIS context Carroll (2005), in a paper profiling those studying in library technician programmes in Australia, revealed a cohort which was largely female (86%) with 60% aged between thirty and forty-nine years of age and 47% employed either full-time or part-time while studying. Such a cohort fits clearly into what Harris, Sumner & Rainey found to be one of the prime participants in reverse articulation. They found reverse articulation

was dominated by women and mature-aged students studying part-time, and the move occurred some time after completing university. Often they chose to study in a different field of education to improve their prospects in their current career.

Understanding the movement, intentions, and backgrounds of students within our own educational environment is essential if we are to continue to educate effectively. It is also important for the LIS industry and LIS educators to examine their industry against the broader backdrop of education and training in Australia to establish a comprehensive picture of who are being educated, and how, for the industry. Such an overview is necessary for a number of reasons including the role it can play in enhancing and informing teaching and learning for the LIS discipline, focusing attention on some of the assumptions underpinning education for each sector, and in challenging widely held beliefs about the nature of students. More generally, such understanding serves to inform as part of the story of the LIS industry, helping contextualise and compare both education and personnel in the LIS industry with wider educational and workforce contexts. By both examining and placing in context the student cohort, the industry can more fully understand its workforce and future workforce needs. This research aims to investigate the motivation of LIS reverse articulators and provide a deeper understanding of those undertaking education and training for the LIS workforce.

Since this study commenced, a major change in VE funding in Victoria may have an interesting effect on the whole issue of reverse articulation in that state. From July 2009, any student who holds a tertiary qualification will be ineligible for a government funded place. This will increase the cost of VE training considerably and while still a less expensive option than the HE one, will no longer provide an inexpensive re-training option for those with a HE degree attempting to return to the workforce looking for vocational skills to enhance their employability. The researchers intend to explore the effect this has on 2010 enrolments in LIS VE and HE courses in Victoria.

SURVEY RESULTS

The completed questionnaires were analysed using SPSS 17.0.2 for quantitative data. Personal background including variables such as age, gender, and first language showed a wide representation of demographic characteristics. The highest number of respondents were aged between 25-35, with 68% under the age of 45, as shown in the following table.

Age	Number	Percentage
18-24	1	1.9
25-30	14	25.9
31-35	8	14.8
36-40	7	13
41-45	7	13
46-50	6	11.1
51-55	4	7.4
56-60	6	11.1
61-65	1	1.9

Table	1:	Ages	of	Respondents
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Males represented 11.1% (6) in the sample, females 88.9% (48). English was the first language for 70.4% (38) of respondents, whilst Chinese was the next most highly represented at 9.3% (5).

The questionnaire asked about current employment status, and if respondents were employed, whether this was in the library and information industry sector. Sixty-one percent (33) of respondents were currently employed and of these, 33% (11) were employed in the library industry. Others were employed in a range of other industry sectors.

Employment status of respondents is shown in the following table:

· · ·	5	
Employment mode	Number	Percentage
FT Permanent	5	9.3
FT Contract	2	3.7
PT Permanent	6	11.1
PT Contract	6	11.1
Short Term Contract (less than 6 months)	15	27.8
Casual	20	37

Interestingly, as far as educational background was concerned, 31.5% (17) of respondents held a postgraduate qualification, with 59.3% (32) holding an undergraduate degree. The remaining respondents held a Diploma (7.4%) or an Advanced Diploma (1.9%). Most common areas of study represented by these other qualifications were Arts, Education, Science, and Business. Seventy percent of qualifications held by respondents were awarded by Australian educational institutions.

Table 3 shows the year in which tertiary qualifications were completed.

Year	Number	Percentage
2006-2008	6	11.1
2000-2005	19	35.2
1995-1999	9	16.7
1990-1994	6	11.1
1985-1989	5	9.3

Table 3: Completion of tertiary qualification

The questionnaire explored factors related to the choice of a vocational course as opposed to a professional (tertiary) course, and whether respondents were in fact aware that tertiary courses in library and information management existed. Seventy four percent (40) of respondents were aware that the course provided a vocational rather than a professional qualification. Chief reasons why a vocational rather than a professional course was chosen were:

- Cost
- To find a job
- Practical skills based course
- Length of course
- Geographical location
- Lack of confidence in undertaking a tertiary course
- Flexibility of course delivery
- English proficiency a barrier to undertaking a tertiary course
- Career change

Forty-two (77.8%) of respondents were aware that there were professional courses in LIS. Of the twelve (22.2%) that were not aware of this, four (7.4%) would have preferred to undertake a professional course.

Respondents were also asked, in an open question, how they found out about the course they were undertaking. A wide range of sources were mentioned, and results are shown in Table 4.

Source	Number	Percentage
Internet	17	31.5
Friends or family	8	14.8
ALIA	6	11.1
Careers Advisor	6	11.1
Work Colleagues	4	7.4
From a current student or graduate	3	5.6
VTAC Guide	2	3.7
Marketing information	2	3.7
Employment Consultant	2	3.7
Open Day	1	1.9

Table 4: Source of course information

The final questions asked respondents to rate overall why they had chosen a *Certificate 111/Diploma/Advanced Diploma in Library and Information Services*. The reasons stated for selection of the course were in order of frequency:

- 1. Acquisition of vocational skills to enhance employability (46 respondents))
- 2. Cost (41 respondents)
- 3. Flexibility of study mode (37 respondents)
- 4. To familiarise themselves with the library industry before undertaking professional qualifications (27 respondents)
- 5. Length of the course (24 respondents)
- 6. Recommendation from someone they knew outside the institution (23 respondents)
- 7. Reputation of the institution (17 respondents)
- 8. Recommendation by a current student (9 respondents)
- 9. Employment agency recommendation (6 respondents)
- 10. Recommendation from employer (3 respondents)

A further question asked respondents to rate the three most important reasons for choosing the course. The primary reason was shown to be the acquisition of vocational skills that would enhance employability, and the second was cost. In equal third place were flexibility of study mode and the opportunity to familiarise oneself with the industry before undertaking professional qualifications.

DISCUSSION

The findings of this study reflect much of the research conducted in Australia regarding the transition of students between sectors and the non-linear nature of

education undertaken by many. Many of the underlying motivations surrounding why people with tertiary qualifications choose a VE course rather than a HE course as found by Harris, Sumner and Rainey are also prominent in this industry specific study. Such commonalities included

- Library technician training was seen by the respondents to provide practical skills that would increase employability.
- The large percentage (88.9%) in the current study were women reflecting the wider findings that many reverse articulators are women.
- All respondents, with one exception, did not hold tertiary qualifications in librarianship and information management, which suggests that many of the respondents in this study, like those in the broader research, were undertaking a VE programme in order to embark on a different career.
- 20% of respondents were currently employed in the library and information industry, suggesting that these respondents as in previous research were seeking a vocationally specific education.
- Just under a third of the respondents employed in the LIS industry had been recommended to undertake the *Diploma of Library and Information Services* by their employer.
- 73% (16) of respondents in the 25-35 years age bracket listed a main reason for undertaking a VE course as being that it offered vocational skills that increased employability.

Other findings in the current study indicated that 61% of respondents were currently employed, compared with 47% in the industry wide study. Of those employed, 13% were employed full time and the remainder (87%) employed either part time or in casual positions, which might be expected in a sample undertaking either full or part time study. Those employed in the library and information industry were in a range of full time/part-time- permanent/ contract positions. Carroll's research indicates a strong relationship between work and study, concluding 'There is an important nexus between having work in the industry and undertaking education in it.' Such a nexus also extends to the study and employment categories students may fall into, including a preference for part-time study and/or work as people juggle work, family, and study commitments, and have a need for flexible study options. Carroll also found some evidence to suggest a relationship between secure ongoing employment and the uptake of further study or upward articulation. Results for this study indicate some difference with the patterns of upward articulators.

The 2005 Harris et al study found that 50% of reverse articulators were aged between 30-45 years of age. In the current study, 51.9% of respondents were aged 31-50 years of age, in keeping with these findings. However, the largest age group in the current sample was 25-30 (25.9%). This suggests that in the LIS industry at least an increasing number of young graduates are enrolling in VE courses after completing a tertiary degree, reflecting some of the complexities outlined

by Curtis (2009) in his examination of current research. When looking at the age of respondents in comparison to the date their highest tertiary qualification was completed, 20.4% (11) were in the 25-30 years age group and had completed the qualification between 2000-2005.

Cost of the VE course was the second most common reason, and given that many graduates already have a significant HECS debt, it is not surprising that they might see a library technician qualification as a cheaper alternative entry point into an industry they are attracted to. Ten of the 14 respondents in the 25-30 years age group selected cost as one of the main factors in influencing their choice of a VE course.

The results have some implications for the way LIS educators market their offerings. It is of concern that 26% of respondents were not aware that their VE course did not give them a professional qualification, and that 22.8% of respondents were not aware that HE courses in LIS existed. These results seem to support a subjective observation that most people outside the LIS industry are not aware of its career structure and do not differentiate between librarians and library technicians. This lack of knowledge would contribute to the informationseeking for courses that 31% of respondents chose to do via an Internet search, possibly not understanding the need to differentiate between VE and HE courses nor perhaps understanding the decline in the use of the word 'library' by most HE providers. ALIA as an information source for the profession was known to only 11.1% of respondents, and the vast majority found out about the VE courses from a range of personal information sources such as work colleagues, current students, friends and family, employment consultants, and careers advisors. A recommendation to undertake a VE course was made, somewhat unexpectedly, to 14.8% of respondents by a careers advisor or an employment consultant. This raises the question of how well informed these professions are of the career structure within the LIS industry. Another related issue is some indication that graduate students enrol in the VE course because they want to use it as a testing ground, or to serve as a 'try before you buy' service before undertaking the expensive and perhaps more demanding professional programme. This is an interesting concept which poses some challenges for the industry in promotion and recruitment and opens up discussion around concepts such as traineeships and internships.

CONCLUSION

The results of this study confirm the authors' subjective observations that increasingly a number of young females, whose first language is English, with a tertiary qualification, are undertaking a VE course as a their first option for a career in the library and information industry. The reasons for this choice are varied, but as discussed above, mainly relate to the perception that a vocational qualification is more likely to lead to employment, the cost of a VE course being significantly less than a HE course, and the flexibility of study options offered. This situation may change in 2010, in Victoria at least, due to changes in the fee structure for VET courses, as noted earlier in this paper. Further research using data from this study will make comparisons with national and state wide patterns and trends in student motivation. If these trends continue, there are distinct issues to be addressed by library educators and employers, regarding acceptable pathways into the LIS industry, and in particular into professional positions. Industry observation indicates many employers currently offer professional positions to people with a tertiary degree and a Diploma in Library and Information Services, and some also appoint people who hold only the latter to professional positions. There are multiple reasons for these appointments, but the practice suggests that we should be re-examining pathways into the LIS profession and improved articulation processes between VE and HE programmes. The issues the wider profession needs to consider relate to the way that HE courses in LIS are marketed, and how information about the library industry is disseminated to career advisers and employment consultants. Questions also need to be asked concerning the current structures in LIS education. Is having two separate pathways into the Australian LIS industry a practical approach, or should we be examining ways of streamlining articulation from para-professional to professional status in more effective and straightforward ways than at present?

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CROSS COUNTRY COMPARISON OF SCHOLARLY E-READING PATTERNS IN AUSTRALIA, FINLAND, AND THE UNITED STATES*

Carol Tenopir, Concepción S. Wilson, Pertti Vakkari, Sanna Talja, Donald W. King

Surveys of academic staff in Australia, Finland, and the United States from 2004-2007 reveal reading patterns of e-articles by academics that can be used to measure the purpose and value of e-reading and to demonstrate the value of library-provided electronic journal collections. Results can also be used to compare differences across subject discipline, age, and national boundaries, and how the decisions that libraries make influence reading patterns.

The surveys used a variation of the critical incident technique to focus on the last e-article read, whether from the library collection or from elsewhere. Readings from e-journals and articles provided by libraries were more often for the purpose of research than were readings from other sources; were rated as highly valuable to that purpose; and have many reported values, including stimulating new ideas. Academics who published more also read more. Although there were some minor variations in e-reading patterns among the countries, most differences in reading patterns resulted instead from differences in subject discipline. Personal characteristics of the reader, including age and status, had much less influence on e-reading habits.

