Editorial

I am continually surprised by the sheer diversity of research interest among members of our profession. This issue exemplifies this, both geographically and historically.

Sarah McDonald, one of 2010's excellent group of LIRG student prize-winners, writes about the currency of news sourced from London newspapers and re-printed in Dublin City newspapers in the last decade of the eighteenth century. Combining primary research within recently digitised London and Dublin newspapers with a sound understanding of the print trade and transport networks in those years, McDonald tells a fascinating story. That she laments the lack of data sources covering environmental and logistical factors during that period simply reinforces the thoroughness of her approach to her research.

Although similarly focused on a major city, Helen Byamugisha and colleagues deal with an entirely different information challenge, in this case one that really can change lives. The authors examine information needs and use among urban farmers in Kampala City in Uganda. Through a mix of face to face interviews and focus groups, the researchers established the types of information that were useful to crop and animal farmers and the occasions or situations in which that information was most needed. Peppered with quotations from the farmers themselves, this study really emphasises the life-changing benefit of appropriate, accurate and timely information.

Given the excellence and value of LIS research, our third paper, from Gaby Haddow, is especially significant. It addresses the issue of how research is communicated to practitioners, and in particular the important role of professional association publications. Among professional literature these publications are the most widely read by practitioners and therefore have the greatest potential to disseminate research to that group. *Library and Information Research* has always strived to present research in a way that makes it relevant and useful to readers, I am sure we can learn from Haddow's work.

Our four book reviews as usual cover a range of interesting subjects: information strategy and policy; the design and planning of new library buildings; copyright and e-learning; and issues surrounding the support of international students in academic libraries. Most of us will be able to relate to at least one of these topics so I urge you to read the review and then perhaps dip into the books themselves.

And of course, if you find another newly published book and would like to review that for *Library and Information Research* then please get in touch. This issue sees the end of an era in our book reviews section. After many years of sterling work, Colin Johnston is retiring from the post of Book Reviews Editor, to be replaced by Pauline Rafferty of Aberystwyth. We are extremely grateful to Colin for all his hard work over the years and we wish him well in his retirement. We greatly look forward to working with Pauline on the Editorial Team.

Miggie Pickton

Open access and copyright

"Freshest advices"?: The currency of London news in Dublin City newspapers, 1790 – 1801

Sarah McDonald

Abstract

This paper summarises a MLIS dissertation which studied the currency of news, sourced from London newspapers and re-printed in Dublin City newspapers, during the final decade of the eighteenth century. London was a vital communications network hub for the dissemination of information, consisting of British and Foreign Intelligence, to Irish port cities such as Dublin. Using the resources of recently digitised London and Dublin newspaper series, it was possible to build a model which accurately represents the transmission time for London 'News' into Dublin editorial offices. The model provides a frequency distribution from which the minimum, maximum and average transmission times are established. It is argued that the same method can reliably be applied to determine the transmission time for news from the main European cities to London and Dublin.

1 Introduction

During the eighteenth-century, London and Paris were gateways to wider cultural and intellectual horizons for the Irish citizen. These European capitals, among others, acted as hubs in the transmission of mainstream current affairs and 'News' reporting to Dublin and other Irish port towns. News which was printed in the London press was transported by British postal service and packet ships across the Irish Sea to Dublin. Relying heavily on the content of the London newspapers for copy, Dublin printers composed, printed and distributed their newspapers to street hawkers, booksellers, coffee-houses and circulating libraries. The idea of news currency and therefore the value of the news product changed in terms of people's expectations as the decades passed. The life-cycle of 'News' as a product determined how up-to-date news was with regard to contemporary perception. But just how was Dublin's *current* awareness of events elsewhere affected, and

Sarah McDonald

Sarah McDonald graduated from University College Dublin in 2010 with a Master of Library and Information Studies. Previously, she was Head of Information Systems in the private sector.

Email: sarahmcdonaldmlis@gmail.com

Received 9 November 2010

Accepted 1 December 2010

impeded even, by the country's physical geographic position; in effect an island beyond an island off the Continental mainland? Negotiating the often treacherous conditions in Dublin Bay, Waterford Harbour, or at the Port of Donaghadee was a continual physical barrier to the arrival of the latest newspapers mailed from London.

2 Dublin's print trade and packet ships

The population of the city of Dublin rose to 182,000 by the end of the eighteenth-century yet "we do not know how many English speakers would read, nor indeed, how many Irish speakers could understand English, let alone read it" (Pollard, 1989, 211-2). At the time of the Union in 1800, Ireland probably held a population of two million Irish-speakers, one-and-a-half million Irish-English bilinguals, and one-and-a-half million English-speakers (Bew, 2007, 62-3). Certainly, Ireland's level of illiteracy, compounded by the need to cater for two languages and two major religions, created substantial challenges for the Irish print trade. It was an era of heavy taxation and threat of prosecution for seditious libel; survival, rather than profit, became the key issue for most print houses. The decision was easily made. "The Dublin book trade catered first and foremost for the English-speaking Protestant ascendancy. The needs of the Catholic majority were served slowly and sparingly" (Pollard, 1989, 225).

The print trade in Dublin reached its peak in membership in the early 1790s but by the end of the decade there was a noticeable decline, probably caused by the effects on trade of the war with France; traditional French sources were cut off by war, and supplies from England and Scotland attracted heavy import duties (Kinane, 2002, 20). In addition, the Press Act of 1798 meant that only newspapers which were organs of Dublin Castle or had a well-established income from advertising could survive the increase in taxes, penalties and sureties (Inglis, 1954, 109-10). This was an era of unprecedented political and cultural change for Ireland yet the channels for influencing and communicating those changes were increasingly muzzled and potentially biased.

The heart of the old city of Dublin was also the heart of its print trade.

From 1750 to 1810, Dublin was dominated by a strong merchant and trading community … [centred on] *the Temple Bar district* [and] *dominated by the Old Custom House on the quays and the Exchange House on Cork Hill*.

(Cox, 2000, 31-2)

The location of the print trade so close to the Custom House and quays was not unintentional. The time of going to press depended entirely upon the arrival, by packet ship, of the 'Mail' containing the London news, and the schedule of postal service out of Dublin to other parts of Ireland. Gandon's new Custom House at Custom House Quay opened for business in November 1791 "with a wharf in front and a road to the packet station skirting the chief entrance" (Marmion, 1860, 230-1). It replaced the dilapidated old Custom House on Essex Quay which was built in 1707 and with this move the progressive development of the city eastwards was hastened. The growth in trade and traffic necessitated the construction of a new bridge in 1794 over the river Liffey, Carlisle Bridge, also by

Gandon, and later rebuilt as O'Connell Bridge. As this was the east-most bridge on the Liffey it had the effect of cutting off a stretch of river previously used to berth sailing ships and discharge their cargoes with the result that only rowing boats could now pass upstream under Carlisle Bridge to the old heart of Dublin city (Gilligan, 1988, 97). The importance of the Dublin coffee-house in the dissemination of information is significant. In both Dublin and London most coffee-houses found it necessary to offer a selection of newspapers for their customers. This facility met the needs of "those who could not or would not pay the full price of the newspaper" but were instead able to read for free – or by subscription[1] – in the coffee-house, "hire copies from a hawker … or club together to buy a copy". Thus readership of newspapers was "more widespread than circulation figures alone suggest" (Boyce *et al*, 1978, 91).

Prior to the advent of railways and steam-ships, communications between Ireland, Great Britain and the Continent were entirely dependent on favourable weather, tides, working conditions, and roads. London newspapers travelled by scheduled British postal service mail-coach, or 'By Express' horse and rider, to Holyhead. In England, Scotland and Ireland the development of the newspaper industry was "intimately linked to the improvement of roads [and] the growing efficiency of the General Post Office" (Boyce *et al*, 1978, 89). Despite the introduction of mail stage-coaches by Palmer in Britain in 1784, travelling speed remained at four to five miles per hour – the maximum speed at which a team of horses could be expected to pull a mail coach over common roads a set distance of up to twenty miles before a fresh team was required (Willson, 1903, 24).[2] It regularly took eighty-two hours to travel 400 miles between London and Edinburgh – equating to a speed of less than five miles per hour.[3] One hundred and eighty years earlier the situation was very similar. When Queen Elizabeth I died at 3am on Thursday, 24 March 1602, the Council met at Whitehall and by 10am had proclaimed James VI of Scotland as the new King of England. Sir Robert Cary rode at 'express' speed to Edinburgh covering 400 miles in three days to bring the news to the new King:

Consequently, lowland Scotland, or at least Edinburgh, may have learned of the change of dynasty before some parts of England. It took considerably longer for the news to travel to rebellion-torn Ireland; the earl of Tyrone, his armies worn out and his supplies exhausted, surrendered to the late queen on 3 April, still in ignorance of her death.

[1] At Hyde's coffee-house in Dublin, subscribers paid a guinea's subscription a year to retire to a specially reserved apartment to read the newspapers and debate their contents (Oram, 1983, 36).

[2] In 1798 the Holyhead mail left London at eight at night and arrived in Shrewsbury between ten and eleven the following night, taking twenty-seven hours to run 162 miles [6mph] (Willson, 1903, 19, 25). In 1828, with the benefit of better roads, the coaches travelled from London to Holyhead, a distance of 261 miles, in twenty-nine hours [9mph] (Hemmeon, 1912, 105).

[3] It would not be until 1816 that Telford and Macadam paved the way, literally, for more rapid transit by creating a level road surface that enabled one horse to pull what it would take four horses to do on an unpaved road. With this invention, the Edinburgh to London mail ran 400 miles in forty hours, stoppages included, which was at the rate of nearly eleven miles an hour. The maximum speed obtainable by the mail-coach on a good road had been reached (Willson, 1903, 26).

(Woolf, 2001, 84-5).

This clearly highlights how distant, in communication terms, various parts of the kingdom were from London, and how that remoteness created multiple, and sometimes conflicting, versions of reality for the people.

In the eighteenth century three routes, known as the 'Domestic Packets' were used for mail crossing the Irish Sea: Donaghadee to Port Patrick (22 miles), Holyhead to [Dublin (60 miles)] *and Milford Haven to Waterford or Dunmore (about 80 miles). Although the boats were not large, usually less than 100 tons and manned only by ten men, they kept the schedule as closely as tide and weather would allow. The final hour for posting letters changed daily according to the tides.*

(Reynolds, 1983, 48)

The principal route across the Irish Sea was Dublin to Holyhead.

Surveys [prior to 1829] *proved that it took an average 20 hours to go from Holyhead to the Pigeon House* [Dublin], *17 hours from the Pigeon House to Holyhead*.

(Reynolds, 1983, 49)

Adverse weather and unfavourable tides played havoc with the packet schedule. The prevailing westerly winds meant that delays on the Holyhead to Dublin route were more frequent than on the reverse route. The route was served by five packet boats on a daily service. The extensive sandbar (Dublin Bar) running north–south in Dublin Bay effectively formed a barrier to shipping at the entrance to the River Liffey except at high water. The packet boats had to lie off-shore until there was sufficient water to cross the Bar. When Sir George Shee wrote '*A Memoir on the Construction of Ships'* to be read at the Royal Irish Academy, 1 November 1794, he specifically highlighted the difficulties which the Dublin Bar created for packet ships:

The construction of vessels employed in carrying mails between Dublin and Holyhead … can float on the Dublin Bar only at a particular time of tide, by which fair winds are frequently missed, and passage from England unnecessarily prolonged. From their want of length and excessive depth they are such slow sailers, that the Favourite, a light long vessel … has made her passage to Holyhead in nine hours, when two packets, which weighed anchor when she did, took twelve to perform theirs.

(Shee, 1797, 24)

The Admiralty Hydrographic Service was established in 1795 but it was not until 1800 that the Board of Admiralty directed that a survey of Dublin Bay be taken by Captain William Bligh[4] of the Royal Navy. Prior to this, mariners used

[4] Bligh recommended that the North Bull Wall be constructed parallel to the South Bull Wall to prevent sand building up in the mouth of the harbour. It was not until the completion of the North Bull Wall in 1842 that Bligh's forecasted natural scouring action of the Liffey estuary began and sand was deposited outside the shipping channel to create Bull Island, thus enabling shipping to pass over the Bar at any time (Dublin Docklands, 2009, History and Heritage at http://www.ddda.ie).

'unofficial' maps of Dublin Bay showing hydrographic information as the depth of the water in feet at low tide.

In 1796, the Post Office decided to maintain small vessels of about forty tons, known as wherries, at Holyhead and Dublin [in the event that] *conditions were against packets trying to enter the Liffey* [...] *the mails could be transferred to wherries in Dublin Bay to be taken ashore.*

(Gilligan, 1988, 104)

Normally, passengers and mail disembarked at the Custom House. The re-construction of the South Bull Wall in the 1750s provided alternative disembarkation points at Ringsend and the Pigeon House when packets were unable to progress up the river.

It seems likely that reciprocal agreements were in place between certain Dublin and London newspaper printers whereby they exchanged copy. Content from the *London Gazette* appears regularly, word for word, in the *Freeman's Journal* and other Dublin newspapers. On arrival at the Dublin printer, the London papers had to be reviewed and content selected for inclusion in the issue of the Dublin paper undergoing composition, or even those already on the press. Late arrival of the London papers meant the press had to be stopped and the newest content added to the chase of set type for printing. The *Freeman's Journal* on 25 June 1796 stated "We stop the press to state that a mail has just arrived, which brings a *London Gazette* containing important intelligence … which we shall give in a Postscript Extraordinary". Carr describes the Dublin street newspaper hawker thus:

Opposite to the grand front of the late parliament-house is the general post-office, where the ear is annoyed with newsmen, crying out, "Two packets, two packets" meaning that the news, which they hold in their hands, contain the intelligence brought by that number of packets last arrived from England.

(Carr, 1806, 52)

Working conditions and time pressures for the Dublin newspaper printer were similar to those in London. "The later a newspaper could be sent to press, the better the chance of including late despatches or parliamentary reports" – this affected the composing department and the press room (Howe, 1947, 372). However, daily newspapers imposed extra demands: "The Full Hands on daily newspapers were compositors engaged to attend the office for … twelve [hours]" (Howe, 1947, 373). These working hours necessitated composition by candlelight for a large portion of the year. It is evident from the *Freeman's Journal* that late night composition was a regular activity: "At twelve o'clock last night arrived four mails"[5]. Dublin pressmen were paid by the hour in accordance with the number of impressions required (Pollard, 1989, 125-6; Wiles, 1965, 91). "With two men at the press, one to ink and the other to pull the forme, a production rate of 250 sheets per hour, printed on one side, was expected" (Howe, 1947, 95). Language translation of foreign intelligence is not apparent in the *Freeman's Journal* so it seems likely that the newspaper relied on translations already made for the London papers. Delays caused by translation would therefore have been

[5] *Freeman's Journal,* 5 Jan. 1796.

incurred at the London link of the chain. In London, "Postal clerks had a monopoly in the translation of foreign-language papers and reports for which a fee was charged. This also held up delivery" (Williams, 1977, 39). The *Times* was particularly noted for its coverage of foreign news having established Foreign Correspondents at Brussels and Paris in 1792.[6]

3 The time value of the news

The history of the spread of information has repercussions on "our knowledge of the history of everyday life, the history of commodities and the history of mentalities". "Information helped form a modern conception of time" (Dooley and Baron, 2001, 8). But the concepts of 'Time', 'Currency' and 'The Present' are hard to define. In terms of 'News' in the pre-industrial revolution era these concepts are relative:

From the point of view of a person receiving news of a great event, and recording it or passing it on to an acquaintance, there was an unbridgeable temporal gap between the event itself and his or her perception of it … Our perception of news is very different from that of [eighteenth century people], *because both our technology and our relationship to that technology is radically different; theirs, in turn, differed from that of the pre-print era.*

(Woolf, 2001, 83)

News has a time value – it has to be 'current' to be valuable (Komito, 2004, 25). Depending on logistical and geographical factors, 'currency' had different meanings for different demographic concentrations. Similarly, for some, 'News' was a source of important intelligence, while for others it was merely a source of diversion. The more news ages, the more likely it is to be read for entertainment rather than intelligence. As long as news was current, it did not lose its value. As well as having a value, news also had a price. Apart from the cost of the newspaper, acquiring literacy skills required an investment. "Many people were therefore not literate, because it was not seen as worth the investment". Literacy was a powerful tool which "would be at the very least a waste, and at the worst dangerous, in the hands of peasants". Restricting literacy made people dependent on others and resulted in "differential access to information" (Komito, 2004, 22).

The second half of the eighteenth century was a period of great political revolution in America and Europe, and this demanded an unprecedented attention to the creation and dissemination of information in the form of news and comment. The same was true for Ireland and Great Britain in the lead-up to the Union. The Dublin press recognised that the communications network was centred in London and that "it was easier and cheaper to reprint accounts from the English press than to employ reporters" (Inglis, 1954, 229). "The format which began in the metropolitan centre of London was imitated by the principal print centres of the empire in an effort to recreate exactly the success of the original template" (Archbold, 2008, 270). To the same end, the Dublin newspaper printer also imitated the format of the London newspaper and copied its content.

[6] *Times*, 21 May 1792.

The spread of newspapers from one country to another was itself a network phenomenon: much of the content of individual papers consisted of news items taken from other papers, thanks to the emerging international postal network. If we think of the newspapers themselves as forming a communications network, the more 'nodes' transmitting information, the more any individual paper could offer at little extra cost to itself.

(Starr, 2005, 33)

Expanding markets increased the appetite for information about the wider world. In the *Freeman's Journal* for this period the space devoted to British and Foreign Intelligence generally exceeded that given to domestic news. For the Dublin newspapers, there was an inherent delay by having to wait for the arrival of newspapers from London, yet without access to the news those papers contained, Dublin's awareness of international events would have been severely crippled. For researchers of eighteenth-century Ireland, the speed at which Dublin learned of remote events – via the communications hub which was London – can be a crucial piece of information.

4 Methodology

This historical research was based on a combination of instrumental and collective case studies of London news reporting in Dublin papers and primarily involved document analysis and experimental dataset construction. In the absence of meteorological records for the eighteenth-century[7] it is not possible to model the weather conditions which prevailed at particular seasons and dates for the arrival of mail and packet ships trying to enter Dublin Bay. However, using the resources of recently digitised London and Dublin newspaper series, it is possible to build a model which accurately represents the transmission time for London 'News' into Dublin editorial offices. We will see that the same method can reliably be applied to determine the transmission time for news from the main European cities to London and Dublin.

For this study, all 1,638 available issues in the digitised surrogate[8] of a Dublin newspaper, the *Freeman's Journal*, 1790 to 1801 inclusive, were examined to create a dataset and model containing the transmission time for all the London news reported in the *Freeman's Journal*. In addition, to verify the findings, a sample of twenty specific events were tracked in two London newspapers followed by five Dublin newspapers to determine the transmission time for the reporting of each of those events and compare the results with those of the *Freeman's Journal* model. The focus was on the particularly turbulent years of the 1790s, with the start of the French Revolutionary wars. Dublin (and London) newspapers of the time reported British and Foreign Intelligence in column

[7] Richard Kirwan's 'Meteorological Observations' from 1790 to 1799 were examined but these did not contain sufficient level of detail for weather modelling. Meteorological observations were taken at the Royal Botanical Gardens in Glasnevin from 1800 and published yearly in the *Proceedings of The Royal Dublin Society* but it was not until 1860 that 'operational meteorology' began in Ireland (Met Eireann, 2009).

[8] Irish Newspaper Archive available at http://www.irishnewsarchive.com.

paragraphs headed with the city of origin and the date of the mail(s) from which their reports are taken (see Figure 1).

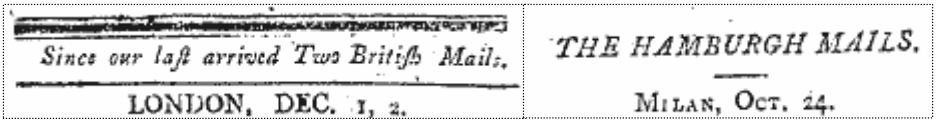
Since our laſt arrived Two Britiſh Mails,
LONDON, DEC. 1, 2.
THE HAMBURGH MAILS.
MILAN, OCT. 24.

Figure 1: Examples of dated paragraph headers from the *Freeman's Journal*.

These dated paragraph headers are key to the calculation of the transmission time; namely, the difference between the publication date[9] of the *Freeman's Journal* and the date of the mail containing the London news. The dated paragraph headers were found to be an accurate and reliable indicator of the transmission time for the re-printing of London news. The London mails were always reported in sequence and there were few gaps in the sequence. To test the validity of the dates given in the *Freeman's Journal*, a selection was cross-checked against the corresponding dates in the London papers. With the validity verified, the dates were used to create a model of the transmission time for reporting London news in the *Freeman's Journal*. A summary of the model is given in Table 1 and graphically in Figure 2.

T-Time in Days	3	4	5	6	7	8	9	10	11	12	13	14	15
Frequency 1790-1801	17	558	1339	830	487	164	39	30	13	7	1	1	1
Mean T-Time in days	5.621												
Standard Deviation	1.31												

Table 1: Frequency distribution, mean and standard deviation of the transmission time (T-Time) in days for reporting news from 3,487 London mails in 1,638 issues of the *Freeman's Journal*, 1790-1801.

Table 1 shows that, over a twelve-year period, the shortest transmission time for re-printing a London newspaper article in a Dublin newspaper was three days. This happened only seventeen times in 3,487 London mails. The mean transmission time for the period was 5.621 days. The longest transmission time was fifteen days[10]. For the Dublin reader, the London news was generally

[9] From [at least] January 1790 until the end of May, 1793, the banner of the *Freeman's Journal* stated the issue date in the form "From Tuesday, May the 28th, to Thursday, May the 30th, 1793". The publication date for these issues is the second of the two dates; in this case Thursday, 30 May 1793.

[10] A single period of stormy weather preceeding 18 Jan. 1791 accounted for all the delays shown of 13, 14 and 15 days; the *Freeman's Journal* of 18 Jan. reported the arrival of 10 mails, 9 of which arrived on a single day. Weather reports were regularly provided to readers to account for the packet delays.

available four to seven days later than for its London reader, as indicated by the low standard deviation of just 1.31 days.

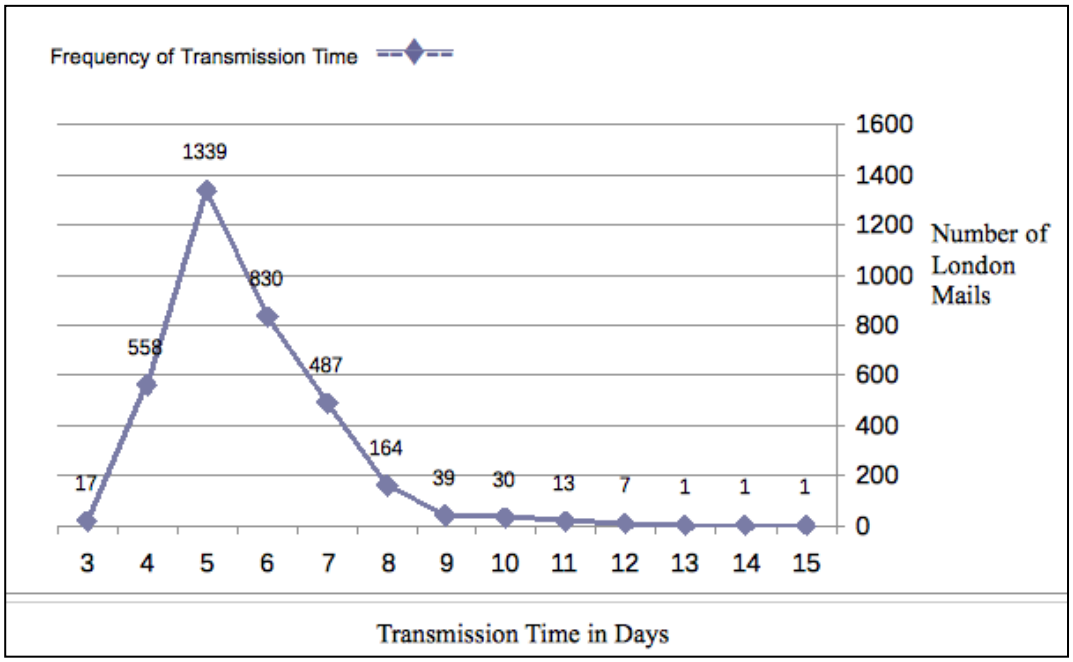

Figure 2: Frequency distribution of the transmission time for reporting news from 3,487 London mails in the *Freeman's Journal*, 1790-1801.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1790	5.96	6.20	5.95	5.89	5.48	6.00	5.74	5.93	6.29	5.85	5.77	7.56
1791	7.88	6.78	5.45	5.12	5.37	5.12	5.28	5.54	5.70	6.03	6.22	7.48
1792	5.59	5.57	6.14	5.81	5.37	5.17	5.07	5.59	5.88	6.11	5.69	7.48
1793	5.75	6.55	5.96	5.26	5.26	5.61	5.17	5.64	5.46	5.59	5.58	5.62
1794	5.65	7.07	6.06	5.00	5.19	5.19	5.03	4.74	5.72	6.48	5.13	6.41
1795	5.56	6.11	5.96	5.00	5.16	5.23	5.36	5.35	5.26	5.72	6.54	6.69
1796	7.10	6.37	5.71	5.08	5.50	5.57	5.06	5.26	5.09	5.91		
1797			5.18	5.13	5.30	5.23	5.04	5.35	5.44	5.42	5.55	5.75
1798	5.75	5.75	5.38	5.10	5.29	5.30	5.48	5.24	5.57	5.44	5.58	5.63
1799	5.21	7.12	5.29	5.33	5.00	5.60	7.68	5.24	5.11	5.45	6.09	5.20
1800	5.42	4.50	4.88	5.26	5.14	5.27	5.32	5.13	5.18	5.70	5.70	5.23
1801	5.66	5.41	5.08	4.77	5.03	5.06	5.03	4.93	4.96	5.06	5.33	5.57
Avg.	**5.96**	**6.13**	**5.59**	**5.23**	**5.26**	**5.36**	**5.44**	**5.33**	**5.47**	**5.73**	**5.74**	**6.24**

Table 2: Average transmission time in days for London news printed in the *Freeman's Journal*, 1790-1801, per month, per year. (*Issues for Nov./Dec. 1796 and Jan./Feb. 1797 were missing from the digitised archive*.)