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INTRODUCTION

E-journals and journal article databases now form a large part of university libraries' periodical collections. E-articles are also available from other sources, including subject repositories, institutional repositories, author web sites, and open access journals. Scholars who are affiliated with universities that have substantial electronic collections and internet infrastructure thus have the potential to access more journals and scholarly articles than ever before. This unprecedented access is true in many nations with developed infrastructure, but little is known about how reading patterns may differ among academics in different nations.

This paper reports a survey of academics (faculty members) from several universities in Australia, Finland and the United States aimed at determining the amount of e-reading, time spent reading, sources of e-article readings, purpose of reading, and the value of reading. Using consistent questions, following the form and types of questions asked since 1977 in surveys of scientists by Tenopir and King (2000), allows cross-national comparisons as well as comparisons by demographic characteristics such as subject discipline, age, and rank. This paper reports on the results for academic staff/faculty.

RELATED STUDIES

Three major literature reviews have summarised research studies from the past fifty years that measure journal reading and, more recently, the transition from print to electronic scholarly resources. King and Tenopir (2001), Tenopir (2003) and Rowlands (2007) describe many national or regional studies that found widespread adoption of electronic resources by academics around the world in situations where the infrastructure is adequate and high quality resources are readily available. Barriers to adoption of e-journals are mainly related to limited access to core resources (Vakkari, 2006) and are often site-specific, such as lack of training and poor computing infrastructure (Raza and Upadhyay, 2006).

Given conditions of adequate infrastructure, training, and library e-collections, few cross-national differences were found or anticipated (Tenopir, King, Spencer and Wu, 2009); differences in reading behaviors instead may be due to other factors. Collaborating researchers in Europe, for example, make a strong theoretical case for future studies to consider the cultural differences within and between disciplines (Fry and Talja, 2004). Talja and Maula (2003) and more recently, Tenopir and others (2009) have explored subject discipline differences in reading patterns.

National studies especially relevant to this paper include studies of Finnish academics, who are surveyed from time to time by the FinElib consortium (Vakkari and Talja, 2006), reading patterns of Australian academics (Wilson and Tenopir, 2008), and journal seeking and reading patterns of U.S. academics in five universities (King, Tenopir, Choemprayong and Wu, 2009). In addition to these studies and those described in the three major literature reviews mentioned above, recent studies of academics of the Technological Educational Institute of Thessaloniki in Greece (Korobili, Tilikidou and Delistavrou, 2006); academic staff of the Consortium of Academic Libraries of Catalonia in Spain (Borrego, Anglada, Barrios and Comellas, 2007); physicists, chemists and pathologists in universities and research institutes in Japan (Kurata, Matsubayashib, Mine, Muranushi and Ueda, 2007); medical researchers from 80 medical schools in Japan (Kurata, Mine, Morioka, Sakai, Kato and Ueda, 2009); registered users of the Electronic Journal of the University of Malaya (Zainab, Huzaimah and Ang, 2007); and humanities researchers, social scientists and scientists from nine universities in the Netherlands (Voorbij and Ongering, 2006) provide a growing international picture of the shift from print to electronic journals among scholars, with reading from both print and electronic journals still an important part of the scholarly enterprise.

METHOD

The surveys reported here were conducted from late 2004 through May 2007. Two universities in Australia, five in the United States, and a nationwide survey of Finnish academics resulted in a total return of over 2,000 academic staff/ faculty responses (Table 1).

The surveys in Australia and the U.S. asked respondents to comment on readings, whether from print or electronic sources, while the Finland survey asked questions only about use of e-sources. For purposes of comparison, only those portions of the Australian and U.S. responses that could be determined to be from e-sources are included in this analysis.

All surveys were distributed electronically to academics through an e-mail cover letter from the librarian at their university, or by marketing the surveys through university libraries' homepages. In some of the U.S. universities a paper copy was also available. Responses were captured or entered into an SPSS data file for analysis.

			011000	
Survey Loc	ation	Date	Academics/ Faculty Response	Response e-sources
	University of New South Wales	Sept-Nov 2004	230	126
Australia	University of Queensland	May 2005	151	82
	Australia Total		381	208
Finland (Na	ationwide)	April-May 2007	491 4	
	Research University #1	Oct-Nov 2005	332	129
	Master's Level #1	Oct-Nov 2005	102	40
UC	Research University #2	Oct-Nov 2005	415	247
U.S.	Master's Level #2	Oct-Nov 2005	47	13
	Research University #3	Oct-Nov 2005	411	172
	U.S. Total		1307	601
Total (All three countries) 2179				1300

Table 1: Survey Dates and Responses

Respondents were asked several demographic questions, notably concerning their subject discipline, academic rank or level, and age. One general recollection question was asked, namely:

"In the past month, approximately how many scholarly articles [electronic articles in the Finnish survey] have you read? Reading is defined as going beyond the table of contents, title, and abstract to the body of the article."

The remainder of the questions focused on the specific incident of the last article reading. This variation of the critical incident technique has been used for many years in surveys of reading patterns by Tenopir and King (2000). The critical incident technique, first introduced by Flanagan (1954) provides a second stage random sample of readings beyond the sample of readers that allows detailed analysis of such things as the purpose and value of readings. By focusing on a recent reading, problems relating to recall are reduced. All common questions are listed in the Appendix.

LIMITATIONS

Some readings from the Australian or U.S. surveys may have been omitted if we could not adequately determine whether the source was print or electronic. Surveys were conducted over a two and one-half year timeframe. Although all of the survey recipients at all of the universities had access to substantial libraryprovided e-journal collections at the time of each survey, some changes in access or attitudes may be attributable to the passage of time between surveys. All answers are self-reported and, therefore, should be considered estimates. Time spent reading, number of article readings, etc. are all estimated by the respondents to the best of their recollections. The academic institutions surveyed and the respondents from these institutions were assumed to be typical representatives within each country.

RESULTS AND DISCUSSION

Faculty members/academic staff in all three countries undoubtedly read from both print and electronic sources. In the United States, for example, on average over half of all readings are from electronic resources and in Australia two-thirds are from electronic sources. The Finnish survey only asked about e-reading; hence, only e-article reading is reported in this paper when comparing the three countries. It may be expected that the total number of article readings was approximately a third to nearly one-half greater than the e-readings reported here when readings from print journals are included. Note that reading from electronic sources does not mean that the final form of reading is on the screen. In a majority of cases, e-articles were printed out for final reading.

Amount of E-Reading

In all three countries, academics reported many e-readings per month: on average, 14.9 in the U.S., 15.4 in Finland, and 17.1 in Australia (Table 2). Based on the monthly averages of e-reading, the amount of e-readings on average per academic per year is close to 179 in the U.S., 185 in Finland, and 205 in Australia. In Finland, where all academics have access to the national e-journal licenses from their FinELib consortia, it was assumed that most of these scholarly readings came from FinELib holdings. In the U.S. and Australian surveys, more detailed questions about the reading source were asked and responses showed that nearly half (103 of 208) of the e-readings in Australia came from library resources, and over two-thirds (412 of 601) of the e-readings in the U.S. came from libraries. Other substantial sources for e-readings included the open web (14.8% in the U.S. and 39.9% in Australia) and, to a lesser degree, personal subscriptions (6.5% in the U.S. and 10.6% in Australia). In all countries, the e-resources provided by the library or the library consortium were the most important sources for e-readings by academics.

Table 2 shows the average number of electronic readings per month by country and by academic standing. Because the academic titles are different in each country, the groupings may account for some of the differences within each category. In all countries, the number of reported readings differed among individuals, with a range of between zero and over 100 e-articles reported as being read in the past month. On average, Australian academics, followed by Finnish faculty members, reported the greatest number of e-readings, although academics from all three countries made a substantial investment of time in e-readings.

				, ,		
Grouped	Aust	tralia	Fir	land	τ	J .S.
Academic Ranks	Mean	Std error	Mean	Std error	Mean	Std error
I. Professor	18.7	5.38	19.6	1.09	16.0	1.39
II. Associate/ AssistantProfessor/ Researcher	24.5	6.68	15.7	1.20	14.8	0.93
III. Instructor/ Lecturer/Adjunct	12.2	1.06	11.2	1.87	13.0	1.93
Other	13.8	2.06	N/A	N/A	12.2	1.55
Total	17.1	2.24	15.4	0.78	14.9	0.70

Table 2: Average Monthly E-Readings by Academic Rank

Note: Tests for statistical significance were performed for all the survey results used in this paper; these can be obtained from the authors. However, they have been omitted from the text for ease of reading.

In Finland, the number of electronically obtained article readings was significantly associated with academic status. Both professors and associate/assistant professors reported significantly more article readings than lecturers. Lecturers' teaching loads are typically higher than that of other academic positions, which leave less time for reading research publications; in addition, lecturers may not have the research expectations of the other two ranks. In the U.S. and Australia, the number of readings was not significantly associated with academic status.

It is often hypothesised (yet rarely supported by data) that younger faculty members may be more likely to read electronic articles, while older ones rely more on print sources. Age of reader may also be a reflection of academic rank and career stage, so no age-related results can be definitive. Age was **not** statistically significantly associated with the number of electronic readings in the three countries (Table 3).

Age	Australia	Finland	U.S.	
18-25	18.0	18.9	11.0	
26-35	22.5	16.8	12.6	
36-45	12.5	13.5	14.9	
46-55	13.2	15.5	16.3	
56-65	11.0	14.7	14.3	
66 or above	N/A	N/A	19.2	

 Table 3: Age of Respondents and Reported Average Number of

 E-Readings Per Month

In the U.S. and Australia, where respondents were asked about reading from both electronic and print sources, there was a definite age-related trend, with older readers more likely to read from a balance of print and electronic resources (Table 4).

Age	Print	Electronic
Under 30	13%	87%
31-40	31%	69%
41-50	44%	56%
51-60	46%	54%
Over 60	50%	50%

Table 4: Source (%) of Readings (Print or Electronic) by academics in
Australia and the U.S., by Age of Reader (n=1251)

In Australia, academic rank II is closely aligned with middle-level academics (Table 2); this group on average read twice as much as junior academics in rank III and also considerably more than senior academics in rank I. In Table 3 this spread was repeated in the number of e-readings by age: the 26-35 age cohort, generally early career/middle-level academics, read nearly twice as much as older academics aged 36-65. The middle-level academic rank and 'up to 40' age cohort represent academics who are keen for promotion, spend more time reading mostly for research (see Table 8 below), and largely prefer reading e-articles (see Table 4).

Subject discipline most likely has an effect on amount of reading and other reading patterns, with humanities faculty members generally reporting reading fewer e-articles per month than faculty members in other disciplines (Table 5). In Finland, academic discipline was significantly associated with the number of electronic article readings. Faculty members in medicine read more than their colleagues in other disciplines. The difference was significantly greater compared to humanities and social sciences. Humanists read significantly fewer electronic articles than their colleagues in other disciplines. They read on average only 6.8 articles compared to 25.5 items read by the scholars in medicine.

Discipline	Australia	Finland	U.S.
Humanities	12.1	6.8	7.0
Social Sciences	12.5	14.0	11.3
Sciences	11.9	18.3	16.5
Engineering	20.4	18.6	14.4
Medicine	22.1	25.5	20.9
TOTAL	17.1	15.3	14.9

 Table 5: Average Number of Scholarly E-Article Readings per Month by

 University Faculty Members by Subject Discipline

In the U.S., academic discipline was also significantly associated with the number of article readings. As in Finland, U.S. medical scholars read on average 20.9 articles, significantly more than their colleagues in the disciplines of social science (11.3), humanities (7.0), engineering (14.4), and science (16.5). While U.S.

humanities scholars read significantly fewer articles than their counterparts in the disciplines of medicine, engineering, and science, the difference in number of readings between humanities and social science was not statistically significant.

In Australia, academic discipline was *not* significantly associated with the number of article readings. However, the results do provide some evidence that scholars from medicine and engineering disciplines read nearly twice as much as scholars from other disciplines.

Part of the differences in article readings among academic disciplines can be accounted for by the fact that a greater percentage of science, technology, medicine, and social science journals are available in electronic form (Vakkari and Talja, 2006). Another reason is that humanities scholars read relatively fewer journal articles (even from print journals) than their science counterparts, relying on books and primary documents more and articles less. In the U.S. and Australian surveys, the humanities faculty members reported an average of 13 article readings per month from either print or electronic sources, compared to an average total of 29 readings for science academics.