Not surprisingly, the detailed data shows that the Winter months display a volatility that is not evident in the Summer months (see Table 2). The months April to September show the least volatility and therefore the optimum window of predictability regarding the expected transmission time for receiving London mails. There is also evidence of a weak, yet visible, downward trend over the twelve-year period (see Table 3). Improvements in the chain of transmission may have contributed to this modest (almost one day) reduction in the average transmission time. There is no evidence that the construction of Carlisle Bridge (now O'Connell bridge) or the relocation of the Custom House had a negative impact on the transmission time.

Year	**1790**	**1791**	**1792**	**1793**	**1794**	**1795**	**1796**	**1797**	**1798**	1799	**1800**	**1801**
Avg. T-Time	6.06	6.06	5.79	5.60	5.67	5.69	5.75	5.35	5.46	5.44	5.28	5.16

Table 3: Average transmission time in days for London news printed in the *Freeman's Journal*, 1790-1801, per year.

The periodicity of the *Freeman's Journal* – a tri-weekly, printed on Tuesday, Thursday and Saturday – was just as significant, if not more so, as a factor affecting the currency of the news than the arrival of the packet ship. If a mail arrived after the publication of Saturday's paper then it would have an imposed time-lag of an extra three days – until the following Tuesday's issue – in addition to the 'natural' lag incurred due to regular logistical and environmental factors. Proceedings of the British and Irish parliaments were regularly reported in the newspapers when the Houses were in session (Nov./Dec. to June/July). London papers reported the proceedings promptly – usually the following day or in the next issue – thus the typical transmission time for British parliamentary proceedings being reported in the Dublin press was the standard transmission time plus one day.

Usage of mails from Donaghadee <> Port Patrick and Waterford <> Milford Haven routes was explicitly mentioned when bad weather closed the Holyhead route. Donaghadee mails were used for eleven issues and Waterford mails for four issues. This contingency would have added two or more days to the overall transmission time.

Newspapers were not published with 'early' or 'late' editions, but the content of the final copy of an issue was likely to be different from an earlier copy if a British mail arrived before printing was completed[11]. This newest content was often included as a '*Postscript Extraordinary'* on the final page printed; this was not necessarily the last page in the newspaper. In the case of the *Freeman's Journal* (a 4-page, two-sided sheet), late news and Postscript Extraordinary generally appeared on page four but also appeared on page one (usually in the rightmost column). There is also evidence that full copies were printed a little

[11] "We stop the press to insert the particulars of the Mail arrived at eight o'clock this morning" (*Freeman's Journal*, 11 May 1799).

earlier for distribution outside Dublin than the final copies intended for the Dublin consumer. In the *Freeman's Journal*, 17 December, 1795, it is stated "The following Gazette having but appeared in our country number of Tuesday, we repeat it, as our duty for our town readers". A consequence of this practice is that the earlier 'country edition' might contain different news from that of the 'city edition', or might not contain the latest news from abroad. Any such missing news was not repeated in the next published issue so it is unclear how it was disseminated to the non-Dublin readership, if at all. Final composition was usually completed by noon on publishing day. A small number (51) of issues contained news items with the heading '*By Express'*. The data shows that the news contained in these paragraphs was no more current than the regular London mails which travelled by the normal mail-coach service from London to Holyhead, rather than by Express rider. This suggests that the sea-crossing / Dublin Bay was the critical bottleneck in the chain of transmission from London to Dublin.

5 Conclusion

Insufficient primary source data exists with which to build a robust model of the environmental and logistical factors on which the chain of transmission of news from London to Dublin depended during the period 1790-1801. In particular, the absence of a comprehensive set of meteorological records meant that the history of a critical factor, the weather, could not be modelled for this research. Nevertheless, the *Freeman's Journal* provided a source of recurrent, consistent and reliable data with which to build a model of the transmission time for the reporting of London – and by extension, other foreign cities – news in Dublin. Results demonstrate clearly that the *physical* transmission time for news into Dublin editorial offices, was on average, just under a week; 5.3 - 5.7 days. Very rarely was news in transit for less than four days. What was 'News' for a Dublin reader, therefore, were the European concerns of a week ago for the London reader. Ireland's harbour cities, as benchmarks for what was 'current' and what was obsolete information, appear to have diverged markedly from their inland counterparts, with their readers sharing many more of the horizons and concerns of port communities elsewhere, rather than those of the inland counties.

Indicators from this research also demonstrate what would be required for the full modelling for the physical arrival of 'Foreign Intelligence' from the Continent.

6 Implications for LIS practitioners

6.1 Transferability of findings

This study suggests that the transferability of the methodology or approach for other port cities/geographical area or other categories of imported news is possible. However, the transferability of *findings* does not apply to other types of printed information such as books or pamphlets; these items were printed for a different purpose and to a different timescale than newspapers. For example, a pamphlet on the Act of Union was a reflective work generally printed some time after the events it discussed and without the urgency required for a newspaper

report[12]. The transmission times reported in Table 2 apply to London news which, by its very nature, was prioritised for reprinting by the Dublin press. Re-printing of other works sourced from London would not follow this frequency distribution.

6.2 Virtual Research Environments

Digitised surrogates of primary sources offer advantages, such as search and browse facilities, over microfilm and the original but the researcher needs to show a critical detachment from the surrogate. Errors can be introduced during the digitisation process. During the *Freeman's Journal* case study, 461 (7%) pages with dated paragraph headers were found to be mis-filed in the digitised surrogate. It was possible to 'logically' re-file these pages in their correct issues of the newspaper during the data capture. As a result, the data from those pages was not omitted from the case-study. Many more pages which did not have dated paragraphs were also identified as being mis-filed but were not of interest to this study. It was not possible to logically relocate some of these pages.

Up until the end of May, 1793, the banner of the *Freeman's Journal* stated the issue date in the form "*From Tuesday, May the 28th, to Thursday, May the 30th, 1793*". The publication date is the second of the two dates, yet in the surrogate the issue is 'incorrectly' filed under the first date.

There were a number of instances where the first page of an issue of the *Freeman's Journal* was missing from the surrogate so it appeared as if the whole issue was missing because issues are indexed for retrieval based on the existence of page one. As a consequence, the 'orphaned' pages two, three and four were mis-filed as a continuation of the previous issue.

A balance needs to be found between the convenience of a digitised collection and the quality assurance provided by study of the originals. The importance of maintaining a critical detachment from a digital surrogate was proven beyond doubt; the convenience of desktop-based research and reliance on virtual research environments can lead researchers, unwittingly, into error. Wusteman (2008) proposes that librarians take a proactive role in the development, training and use of virtual research environments. A finding of this study suggests an additional role for librarians, namely, providing a valuable service to researchers by validating the digital surrogates in their collections.

6.3 Newspapers and society

Sommerville (1996, 4) stated how news created "a new kind of reading public, even a new society". The newspapers encouraged this perception of their status and value to society; "… this undeniable truth – that the *Freeman's Journal* finds its way into the circles of rank and fashion, and is read by every family of distinction in Ireland and Great Britain." (*Freeman's Journal*, 19 October 1790,

[12] In the *Freeman's Journal*, 7 February, 1799, J. Moore advertised his publication of a summary report of the Union debates in the Irish House of Commons from the 22 and 24 January. In the *Freeman's Journal* of 16 February, 1799, John Exshaw advertised his publication of Pitt's speech on the Union in the British House of Commons from the 31 January, to which he added related speeches from August 1785.

4). Barnard (2006, 51) says "the expectation was that a man of [good] standing … might reasonably be assumed to read the papers", indicating the necessity of being well-informed. The similarity of content and style, and the promotion of London intelligence among the five Dublin newspapers in this study supports Barnard's suggestion that "these features may have strengthened the sense in some readers of belonging to a Britannic or Anglophone community not confined to Ireland" (Barnard, 2006, 51). The passing of the Act of Union and many other mechanics of the Anglicisation of Ireland were well-oiled directly and indirectly by the Dublin press.

Not only was the content of the news of interest, but the timing of its arrival by packet ship in Dublin was a recurring event that caused (a) the urban dweller to consider if, and when, he should look for news, and (b) the newspaper printer to decide what news would be disseminated – and when. The deliberation on these decisions was more acute in the era of tri-weekly newspapers and an unpredictable environment. People's information-seeking and information-processing behaviour may well have been influenced by the periodicity, currency and content of the news from London.

6.4 Recommendations for further research

(a) A model constructed using data from a daily published newspaper would provide a more finely-tuned representation of the transmission time. Such a model would have eliminated the enforced time-lag due to the tri-weekly periodicity of the *Freeman's Journal*. A comparison of the models would show the extent to which periodicity affected the frequency distribution shown above.

(b) The methodology employed in this research could be applied to build models of the currency of news in other contexts:

- London news reported in Dublin newspapers at other periods in the seventeenth and eighteenth centuries;
- Foreign (American and Continental) intelligence reported in Dublin newspapers;
- The difference in currency for Dublin readers between information from newspapers and that of other printed materials (pamphlets, letters, etc) sourced from London;
- London news reported in other Irish port towns;
- The difference in news currency between pre- and post-industrial revolution times.

(c) Explore any correlation between Dublin City newspaper readership fluctuation and the dates given in contemporary *Almanack*s for specific events occurring on "Remarkable Days". For example, when Parliament was in session, an increased demand for newspapers might be expected.

References

Archbold, J. (2008) *Irish Periodicals in their Atlantic Context, 1770-1830: The monthly and quarterly magazines of Dublin, with comparison to those of Edinburgh and Philadelphia*. Ph.D. thesis, Trinity College, Dublin.

Barnard, T. (2006) Print Culture, 1700-1800. *In:* Gillespie, R. and Hadfield, A. (eds.) *The Oxford History of the Irish Book Volume III: The Irish Book in English, 1550-1800*. Oxford: Oxford University Press. 34-58.

Bew, P. (2007) *Ireland: The Politics of Enmity 1789-2006*. Oxford: Oxford University Press.

Boyce, G., Curran, J. and Wingate P. (eds.) (1978) *Newspaper History: from the seventeenth century to the present day*. London: Constable.

Carr, J. (1806) *The Stranger in Ireland: or, a tour in the southern and western parts of that country in the year 1805*. London.

Cox, C. (2000) Women and business in eighteenth-century Dublin: a case study. *In:* Whelan, B. (ed.) *Women and paid work in Ireland, 1500-1930*. Dublin: Four Courts Press. 30-43.

Dooley, B. and Baron, S.A. (eds.) (2001) *The Politics of Information in Early Modern Europe*. London: Routledge.

Dublin Docklands: *History and Heritage*. URL: http://www.ddda.ie/index.jsp?p=629&n=113 [accessed 15.1.11].

Gilligan, H.A. (1988) *A History of the Port of Dublin*. Dublin: Gill and Macmillan.

Hemmeon, J. C. (1912) *The History of the British Post Office*. Cambridge: Harvard University.

Howe, E. (ed.) (1947) *The London compositor: documents relating to wages, working conditions and customs of the London printing trade,1785-1900*. London: Bibliographical Society.

Inglis, B. (1954) *The Freedom of the Press in Ireland 1784-1841*. London: Faber and Faber.

Irish Newspaper Archives. URL: http://www.irishnewsarchive.com/ [accessed 31.07.09].

Kinane, V. (2002) *A Brief History of Printing and Publishing in Ireland*. Dublin: National Print Museum.

Komito, L. (2004) *The Information Revolution and Ireland: prospects and challenges*. Dublin: University College Dublin Press.

Marmion, A. (1860) *The Ancient and Modern History of the Maritime Ports of Ireland*. London.

Met Eireann: Our History – The Irish Meteorological Service Online. URL: http://www.met.ie/about/our-history.asp [accessed 12.08.09].

Oram, H. (1983) *The Newspaper Book: a history of newspapers in Ireland, 1649-1983*. Dublin:MO Books.

Pollard, M. P. (1989) *Dublin's Trade in Books 1550-1800: Lyell Lectures, 1986-1987*. Oxford: Clarendon Press.

Reynolds, M. (1983) *A History of the Irish Post Office*. Dublin: MacDonnell Whyte.

Shee, Sir G. (1797) A Memoir on the Construction of Ships. *In:* Royal Irish Academy (ed.) *The transactions of the Royal Irish Academy, Vol. 6. Dublin, [1787]-1800*, edited by Royal Irish Academy. Dublin. 15-25.

Sommerville, C. J. (1996) *The News Revolution in England: cultural dynamics of daily information*. Oxford: Oxford University Press.

Starr, P. (2005) *The Creation of the Media: political origins of modern communications.* New York: Basic Books.