In Finland and the U.S., academics who publish more also read significantly more; however in Australia, where academics reported the highest amount of reading overall, there was no significant correlation found between the reported number of e-readings and the number of publications. In Finland, the total number of all scholarly items published was significantly associated with the number of electronic article readings. There were significant correlations between readings and publishing in journals, conference proceedings, and monographs, but not for text books or manuals. In the U.S. the total number of e-article readings. The number of publications in refereed journals was significantly correlated with the number of article readings; however, the numbers of article in the other publication types (that is, non-refereed journals, conference papers, books and chapters in books) were *not* significantly correlated to article readings.

Where E-Reading took place

There were some differences across countries in where e-reading took place. In Australia, Finland, and the U.S., the office or laboratory was, however, by far the most common place for reading e-articles, with home a distant second and other places only minimally popular. The library was not a place for reading e-articles in any of these countries, even though most of these articles were retrieved online through the libraries' e-collections. Within "other", "while travelling" was a notable choice only of Australian academics, with 6.7% of readings done while on the road (Table 6).

Reading Location: (%)	Australia	Finland	U.S.
Office (or Laboratory)	60.1%	75.7%	66.2%
Home	26.1%	19.9%	26.8%
Library	3.9%	0.8%	1.5%
Other	9.9%	3.7%	4.3%

Table 6: Location of E-Readings

In Finland, academic status was significantly associated with reading place, with 82% of e-readings by assistant professors, 68% of e-readings by lecturers, and 65% of e-readings by professors done in the office. In the U.S. and Australia, academic status was not significantly associated with the location of e-reading.

In Finland and Australia, there was no statistically significant association between age and location of e-reading. In the U.S., however, age was significantly associated with e-reading location, with 74% of readings by academic staff in the age group of 26-35 done at the office or laboratory, followed by the 36-45 age group (68%), 56-65 age group (67%), and 46-55 age group (64%). Only 48% of e-readings by scholars older than 66 were done at the office and laboratory, and just as many of their e-readings done at home.

In the U.S. and Australia, academic discipline was significantly correlated with reading location. In the U.S. 85% of readings by engineering faculty and 80% of readings by science faculty occurred at the office or laboratory, while only 40% of humanities readings, 58% of social science readings, and 64% of medical/health readings occurred at the office or laboratory. Over half (55%) of humanities readings by U.S. faculty were done at home, which was significantly higher than the other disciplines (only 13% of engineering and 16% of sciences readings were at home.)

In Australia, readings by science academics were more likely to be at their school or department office (75%), followed by readings by scholars in medicine and health (73%), social sciences (59%), humanities (53%), and engineering/ technology (44%). Humanities scholars are the most frequent users of the university library (13.3%) as an e-reading location. More readings by scholars in social science (35%) and engineering/technology (36%) are from home, compared with readings by scholars in humanities (13%), medicine (20%), and science (17%). Humanities scholars are more likely than the other disciplines to read while traveling (20%). Reading in the office or laboratory was perhaps practiced more by academics in middle or junior ranks (see Table 2, ranks II and III) in those disciplines engaged in experimental scientific or medical research; those academics aged 35 or younger reported on average over 20 e-readings per month (see Table 3) and at least some of the e-readings are likely to be on computer screens.

How E-Articles Were Found

Not surprisingly, searching was overwhelmingly the most popular method for finding electronic articles, but browsing, following citations and consulting colleagues were also important ways to locate e-articles (Table 7). (In Australia, due to limitations of the questionnaire design, only browsing, searching, and some other methods could be differentiated by electronic and print. Therefore, in selecting electronic source, only browsing and searching were included and cases with following citations and consulting colleagues were excluded.)

Method of Finding: (%)	Australia	Finland	U.S.
Browsing	39%	15%	23%
Searching	49%	65%	34%
Citations	N/A	10%	17%
Colleagues	N/A	6%	18%
Other	12%	4%	8%

Table 7. How E-Readings Were Found

In Finland and Australia, none of the independent variables of academic status, age, or discipline was associated with the search method used for finding electronic articles and in the U.S., neither age nor discipline were significantly correlated with the search method. In the U.S., however, academic status and degree were both significantly correlated with the search method. Professors were more likely to use their colleagues to find articles (19.4%), compared to assistant professors (19%) and lecturers (10%). More lecturers (44%) used searching to find articles, than professors (27%) or assistant professors (35%).

Principal Purpose of E-Reading

Academic staff read e-articles for many reasons, including research, teaching, keeping up-to-date, and other reasons. Research is by far the most common reason for reading scholarly articles in all three countries (Table 8).

Principal Purpose	Australia	Finland	U.S.
Research	64% (133)	68% (346)	53% (319)
Teaching	11% (22)	11% (58)	20% (119)
Keeping up to date	9% (16)	12% (60)	5% (29)
Other	16% (34)	9% (48)	20% (119)

Table 8: Principal Purpose of E-reading

In Finland, the U.S., and Australia, academic status is significantly associated with the main purpose of use. In Finland, 76% of readings by assistant professors, 62% of readings by professors, and 52% of readings by lecturers were for research. Reading for teaching was the reverse: 7% of readings by assistant professors, 12% of readings by professors, and 22% of readings by lecturers were for teaching. These findings may be related to the heavier teaching load and stronger teaching orientation of lecturers.

In the U.S., 61.3% of readings by assistant professors, 51% of readings by professors, and 33% of readings by lecturers were for research, whereas 20% of readings by assistant professors, 18% of readings by professors, and 26% of readings by lecturers were for teaching. The U.S. surveys included three research intensive/extensive universities and two master's level universities. Although the latter two universities represent only a small percentage of the total responses (53 of 601 e-reading responses) and, therefore, do not alter the final results greatly, there was a significant difference in purpose of e-readings between the categories of institutions. A slightly greater number of e-readings at the three research-level institutions were for research: 55% (296) of total e-readings, compared to 44% (23) at the two master's level institutions. In contrast, 29% (15) of the e-readings were for teaching at the master's level universities, compared to 19.5% (104) for teaching in research level institutions.

In Australia, readings by academics in the top two ranks, I (74%) and II (71%), were most often for research, compared to readings by junior academics in rank III (59%). Readings by junior academics are more often for teaching (21%) than those of other academic ranks (see also Table 2).

The purpose of e-reading also varied with the age of the reader. In Finland and the U.S., age was significantly associated with the principal purpose of reading. Readings by younger scholars were more likely to be for research than readings by their older peers, whereas readings by older scholars were more likely to be for teaching. More readings by those in the age group of 26 to 45 were for research, while readings for research declined after age 46 and readings for teaching increased. In Australia, a scholar's age was not significantly correlated with the principal purpose of reading.

In all three countries, the purpose of reading was significantly correlated with the method of finding articles. In Finland, the most commonly used method for finding articles for keeping up to date was searching (43 %) followed by browsing (30 %), and other means (13 %). Most articles read for research were found by searching (67%), followed by browsing (13 %), and by following citations (11 %). E-readings for teaching in Finland were also most often found by searching (63 %), followed by browsing (16 %), and consulting colleagues (11 %).

In the U.S., the most frequently used method for finding e-readings for research was searching (33%), followed by browsing (25%), following citation (21%), and consulting colleagues (16%). Readings for teaching were most often found by searching (35%), followed by browsing (26%), consulting colleagues (20%), and following citations (13%). In the U.S., readings for keeping up to date were also most often found by searching (28%), followed by browsing (24%), and from colleagues (21%). For writing proposals and reports most articles were found by searching (46%), with following citations next most common (23%), then by browsing (10.8%).

In Australia, the most frequently used method for finding e-readings for research was also searching (53%), followed by browsing (37%). Readings for teaching were most often found by browsing (46%), more so even than searching (41%).

Also in contrast to the U.S., readings for current awareness were most often found by browsing (56%) by Australian academics, followed by searching (33%). For writing proposals, searching (57%) was more common than browsing (38%).

CONCLUSIONS

When university libraries provide access to substantial e-journal collections and adequate infrastructure, academic staff read many e-articles that help improve their research, teaching, and current awareness. They use many methods to find these articles, including browsing, searching, following citations, and consulting colleagues. In all countries, e-articles were an integral part of the academic process, with multiple purposes for reading and multiple methods used for locating articles. Although there were some differences in the amount of reading and patterns of reading among academic scholars in the three countries of Australia, Finland, and the United States, most differences can be accounted for by the academic discipline of the reader. Academic rank/status, productivity and age account for some differences as well. Some differences, such as location when reading, do seem to be country-dependent. Finnish faculty members, for example, were more likely to do their e-reading in their offices or laboratories rather than at home.

The cross-country analysis reported here showed that for academic staff/faculty in Finland, the U.S. and Australia:

- the number of electronic article readings varied by academic status: senior and middle level academics read more articles than lecturers or junior level academics.
- age did not explain adoption of e-resources, but older readers used both print and electronic resources in a more balanced manner.
- both e-article and article reading patterns varied by discipline: scholars in medicine and engineering read more articles than scholars in other disciplines; humanities and social sciences scholars read both books and journal articles, which explained in part their lower use of e-journal articles.
- publication productivity was associated with the number of electronic article readings in Finland and the U.S.

There are some cross-country differences, however. In Australia, for example, no correlation was found between publication activity and amount of e-reading, and overall Australian academics reported the highest amounts of e-reading. Another significant difference between the countries emerged in the higher use of searching by Finnish scholars in locating e-articles. Finnish academics were also less likely to do e-readings at home. These differences are interesting, and clearly merit further exploration.

It is clear that the decisions that libraries or library-consortia make do influence some reading patterns. One university in Australia, for example, had purchased significant numbers of e-journal backfiles prior to the survey. Consequently the academic staff at that university reported more readings of older articles in electronic form. In Finland, the national consortium FinELib licenses e-journal collections and makes them available to academics nationwide. It is likely, therefore, that readings from print resources were lower overall, as e-resources were available uniformly to all Finnish universities.

The number of articles read on average continues to increase as electronic journals become more widely available. At the same time, the average time spent per reading is decreasing (see Tenopir and King surveys (2000, 2004) conducted since 1977). Libraries and publishers, therefore, must continue to find ways to help readers locate and obtain the most relevant and high quality articles quickly and efficiently.

When university libraries provide access to substantial e-journal collections and adequate infrastructure, academics are likely to read many more e-articles that may help improve their research, teaching and current awareness. Academics use many methods to find these articles, including browsing, searching, following citations, and consulting colleagues. In all countries, e-articles were an integral part of the academic process, with multiple purposes for reading and multiple methods used for locating articles.

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APPENDIX

Questions common to all surveys

1. Recollection of amount of reading:

<u>U.S. and Australia</u>: In the past month (30 days/4 weeks), approximately how many scholarly articles have you read? Articles can include those found in journal issues, Web sites, or separate copies such as preprints, reprints, and other electronic or paper copies. Reading is defined as going beyond the table of contents, title, and abstract to the body of the article.

<u>Finland</u>: How many scholarly articles that you have obtained in electronic form have you read during the last month (4 weeks)? Reading means going beyond the table of contents, title and abstract to the body of the article. Estimate the number:

2. Critical incident of last article reading:

2.1 U.S. and Australia: How did you find the last article you read?

Finland: How did you find the last e-journal article you read? <u>Both</u>: Choose one of the following (specific names of systems or methods that can be consolidated into browsing, searching, following citations, from a colleague, or other)

2.2 Where did you use/read the last e-journal article you read (reading location)?

2.3 For what purpose have you used or will you use the information obtained from the article primarily?

To keep up with developments in my own field.

For research and/or development work.

For some other private task (e.g. writing a funding application).

For teaching and counseling.

For preparing a dissertation

For some other studies

Other, what?

3. Demographics:

Age, gender, academic rank, academic discipline, highest degree earned, year of last degree, number and type of publications authored

ON BECOMING CITIZENS: EXAMINING SOCIAL INCLUSION FROM AN INFORMATION PERSPECTIVE

Annemaree Lloyd, Suzanne Lipu, and Mary Anne Kennan

Increasing participation in social, economic, and community life is considered to be one of the defining principles of an inclusive society and a key aspiration for the Australian Federal Government. Central to this principle is the ability to build the capacity of individuals and groups to develop connectedness, and to engage in decision-making. Participation such as this improves individual well-being and the well-being and prosperity of the communities in which individuals learn, work and play. A prerequisite for participation, inclusion, and informed citizenship is the ability to develop knowledge from information about the social, economic, and community dimensions through which modern Australian society is constituted.

While the concept of social inclusion is broad and extends to all sectors of the Australian community, this paper focuses on a particular sector of Australian society – new arrivals, termed settlers¹ - and explores the concepts of social inclusion and exclusion and information poverty. It then describes research currently under development which will examine how settlers reconcile their own cultural information practices and understandings about information with their experiences in their adopted country. *AARL March 2010 vol 41 no1 pp 42–53*

^{1.} The Australian Bureau of Statistics (ABS) has specific definitions for the terms migrant, refugee, and resident . Technically a migrant is defined as a person who was born overseas and has obtained permanent Australian resident status prior to or after their arrival. A permanent resident is defined as a person who was born overseas and has obtained permanent Australian resident status prior to or after their arrival. A refugee is a person who is subject to persecution in their home country and who is in need of resettlement. In other publications, the ABS uses the term "settler" to apply to all these categories and we follow their precedent for this paper.

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INTRODUCTION

B nabling the participation of citizens in social, economic, and community life is considered to be one of the defining principles of an inclusive society and a key aspiration for the Australian Federal Government (Vinson, 2009). A key aspect of this principle is the ability to build the capacity of individuals to develop connectedness and to engage with decision making that improves the well being and prosperity of the communities in which they learn, work, and play. Central to the overall principle of inclusion is the ability for people to live well and to participate in the running of their communities and the development of government policy, contributing to the social capital of their communities and the role of information in social inclusion processes in an Australian context.

Inclusion requires a collaborative approach, with communities and service providers working together. To participate in informed and productive ways people require access to information and to the technologies used to access, disseminate, and use information. They also require access to training that will motivate and enable them to develop the ability to understand how information is produced, how it is disseminated, and how it can be accessed through their immediate communities and through society in general. To achieve this collaboration, service providers need to develop a clear understanding of the range of information practices employed by various groups within their community, in order to ensure that information is effectively communicated, reducing the risk of exclusion.

A prerequisite for informed citizenship is knowledge about the social, economic, and community dimensions through which modern Australian society is constituted. Settlers, particularly new arrivals, need to acquire information and knowledge about their new country and their specific communities in order to engage with everyday living issues such as health, employment, and education. Many settlers may come to Australia from countries in conflict, where their education has been interrupted, where communication is in languages other than English, and where their culture and other environmental factors may be vastly different to those they encounter in their new country (Australian Bureau of Statistics, 2008). Without information and other mechanisms to ensure that newcomers are adequately informed about their newly adopted society, these groups may be at greater risk of being at the margin of the democratic process or of feeling isolated and lacking opportunities and choice (Caidi & Allard, 2005).

The acquisition of this knowledge could be enhanced on the one hand by the development of information practices and technological competencies through information literacy programs for settlers, and on the other hand by increasing the understanding of information service providers about the needs and requirements of different settler groups. These programs, designed to foster a

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critical and evaluative approach to information and the infrastructures by which information is delivered, would provide valuable additions to existing formal networks. A first step in this development is to gain a clear understanding of how settlers encounter information in their adopted countries and second, how they reconcile this encounter with their own cultural understandings of information provision.

While the concept of social inclusion is broad and extends to all sectors of the Australian community, this project focuses on a particular sector of Australian society – settlers who, while still largely concentrated in metropolitan areas, are also now becoming increasingly visible in rural and regional Australia as concentrated diasporas. The proposed research will focus on rural and regional diasporas, as a need has been identified by both the information providers and the settler groups themselves. Further, it is proposed to address issues relating to social inclusion and information poverty which may specifically arise due to the rural and regional location.

To explore social inclusion from an information perspective, the proposed research will examine the information experiences and information practices of settler groups in regional Australia. The aims of this research are to better understand how settlers might engage and learn about the Australian information landscape. The research will also consider how this experience influences and affects participation with the cultural, social, and economic dimensions which shape Australian life and enable settlers to become informed citizens.

SOCIAL EXCLUSION

To determine what is meant by social inclusion it is necessary to understand what is meant by *social exclusion* as the two concepts are closely related and considered to be part of the same dimension (Hayes et al., 2008). A difficulty with the concept of social exclusion is that no single definition is universally accepted. Three main themes have been identified in the literature by Atkinson and Hills (1998), which indicate that social exclusion can be seen in terms of the norms and expectations of a society (relativity); is caused through agency, whereby exclusion may be an individual choice or a group decision; or may be due to an individual's current circumstances. Social exclusion is defined by Silver and Miller (2003,3.) as a 'relational process of declining participation, solidarity, and access'. Pierson (2002, 2) suggests that 'social exclusion focuses more on social relations' and the extent to which people are able to 'participate in social affairs and attain power to influence decisions that affect them'.

Emphasising the multi-dimensional nature of the process of exclusion, which impacts not only the individual but also the whole of society, Levitas, Pantazis, Famhy, Gordon, Lloyd, and Patsios (2007, 9) consider social exclusion as the 'denial of resources, rights, goods and services.' A number of researchers emphasize the social consequences of exclusion in terms of deprivation and alienation from local communities and from wider society. In his review of the literature on inclusion and exclusion Vinson (2009) indicates that while many definitions exist, a set of common elements are present in each. He goes on to

note that all definitions include a 'lack of connectedness', and reflect 'the many sided nature of exclusion as well as the fact the social and physical environments in which people live are implicated'. The risks of exclusion for individuals are identified as; 'limited support networks, inability to access the labour market, alienation from society and poorer educational outcomes' which can lead to further risk of disenfranchisement for individuals (Vinson 2009, 7). As a 'whole of community issue' Warschauer (2002) suggests that social exclusion hurts not only those who are excluded but also the broader community and the economy.

Social exclusion is a process, and developing a clear understanding of the causes that enable or constrain this process is important (Hayes, 2008). The Australian Government in its recent report *Social inclusion ; A compendium of social inclusion indicators* (Australia. Department of the Prime Minister and Cabinet. Social Inclusion Board, 2009) highlights the forces which shape social exclusion, with each of these forces being seen in terms of the information problem that directly affects the capacity for people to participate in society. Poverty and low income may mean that some people face the lack of financial capacity to own a computer, or to purchase high speed broadband, significantly restricting and limiting access to an extensive and expanding range of online resources and assistance, now available in Australia through the various e-government and e-participation initiatives at all levels. This is particularly significant where locality (for example rural or remote locations) and connectivity may be an issue.

Barriers to the labour market, including work-related information skills, also reinforce exclusion. Work related information skills vary from 'soft skills' (such the ability to use information critically and in culturally appropriate ways to solve problems, to engage in teamwork or to develop knowledge about the organisation and flow of information within a workplace) as well as hard skills (such as the ability to use a computer and the Internet). These issues may be related to the education which settlers were able to access before and after their arrival in Australia.

According to Vinson (2009) limited social networks may result in 'network poverty' resulting in limited access to informal sources of information related to job-seeking opportunities, education, health or well-being. The overall alienation from local community networks and wider society can result when information is not easily accessible by the individual, or when the individual lacks the critical skills to evaluate it, or in situations where more powerful figures act as mediators.

SOCIAL EXCLUSION AS AN INFORMATION PROBLEM

There is much discussion (Pierson, 2002; Silver & Miller, 2003; Vinson, 2009) in the inclusion/exclusion debate about resources. However, the most fundamental resource, information, and the information practices and related skills that enable people to access, critically evaluate, and use information (information literacy), are rarely mentioned. In Australia and elsewhere, social inclusion and exclusion as an information problem has not been the focus of sustained research. Caidi and Allard (2005), who have studied this issue in Canada, suggest that a lack of access to information creates barriers that prohibit full participation in education, work, and every life. This may result in those without access to information becoming increasingly excluded from mainstream information sources and subsequently failing to develop the capacity to fully integrate and participate in society as full citizens. Thus Caidi and Allard conceptualise social exclusion as an information problem. Settlers, they propose, in particular, face substantial information problems, in the first instance relating to the navigation of information related to basic needs such as housing, employment, education and health. The sub-group of settlers who are refugees may face additional problems related to trust arising from trauma in the circumstances of their departure from their former country.

Continuing social exclusion will leave settlers at greater risk of remaining on the margins of society, excluded from participation in democratic processes, lacking opportunity for advancement in education and employment and feeling a lack of inclusion in the broader community. Thus the ability to access information is critical to social inclusion. Caidi & Allard (2005, 304) suggest that currently very little is known about 'the ways newcomers and longer established immigrant communities locate and access content in forms that are understandable and useable to them'. Further, little is known about 'their attitudes, values, awareness of and skills in utilizing various information institutions and related technologies' (p.304). They therefore suggest that settlers may experience information poverty, which contributes to their social exclusion.

INFORMATION POVERTY

People's inability to develop effective information practices which enable access to quality information can result in information poverty. The information poor constitute a class that is shaped by economic and social exclusion (Chatman, 1996, 1999) and whose knowledge is generated at the 'periphery of society'. Feminist and critical theorists argue that what one knows emerges from their social location (Mohanty, 2003; Narayan, 2004). Therefore, members who are located outside the mainstream of society often have different understandings of the society and the world that they inhabit (Caidi & Allard, 2005). The idea of information poverty is closely related to social exclusion. Limited information access and associated information skills in turn limit the capacity of individuals to fully participate in society and to make informed decisions. Over time this reduced capacity can effect the ability to extend social networks, to gain employment, maintain health, and improve educationally, thus creating a cycle of alienation from mainstream society and continued marginalisation and disenfranchisement of sectors of the community.

The idea of information poverty has been notable in the LIS literature since the 1970's, with later discussion, eg. Thompson (2007), relating it specifically to information literacy. The concept has been associated with economic hardship, which reduces access to modern ICT (information and communication technology), and to a lack of education and training to facilitate use. This has lead to the recognition that a digital divide exists. According to the Caslon Analytics (2007) report, the *Digital Divides*, the divide is not a singular concept but must be understood in terms of differential access to computers, the Internet, telecommunications, and information resulting in unequal access to knowledge, training, and resources .According to this report, in Australia, the profile of the information poor relates to '...those on low incomes, without tertiary education, living in rural/remote areas, of Aboriginal and Torres Strait Islanders heritage, with disabilities, with a language background other than English, and aged over 55'.

Cultural behaviour which creates barriers to accessing information by limiting social participation can also result in information poverty. Research by Childers and Post (1975) produced a tripartite approach to understanding an information poor lifestyle, whereby information poverty could be understood in terms of low information processing skills; sub-cultural limitations, where the information poor feel excluded from mainstream society, leading to the creation of closed subsystems; and, personal attitudes in relation to authorised agency such as government departments. Their research indicated that the information poor could be identified as having poor information processing skills, which may be the product of low literacy, language and communication skills. Physical barriers including location and economic capacity may also influence the ability to process information. While information infrastructure and technologies may be readily available, a lack of information literacy and information processing skills, coupled with limited technical competency related to information technology, can result in anxiety about understanding how to evaluate information accessed through a variety of sources, producing an inability or limited capacity to make effective decisions.

These limitations are evident in the findings of Palmer, Lemoh, Tham, Hakim and Biggs (2009) who studied HIV/AIDS information seeking behaviours of Sudanese women living in Victoria. Their study concluded that for this group lack of access to information was due to socio-cultural barriers to information seeking (which may also be conceptualised as cultural information illiteracy), inadequate sources of information, the timing of dissemination, and a lack of culturally appropriate information. The women in this study reported that verbal and visual sources of information were preferred and information delivery was more successful when disseminated in culturally appropriate ways by highly respected members of their community. In Australia (as elsewhere), there is a need to understand how the attributes of the social network of new settlers affects their ability to find and interpret information, resolve problems, or deal with everyday situations which might arise in their adopted country.

Social exclusion forces the information poor, such as settlers, to rely more heavily on their social networks. These networks can then sometimes act as gatekeepers, delivering, amending, or withholding important information, and in this way creating power relationships which may inhibit the potential flow of information. The role of social networks and their influence on information poverty has also been explored and framed through the research of Chatman (1996), who examined the insider /outsider networks. This theoretical framework is relevant to a discussion on the problematising of inclusion and exclusion from an information perspective. Earlier, Merton (1972), working from a sociological perspective, suggested that those who are excluded from membership of a

network or a society also have restricted access to a wider range of information that is privileged through membership. While Goffman (1959) argued that group membership can result in less contact with the wider community, leading to problems with integration and consequently broader access to information. Therefore, exclusion from the mainstream may result in inclusion within a specific group which in turn may limit the amount and type of information available. This is suggested by Chatman (1996, 1999) when she states that 'our membership within a particular social group contributes to information poverty'.