Wiles, R. M. (1965) *Freshest Advices: early provincial newspapers in England*. Columbus: Ohio State University Press.

Williams, K. (1977) *The English Newspaper: an illustrated history to 1900*. London: Springwood Books.

Willson, B. (1903) *The Story of Rapid Transit*. New York: Appleton.

Woolf, D. (2001) News, history and the construction of the present in early modern England. *In:* Dooley, B. and Baron, S.A. (eds.) *The Politics of Information in Early Modern Europe*. London: Routledge. 80-118.

Wusteman, J. (2008) Virtual Research Environments: What is the librarian's role? *Journal of Librarianship and Information Science*, **40**(2), 67-70.

The Occasion

Sarah McDonald was awarded a special mention by the judges of the 2010 LIRG student prize competition for her MLIS dissertation: *In one forme or another: the currency of London news in Dublin City newspapers, 1790-1801*.

Acknowledgement

Grateful thanks to Dr. Barbara Traxler Brown of University College Dublin for her inspiration, supervision and enthusiastic support.

Information needs and use among urban farmers in Kampala City in Uganda

Helen M. Byamugisha, Robert Ikoja-Odongo, George William Nasinyama

Abstract

The paper presents results of a study on information needs and use among urban farmers in Kampala City in Uganda. An information need is recognition that one's knowledge is inadequate to satisfy a goal. Urban farming is characterized by low agricultural production leading to food insecurity. Although urban farming is viewed as an important survival strategy, the information needs of urban farmers in Kampala City are not known. The study used both qualitative and quantitative study design. Methods used were face-to face interview and focus group discussion. Respondents included 380 urban farmers and 36 focus group respondents. Results show that the information needs of the urban farmers were as varied as the heterogeneity of their agricultural enterprises and information was used for different purposes and depended on the type of farming enterprise(s) and activity undertaken. The paper recommends that the dissemination of agricultural information in Kampala City needs to be based on the urban farmers' enterprise groups and their information needs.

1 Introduction

The fast growth in urban population coupled with rural - urban migration has given rise to food insecurity in Kampala City. As lack of food increases and life for the urban dwellers becomes more complex, urban farming is viewed as one of the alternative survival strategies. Urban farmers are people who practice farming within the city boundaries**,** including the cultivation of food and cash crops, animal husbandry, forestry, flowers and garden plants production (UNDP 1996). Urban farming is characterized by low agricultural production leading to food insecurity.

Authors

Helen Byamugisha is the Head of the Books Acquisition Section of Makerere University Library and is a Doctoral candidate; Robert Ikoja-Odongo is Professor of Library and Information Science and George Nasinyama is Associate Professor of Veterinary Medicine, both of Makerere University, Kampala, Uganda.

Email: hbyamugisha@mulib.mak.ac.ug

Received 01 May 2010

Accepted 01 December 2010

Case (2002) suggests that an information need is the recognition that one's knowledge is inadequate to satisfy a goal, while Moore (2002) describes an information need as the lack of appropriate information on which to base choices that could lead to benefits or services that may improve people's well-being. Belkin, Oddy and Brooks (1982) describe an information need as an inadequate state, or an Anomalous State of Knowledge (ASK). Since the information needs of urban farmers in Kampala City are not known, there are no agricultural information services that specifically target these farmers.

Wilson (1981) noted that need is a subjective experience which occurs only in the mind of the person in need, and consequently, is not directly accessible to an observer. He further explained that the experience of need can only be discovered by deduction from behaviour or through the reports of the person in need. Dervin (1977) recognizes limitations in existing research, arguing that the majority of information needs studies have focused upon the library and its activities and has considered the user only in this context. Wilson (1981) hence advises that information need research should focus upon uncovering the facts of everyday life of the people being investigated to understand the needs that exist which press the individual towards information seeking behaviour.

Based on Wilson's advice, Ozowa (1995) studied information needs of small scale farmers in Africa. He found that the information needs of farmers revolve around the resolution of problems such as hazards, weed control, moisture insufficiency, soil fertility, farm credit, labour shortage and soil erosion. He lamented that agricultural information is not integrated with other development programs to address the numerous related problems that face farmers. The author noted that the information provided was exclusively focused on policy makers, researchers, and those who manage policy decisions, with scant attention paid to the information needs of the targeted beneficiaries of the policy decisions, particularly farmers. He warned that non-provision of agricultural information to farmers is a key factor that has greatly limited agricultural development particularly in developing countries. Ozowa (1995) recommended that if the approaches to agricultural development programs are to work, African governments need to take approaches to information dissemination that grow from a clear understanding of what farmers' information needs are.

Earlier, Aina (1991) had studied information for successful agriculture in six farming communities in Nigeria. He found that farmers needed information mainly in the areas of fertilizers, pests and disease control, planting materials, credits and loans. In a related study of the information needs of small scale farmers in Zambia, Kalusopa (2005) found the most important information needs of small-scale farmers to be farm management, diary management, poultry equipment and technology. He stressed that although agricultural development activities are based on the utilization of information, the role of information in agricultural development had not received sufficient attention by the Government of Zambia. The supply of information in the agricultural sector was scattered, poorly developed and unfocused. Kalusopa (2005) concluded that in order for agriculture to improve, there was need to have a well organized and functional integrated information delivery system supported by efficient national collaboration programs.

Wesseler (2002) intimated that farmers' information needs pertain to the production and initial processing of farm products, and to the market (prices, quantity, quality, mandatory norms, etc.), natural resources and their management. The author advised that many limitations such as illiteracy, poor communication networks (deficient or non-existent infrastructure), and inappropriate support from service providers must be lifted in order to begin to meet these information needs efficiently.

Information use, on the other hand, is a behaviour that consists of the physical and mental acts involved in incorporating the information found into the person's existing knowledge base (Marchionini, 2001). Wilson (1981) pointed out that one of the problems with information use is that information processing is as subjective as information need, and like information need, is not observable since it takes place in the mind of the individual. Wilson and Walsh (1996) proposed eight general categories which describe how people use information. To them, information may be used to develop a context; understand a particular situation; know what and how to do something; get the facts about something; confirm another item of information; project future events; motivate or sustain personal involvement; develop relationships, enhance status, reputation or personal fulfillment.

Although Savolainen (1994) acknowledges that the use of information has not been successfully studied, results of research in information use in other disciplines (e.g. artificial intelligence, cognitive research in learning, memory and thinking) indicate that the first characteristic to be noted about users is that the number of those who have need of information far exceeds those who actually use it. Therefore, it can be hypothesised that if the information needs of urban farmers in Kampala district were known and if the farmers had access to and used agricultural information, they would make the best use of resources at their disposal thereby improving urban food security and reducing urban poverty.

2 Methodology

This research adopted a mixed method approach using a dominant quantitative and less-dominant qualitative design. The mixed methods approach aims to overcome the weaknesses that are often experienced in single method studies, allows the strengths and weaknesses of each technique to be addressed and arguably produces more convincing research findings (Creswell, 2009). Both purposive and simple random sampling methods were used to select the study areas and the respondents. The three study Divisions namely Kawempe, Nakawa and Rubaga were selected using a purposive method. A simple random sampling method (Lottery method) was used to select nine parishes (three from each Division) while a systematic sampling method using random numbers was used to select 380 urban farming households from all the nine parishes. In addition, a purposive sampling strategy was employed to select 36 focus group respondents from nine parishes from the three study Divisions.

Methodological Triangulation (the use of multiple methods to study a single problem) was employed to collect data. Face-to-face interview and focus group discussion were hence the methods used to collect data on urban farmers'

information needs and information use. A structured interview guide and a focus group interview schedule were the instruments used to collect data. Data analysis for the quantitative data was done using the Statistical Package for the Social Sciences (SPSS) software. For the qualitative data, analysis followed the guidelines laid out by Krueger and Casey (2000). The strategy involved content analysis that included examining transcripts, categorizing responses and analyzing themes that emerged in the data. Chunks or units of data, a process referred to as 'unitizing' the data (Guba and Lincoln, 1985) were identified; categories were developed according to the themes of the study, namely information needs and use. Some qualitative interviews responses based on verbatim recordings (translated from vernacular to English) are quoted in italics and are given in the findings.

3 Findings

3.1 Urban Farmers' Agricultural Information Needs

The study sought to establish the information needs of the urban farmers. The results in Table 1 show that of the 374 farmers interviewed, the greatest need for information was about markets and prices (62.3%). This was followed by information needs on improving farming practices (59.6%), pest control and management (51.9%) as well as nutrition and fertilizers (50.8%). Just over one third of farmers wanted information on disease resistant animals (42.5%), disease resistant crops (39.6%) and better animal breeds (39.6%), while information about improved seed varieties (34.2%), soil management (31.3%), and weather and environment management (30.2%) received a number of mentions. The farmers showed less need for information about safe water and weather (5.9%) probably because there are many sources of safe water in Kampala City due to the presence of the National Water and Sewerage.

A Chi-square test for independency was used to test for the relationship between the types of information need and both gender and farming enterprise. While there was no significant relationship between information need and gender (with the exception of information needs concerning improved farming practices), the results show that there was a highly significant relationship between farmers' information needs and the type of urban farming enterprise undertaken. For example, the farmers engaged in animal production showed a higher need for information on markets and prices (73.0%) than those involved in crop production (47.0%). Conversely, the crop producing farmers showed a higher need for information on improved farming practices (74.4%) than those who farmed animals (33.6%).

Responses from the three focus group discussions were not divergent although they additionally expressed a need for information on land management and the right seasons for planting crops. The farmers needed information about extension services such as veterinary services and on the monitoring of their agricultural activities by the extension personnel. The respondents indicated a need for information on how to plan their agricultural activities, saying, "*it is through this information that one can plan for the activity that he wants to carry out*". The farmers expressed a need for information on how to effectively utilize the little

land they occupied. Both male and female respondents argued that they spent a lot of money buying expensive animal drugs and feeds.

> *"We want to know the right animal drugs or vaccines to use because in some animal drug shops, people sell expired animal drugs while others sell drugs that are no longer recommended for use".*

	Gender			Farming type				
Type of information (n=374)	**Male (%)**	**Female (%)**	**p-value**	**Crop (%)**	**Animal (%)**	**Both (%)**	**p-value**	**All (%)**
Markets and prices	64.1	61.2	0.577	47.0	73.0	65.9	0.000	62.3
Credit Facilities	37.3	32.3	0.323	29.1	40.2	33.3	0.188	34.2
Improved farming practices	52.1	64.2	0.021	74.4	33.6	70.4	0.000	59.6
Nutrition	25.4	30.6	0.275	12.8	33.6	37.8	0.000	28.6
Fertilizers	17.6	25.0	0.095	36.8	2.5	7.4	0.000	22.2
Policies/laws related to urban farming	12.7	16.8	0.280	13.7	11.5	20.0	0.140	15.2
Pest control/management	50.0	53.0	0.571	58.1	38.5	58.5	0.002	51.9
Land availability	12.0	14.2	0.535	19.7	6.6	14.1	0.011	13.4
Health	23.9	20.3	0.401	9.4	30.3	24.4	0.000	21.7
Environment management	26.8	22.8	0.392	29.1	16.4	27.4	0.043	30.2
Soil management	29.6	32.3	0.578	46.2	5.7	41.5	0.000	31.3
Weather	6.3	5.6	0.770	6.8	2.5	8.1	0.134	5.9
Harvesting and storage	6.3	5.6	0.278	10.3	0.8	14.1	0.001	8.6
Safe water	7.7	4.7	0.231	1.7	5.7	9.6	0.029	5.9
Improved seed varieties	31.0	36.2	0.302	47.9	6.6	47.4	0.000	34.2
Better animal breeds	38.0	40.5	0.633	6.0	55.7	54.1	0.000	39.6
Disease resistant crops	34.5	42.7	0.117	56.4	7.4	54.1	0.000	39.6
Disease resistant animals	38.3	45.3	0.170	7.7	59.0	7.8	0.000	42.5
Total number of respondents	**142**	**232**		**117**	**122**	**135**		**374**

Table 1: Types of information needed by urban farmers

They unanimously expressed need for information on how to build animal shelters, and on how to make animal drugs and animal feeds from locally available materials. The farmers further said that they needed information on seasonal changes, the right crops and when to plant them.

The indication was that urban farmers' information needs were as varied as the heterogeneity of their farming enterprises, activities or tasks. The findings are in line with Ozowa (1995) who observed that the information needs of small scale farmers revolve around the resolution of problems related to pests hazards, weed control, soil fertility, farm credit and soil erosion. As Ozowa (1995) emphasizes, no one can categorically claim to know all the information needs of urban farmers especially in an information dependent sector like agriculture where there are new and rather complex problems facing farmers every day. However, the findings of this study indicate that it may be possible to identify significant groups of urban farmers who share common information needs. Therefore, the dissemination of agricultural information should be based on the different urban farmers' enterprise groups and those groups' information needs.