RELATIONSHIP BETWEEN INFORMATION LITERACY, INFORMATION POVERTY AND EXCLUSION

There is a strong relationship between information literacy, information poverty and social exclusion and this relationship has been recognized by UNESCO in statements related to the role of information literacy (Garner, 2006). Information literacy has a capacity to 'empower people in all walks of life to seek, evaluate, use and create information effectively to achieve their personal, social, occupational and educational goals. It is a basic human right in a digital world and promotes social inclusion...' (Garner, p.3). Information literacy is a social and situated practice and is defined in this research as a way of knowing an information landscape, by developing practices and skills that will enable an individual to critically interrogate and analyse the source from which information is accessed, in addition to the information itself, and to recognize this practice as catalyst for learning (Lloyd, 2006).

In analysing information, the information user takes into account how and why information is provided, considers the discourse that surrounds information production and provision, and the process by which information and knowledge are sanctioned within the particular setting (Lloyd, 2005). Information literate people can be characterised as those who are enriched, enabled and engaged with their information environments (Lloyd, 2006). The practice of information literacy is closely aligned to learning in formal and informal contexts. Information literacy acts as a catalyst for learning (Bruce, Edwards, & Lupton, 2007; Lloyd, 2005).

In the 21st century, information is represented and made available through many media and access is no longer confined to book, pamphlet, or other print based objects. Consequently, the range of possible information sources which settlers may draw from presents particular problems, especially when these sources may conflict with cultural values and ways of knowing (Palmer et al., 2009).

A central premise of the information literacy concept is the empowerment of learners to make informed decisions and to take informed action through the critical and reflective use of information regardless of the format. Falling under the umbrella term of information literacy are a number of other literacies through which the information literacy concept has been conceptualised. These 'literacy' areas have been recognized by Australian government agencies (Australian Bureau of Statistics, 2006) and focus on specific content or tool aspects of information literacy. These are: health literacy, which includes the knowledge and skills required to understand and use information related to health issues; prose literacy related to the ability to understand and use information from various kinds of narrative texts, including newspapers, magazines and brochures; document literacy which measures the knowledge and skills required to locate and use information contained in various formats including tables and charts; and digital literacy, the ability to locate, understand, and evaluate information from computers. This last facility is increasingly important as Australian governments and agencies provide information and services over the internet and increasingly shift the focus from the simple provision of information to an expectation of more active participation from users (Cecez-Kecmanovic, Kennan, Hull, & Nagm, 2009).

A ROLE FOR INFORMATION AGENCIES IN ADDRESSING SOCIAL EXCLUSION AND INFORMATION POVERTY

As the concepts of social exclusion and information poverty become better understood, it becomes increasingly clear that information service providers and information literacy skills can provide the potential for people to move from being information poor and socially excluded to information literate and socially included. There is a potential role for libraries and other information service providers in addressing social exclusion and information poverty.

Accordingly this proposed project will involve libraries and information agencies working with the researchers and settler communities to identify ways of understanding their information experience and practices - working together to develop information and information literacies that will be both culturally sensitive and designed to promote social inclusion.

An important focus of the proposed project is the relationship between social networks as sources of information and the impact of these relationships on the transition of settler groups into community life. In this aspect of the research, the aim is to develop an understanding of the role that social networks play in the mediation of access to information and the relationship between this role and the social and cultural contexts of the information practices of newcomer settlers. Newcomers may have differing social network structures (in terms of size, density, and strength of network ties) from members of their general community to which they connected, and from those they encounter in their adopted country. These differing network structures may influence how information is accessed and used, which in turn, may impact on their transition to their newly adopted society (Caidi & Allard 2005, 305).

A review of the library and information science literature indicates that there is a small and slowly evolving body of research (Allen, Matthew & Boland, 2004; Caidi & Allard, 2005; Pyati, Chu, Fisher, Srinivasan, Caidi, Allard, Dechief, 2008; Srinivasan & Pyati, 2007) in relation to exclusion and inclusion, and the contribution that libraries and other information agencies may make to the development and empowerment of settlers as informed and included citizens. Where research has been undertaken, the literature indicates a need to address options for information access, provision, and information literacy education in culturally appropriate ways, which acknowledges cultural difference in the provision of information. A study of Hmong populations in the US (Allen et al., 2004) concluded that western understandings of information provision through the Internet, did not reflect the migrant population's understanding of how information should be provided or could be accessed. This finding is particularly relevant for regional and rural libraries, and other information providers in Australia who continue to support settlers past the period of their initial arrival, in areas such as health, employment, education, and general aspects related to everyday living.

Consequently, it is important for libraries and other information agencies to work collaboratively with each other and with settler communities to develop a clear understanding of the information related issues faced by settlers in their transition into the community and wider society.

RESEARCH IN PROGRESS

The research project for which preliminary work on literature analysis and team building has commenced, will begin in earnest in 2010 to explore the formal and informal information experiences, and information issues faced by newly arrived and longer standing settlers to regional locations, as they begin to engage and participate in the community, educational, and workplace spheres of their adopted communities. The study will explore how migrant information practices are formed and reconciled against their pre-existing cultural information related practices as a result of these experiences. As their information experiences are relational to the services provided to this group, the study also aims to identify how stakeholders such as libraries and local, state, and federal government agencies and information providers understand the migrant information experience and how they interpret these experiences in the production and provision of information.

The proposed research aims to involve settler participants, information providers, researchers, and community members working together to 1) understand the information experiences and practices of settlers; 2) compare this understanding with those of service providers; and 3) develop a framework that can be used by the library and other services providers in the development of community based information programs aimed at settlers. Such programs will need to recognise inclusion and exclusion principles, and take into account information literacy and adult learning principles and different ways of knowing and accessing information. An emphasis of this dialogic approach is on understanding how people from culturally diverse backgrounds interact and experience the Australian information landscape (for example at the federal, state, and local levels); how they develop information practices within the context of their integration into new community groups; and how they reconcile these practices with their own cultural understandings about information provision and dissemination.

To achieve the aims of this research, the project will be conducted in three phases. In the first phase, a steering committee will be formed. This committee, including members from the local community, will oversee the life of the project.

In phase two, Settler group (SG) and Stakeholders group (SH) members will be interviewed using a semi-structured interview schedule. In phase three, two focus groups (one for each of the SG and SH groups) will be held to discuss the analysis of phase two. At the conclusion of phase three, the steering committee and participants will be invited to evaluate the developed framework, workshop, research process, and outcomes.

Active participation in the research by the information service providers and representatives of settler communities is essential for achieving the objectives of this research. These are the arguments for the adoption of a *participatory action research* (PAR) approach which involves researchers, settlers, and information agencies, in both the doing of the research and the learning arising from the research (Kemmis & McTaggart, 2005). This approach exemplifies the view of research as social practice that focuses on and improves practice and generates knowledge.

CONCLUSIONS

This paper defines the terms social inclusion, social exclusion, information poverty, and information literacy. It establishes links between these concepts and proposes research that will explore the formal and informal information experiences and information issues faced by newly arrived and long term settlers to regional locations, as they learn to engage and participate in the community, educational and workplace spheres of their adopted communities.

While the main focus of the study is to increase the understanding of the information needs of settler communities for information and service providers, it will also aim to develop an understanding of ways for information providers to provide information in culturally appropriate ways. An additional aim is to develop a theoretical framework that will provide insight into, and understanding about, information practices of settlers that will enable information service providers and community educators to better meet settler information needs.

This study is potentially significant as it differs in a number of respects from previous studies in settler information use. Thus the use of an information practice perspective is novel in the LIS field, where the majority of studies conducted in this area have focussed on individual information use and information behaviour or information seeking from an individual user perspective. The proposed study differs because it will consider the socio-cultural, material-economic, and historical dimensions which influence and shape this information experience. By broadening the focus of enquiry to explore settlers' information experience from a practice perspective, the study also focuses on how this group reconciles their cultural understandings of information against the provision of information in their adopted country. Finally, the study will adopt a dialogic approach that sees stakeholders as part of this experience. It therefore seeks to explore understanding of settlers' information practices and how this understanding translates into information production, dissemination, and use practices.

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THE DEAD LETTER OFFICE: ARCHIVAL RECORDS AT THE LIBRARY OF THE SUPREME COURT OF VICTORIA

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The library of the Supreme Court of Victoria has a long history, much of it well documented. However, the historical artefacts related to the evolution of the library are difficult to access, limiting their use as a guide to past practice, or as something useful to inform activities in the future. This paper uses cases from the library's history to discuss why historical records should be reconstituted into formal organisational memory in order to strategically and culturally inform the future in a way that is not possible if the documents remain inaccessible or 'dead'.

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MEMORY, LIBRARIES AND ARCHIVES

orcan Dempsey, blogger and OCLC's Vice President of Programs and Research and Chief Strategist, refers to libraries, archives, and museums as 'memory institutions' for the role they play in linking the legacy of the past to the future: 'their collections contain the memory of peoples, communities, institutions and individuals' (Dempsey, 2000). In particular, as noted by the library and book historian David McKitterick, librarians have a particular tendency to collect the records of their own institutions in what he rather optimistically refers to as 'the archives' of libraries:

Librarians ... seem more reluctant than many other professionals to discard their working papers. Until the general advent of the card catalog in the late nineteenth century it was almost a habit to shelve, simply as more books, old, outdated catalogs and other administrative papers in codex form. The presence of admissions registers, shelf lists, borrowing ledgers, financial records, and correspondence of all kinds (though, alas, in less quantity than one would sometimes like) can all be reckoned to be almost standard in the archives of the larger libraries. Librarians often being of a literary turn of mind or inclined to introspection, some even kept diaries (1986, 18).

Although libraries may well have retained records related to their own existence and operation such as those described by McKitterick, many libraries' own records have not been consciously collected as artefacts of the library's history that could be actively used to help inform and support the activities of the organisation today. A library cannot properly be a 'memory institution' for itself if its own memories are buried in a 'dead letter office', (used as a metaphor for letters which are in effect lost and unusable in the present time) of tatty boxes or old filing cabinets with no appointed conduit to the present (History Factory 2008, 1).

The Library of the Supreme Court of Victoria has just such a 'dead letter office', a substantial but informally arranged and housed collection of nineteenthcentury records of the types described by McKitterick, that do not constitute a formally kept archive. The artefacts (stored in a variety of receptacles, from boxes to filing cabinets) include minutes of meetings, record books, cash books, ledgers, a voucher book, a donor book, invoices and receipts, and various letter books. In addition, records relevant to the library's history are also held at the State Library of Victoria, the Public Record Office of Victoria, and the University of Melbourne as a consequence of the library's founder, Redmond Barry, being also involved with almost every significant cultural organisation in the Colony of Victoria.

Redmond Barry arrived in the District of Port Phillip in 1839, and until his death in 1880 he maintained the Regency characteristic of putting pen to paper at every opportunity. He had a well known tendency to 'produce his note paper and write letters and memoranda relating to extraneous works' when he was supposed to be hearing a case in the Supreme Court as Victoria's first puisne judge (or often as Acting Chief Justice). This wealth of records ended up being held by various institutions with many quite unrelated in theme to the institutions in which they are kept (Murray 1998, xiii).

This paper will consider how some of these archival records can be used as the basis for case studies illustrating their value as a component in a 'tactical toolbox' (History Factory 2008, 1) of strategies for the development, even survival, of the Supreme Court Library today and into the future, particularly in the face of financial downturns. They provide an example that can be used to show how other memory institutions may deploy their own archives to tell their stories: 'it is stories of identity – narratives that help individuals think about and feel who they are, where they come from, and where they are headed.' (Gardner 1997, 42).

SUPREME COURT LIBRARY STAFF

In the first years of the twenty-first century, the Chairman of the Committee of the Library of the Supreme Court of Victoria directed the Committee's efforts towards transforming a practice which had been fundamental to the library's existence and operation for over 155 years. The Supreme Court Act of 1852 empowered the Supreme Court of the new Colony of Victoria to make rules for barristers, attorneys, solicitors, and proctors, pertaining to, amongst other things: their admission, their qualifications, examinations in specified subjects, fixing of fees and costs, and the 'mode of application' of the fees and costs paid. The consequent Rules and Regulations of the Supreme Court, gazetted in April 1853, established that all fees paid for admission to practice law in the colony were to be paid into the Supreme Court Library Fund for 'the purchase and maintenance of a Library, for the use of the said Supreme Court' and also allowed for a Library Committee to be formed with the 'power to make rules and regulations for the management and good government of the Library'. Thus, from 1853, admission fees have been paid directly to the Supreme Court Library, as a form of life membership for Victorian legal practitioners, and a Library Committee, with the Court Librarian as its secretary, has been responsible for all aspects of the library's operation.

On July 1, 2008, quietly and inconspicuously, the individuals currently serving on the Library Committee ceased to be responsible for the library staff as each previous Library Committee had been. In 2008, the library staff became employees of the Department of Justice of the State of Victoria, with any staffrelated legal liability incurred in the future to be borne by that government body rather than the Library Committee. Staff conditions, which have always been aligned with those of the public service, remain the same, and although the Department of Justice is now the employer of the library staff, their salaries are still derived from the Library Fund.

Despite the quiet nature of its occurrence and the superficial appearance of being a relatively minor change, it is in reality the most significant modification of the original nineteenth-century infrastructure in the history of the Supreme Court Library. This has been largely unremarked on, and it would seem that the Library Committee which initiated the recent reorganisation was unaware of the correlation of its mission with similar, but unsuccessful, efforts made by its nineteenth-century counterparts, as reported in the Minute Book; or that its recent achievement had in fact been over one hundred and fifty years in the making.

SUPREME COURT LIBRARY FUNDING

The twenty-first century rationale for the removal of liability from the Supreme Court Library Committee was different to the primary reason a century and a half ago when the Supreme Court Library Committee of the day also sought to divest itself of the responsibilities for library staff. In June 1854, Judge Redmond Barry, acting Chief Justice of the Colony of Victoria, thus acting Chairman of the Supreme Court Library Committee, wrote to the Colonial Secretary requesting that the government provide funds for the employment of a librarian or library porter to supervise the valuable library which was accruing from assiduous expenditure of admission fees. The Government obliged for some years, but in 1864 government financial support ceased and the Library Committee at that time was forced to hire a librarian under its own authority (Reynolds, 2007). The Committee's campaign for government funding was centred on the contention that, as a 'private servant to a body composed of constantly fluctuating persons', the librarian was being deprived 'of his rights as a public officer' (Stawell, 1864). Furthermore, the Committee asserted that it was unfair that their members should be obliged to undertake a personal liability with regard to the librarian.

The Committee was strident in their claims and devious in their tactics and threatened to close the library if the Government would not comply with their request, but to no avail. The Government determined that the Library of the Supreme Court was a private library, only open to the legal practitioners who paid their admission fees to it, and as such was not entitled to any public funds, for either building the collection or employing staff, and that the Library Committee was to be entirely liable for its actions.

The issue of the Supreme Court Library being a private entity or not was also central to two failed attempts to become incorporated made by the Library Committees of 1875 and 1879. The Committee members then also wished to remove any personal liability as a result of being on the Committee and applied for it to be recognised as a single legal entity rather than a collection of individuals, whilst retaining the collective autonomy they had had since the library's foundation in 1854.

SUPREME COURT LIBRARY - PRIVATE OR PUBLIC?

The stories of earlier Committee efforts to circumvent legally binding rules and regulations with regard to staff have begun to be told from the library's records (eg. Reynolds, 2007) but the private nature of the library (as announced on the library doors with the admonition 'Private. No Admittance') has been well understood for decades as a result of the Supreme Court Library's historical records having been deliberately examined and publicly reported in a court judgement.

In 1953, a case was brought against the Acting Chief Justice and Chairman of the Library Committee, Sir Charles Lowe, by a notorious vexatious litigant claiming rightful access to the library (Joske, 1953). As part of his judgment against Goldsmith 'Goldie' Collins, Mr Justice Gavan Duffy summarised the history of the Supreme Court Library as expressed by the Supreme Court Act, no. 10, 1852, the Supreme Court Rules brought about by it and the rules of the library itself, using a précis made from the library's records provided by the librarian, Eustace Coghill.

THE IMPACT OF HISTORY ON THE LIBRARY OF THE SUPREME COURT LIBRARY

The financial and administrative decisions, made legally binding by the Supreme Court Act of 1852 and the Rules and Regulations of the Supreme Court in 1853, established the Supreme Court Library as a unique organisation in the colonies, serving the legal profession and the Supreme Court but retaining its independence from the government. Over the decades, the Supreme Court Library and the librarianship it practises have changed in response to the external world and the legal research needs of its members, but the functional infrastructure of the library today is little removed from its historical, cultural, social, and political beginnings in 1854.

Regardless of the fact that the current librarian manages a library in the twentyfirst century, with all the demands of a modern legal profession and the possibilities now available for providing information, he operates within limitations imposed in the nineteenth century and still in force in much the same form. Yet this provenance is unacknowledged and generally unknown.

Richard Finlay claims that the history of Australian law libraries 'since 1960 could be written almost entirely from ... governmental and professional reports' (Finlay 1989, 12). This would include the library of the Supreme Court of Victoria, the oldest and most prestigious law library in the state, which was included in three general court library reviews in the 1980s and underwent its own major review in 1997 (FLIS, 1998). However, the general lack of action taken in response to the recommendations arising from these reviews may be attributed to the library's foundation legislation which appears not to have been taken into account by any of the review consultants, who were seemingly unaware of the library's foundation story.

The persistently poor financial state of the library has been raised as a major issue in all of the reviews - but library funding is not within the control of the Supreme Court. The amount paid by individuals on admission to practise, and its deployment as funding for the library, is legislated. It gives lifetime membership to the library because Redmond Barry considered this to be 'less oppressive than if it were necessary to enforce payment of such annual subscription by exclusion from the enjoyment of the use of the library until paid; or by interfering with the right to practise, as is done ... in England'. In 1853, the amounts paid as admission fees 'were estimated as a reasonable commutation of what would be a fair annual subscription to support such a library as would be required by the legal profession and the Court, for the benefit of the suitors and the public' (Supreme Court, 1875, p. x). Increases made to admission fees have been infrequent (the most recent was in 1996, with the current admission fee being \$560) and for some time the amount has been insufficient to support the premier law library in Victoria as a modern organisation.

The government now provides a grant to the library (\$350,000 in 2008) but the library's funds are still largely dependent on the number of admissions in any year and it continues to operate with its finances anything but stable, as the latest Annual Report attests: 'Funding in real terms from government sources is constantly decreasing, as is funding from other sources' (Supreme Court of Victoria 2008, 34).

While each review of the library has recognised its funding difficulties and made recommendations to overcome this, they seem to have been unaware that it is the library's legacy from its nineteenth-century legal foundation which has made their recommendations completely impotent, at least in the short-term.

In addition to recommending financial changes, the 1997 Supreme Court of Victoria: Library Review (FLIS, 1998) made many recommendations to improve the 'effectiveness and efficiency of the Supreme Court Library', but most of the shortcomings requiring remedy are also directly related to the library's nineteenth-century arrangements, still in place. The Library Review recommended that: impediments to the 'ability of the library manager to effectively manage the library' be removed; that circuit court libraries 'be properly administered and upgraded'; that the 'conservation requirements of the rare and valuable books within the collection' be addressed; the 'employment status of the library staff be examined'; the librarian to be given 'more autonomy to select and acquire standard materials'; and that 'the government to fund the library more generously' (FLIS, 3-6). Standing in the way of these recommendations are the facts of history: the Library Committee has always had responsibility for library management, rather than the Librarian who supervises the day to day activities of the library; the circuit court libraries have been supervised by the clerks of court since 1871; the library staff were employed by the Library Committee from the first librarian's appointment in 1865; and the government is not legally obliged to fund the Supreme Court Library, which is effectively a private entity. Currently, despite the Library Committee's willingness to do so, most of the review's recommendations (given above) have not been implemented, as a direct result of the government's failure to legislate to remedy the library's perilous financial situation.

A further impact today of the library's origins is evident in the use of the heritage protected library building. The library is in an octagonal building sited in the central courtyard of the Supreme Court buildings in William Street, Melbourne, erected during the 1870s and first occupied in 1884. The building was built to a design specified by a Royal Commission, which included the judges of the Supreme Court, convened to 'suggest, consider and select necessary plans' (Victoria. Parliament 1878, 1) for the new Law Courts. The plans for the building called 'the Library' did indeed include a library (to which the judges had - and still have - private access) and a librarian's office, but also a bar robing room, two barristers' lobbies, a lavatory, four barristers' and attorneys' rooms, and three recesses. The configuration of the rooms and recesses in the library building changed during the design and building processes and the spaces have been utilised variously over the decades since the building was opened in 1884. Recently, apart from containing the library, the library building has also accommodated judges' chambers and an extra court, rooms which until very recently were used for library purposes are currently occupied by legal researchers and the court tipstaves. Without having read and understood the archival documents relevant

to the building, it is always surprising to library staff and patrons alike when library space is taken over for other purposes, yet the library records indicate that this has always been the intention and tell the story of why it is so.

ORGANISATIONAL MEMORY

The history of the library of the Supreme Court is a long and interesting one in relation to the history of Victoria. Bruce Weindruch, founder and CEO of *The History Factory*, a commercial enterprise for promoting corporate history, maintains that 'The real value of your history is in knowing it and using it as a resource that supports your character and informs your path ahead.' Weindruch calls his company's product 'applied history' and *The History Factory* uses foundation stories, successes and setbacks, personalities and successions, growth, decisions, events, buildings, products, customers, crises etc. to leverage a company's heritage to successfully use it to inform present and future activities and strategies. Such stories are well documented at the Supreme Court Library with its wealth of archival resources, but they are yet to be told and used and this is to the detriment of both staff morale and the library's very existence.

Weindruch's business philosophy is based on the theory of organisational memory, which has been defined as 'the means by which knowledge from the past is brought to bear on present activities, thus resulting in higher or lower levels of organisational effectiveness' (Stein 1995, 22). Not all organisational history is useful and while it can help organisations benefit from past experience it can also be a stunting influence if habitual responses are applied or if decisions are made based on a misunderstanding of the intent and context of the original event. Occurrences of the latter phenomenon are almost inevitable if there is a long history and if knowledge of the events has not been passed to the present in any meaningful way. There have only ever been six librarians employed by the Library Committee at the Supreme Court of Victoria and the long tenure of most of the librarians means that there is less of a gap than there might otherwise have been between the first librarian and today's incumbent. This lineage is shown on a board hanging in the library: John Schutt 1866 (i.e. 1865)-1919, L. F. S. Robinson 1919-1935, Eustace H. Coghill 1935-1956, Cynthia W. Goodwin 1956-1961, George Alcorn 1961-1987, James M. Butler 1988 - .

Yet, despite the diligent recording of activities and retention of paperwork required of each of these librarians, who also act as secretary to the Library Committee, the knowledge of past events has not been formally constructed into a narrative and passed on to enable easy reference to it, or use of it, today. The archives of the library exist, but do not equate to memory without a facilitator (such as an historian) to transform them and without an audience (the employees and decision makers) to make meaning of the stories from the past, told and employed in the context of the present.

Stein suggests that managers should consider whether or not memories from the past match present day situations and determine which memories can contribute to effectiveness in the present (Stein 1995, 17-32). The process of using organisational memory involves acquisition, retention, maintenance, and retrieval of records and/or human knowledge in an organisation and these are the means by which the 'knowledge of the past is brought to bear on present activities.' At the Library of the Supreme Court of Victoria, the memories have been acquired and retained over 150 years but not retrieved or applied. Stein believes that organisational memory can be of benefit to organisations in several ways:

it can help managers maintain strategic direction over time ... help the organization avoid the nightmare of cycling through old solutions to new problems because no one can remember what was done before ... give new meaning to the work of individuals if such efforts are retained ... facilitate organizational learning ... strengthen the identity of the organization [and] ... provide newcomers with access to the expertise of those who preceded them. (Stein, 31-32).