The farmers were next asked to narrate the situations in which they had experienced a need for agricultural information. Varied responses were given. The results show that of the 364 farmers who responded, 54.4% needed information when animals were sick and 40.9% of farmers identified a need for information when yields were low (see Table 2). A Chi-square test for independency was again used to test for the relationship between the situations in which information needs arose and both gender and type of farming enterprise. While there was no significant correlation between gender and the situation in which information needs arose, there was a high significant relationship between the situations in which farmers' information needs arose and category of farming enterprise (represented by p=0.000 and 0.004). This is not unexpected since the situations described are mostly applicable to either crop farmers or to animal farmers but not both (e.g. 'before planting and want to know about rains' or 'when my animals are sick').

Members of the three focus groups had similar views but in addition mentioned that the farmers needed agricultural information during harvesting and marketing of the produce. However, the focus group respondents unanimously insisted that they needed the information all the time as long as farming activities were taking place. The indication was that rather than gender, urban farmers need for information was specific to the problem situations they found themselves in and mainly depended on the type of farming enterprise.

The findings agree with van Lill (2000) who argues that a crucial generator or source of information need is the situation which causes the need. This author pointed out that the situational approach places emphasis not so much on the users, but rather, on the problem situations in which the users find themselves. This therefore implies that information providers in Kampala City need to have knowledge of the different farming enterprises that the farmers engage in and the situations in which their information needs may arise.

Situations (n= 364)	Gender			Farming Type				
	Male (%)	Female %)	p-value	Crop (%)	Animal (%)	Both (%)	p-value	Total (%)
When I want land for farming	28.7	28.1	.901	42.9	10.2	32.1	.000	28.3
Before planting, and want to know about rains	26.5	36.80	.042	54.5	5.1	33.6	.000	33.0
When my animals are sick	54.4	54.4	.996	6.2	77.1	74.6	.000	54.4
When I get low yields	36.8	43.4	.212	59.8	14.4	48.5	.000	40.9
When I need fertilizers	22.8	21.5	.772	31.2	3.4	30.6	.000	22.0
When I want solution for crop disease	33.8	40.8	.186	54.5	5.9	53.0	.000	38.2
When I want to start rearing chicken, pigs or cattle	29.4	23.7	.227	4.5	42.4	29.1	.000	25.8
When I want to sell some produce for money	31.6	30.7	.855	19.6	39.8	32.8	.004	31.0
Total number of respondents	**136**	**228**		**118**	**121**	**134**		**364**

Table 2: Situations in which urban farmers needed agricultural information

3.2 How Agricultural Information was used

The farmers were asked to describe how they used the agricultural information they received. Table 3 shows that information was mainly used in controlling animal diseases (51.5%) followed by controlling crop diseases (48.2%). The findings show that except for getting access to markets (p=0.003), there was no significant difference in information use between female and male urban farmers. However, there was a strong correlation between information use and the type of farming enterprise as reflected by the p-value in table 3 below.

Although one would have expected higher use of information among farmers with higher levels of education, there was no significant difference in information use among the farmers with different education levels except for knowing how to get access to credit (p=.012) and having knowledge of urban farming laws (p=.003). The indication is that while agricultural information was used for different purposes, the level of information use per activity varied. These responses were in line with Wilson and Walsh's (1996) information use categories described above. In this model the significance and role of agricultural information were conceptualized as the value urban farmers attributed to information. This led to various actions that put the knowledge acquired into practice or applied the information for decision making.

How information is used (n=361)	Gender			Farming type				Education level						
	Male (%)	Female (%)	p-value	Crop	Animal	Both	p-value	Tertiary	Secondary	Primary	Adult Literacy	None	p-value	Total (%)
Get access to markets for output	54.0	37.8	.003	36.0	51.3	44.3	.067	41.9	51.7	38.3	55.6	26.9	.067	44.0
Learnt how to apply manure or fertilizers	31.7	35.6	.443	45.9	14.3	42.0	.000	32.3	37.6	26.1	55.6	46.2	.103	34.1
Learnt how to control crop diseases	42.4	51.8	.083	66.7	10.9	66.4	.000	41.9	47.0	53.0	77.8	38.5	.179	48.2
Learnt how to control animal diseases	48.9	53.2	.434	7.2	77.3	65.6	.000	51.6	55.0	50.4	33.3	42.3	.580	51.5
Increased agricultural production	48.9	47.3	.764	50.5	28.6	63.4	.000	56.5	43.6	49.6	44.4	46.2	.539	47.9
Learnt how to access credit facilities	13.7	16.2	.512	9.0	13.4	22.1	.015	11.3	22.8	7.8	22.2	11.5	.012	15.2
Have knowledge about availability of urban farm land	10.1	9.5	.848	5.4	5.0	17.6	.001	6.5	10.1	8.7	11.1	19.2	.460	9.7
Have knowledge about urban farming laws	36.0	26.1	.047	28.8	31.9	29.0	.842	41.9	33.6	21.6	11.1	3.8	.003	29.9
Total number of respondents	**139**	**222**		**111**	**119**	**131**		**62**	**149**	**115**	**9**	**26**		**361**

Table 3: Use of agricultural information

The benefits accrued from utilizing the information (n=374)	Gender			Farming type				Education level						
	Male (%)	**Female (%)**	**p-value**	**Crop**	**Animal**	**Both**	**p-value**	**Tertiary**	**Secondary**	**Primary**	**Adult Literacy**	**None**	**p-value**	**Total (%)**
Have enough food for my family	54.9	60.3	.303	68.4	29.5	75.6	.000	60.9	62.9	53.3	36.4	57.1	.296	58.3
Sell excess for income	56.3	45.7	.046	29.1	61.5	57.0	.000	46.9	55.6	49.2	45.5	28.6	.115	49.7
Farming keeps me busy since I do not have other job	19.0	30.2	.017	24.8	18.9	33.3	.029	15.6	27.8	28.3	18.2	32.1	.279	25.9
Total number of respondents	**142**	**232**		**117**	**122**	**135**		**64**	**151**	**120**	**11**	**28**		**374**

Table 4: The benefits accrued from utilizing agricultural information

3.3 Benefits that accrued from using agricultural information

The impact of information usage was judged by the benefits that accrued. Table 4 shows that having enough food for the family (58.3%) was the most frequent benefit, followed by selling excess for income (49.7%). The views from the focus group discussions also emphasized that the major benefit from using agricultural information was improved agricultural production:

> *"I had one cow but when I got information from a fellow farmer about cross-bred cows, I used the information. As a result of this information, I multiplied my cows and I now have 8 cows" (male FGD participant, Nakawa Division).*

A female participant from Kawempe Division said:

> "*I got and used information on how to keep eggs and then sell them at once. As a result, I now sell many trays and have improved my standards of living".*

The implication is that information use is as varied as the farmers' farming enterprises and needs. This finding tallies with Meho and Hass (2001) who believe that information use is an indicator of information needs and a behaviour that leads an individual to the use of information in order to meet his/her information needs. But as Mwala (1997) pointed out, the use of information may also have varied as a result of the value urban farmers attached to information, the characteristics of the individual urban farmer seeking information, social and organizational factors as well as urban farming tasks' requirements.

The respondents were asked to describe the level of satisfaction they derived from using the agricultural information they obtained. The aim was to establish whether the information received satisfied the farmers' needs. Interestingly, slightly over half of the respondents derived partial satisfaction (50.6%) as compared to 49.4% of the respondents who reported full satisfaction. Moreover, the survey data indicates that in cases where the farmers were not satisfied with the information obtained, they started information search all over again. Rational choice theory provides a framework for understanding why individuals decide how much effort is needed to find information in order to accomplish their objectives. The theory posits that when faced with several courses of action, people usually do what they believe is likely to have the best overall outcome (Scott, 2006). Actors assess costs and benefits according to their own preferences, value and utilities and then choose an alternative that promises to maximize the benefits relative to the effort or cost required (Prabha *at al.,* 2007). However, in real life situations, urban farmers may not have had at their disposal the full range of all possible choices with which to assess and compare the benefits of each choice in relation to the effort or cost. Therefore, the premise of rational choice theory has been challenged and debated widely by scholars. For example, Simon (1995) proposed the concept of satisficing behaviour, recognizing that in many situations it is neither possible to know the entire spectrum of options, nor is it possible to compare the benefits each option may offer. In practice, satisficing translates into judgment that the information is good enough to satisfy a need even though the full cost-benefit analysis was not performed. According to Schmid (2004), when

individuals satisfice, they compare the benefits of obtaining more information against the additional cost and effort of continuing to search. Theoretically, decision makers consider all potential alternatives until the optimal solution emerges (Stroh *et al.,* 2002). However, such an exhaustive analysis would require additional time and expenditure which information seekers, including urban farmers, must weigh against the likelihood that they will find additional information of sufficient value to offset the cost of continued searching. The consequences of putting time and effort into finding optimal solutions can be costly. Users may hence satisfice their need for information based on what they are able to find and thus stop looking for more information. Prabha (2007) noted that users may also stop looking for information prematurely if the information systems are difficult or unusable. Therefore, the very abundance of agricultural information makes it crucial for urban farmers in Kampala City to decide on what information would be enough to satisfy their needs although like Stroh *et al.*, (2002) advised, the farmers must be willing to forgo the best solution in favour of one that is acceptable.

3.4 Information Transfer

A final question aimed to find out whether the agricultural information obtained was shared with other people. Although the value of information is subjective, the results show that information obtained was transferred to other people. Table 5 shows that out of 326 farmers who responded to this question, the majority of them transferred information to neighbours (71.8%) and approximately half passed it on to family members not in the same household ('other family members', 47.2%). The lowest proportion of farmers (6.7%) transferred information to local leaders, probably because the farmers instead expected to receive information from these people. The results also show that neither gender, farming enterprises nor education level influenced the way urban farmers shared information. Views from FGDs show that information obtained was mainly transferred to fellow farmers who were involved in similar farming activities:

> *"We exchange information with fellow farmers because they are the immediate people to help us before looking for the LC's who are always out of their offices. One time I went to the animal drug shops and I was given expired drugs and when I used the drugs, my animal died. Because of that, fellow farmers are more helpful".*

Some of the people who had encountered problems in accessing agricultural information in one way were able to access and utilize it in another. The fact that urban farmers shared information with other people is recognition that information flow among them is rarely one way. This confirms the findings of Marcella and Baxter (2005) who observed that transferring information to other people is a considerable break from the linear information provider / information user picture which previously dominated the perceptions of the information professions.

To whom information is transferred (n=326)	Gender			Farming type				Education level						
	Male (%)	Female (%)	p-value	Crop (%)	Animal (%)	Both (%)	p-value	Tertiary	Secondary	Primary	Adult Literacy	None	p-value	Total (%)
My household members	28.1	18.2	.035	22.7	25.5	18.5	.440	30.4	19.7	21.6	18.2	20.0	.585	22.1
Other family members	46.9	47.5	.916	49.5	41.8	50.4	.372	37.5	51.1	52.9	27.3	30.0	.077	47.2
My neighbours	68.8	73.7	.329	70.1	68.2	76.5	.345	71.4	70.8	75.5	45.5	75.0	.328	71.8
Farmer group members	25.8	23.2	.600	16.5	20.9	33.6	.009	14.3	29.2	22.5	27.3	25.0	.280	24.2
People at seminars, conferences and workshops	25.0	30.8	.257	25.8	22.7	36.1	.062	33.9	33.6	22.5	27.3	10.0	.104	28.5
Extension link farmers	10.2	12.1	.585	9.3	8.2	16.0	.133	5.4	13.9	11.8	.0	15.0	.336	11.3
Local leaders	7.0	6.6	.870	3.1	6.4	10.1	.123	3.6	10.2	5.9	.0	.0	.208	6.7
Total number of respondents	**128**	**198**		**97**	**110**	**119**		**56**	**137**	**102**	**11**	**20**		**326**

Table 5: Transfer of agricultural information to others

4 Conclusion

Urban farmers' information needs were context-specific and as varied as the heterogeneity of the farming enterprises and activities or tasks. As Ozowa (1995) emphasizes, no one can claim to know all the information needs of urban farmers in Kampala City especially in an information dependent sector like agriculture where there are new and complex problems facing farmers every day. However, it is possible to identify significant groups of urban farmers who share common information needs. While farmers use information for different purposes, the level of use depends on the farming enterprise(s) and activity. But as Mwala (1997) points out, the use of information may also vary due to the value that urban farmers attach to information, the characteristics of the individual urban farmer seeking for information as well as social and organizational factors. Given the results of this study it is recommended that the dissemination of agricultural information to urban farmers in Kampala City should be based on the different urban farmers' enterprise groups and their information needs.

References

Aina, L.O. (1991) Information for successful agriculture, *World Libraries* [online], **2**(1). URL: http://www.worlib.org/vol02no1/aina_v02n1.shtml [accessed 05.12.10].

Belkin, N.J. Oddy, R.N., and Brooks, H.M. (1982) ASK for information retrieval: Part I. Background and theory. *Journal of Documentation*, **38**(2), 61-71.

Case, D. (2002) *Looking for information: survey of research on information seeking, needs, and behaviour*. San Diego: Academic Press.

Dervin, B. and Nilan, M. S. (1986) Information needs and uses, *Annual Review of Information Science and Technology*, **21**, 3-33.

Guba, E.G., and Lincoln, Y.S. (1989) *Fourth generation evaluation*. Newbury Park, CA: Sage.