Beyond this, organisational memories contribute to organisational culture; that is, they provide 'a shared, common frame of reference' which 'governs ... organisational behaviour, [is] a common psychology ... enduring over time ... symbolic ... invisible and determinant.' (Stoyko, 3).

One way of providing access to this memory is through stories which are

good at presenting things sequentially ... [and] causally ... make diverse information cohere ... [and] convey not only specific information but also general principles ... [which] can then be applied to particularly situations, in different times and places (Brown and Duguid 2002, 106-107).

In the case of the library of the Supreme Court of Victoria, the stories are secreted in its recorded memories but remain 'dead' without a storyteller to construct the narrative they might provide. Barbara Craig wrote that

the usefulness of the memory recalled by archives is affected by two conditions: the qualities of the documents as credible evidence and the transparency of the contextual envelope that encloses them. Together these work to transmit clear intent that provides a stable foundation on which users can begin to create their own meanings' (Craig, 2002).

At the library of the Supreme Court, the documents are profuse, very complete and very credible, and the 'contextual envelope' not too difficult to discern by a proficient researcher. But memories are really not memories at all if no one retains or conveys them for the meaningful use suggested by Craig.

In the current financial environment, any plan to employ a professional historian to mine memories is likely to remain unrealised. This would certainly be the case at the Library of the Supreme Court, where finances are perennially inadequate. An LIS (Library and Information Studies) professional, as a trained researcher, would almost certainly have the necessary skills to construct an institutional history for use in their own environment but, in addition to less financial resources being available, the 'Global Financial Crisis' may also mean that there are less human resources to contribute to, care for, and make available institutional records. Institutional knowledge may therefore become static, diminish and be less accessible with every retrenchment. But this does not mean that organisational memory need necessarily be lost or records unused, particular in today's digital world. Oral history recordings of memories and routine digitisation processes can simplify the acquisition and preservation of records, and improve access to such material relatively cheaply and easily. Staff (and users) can be encouraged to contribute organisational memories to a website on their own volition and to use web 2.0 tools to create the metadata needed for retrieval. This removes, at least in the short term, the need for anyone to be especially employed to perform the basic tasks attached to the purposeful use of organisational memory; that is, acquiring, retaining, maintaining and retrieving it. The professional maintenance of the records by an archivist or the writing of an institutional history by an historian may well have to wait for more prosperous times or until such time as the usefulness of these activities has been recognised as a valuable, or even imperative, contribution to the efficient conduct of an organisation's business.

In 1953 Mr Justice Gavan Duffy pointed out in his summing up of the Goldie Collins' case that it was the history of the library's 'foundation, nourishment and government' which made plain the impossibility of sustaining any claim of a 'legal right to use the library' (Joske, 1953). The library's continuing history has the potential to make much more than this clearer if the time and means become available for the library's 'dead letter office' to be mined for the memories and stories hidden there. The tools of the twenty-first century may provide the key to accessing the assets of past and present contexts for use in developing the future of the Supreme Court Library and other such 'memory institutions'.

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COLLABORATIVE RE-IMAGINING: ACCELERATING THE RATE OF CHANGE IN NATIONAL AND STATE LIBRARIES

The online networked environment has already forced the reconfiguration of many industries, from music to banking to electioneering, and will continue to drive major shifts until few industries resemble their twentieth century model. Our libraries are now taking a system-wide view of the impact of this environment, looking to 'unbundle' our activities and to assess the most effective way of tackling these challenges.

The members of National & State Libraries Australasia (NSLA) are using collaboration to accelerate transformative change, and to move more rapidly than they could on their own. In 2008, NSLA endorsed the *Re-imagining Libraries Strategic Plan* and began to shift resources from individual library activity to collaborative activity.

The projects in the Strategic Plan are underway and the picture of our re-imagined libraries is beginning to take shape. It will include both new services and new approaches to the body of work undertaken in our libraries.

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he development of NSLA's collaborative strategic plan in 2008 began with stepping back to analyse what the primary roles are for our libraries and then assessing and exploring:

- what we could and should be doing collaboratively;
- what is most effective done locally;
- what is no longer feasible individually; and
- what is holding libraries back from the systemic change required for relevance in an online networked environment.

This analysis, conducted initially with Deloittes as consultants, was not undertaken just as a precursor to the development of the *Re-imagining Libraries Strategic Plan*, but is ongoing. As the projects under the plan begin to firm up their deliverables, and as the environment around us continues to change, this analysis is being frequently revisited.

Though NSLA felt some urgency in initiating this work in 2008, the global economic climate and the continuing shift in technologies are driving an accelerated need for change. At the same time as the pressure to change increases, the resources that can be committed outside of our traditional boundaries are tightening. NSLA Libraries are moving as fast as they can within this complex political, economic, and technological environment.

The push for new approaches is also coming from changes in society and expectations. The onsite role of libraries is evolving rapidly. The number of people coming in to NSLA libraries has increased by more than 10% since 2006, reflecting an increase in visitation across major international libraries. People clearly value our welcoming and safe community space, access to free wireless broadband, and other services that together support the education, community building, and social inclusion goals of government.

Behind *Re-imagining Libraries* is the drive to separate aspects of our work that have always been addressed predominantly within a one-organisation context, moving key parts to a collaborative approach. NSLA has defined these parts within a framework of strategies: One Library; Transforming our Culture; and Accessible Content.

- *One Library* aims for a welcoming, easy, open, and consistent experience for those using NSLA libraries and collections, with services available at the point of need and community contributions collected and valued.
- *Transforming our Culture* is both a product of the process of Re-imagining Libraries and a means of supporting staff as they reshape our libraries.
- *Accessible Content* is a key driver for this program of work. All our content must be easily discoverable online, as most information-seeking is now centred in the digital sphere. The infrastructure and services behind discovering and connecting to our content online are where many gains can be made in an integrated collaborative approach.

THE PROJECTS

There are currently nine major projects in Re-imagining Libraries. They have been underway for over a year and are moving from research and scoping phases into agreement on deliverables. Important in these early phases has been the establishment of the program office led by the Program Manager, coalescing the project teams, developing a common understanding of what each project is setting out to achieve and, in several cases, coming to agreement on underlying principles. The projects address:

- next-generation reference services;
- improved digital delivery of material;
- a shared framework for supporting and collecting community created content;
- collaborative collection management; consortial purchasing;
- re-engineered acquisition, description and cataloguing processes;
- standard free wireless services;
- clearer copyright messaging; and
- central discovery services, called *Trove* in Australia and *Find* in New Zealand, that form the backbone of efforts to connect users to improved online access to our collections and services.

An important sub-project already accessible through *Trove* is the Australian Newspapers service, a digitising program creating a searchable database of pre-1954 newspapers. Although the first stage is concentrating on major metropolitan newspapers, the second stage will include some regional papers by 2011 and a possible third stage to bring in papers from smaller towns and more remote areas, are being planned. Apart from the remarkable access to our history contained in these papers, it has revealed an extraordinary appetite among the users of the service to contribute by improving and enriching the data. The OCR'd text of the old newspapers has a level of error and those using the service are invited to correct the transcription errors as they see them. This effort has resulted in more than 8 million lines of text being corrected since July 2008.

In late 2009, the members of NSLA (the Chief Executives of the ten member libraries) reviewed and re-assessed the project paths, particularly noting the extent to which they are adopting a collaborative 'One Library' approach to the challenges faced in each project. This level of engagement was defined in four ways:

- all libraries acting as One Library;
- all libraries presenting as One Library;
- all libraries providing similar services; and
- all libraries sharing knowledge and lessons learned, at the request of the other member libraries.

The agreed aspiration for most of the projects was at either Level 1 or Level 2, creating an ambitious agenda for the project teams.

As the *Re-imagining Libraries* program moves into the second of its expected five years, the challenges move to delivering the projects, measuring and demonstrating the value of this collaboration to stakeholders, mapping and tracking the

dependencies, and increasing resourcing and momentum. The collaborative process requires more time and communication effort than a single-institution approach. Translating the strategic plan and reaching a shared understanding and commitment across ten organisations in two countries for specific project outcomes requires time. The advantages are that the scale of the aspirations is greatly increased as the libraries move forward as a block and leverage the expertise from all of the organisations.

The *Re-imagining Libraries* program is funded through a combination of levies contributed by members to a central NSLA budget plus provision of staff and other resourcing within organisational budgets and constraints. As yet, releasing the talented, experienced staff necessary for these challenging project roles from their normal positions has rarely been possible, so project teams stretch to absorb the work into their already full-time work plans. As the projects move to delivery and implementation, more dedicated positions will be filled and work plans within each organisation will begin to change more radically.

Valuing collaboration is always difficult and attempting to value this accelerated effort by NSLA Libraries is more complex as the baseline for what our libraries are providing will change. Outputs can and will be measured as each project delivers new services or new approaches but this does not measure either the immense input of time and expertise or the opportunity this work creates for shifting our services and our culture. Studies such as those undertaken by the public library network in NSW in 2008 and by the British Library in 2003 demonstrate the economic benefits of libraries to the community, but the value of collaborative shift is harder to measure. Determining a method for this measurement is important for our libraries, as they compete for funding within their government jurisdictions, and also to draw further funds into the sector to support the switch to the digital environment. NSLA will be exploring this in 2010.

So what will the new picture of our services look like to those who use NSLA libraries? For them, *Re-imagining Libraries* will mean:

- more of the collections available online and easily able to be used, adapted, and transformed;
- more of the community's collections, comments, contributions, and expertise enriching our collections;
- more online tools freely available to take and use;
- more widgets linking to our services, from external web pages, social networking sites, and within other services;
- our research expertise and deep collection knowledge available when it is needed;
- easier access to quick reference answers through mobile devices and other platforms;

- easier and central discoverability of information and collections, backed up by faster digital delivery and home delivery;
- less registration and authentication; and
- similar services and a common experience across NSLA libraries.

For NSLA Libraries, Re-imagining Libraries is creating:

- an increased trust and shared commitment between our libraries;
- a larger proportion of our work benefiting the group of libraries and less solely for our own organisation;
- a more agile, risk-taking and innovative culture; and
- an increasing profile for NSLA libraries in the networked environment.

Re-imagining Libraries represents our unbundling of library work. We recognise that increasing the impact of library collections in the online environment can be most effectively achieved through collaboration, and that leveraging from each other is accelerating the shift in our work and thinking across all our business, onsite, and online.

Further details are available at www.nsla.org.au

Reviews

Wikipedia: A New Community of Practice?

Dan O'Sullivan Farnham Surrey Ashgate 2009 191pp ISBN 9780754674337 (hbk) £40

Ox populi vox dei!' many of us sneered when we first heard of Wikipedia, and for a while our cynicism seemed justified. The privilege of unfettered editing *is* wide open to abuse, but abuses of privilege are everywhere, not just on the net, and societies usually cope with them by developing checks and balances that make it more difficult to do wrong than right. Wikipedia relies on sheer numbers and, the eternal vigilance of its participant-audience – and there is growing evidence that it has achieved the critical mass to maintain general integrity and develop genuine scholarly depth. Its non-English content is growing, too, both in number and proportion.

Dan O'Sullivan's book – yes, a single-author printed book proselytising a deindividuated internet resource! – explores the challenges posed to some of our key assumptions, resources, and methods by the collaborative possibilities opened up through the Web in general and by Wikipedia in particular.

In Part One, O'Sullivan discusses group theory, and analyses the scholarly communities surrounding the Library of Alexandria, the Royal Society, Diderot's *Encyclopédie*, the *Oxford English Dictionary*, and the Left Book Club. There is a touch of special pleading about some of O'Sullivan's claims – his chapter on the Left Book Club, whilst a perceptive account of the Club itself, is the weakest in terms of advancing his core argument – but in general he mounts a convincing case for understanding Wikipedia in historical context, and for interrogating our concepts of 'authority'.

Part Two discusses Wikipedia and how it operates. Part Three is about using it, with particular emphasis on assessing the quality of its content. O'Sullivan presents abundant evidence that Wikipedia's 'community of practice' really is capable of ensuring effective quality control. The steadily evolving entry for the Great Fire of London demonstrates the capacity of Wikipedia to develop richly textured content.

Is Wikipedia flawless? Of course not. You must apply the same caution that you would to any printed source. The key point, though, is that when you find an error in Wikipedia you can actually fix it yourself, straight away; multiply that reaction by millions and the effect is immensely powerful. Surely that is better than waiting years for a revised edition of a paper encyclopedia that you then find you can't afford.