Kalusopa, T. (2005) The challenges of utilizing information communication technologies for the small-scale farmers in Zambia, *Library Hi Tech*, **23**(3), 414-424.

Kruger, R. A., and Casey, M. A. (2000) *Focus groups: A practical guide for applied research*. 3rd Ed. Thousand Oaks, CA: Sage Publications.

Marcella, R., Baxter, G., Moore, N. (2002) Theoretical and methodological approaches to the study of information need in the context of the impact of new information and communications technologies on the communication of parliamentary information, *Journal of Documentation*, 58(2), 185-210.

Marchionini, G. (1995) *Information seeking in the electronic environments*, Cambridge: Cambridge University Press.

Mwala, K. S. (1997) Using the library for problem solving in African agriculture. *Information Development*, **13**(3), 132-134.

Ozowa V. N. (1995) Information Needs of Small Scale Farmers in Africa: The Nigerian example. *Quarterly Bulletin of the International Association of Agricultural Information Specialists, IAALD/CABI*, **40**(1). Reprinted at URL: http://www.worldbank.org/html/cgiar/newsletter/june97/9nigeria.html [accessed 05.12.10].

Prabha, C., Connaway, L.S., Olszewski, L., and Jenkins, L.R. (2007) What is enough? Satisfying information needs. *Journal of Documentation*, **63**(1), 74-89.

Savolainen, R. (1999) Everyday life information-seeking: Approaching information-seeking in the context of way of life. *Library and Information Science Research*, **17,** 259-294.

Schmid, A. A. (2004) *Conflict and cooperation: Institutional and behavioural economics*. Malden, MA: Wiley-Blackwell.

Scott, J. (2006) Rational choice theory. In: Browning, G., Halcli,A. And Webster, F. (eds.) *Understanding contemporary society: theories of the present*. London: Sage Publications. Also available from URL: http://privatewww.essex.ac.uk/~scottj/socscot7.htm [accessed 05.12.10].

Simon, H. (1995) A behavioural model of rational choice, *Quarterly Journal of Economics*, **69**(1), 99-118.

Stroh, L.K., Northcraft, G.B., Neale, M.A. (2002) *Organizational behaviour: A management challenge*, 3rd ed., Mahwah, NJ: Lawrence Erlbaum.

United Nations Development Programme (1996) *Urban agriculture: food, jobs and sustainable cities*. New York: UNDP.

Van Lill, C. (2000) A model of studying users' information needs and use. *South African Journal of Library and Information Science*, **67**(1), 39-49.

Wesseler, G. and Brinkman, W. (2002) Bridging information gaps between farmers, policy makers, researchers and development agents. At: *Agroforestry impacts on livelihoods in South Africa: Putting research in practice, Aventura Wambaths, South Africa, 20-24 May 2002.* URL: http://dlio.ctafotogallery.webfactional.com/static/eng/files/2hash/5f/5f02707e3091cd0f20c4661930106d468602c618/Bridging_Information_Gaps_between_Farmers_Policy-makers_Researchers_and_Development_Agents.pdf [accessed 05.12.10].

Wilson, T.D. (1981) On user studies and information needs, *Journal of Documentation*, **37**(1), 3-15.

Wilson, T.D. and Walsh, C. (1996) *Information behaviour: an interdisciplinary perspective.* Sheffield: University of Sheffield, Department of Information Studies. URL: http://informationr.net/tdw/publ/infbehav/cont.html [accessed 05.12.10].

Acknowledgement

We acknowledge the Government of Sweden, which through the Swedish Development Agency (SIDA/sarec) provided financial support for this research. We also thank the study respondents and local leaders in the study area for their cooperation, without which this study would not have been accomplished. Logistical support by Makerere University is acknowledged.

Library and Information Research
Volume 34 Number 108 2010

Communicating research to practice: The role of professional association publications

Gaby Haddow

Abstract

Effective communication of research to practice should facilitate evidence based decision-making by library and information professionals. One way this may be achieved is through the publications distributed by library associations to their members. This paper reports on a study that explored the role of library associations' publications in communicating research information. Firstly, the reading habits of practitioners from a range of disciplines are discussed, finding support for making research information accessible through library associations' publications. Using content analysis, the extent and subject of research information published in two associations' publications were examined. Research information comprised a small proportion of the publications' content and much of the research information is presented as a brief mention only. The largest proportion of research information in both publications focuses on content about 'information behaviour, user needs/services'. The paper concludes by suggesting initiatives to improve practitioner access to research information in association publications.

1 Introduction

The philosophy behind evidence based practice is that important professional decision-making is undertaken after considering the best information available. It is generally held that the evidence most highly rated is research findings. For this to occur, access to research is critical, and access can relate to physical or cognitive factors. That is, relevant research must be available in sources that are routinely used and it must be discussed in language that is comprehensible to those who may benefit from it. This paper reports on a study which explored the first of these factors by examining the literature most frequently read by library

Gaby Haddow

Gaby Haddow teaches in the Department of Information Studies at Curtin University. Her PhD examined research communication, a focus continued in her professional and research interests.

Email: G.Haddow@curtin.edu.au

Received 28 December 2010

Accepted 15 January 2011

and information science (LIS) practitioners – the publications distributed by professional associations.

In the field of library and information science (LIS), research publication, reading and use has received a great deal of attention in the literature over many years. A number of concerns have been raised regarding the nature of LIS research, including that it is less scholarly and proportionally low compared to other disciplines (Fisher, 1999; Harvey, 2001; Peritz, 1981; Stephenson, 1990; Swigger, 1985). Others note a focus on pragmatic issues, rather than the development of theory from research (Montanelli and Mak, 1988; Robbins, 1990; Saracevic and Perk, 1973; Williamson, 1999), which has in turn led to the notion of a communication gap between research and practice (Blick, 1984; Clayton, 1992; Haddow and Klobas, 2004; Lynam, Slater, and Walker, 1982). In suggesting ways to close this communication gap, it is important to consider the time-poor and operations-focused environment in which LIS practitioners work (Clapton, 2010). Acknowledging the barriers to practitioners actually engaging in research, but encouraging practitioner reading of research, it has been proposed that researchers should report their findings in a way that is comprehensible to practitioners (Clayton, 1992; Turner, 2002; Waldhart, 1975). This may be achieved, for example, by reducing the amount of technical terminology used in research articles and including implications for practice (McKechnie, Julien, and Genuis, 2008). While the latter has been implemented by some journals, this strategy alone will not necessarily result in a journal being read by practitioners. It is the contention of this paper, and the motivation for the research on which it is based, that a pivotal issue in the communication of research to practice is the professional reading habits of practitioners.

2 Professional reading by practitioners

LIS practitioners share common characteristics with professionals in other fields in relation to their reading habits. Discussing the issue for practitioners in the information systems profession, Lang (2002, 871) notes the importance of selecting "suitable communication channels". Horder (2004, 304) provides a personal perspective as a social work practitioner and recalls: "Weekly trade publications … were important in reducing a sense of isolation". The author also remarks on the limited access to libraries with journal collections and goes on to commend the Social Care Institute of Excellence for disseminating "summaries of knowledge for practice" (Horder, 2004, 307). In the field of recreation and leisure services, Jordan and Roland (1999) asked academics and practitioners about their reading habits. They found the most frequently read publications were practice-based (a larger proportion of practitioners than academics read these types of titles) and between 61-86% of the sample rarely or never read a research journal, citing lack of time as the primary barrier (Jordan and Roland, 1999, 170). Rudland and Kemp (2004) reviewed the literature about reading habits of teachers. Their results showed that 60% of a sample of K-5 (primary school) teachers never read research journals. Echoing Horder's comments, Rudland and Kemp note concerns relating to "the extent to which respondents have an ease of access to the professional reading material" (Rudland and Kemp, 2004, 12) and conclude with

a suggestion to distribute "a gazette containing a variety of summaries and sources of recent and relevant publications" (Rudland and Kemp, 2004, 14).

These findings parallel those from previous work looking at research and practice in the LIS field. LIS practitioners tend to read and assign importance to publications other than scholarly journals (in which research is routinely reported). Blick (1984) and Robbins (1990) refer in general terms to the different reading habits of practitioners and researchers, and in Williams, McConnell and Wilson's (1997) study only a small proportion of the practitioners noted scholarly journals as an information source. More specifically, Ali (1985, 1986) found 'popular journals' were regularly scanned by practitioners, with the *Library Association Record* important for UK practitioners and *American Libraries* being the most frequently read title for US practitioners. This finding is repeated in studies by Tjourmas (1991) and Blake (1991), discussed by Rochester (1996). *American Libraries* was amongst the most important sources of information for the public library directors surveyed by Tjourmas and by the school library media coordinators in Blake's sample. Powell, Baker and Mika (2002) and Weaver (2002) report the same finding for *American Libraries*, with Weaver referring to two earlier lists, compiled in 1982 and 1999, which also included this title as the most important publication for practitioners. In her conclusion, Weaver suggests that since most of the librarians surveyed browse their reading material and report lack of time as a barrier to reading, a solution may be to publish "concise and accurate abstracts to articles" (Weaver, 2002, 5).

Similar findings have been found in studies of LIS practitioner reading habits in Australia and for German-language countries. Haddow's (2001) doctoral research found 80% of a small sample of Australian library practitioners reported reading newsletter-types of publications, compared with 62% who read scholarly journals. The most frequently read title was *inCite*, the newsletter distributed to members of the Australian Library and Information Association (ALIA). Schlogl and Stock (2008) conducted a reader survey of practitioners in German-language countries, finding *Bibliotheksdienst* the most frequently mentioned title. *inCite*, like *American Libraries* and the *Library Association Record* (now *Library + Information Update*) are distributed freely as part of the respective association's membership entitlements. *Bibliotheksdienst* is subject to a subscription fee which is cheaper for members than non-members of the German professional association. With the exception of *American Libraries* (published bimonthly), the titles are monthly publications.

The literature clearly indicates that the publications of library associations reach a wider practitioner audience than any of the scholarly titles in the LIS field. And it follows that they are potentially the most useful medium for the communication of research information. Moreover, it is the professional associations responsible for these publications that encourage, and are the primary sources of, professional development activities for their members. There is clearly an opportunity for professional association publications to play a major role in developing an evidence base for their practitioner members. The small study undertaken and reported here aimed to determine whether this role was evident in the content of two of these publications.

3 Methods

A content analysis of two professional association publications, both distributed freely to members on a monthly basis, was conducted to identify the extent and subject of research information included in the publications over the period of one year, 2008. Described as magazines, the publications examined were *Library + Information Update* (*Update*), from the Chartered Institute of Library and Information Professionals (CILIP) and *inCite*, from the Australian Library and Information Association (ALIA).

The content was examined by the author, using print copies of all issues published in 2008. An initial scan of the publications led to determining exclusions from the content for analysis. These were: calls for papers; conference announcements; events and activities notices; book reviews; and advertisements. The 'Media watch' column in *Update* was also excluded. As well as short pieces and articles, editorials, letters to the editor, obituaries and current awareness columns (for example, useful websites) were included for examination of research content. Each issue was read closely and research content was noted in a table developed for the study. A second examination of the issues was then conducted to ensure all relevant content had been identified and to check that categorization of content had been carried out consistently.

Two aspects of research content were coded for analysis. Firstly, the extent of information about research and secondly, the subject matter of the research. Extent of research content was identified as belonging to one of three categories, determined from the first close reading. These were:

- Brief mention - for example, a sentence noting a research report had been published or a reference to a study without further discussion.
- Substantive mention – for example, when the aims, very brief study findings, and/or research method were discussed.
- Expanded discussion – for example, an entire article reporting on a research project or providing extensive information about research design and findings.

Summary details of each instance of research content were noted. In some cases it was difficult to draw clear distinctions between the different categories for extent and as a result the coding tended to the generous. To provide comparative results for the publications, the extent of research content was calculated as a ratio (presented as a percentage) of the total pages published in the publication for 2008.

In most cases it was impossible to determine subject with any degree of certainty from the brief mentions of research, and by their nature these instances of research content do not provide information with which practitioners can make informed decisions. Therefore, only the substantive mention and expanded discussion categories of research content were analysed for subject. The categories for subject of research content were drawn directly from the content, resulting in a wide range of subjects being noted in the first examination. However, on second reading of the content a number of the subjects were so closely related and potentially indistinguishable that the original categories were merged. For

example, content about a survey of users to determine their resource needs was considered to be a component of the subject area of information behaviour, even though the terminology differed. Similarly, content relating to a survey of new graduates was deemed closely linked to content discussing the skills required by LIS practitioners.

4 Results

4.1 Extent of research content

In 2008, the issues in *Update* comprised a total of 510 pages and *inCite* published 418 pages. For both publications, the mentions of research in the brief and substantive categories greatly exceed the extent of research content in the expanded discussion category. The total research content of *Update* is almost double that of *inCite*, with a similar result when comparing research content in the expanded discussion category. These findings are presented in Table 1 below.