O'Sullivan reminds us that knowledge is a collaborative process, and perhaps the strongest parallel between the world of print and the world wide web is how a confluence of new technologies brought them into being – and how products of the new media were met at first with scepticism and suspicion.

Ian Morrison

Tasmanian Archive and Heritage Office

A Companion to the History of the Book

Simon Eliot and Jonathan Rose (eds) Malden MA Wiley-Blackwell 2009 599p ISBN 9781405192781 (pbk) AUD\$64.95

The 'history of the book' as currently conceived is a relatively new scholarly endeavour which aims to explore both the historical factors which inform the dissemination of the written word and the impact of the written word on the historical process. As such, it engages scholars from several disciplines including history, literary studies, information studies, and sociology.

This companion, originally issued in 2007 and appearing now in paperback, is edited by two distinguished academics in the field, and contains contributions from some forty specialists. It provides a systematic introduction to the area, covering the history of the 'material text' from the ancient Sumerian clay tablet, through the papyrus scroll of the classical world, through the invention of the codex, the development of moveable type, the rapid expansion of printing in the nineteenth century to the technological revolutions of the late twentieth century and the arrival of the internet. There are chapters not only on technology and publishing, but also on the development of readership, and on globalisation and marketing.

Although the focus is on Western Europe and North America, there are also chapters which take us beyond the 'west' to explore the situation in China and Japan, in South Asia and in Latin America, and to examine the Hebrew and Islamic book traditions. Australia and New Zealand are treated briefly in the context of the imperial British book market. The rich and politically charged history of books in Eastern Europe, however, is very largely left out of account.

Other sections of the *Companion* consider different possible methodological approaches to the history of the book – bibliography, textual scholarship, bibliometrics, readership studies; some book-related phenomena that go beyond the textual content of the book – the development of the periodical, print ephemera, the implications of digital technology; and issues such as the history of literacy, the aesthetic significance of books, copyright, and the development of libraries.

A coda considers the future of the book in the digital world, but the *Companion* seems uneasy about incorporating the electronic book into its historical and philosophical schema. Perhaps it is still too soon to predict its long-term impact, though the indications seem to be that the book (together with its readers) will continue to evolve and to adjust to new technologies just as it has done in the past. This Companion will provide a sound point of reference for situating the book, whatever it may yet become, in its proper historical and sociological context.

David N. Wells

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Archives and Archivists in 20th Century England

Elizabeth Shepherd Farnham Surrey Ashgate 2009 245p ISBN 9780754647850 £60

ho are archivists? Why do archives exist? If professional records managers cannot answer these questions clearly and passionately, what future is there for the archival profession? In *Archives and Archivists in 20th Century England*, Elizabeth Shepherd provides in great detail information archivists need to be aware of if they are to have the capacity to accurately answer these questions.

Shepherd helps take the mystery out of large institutions, exposing the politics and administrative wrangling which lie behind both national and local records repositories; demonstrating that a lack of legal clout and funding has dogged English archives. Tracing the history of archiving, Shepherd demonstrates that current practice and tradition, such as 'respect des fonds', archivists as undertakers of arrangement and description, and archivists as providers of record keeping advice, actually have a much younger history than commonly assumed. Shepherd also teases out what is unique to English archival practice. Such a clear understanding of regional practice is useful not only for English practitioners. Australasian and North American readers could utilise this knowledge in articulating what it is that makes their traditions unique, as well as in identifying areas where modifying current entrenched practice could lead to greater outcomes.

Shepherd, currently based at University College London, brings authenticity to her work through academic credentials along with practical experience of archiving. Academic rigour is evident in her extensive bibliography – rarely will a reader encounter such a thorough usage of archival material. Unfortunately, while Shepherd gives in-depth coverage of Government records and archives, only passing reference is made of church, university and business archives. This is a weakness in her claim to cover all of 20th century practice. However, it is an oversight not at all uncommon in a profession dominated by Government archivists.

Historians, authors, and all seekers of the information held in records could gain immensely from the assistance Shepherd's work brings in understanding what records have been kept, which have not, and where they may be housed. However, this audience has not been targeted by the publishers and as such Shepherd's work is likely to be overlooked. Clearly a reworking of a 2004 PhD thesis, it is a shame that this publication was not reshaped into something less dry and thus more enticing. Its bland cover, plain title, and academic style are not likely to persuade an average reader to pick it up, let alone wade through what is in essence a well researched and important work.

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Bite-sized Marketing: Realistic Solutions for the Overworked Librarian

Nancy Dowd, Mary Evangeliste and Jonathan Silberman London Facet 2009 144pp ISBN 9781856047043 (pbk) £32.95

Starting with the most obvious means of creating awareness about a library service, word of mouth, *Bite-sized Marketing* provides a range of 'bite sized chunks' that can be mixed and matched according to situation and resources. These include using the stories associated with the library, as well as electronic resources; how to make and maintain press contacts; as well as reaching those who don't use libraries and building up an advocacy group.

Aimed primarily at public libraries, the ideas are applicable to academic and special libraries, and start with ideas that can be acted on almost immediately. A quick skim through gives the impression that mixing the 'chunks' would be relatively easy – but for me, the really chewy bits are the chapter on public relations and the last chapter on marketing best practices.

Promoting your library is sometimes hard to remember to do, especially as a relatively inexperienced manager. I found that I was drawn into the ideas, noting things that may or may not work well for my library as I went, until I reached the chapter on marketing best practice. This last chapter provides the process to market a library service; to those who don't use it, those who do use it, and those who work within the library, because without the support of the staff, and planning for the future, all the good ideas about marketing would probably not be as successful.

In some ways the rumballs on the cover of this book sum up its content. Simple ingredients, requiring a degree of organisation and time to make, result in a marketing program that can be adjusted to the requirements of the individual

library. One could almost consider it a 'beginner's recipe book', and the recommendations on the back cover will certainly be going on my reading list. But I think I would still refer to this book as a starting point for my next library marketing campaign.

Alethea Raspa

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Googlization of Libraries

William Miller and Rita M Pellen (eds) Oxford Routledge 2009 202pp ISBN 9780415483810 (pbk) US\$45.95

hose of you who have ventured into Terry Pratchett's *Discoorld* will know that the written word has powerful magic properties and that large quantities of books warp time and space around them, creating portals into L-space (Library Space).

When picking up *Googlization of Libraries*, literally, I did ponder the irony of reading about the potential demise of these physical items as the world's 'magical and mundane books' (Pratchett again) are sucked into the maw of Google, digested and regurgitated onto a variety of electronic screens in and outside library spaces.

Miller and Pellen, however, have produced a rewarding read with a variety of articles taking a critical and informed look at the impact of Google on the world of libraries.

For a start it is OK to use Google in your library, particularly for mechanical tasks such as completing citations and finding full text. Google Scholar is identified as a valuable resource despite concerns that users will be tempted to abandon traditional methods of research, leading to a dilution of the quality of academic work. The trick for librarians is to recognise its potential and see that it is used well.

Several contributors take an upbeat and positive approach, though I would take issue with the assertion that 'we are dealing with the most tech-savvy information aware generation that has ever lived'. Manual dexterity does not necessarily lead to informed processing of the information retrieved.

A number of chapters focus on Google Book Search, and related projects such as Early English Books. I suspect that librarians in particular are likely to be beguiled by the idea of having access to an ever-increasing repository of material from the great libraries of the world. In the case of Google Book Search. However, the trade off for viewing pages is being subjected to content-related advertisements; in the words of one contributor: 'Dante with an ad for Viagra'. Other contributors provide a liberal dose of healthy scepticism, raising concerns about the web's capacity to deliver truckloads of irrelevant results and the very real danger that literacy and the reading comprehension of future generations is being compromised.

All librarians need to read this book to make sure we end up with the future we want, rather than the future we allowed to develop.

Dorothy Shea

Supreme Court Librarian, Tasmania

Libraries: A Copyright Guide

Ian McDonald Redfern NSW Australian Copyright Council 2009 76 pp ISBN 9781920778163 (Australian Copyright Council publication B136) \$40 (\$20 upgrade price for purchasers of B110, *Libraries and Copyright*)

he area of copyright is becoming increasingly complex and overwhelmingly large. As technologies continue to evolve that make reproduction and remixing accessible to a wide audience, the laws that protect creators of original work are multiplying, and can be difficult for anyone without legal qualifications to comprehend.

Ian McDonald of the Australian Copyright Council, working extensively with ALIA staff, has written this practical and completely up-to-date guide to copyright for people working in libraries and archives in the non-profit, government, and corporate sectors. This guide revises and updates the previous edition, B110, *Libraries and Copyright*, and also includes information about the 'flexible dealing' or 'special case' exception (section 200AB).

Employees of libraries in educational institutions may also find this guide useful, however it must be noted that there are specific provisions relating to material being used for educational purposes which are not addressed.

Libraries: A Copyright Guide sets out how library staff can deal with different types of copyright material, using examples and tips to illustrate the law in practice. Areas that are addressed include client supplied text, images, notated music, and AV materials, lending to clients and inter-library supply, and how to manage the collection with respect to replacing and preserving materials. A chapter is also devoted to licences from collecting societies, that explores CAL licences, as well as the guidelines for playing radio, cd's, and tv programs.

Two appendices further enrich the content. Appendix A outlines the provisions relevant to those working in libraries within educational institutions and government authorities, while Appendix B supplies sample forms and correct wording of notices that are required when providing various services to clients.

This volume is easy to read, clearly set out, and will be a well-used resource for any library employee, as well as an easily accessible guide to common copyright queries. While the printed format precludes regular updates, the accompanying website, www.copyright.org.au/libraries is being developed to respond to more specific requests. A must-purchase for any and every library in Australia.

Kay Cantwell

Brisbane Catholic Education Centre

Library Mashups: Exploring New Ways to Deliver Library Data

Nicole C. Engard (ed) London Facet 2009 334pp ISBN 9781856047036 £29.95

ibrary Mashups is a how-to book by librarians, for librarians. The editor, Nicole Engard is an open source software advocate and librarian who works in the US for a company called LibLime. The contributors are mostly librarians or web technologists from the USA with a contributor from Australia, New Zealand, and two from Europe.

This volume aims to give the reader an understanding of what mashups are and how they have been used in libraries all over the world. The book is broken down into broad sections, such as 'What are mashups?', 'Mashing up library websites' and 'Mashing up catalog data'. Part IV, 'Maps, Pictures and Video... Oh My!' includes a chapter about creating campus maps (very useful within the university environment) using the Google API, geo-tagged building locations, and a collection of data about buildings and their uses (e.g. computer labs, libraries, student accommodation etc). I also shared this publication with a colleague from the Library web team; she found the chapter about mashing up data from within the library catalogue to be the most useful section and is looking forward to being able to put some of the knowledge she gained from this book to the test on the development server.

Engard acknowledges that the web is a dynamic environment and points out that both web pages and websites can break or move. To assist in keeping the content of the book current, there is a companion website http://mashups.web2learning. net/ that refers to all of the online resources used in the text. Contained at the end of the book are two appendices; a list of websites referenced in the book, broken down into chapter headings. The second appendix is a glossary of terms, which is useful to bookmark and refer back to whilst reading the more unfamiliar content.

Katie Hannan

Charles Sturt University

Publications received

Supporting research students.

Barbara Allan, London: Facet, 2009. ISBN 9781856046855 £44.95

The critical assessment of research: traditional and new methods of evaluation.

Alain Bailin & Ann Grafstein, Oxford: Chandos, 2010. ISBN 9781843345435 £45

Collaborative information literacy assessments: strategies for evaluating teaching and learning.

Thomas P. Mackey & Trudi E. Jacobson (eds), London: Facet, 2010. ISBN 9781856047067 £52.95

Managing change and people in libraries.

Tinker Massey, Oxford: Chandos, 2009. ISBN 9781843344278 £45

Open access and its practical impact on the work of academic librarians: collection development, public services, and the library and information science literature.

Laura Bowering Mullen, Oxford: Chandos, 2009. ISBN 9781843345930 $\pounds 45$

Web 2.0 tools and strategies for archives and local history collections.

Kate Theimer, London: Facet, 2010. ISBN 9781856046879 £49.95

Digital information: order or anarchy?

Hazel Woodward & Lorraine Estelle (eds), London: Facet, 2010. ISBN 9781856046800 £44.95