	Brief mention		Substantive mention		Expanded discussion		Total research content	
	No.	R(%)*	No.	R(%)	No.	R(%)	No.	R(%)
Update	39	7.6	34	6.7	9	1.8	82	16
inCite	17	4.0	18	4.3	3	0.7	38	9

*R (ratio) calculated as a percentage: number of content category instances to total number of pages published

Table 1: Extent of research content in *Update* and *inCite*

4.2 Subject of research content

A total of nine subject categories were determined after the second reading of the publications' content. They are listed below in Table 2. Given the small numbers involved in this analysis, ratios were not calculated. Instead, only the raw numbers are reported alongside each subject category.

The findings indicate there are subjects common to both publications that are more frequently discussed in their content. Two of the subjects, the 'information behaviour' and 'LIS profession' categories, were the product of merging categories at the time of the second examination. A major difference between the publications' research content can be seen in the management subject category, with *Update* carrying almost four times the content as *inCite* (based on a percentage of the two categories of research extent). 'External policy' research content is also higher in *Update*. This subject encompassed discussion such as copyright, knowledge economy, and government reviews. There is the potential for merging the categories 'collection management' and 'digital/digitizing collections', although the content tended to focus on the quite different aspects reflected in the category titles. Looking more closely at this research content it was found that e-books were discussed in only two instances, both in *Update*. 'Information technology' was used to code content that discussed library

management systems. While it might be expected that this subject would be the focus of more LIS research information, the content examined indicated that information technology was most often discussed in connection with one of the other subject categories. For example, content relating to technology skills of librarians was coded with the LIS profession category.

	Update		*inCite*	
	Substantive mention	Expanded discussion	Substantive mention	Expanded discussion
Information behaviour, user needs/services	9	2	5	2
Management	8		1	
LIS profession	6	2	7	
External policy	4		1	
Collection management	3	1	1	
Digital/digitizing collections	2	1	1	1
Community engagement	1		1	
Information literacy	1	2	1	
Information technology		1		
Total	34	9	18	3

Table 2: Subject of research content in *Update* and *inCite* (substantive mention and expanded discussion categories only)

5 Discussion

As an important source of professional reading material, the associations' publications have the potential to communicate research information to practitioners. Based on the findings of this study, this potential is not being realized. Research information comprises only a small proportion of the publications' content. *Update*, with 16% research content, includes almost twice the amount of research content as *inCite*, with 9%. However, nearly half of the research content in both publications was in the form of brief mentions of research. This content provides no real guidance for readers as it is typically a sentence, or two at most, referring to a project or publication or espousing the value of research. For both publications, the mentions of research in the brief and substantive categories greatly exceed the extent of research content in the expanded discussion category. The expanded discussions of research, of which there were few, were excellent and clearly targeted at a practitioner audience.

It is interesting to note which subjects of research are being published in *Update* and *inCite*; indicative perhaps of the importance placed on different aspects of the LIS profession. The most frequently discussed subject in both publications is 'information behaviour, user needs/services', core functions and foci for information services of all types. With the equal highest content of expanded discussion, albeit two instances in each publication, these pieces could provide valuable research information for practitioners. The findings are not dissimilar to the trends discussed by Rochester and Vakkari (2003) in which 'library and information services' was the most frequently published research topic in UK and Australian journals of LIS.

Another subject frequently discussed in both publications is the LIS profession. Although this topic is noted in previous content analyses of LIS journals (Rochester and Vakkari, 2003), it is not amongst the most frequently researched topics. The findings of this study beg the question; why is research information about the LIS profession published in such a relatively high proportion in the associations' publications? In terms of usefulness to practitioners, this research area would seem to be of limited relevance.

A marked difference between the research content of *Update* and *inCite* is in the extent of information published about management issues. *Update*, with four times the instances of research information on management topics than *inCite*, appears to be continuing a trend found by a 1998 study (Layzell Ward, reviewed by Rochester and Vakkari, 2003). This study found that 'administration and planning' became the most frequently researched topic in UK research literature in 1985 and again in 1995. The low proportion of research information about management in *inCite* suggests that a comment by Whyte in 1976 that library management is a "non-preoccupation of Australian librarians" (Whyte, 1976, 211) may hold true three decades later.

Comparatively little research information was published about 'digital/digitizing collections', a subject which is challenging many library services today. Also, 'information literacy', one of the most widely researched aspects of LIS, is rarely discussed in the associations' publications.

These comments should be considered as tentative conclusions only due to the range of factors likely to influence the content of the associations' publications. For example, copy for the publications may be just as much a product of the editors' focus as the motivation of authors submitting pieces for publication. Decisions on research content may also relate to the scholarly journals access provided by the associations. Members of CILIP and ALIA are entitled to free access to the LISA database and the ProQuest LIS journal subset, respectively. If members are accessing these sources of research information (the associations were contacted to request access data but were unable to provide it), then there is some logic to publishing content that is primarily current awareness pieces in the *Update* and *inCite* publications.

However, a decision to remain removed from the research communication process does not address the findings for practitioner reading habits and does not take into account the many frameworks available to improve the communication of research to practice. A systematic review on dissemination of research findings

(Wilson, Petticrew, Calnan and Nazareth, 2010) argues that theoretical frameworks are a useful tool for considering in research communication. One of these is based on the Persuasive Communication Matrix and includes:

...five variables that influence the impact of persuasive communications. These are the source of communication, the message to be communicated, the channels of communication, the characteristics of the audience (receiver), and the setting (destination) in which the communication is received.

(Wilson *et al*., 2010, para 22)

It is argued here that for effective communication of research information in LIS it is important to take note of previous research on practitioner reading habits, the best available evidence, and ensure that practitioners have the opportunity to read research information in the sources and through the channels that they are most likely to access. An interesting question arises from the recent move by both associations to deliver their publication, at least partly, online – that is, will the different communication channel affect practitioner reading habits and therefore demand reconsideration of the most effective means of communicating research to practice.

6 Limitations in the study

There are two important limitations that should be acknowledged in relation to this study in particular, and to content analysis as a methodology more generally. Firstly, the scale of the study is small and although a year's issues constitute extensive material to analyse, the results may be more representative if a longer publishing period was sampled. In addition, the restriction to two professional associations' publications for examination means that the results are limited to UK and Australian contexts only. *American Libraries*, as the publication noted in several studies about practitioner reading habits, would be the logical addition to the sample in any future study of the same type.

Secondly, and related to the research method applied, more than one coder for analyzing content is recommended. Content analysis is a time-consuming and exacting method, and a sole coder frequently experiences self-doubt and concerns about consistency.

While the aim of this study was limited to examining the content of the associations' publications, it would be useful to consider alternative sources of professional reading in future. The availability of blogs, wikis and other websites could be an important source of research information and a source that can be accessed when required; an important factor for practitioners who may turn to research when in need rather than habitually read research information.

7 Conclusion and implications for practice

It is important to appreciate the implications of failing to address, in a serious and sustained manner, the communication of research to practitioners. Library services are not under the same pressure as the health industry, for instance, where evidence based practice has a resonation that professionals and clients can relate to. As Cullen (cited by Powell, Baker & Mika, 2002, 51) comments, there are "no

matters of life and death" to motivate higher use of research by LIS practitioners. However, there is abundant professional literature to suggest that evaluating services and accountability to parent organisations and funders is an increasingly significant aspect of a practitioner's role, with both governments and library organisations involved (see for example, Department for Culture Media and Sport (2010) and Library Council of New South Wales (2008)). To meet these demands library practitioners will need to incorporate the best possible evidence into their decision-making and provide reliable evidence to their managers. Ideally, this evidence should be drawn from systematic data collection in their own context, based on proven data collection methods drawn from previous research. Without access to this information, practitioners face the prospect of developing (and possibly re-inventing) projects on an individual basis.

Previous studies indicate that the publications of library associations are read by more practitioners than any other title in the LIS literature and their potential as the most useful channel for communicating research information is important to harness. By including research information in these publications two barriers to research communication are addressed. Firstly, because the publications are received as a membership entitlement the physical access barrier is overcome. Secondly, authors writing about research for these publications presumably consider their reader audience and therefore deliver the information in a style that is appropriate, thereby addressing the cognitive barriers to accessing research information.

Library associations should consider including more research information in the form of substantive or expanded discussion in their publications. This is not a new or novel suggestion. In an editorial in 1999, Schwartz and Hernon note that a committee of the American Association of School Librarians was responsible for "preparing summaries of research of interest to the school library media community" (Schwartz and Hernon, 1999, 143). Currently, research summaries are included in the open access journal *Evidence Based Library & Information Practice*, with similar information about management research available online (at http://www.evidence-basedmanagement.com/). These are ready made sources that could be adapted for the associations' publications. In addition, requests for short pieces could be made to researchers working in areas with relevance to practitioners, ensuring that useful research content is included in the publications. Strategies that have been adopted in other fields might be effective, such as the regular publication of a two page article that discusses the latest evidence available on a specific topic in the newsletter publication of the Royal College of Nursing Australia.

In conclusion, there is a role for library associations to make research information more widely available to LIS practitioners through the publications that are most frequently read by them. This study shows that the research information content of these publications is relatively low and generally presented as a brief mention only. Substantial and expanded discussions of research in the publications provide both physical and cognitive access to research information, and it is from these that practitioners and their services will derive the greatest benefit.

References

Ali, S. N. (1985) Library science research: some results of its dissemination and utilization, *Libri* **35**(2), 151-162.

Ali, S. N. (1986) Attitudes and preferences of library practitioners in Illinois to channels for dissemination of research results, *College and Research Libraries*, **47**(2), 167-172.

Blick, A. R. (1984) Information science research versus the practitioner. *In:* Dietschmann, H. J. (ed.) *Representation and exchange of knowledge as a basis of information processes*. Amsterdam: North-Holland. 231-244.

Clapton, J. (2010) Library and information science practitioners writing for publication: Motivations, barriers and supports, *Library and Information Research*, **34**(106), 7-21.

Clayton, P. 1992. Bridging the gap: Research and practice in librarianship. In: Clayton, P. and McCaskie, R. (eds.) *Priorities for the Future: Proceedings of the First National Reference and Information Service Section Conference and the University, College and Research Libraries Section Workshop on Research.* Canberra, ACT: D. W. Thorpe. 73-76.

Department for Culture, Media and Sport (2010) *The modernisation review of public libraries: a policy statement*. URL: http://webarchive.nationalarchives.gov.uk/+/http://www.culture.gov.uk/images/consultation_responses/modernisation_review_public_libraries.pdf [accessed 16.11.10].

Fisher, W. (1999) When write is wrong: is all our professional literature on the same page? *Library Collections, Acquisitions, and Technical Services*, **23**(1), 61-72.

Haddow, G. (2001) *The diffusion of information retrieval research within librarianship: A communication framework.* PhD dissertation, University of Western Australia.

Haddow, G. and Klobas, J. E. (2004) Communication of research to practice in library and information science: Closing the gap, *Library & Information Science Research*, **26**(1), 29-43.

Harvey, R. (2001) Losing the quality battle in Australian education for librarianship, *Australian Library Journal* **50**(1), 15-22.

Horder, W. (2004) Reading and not reading in professional practice, *Qualitative Social Work*, **3**(3), 297-311.

Jordan, D.J. and Roland, M. (1999) An examination of differences between academics and practitioners in frequency of reading research and attitudes toward research, *Journal of Leisure Research*, **31**(2), 166-170.

Lang, M. (2002) On the dissemination of I.S. research findings into practice. *Proceedings of the Informing Science + IT Education Conference*, Cork. URL: http://informingscience.org/proceedings/IS2002Proceedings/papers/Lang102OnThe.pdf [accessed 16.11.10].

Library Council of New South Wales (2008) *Enriching communities: the value of public libraries in New South Wales*. Sydney, NSW: Library Council of New South Wales. URL: http://www.sl.nsw.gov.au/services/public_libraries/publications/docs/enriching_communities.pdf [accessed 16.11.10].

Lynam, P., Slater, M. and Walker, R. (1982) *Research and the practitioner: dissemination of research results within the library-information profession*, Aslib Occaional Publication. London: Aslib.

McKechnie, L., Julien, H. and Genuis, S. K. (2008) Communicating research findings to library and information science practitioners: A study of ISIC papers from 1996 to 2000, *Information Research* [online], **13**(4). URL: http://informationr.net/ir/13-4/paper375.html [accessed 15.01.11].

Montanelli, D. S. and Mak, C. (1988) Library practitioners' use of library literature. *Library Trends,* **36**(Spring), 765-783.

Peritz, B. C. (1981) Citation characteristics in library science: Some further results from a bibliometric survey, *Library Research*, **3**, 47-65.

Powell, R. R., Baker, L. M. and Mika, J. J. (2002) Library and information science practitioners and research, *Library and Information Science Research,* **24**, 49-72.

Robbins, J. B. (1990) Research in information service practice, *Library and Information Science Research*, **12**, 127-129.

Rochester, M. (1996) Professional communication through journal articles, *Australian Academic & Research Libraries*, **27**(3), 191-199.

Rochester, M. and Vakkari, P. (2003) *International library and information science research: a comparison of national trends*, IFLA Professional Reports, No. 82. URL: http://archive.ifla.org/VII/s24/pub/iflapr-82-e.pdf [accessed 16.11.10).

Rudland, N. and Kemp, C. (2004) The professional reading habits of teachers: Implications for student learning, *Australasian Journal of Special Education* **28**(1), 4-17.

Saracevic, T. and Perk, L. J. (1973) Ascertaining activities in a subject area through bibliometric analysis, *Journal of the American Society for Information Science*, **24**, 120-134.

Schlogl, C. and Stock, W. G. (2008) Practitioners and academics as authors and readers: the case of LIS journals, *Journal of Documentation*, **64**(5), 643-666.

Schwartz, C. and Hernon, P. (1999) Professional associations and LIS research, *Library & Information Science Research*, **21**(2), 141-151.

Stephenson, M. S. (1990) Teaching research methods in library and information studies programs, *Journal of Education for Library and Information Science*, **31**(1), 49-66.

Swigger, K. (1985) Institutional affiliations of authors of research articles, *Journal of Education for Library and Information Science*, **26**, 105-109.

Turner, K. J. (2002) Do information professionals use research published in LIS journals? *68th IFLA Council and General Conference*, Glasgow. URL: http://archive.ifla.org/IV/ifla68/papers/009-118e.pdf [accessed 16.11.10].

Waldhart, T. J. (1975) The impact of research on professional practice: a proposed communication innovation. *Information Revolution: Proceedings of the 38th ASIS Annual Meeting*, **12**, 26-27.

Weaver, S. M. (2002) The professional reading habits of American librarians, *68th IFLA Council and General Conference*. Glasgow. URL: http://archive.ifla.org/IV/ifla68/papers/166-118e.pdf [accessed 16.11.10].

Whyte, J. P. (1976) Issues in Australian librarianship: an examination of the *Australian Library Journal* and the Proceedings of the Conferences of the Library Association of Australia, 1951-1972. *In:* Rayward, W.B. (ed.) *The variety of librarianship: Essays in honour of John Wallace Metcalfe*. Sydney: Library Association of Australia. 190-217.

Williams, D., McConnell, M. and Wilson K. (1997) *Is there any knowledge out there? The impact of research information on practitioners*. British Library Research and Innovation Report **62**. London: British Library.

Williamson, K. (1999) The role of research in professional practice: with reference to the assessment of the information and library needs of older people, *Australasian Public Libraries and Information Services*, **12**(4), 145-153.

Wilson, P.M., Petticrew, M., Calnan, M.W. and Nazareth, I. (2010) Disseminating research findings: what should researchers do? A systematic scoping review of conceptual frameworks, *Implementation Science*, **5(**91). URL: http://www.implementationscience.com/content/5/1/91 [accessed 21.12.10].

Open access and copyright

CORNELIUS, Ian. *Information strategies and policies*. London: Facet Publishing. 2010.

209 pages. ISBN 978 1 85604 677 0. £44.95.

This is a useful publication and well worth perusal although it does not really do what it says on the tin. Those expecting a study of actual information policies will be disappointed as this is precisely what the book does not set out to do. As the author writes, "[t]his is not a description or explanation of what policies or regulations currently are, or should be, in any jurisdiction"', rather it is a "discussion of the issues that affect the determination of what policy should be". Discussion is the essential foundation of the text and within the discussion of theoretical issues are many practical examples to illustrate the issues raised.

There is no real process of definition of what information policies and strategies actually are. The nearest to a definition appears on page 9:"information policy to be about any means by which the generation, distribution and use of information is regulated".

Rather the text focuses principally round issues which relate to information policy making which are primarily the role of governmental and non governmental agencies, globalisation, the public sphere, information rights, censorship and freedom of the press, data protection, freedom of information, and IPR issues. However, that most annoying of red herrings, IT, does not get much discussion. Many apparent information policies are actually IT policies and as expert commentators have pointed out governments are happier to address IT policies rather than information policies because they find the issues easier to grasp and address than the messy and shifting world of information. One of the key issues is who creates leads and controls information policy and here government has a key role. The means by which governments generate consume, generate and control information is thoughtfully discussed. An important issue is who information policy is for. Is it to make government more efficient, or should information policies favour wealth generators to promote economic expansion? It is not just about the rights of the citizen. As the author points out, one of the functions of intellectual property rights is to make money, not guarantee liberal consensuses. As he points out, in the West information policies start from a perspective of a liberal consensus, something which does not operate in many parts of the world as a recent Nobel prize-winner is painfully aware. I particularly liked the discussion on censorship which discusses the practical difficulties that lie behind an admirable principle.

There is also a useful review of some theoretical issues, notably Habermas' concept of the public sphere which informs modern public debate and Ann Bransconb's ideas about information rights.

The bibliography, as the author himself acknowledges, is brief and mainly supports the discursive nature of the text. References in the text are also sparse. If no examples of information policy are discussed in the text, a few references for the reader to follow up would have been useful.

If the bibliography is brief then the index is a model of comprehensiveness and it is good to see that corner cutting here has been avoided.

In a relatively short text of 209 pages, obviously no issue can be dealt with in detail, but those looking for an overview of key issues concerning information rights, censorship and freedom of the press, data protection, freedom of information, and IPR issues will find this a helpful read.

John Crawford

PETERS, Diane E. ***International students and academic libraries: A survey of issues and annotated bibliography.*** **Lanham: Scarecrow Press. 2010.**

218 pages. ISBN 978-0-8108-7429-9. £34.95.

Peters' book is well structured in that it starts with an extensive chapter outlining the issues featured in literature on international students in the context of academic libraries. This chapter provides the reader with context and background on the subject, followed by a thematic annotated bibliography of 591 references dating from 1940 – 2008. One can navigate around the bibliography by theme, or by an extensive author and subject index provided at the end of the book.

Themes covered in the book are wide-ranging and only a few can be touched on in this review. Issues faced by international students are included such as the learning of 'standard' English without relevant cultural context and the challenges students face when applying this within a North American context. Provision of support to help students is discussed including doing a needs assessment before induction to help pitch introductory library sessions and avoiding using jargon. Also covered are the importance of marketing services relevant to international students and providing appropriate staff training to ensure staff are culturally aware.

The introductory chapter and the description provided on the back cover emphasise increasing globalisation and the impact this has on higher education. The focus is on the efforts by North American universities to recruit international students, and the consequences this has for academic libraries. Whilst accepting the focus on the book is on North America, with the internationalisation of higher education it is a shame the book's content is so much on North American universities, with only 10% of references being outside North America. This is a missed opportunity, particularly given that the book acknowledges Australia has the largest proportion of international students of any country in the world, and is producing a lot of excellent accompanying literature.

The idea of peer support is addressed such as getting international students to translate library literature into other languages and having peer counselling or instruction to help students learn from the experiences of previous students. Terminology used in the book is North American in its focus, for example, 'bibliographic instruction' rather than 'information literacy' which for a British audience makes it feel less relevant. Nine pages are given in the bibliography to the theme 'Computers and the internet', yet this is hardly mentioned in the introductory chapter. Peters refers to the increasing importance of virtual learning environments, but these are well established so one wonders about the currency of the book. Much of the literature is from the 1980s and early 1990s, yet with internet developments and thus increasing opportunities for technological developments and cultural awareness, one would expect a greater proportion of the book to cover this key area.

Given the focus on North American libraries, it is intriguing to see in the concluding remarks of the introductory chapter that great detail is given about SCONUL research from 2007, with no mention of American literature. From the viewpoint of a British reader, the attention given to that particular research is very

welcome, and a shame that one is left with the feeling that the book is not of much relevance to librarians outside North America.

Suzie Kitchin
Library Liaison Adviser
Northumbria University
suzie.kitchin@northumbria.ac.uk

KHAN, Ayub. *Better by design: an introduction to planning and designing a new library building.* London: Facet Publishing. 2009.

xix,195 pages. ISBN 978-1-85604-650-3. £44.95.

The author, Ayub Khan is a professional librarian who has previously worked in school, public and college libraries, and currently works in local government. He is Head of Library and Information Service (Strategy) with Warwickshire County council where his main roles include service, quality and design, strategic collection management and setting standards. He has been responsible for several refurbishment projects and now shares his knowledge and experiences of planning and designing new library buildings in this book.

The book is aimed at all library sectors including educational, public and corporate, and is useful to all those involved in either refurbishing or re-designing a library, or designing a completely new library building.

I found the book to be very informative, both as a professional librarian who has been responsible for moving and redesigning corporate libraries, and also as a librarian working in an architects' practice that has designed many libraries. I purchased a copy of this book for one of our offices with a project to design a new library, but had not read it until recently. I am glad I did.

Designing a library is not something librarians do every day and the pressure is on to get it right, so assistance from someone who has been through the process is greatly appreciated.

The book covers all the required elements of planning and designing a library effectively and in just the right amount of depth. The extensive bibliography, with websites, allows the reader to do his or her own further research on specific areas of interest.

The chapter headings are

- twenty-first century libraries
- developing a business case
- project management
- the design/project team
- selecting an architect
- partnership and community engagement
- the design brief
- design quality
- space planning and access
- occupancy and post-occupancy evaluation
- building libraries for the future.

There are many useful checklists, examples and tables that make this book very practical. It is set out in such a way as to aid librarians in getting to grips with the

very complex task of specifying and designing a library, from the very beginning to completion, including awareness of funding, contracts and legal requirements.There is a helpful summary of the major points at the end of each chapter.

The chapter on '21st century libraries' highlights the changes that have developed and continue to influence the design of libraries in the modern world, in the way that the user and technology and the need for flexibility in terms of space and technology are now foremost in a designers' thinking. I found the chapter on developing a business case very informative, and the chapter on project management was an excellent reminder for managing any type of project. The appendices include a very useful 'Top ten tips' that are clear and concise, and distil real experiences into simple points to remember.

This book is both practical and accessible and I would recommend this to any librarians who have been given the responsibility for a major refurbishment project or the design of a new library. I would also recommend it to any architects involved in designing a library to help them understand the project from a librarians perspective, and to better appreciate the extent of their clients' experience, knowledge and expectations.

Christine Macleod
Knowledge Centre Manager
RMJM Ltd (Architects and Masterplanners)
c.macleod@rmjm.com

SECKER, Jane. *Copyright and E-Learning: A guide for practitioners.* London: Facet Publishing. 2010.

204 pages. ISBN 978-1-85604-665-7. £44.95.

E-Learning is a large part of any educational experience, whether it's just recording lectures and putting them up on a Virtual Learning Environment (VLE), digitizing reading lists or embedding multimedia resources into lessons. We expect a wide range of resources to be made available, but all of these resources fall under various copyright licenses and restrictions, and for those of us whose job it is to worry about these things, it can seem like we're walking through a minefield of possible copyright infringements. This book is very clearly aimed at people who work with copyright and electronic resources in a practical, educational setting, many of whom can end up being copyright advisors almost by default. Library staff, administrators, educational technologists and teachers don't want to be the person "inhibiting exciting new developments" [Secker, p xii], but they are the ones being expected to try and stay on top of ever evolving copyright rules whilst offering a wide range of resources and keeping them all nice and legal. Which is where this book comes in.

There is a detailed introduction explaining exactly what Copyright and E-Learning is aiming to cover, as well as short introductory paragraphs to every chapter. The book is divided into logical sections, starting off with some background about copyright and e-resources including the different copyright laws and agencies in various countries, and how that can affect not only what we can use, but how and where. Secker also looks at how creative commons and open source materials can be used; she then moves on to digitizing readings for a VLE, using images, using content from websites, plus born-digital material, lecture casting, web 2.0 learning resources and social media as an educational tool. The more varied the resources, the more numerous the potential copyright pitfalls that can occur unless there is someone paying attention, so the last chapter usefully focuses on staff training.

I was particularly interested in chapter 2: Digitizing published content for delivery in the VLE, as it pertains to my own work in a university library. This chapter also looks at the pros and cons of the blanket CLA scanning licence for Higher Education Institutions. I would perhaps have liked a bit more information about the CLA's auditing process for holders of the scanning licence, though it is touched upon in chapter 6: Copyright training for staff later on. Chapter 2 also looks at the results of a survey carried out by Jane Secker and June Hedges in 2009, which provided a "snapshot of activity relating to the digitization of core readings in higher education in the UK" [Secker, p44] and there are some useful case studies. It was interesting to compare the resources, workflow and staffing requirements etc. of other universities with my own experiences.

A key point the author makes in the conclusion, and which I think is very important is the need to tackle copyright and IPR upfront, as part of staff training, teaching, and when developing e-resources. Becoming familiar with copyright early on, even at a basic level, can save a lot of problems later.

The language and structure of this book is clear and concise, everything is set out clearly from the start and the case studies throughout are useful and relevant; you know what to expect from each section. This is very helpful when thinking about something as potentially intimidating or complicated as copyright, and means you can just skip to a particular section, for example on web copyright if someone asks you a question about using screen grabs. This is certainly a very worthwhile read for those of us working in education right now, and I think many will find it useful. There is a glossary of terms and a list of further resources at the back, which I may well dip back into when I need to check something copyright related in the future.

Bekky Randall
The Library
Goldsmiths, University of London
r.randall@gold.ac.uk