

A Collaborative Quest - Building Information Literacy Initiatives at the University of Otago

Kat Turner and Thelma Fisher, University of Otago Library

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Abstract

The purpose of this paper is to give an overview of the developing Information Literacy (IL) environment at the University of Otago Library since 1993. Several IL initiatives are highlighted to indicate differing ways to embed IL skills into the curriculum. Various issues affecting the successful integration of IL will be discussed in terms of future planning at the University of Otago.

Introduction

The present age is dominated by a rapidly increasing amount of information that manifests itself in a variety of formats. University library clientele require IL skills to cope effectively with the wealth of information at their disposal, both during their university career, and in the years that follow.

The University of Otago has a roll of over 17,000 students, comprising those in Dunedin, Christchurch, Wellington and Auckland, and those off-campus nationally and internationally. The campus in Dunedin is serviced by five main Library units – Central, Hocken, Law, Medical/Dental, and Science. Each of the Library units has a designated Reference Librarian with responsibilities for the delivery of reference services and IL programmes to that Library's core staff and student clientele.

The University of Otago Library is dedicated to the development of IL initiatives; its Mission Statement directs Library staff to “assist in providing access to information” and “training in information literacy skills” for its users. The University of Otago Library defines an Information Literate individual as one who “has acquired the lifelong ability to recognise when information is needed and to locate, evaluate and use it effectively.”¹

The following paper will outline the chronology of IL developments at the University of Otago to date, before examining those issues that underpin the successful implementation of IL programmes in the university context. A set of case scenarios taken from current Library IL practice will then be presented, followed by a consideration of future ventures that will be addressed as part of the Library's efforts to develop the IL skills of the university's clientele.

¹ This definition was adapted from the definition supplied at the ALA (American Library Association) Presidential Committee on Information Literacy, 1989.

Chronology

An awareness of Information Literacy (IL) and its importance arose in the University of Otago Library in the early 1990s. The Library's senior staff were specifically encouraged by Michael Wooliscroft, University Librarian, to read a book entitled *Information Literacy: Revolution in the Library*, by Patricia Senn Breivik and E. Gordon Gee, as a way of stimulating thought for initiatives in this area. The authors:

- document the role of information literacy in preparing students for lifelong learning;
- set out to convince academic communities that the library is a key resource for the achievement of an institution's instruction and research objectives;
- guide librarians in their efforts to strive for elevated credibility and status in the academic setting.

1997

In July 1997, Michael Wooliscroft, Immediate Past President of the Commonwealth Library Association (COMLA) presented a paper, "From Library User Education to Information Literacy: Some Issues Arising in this Evolutionary Process" at the COMLA Seminar, Gabarone, Botswana. It explored the various definitions of IL, its evolution from library user education, and its role as "a signal skill for lifelong and flexible learning situations" (p.1). This paper was considered in-house by the Library's Staff Committee, and staff were encouraged to read it in order to obtain a summarised understanding of the issues.

1998 - 1999

In 1998 benchmarking was targeted as a strategic process of benefit to the University of Otago Library, and User Education was identified as one of the areas that would stand to gain from the development of measurable standards of excellence derived from benchmarking procedures. Dr Phil Meade (Deputy Vice-Chancellor - Academic) provided not only support for this endeavour by way of a supplementary grant, but also advice and expertise. Offers from suitable benchmarking partners were invited via the Council of Australian University Librarians' (CAUL) list-serv, and responses were measured against established criteria that considered:

- the standing and reputation of the institution in the area of User Education;
- the institution's contextual parallels with the University of Otago Library, and its subsequent ability to be compared effectively.

The University of Queensland (UQ) was selected as the partner for the User Education benchmarking project, and quantitative and qualitative methods of data collection and analysis were employed to identify student perceptions of existing User Education activities. These methods comprised:

- a written survey;
- focus groups;
- a visit by University of Otago Library staff in August 1999 to explore UQ procedures *in situ*.

The results of the benchmarking study stimulated interest in, and enthusiasm for, IL programmes, and were invaluable for guiding future initiatives in this area.

Throughout 1999 three Assistant Librarians with teaching responsibilities from the Medical, Science and Law Libraries undertook a Postgraduate Certificate in Tertiary Teaching, offered by the University of Otago's Higher Education Development Centre (HEDC). This provided a theoretical and thought-provoking approach to teaching and learning, and encouraged participants to explore the education literature and apply it to the Library context. Study for the certificate encouraged:

- the establishment of a theoretical approach to teaching and learning endeavors;
- self appraisal of personal approaches to teaching, and how these approaches might facilitate student learning;
- the cultivation of collegiality with academic staff undertaking the Postgraduate Certificate or Diploma in Tertiary Teaching.

In December 1999 four Library staff attended *Concept, Challenge and Conundrum: From Information Skills to Information Literacy*, the 4th Information Literacy Conference in Adelaide, hosted by the University of South Australia under the leadership of Alan Bundy with assistance from Irene Dorskatsch. Judith Peacock, Information Literacy Co-ordinator, Queensland University of Technology (QUT), presented an impressive and inspiring paper at this conference, and was subsequently invited to speak at the *COMLA 2000 Seminar, User Education for User Empowerment*, in Christchurch, and visit the University of Otago Library to workshop with Library staff on developing IL initiatives.

2000

In January 2000, the Library and Information Association of New Zealand Aotearoa (LIANZA) Summer School was held in Gore, which included presentations by Vicki Darling (Medical Library) and Pat Kittelson (Science Library). This provided a welcome opportunity for the articulation of ideas prior to the *COMLA 2000 Seminar*, for which intensive planning was already underway.

An initiative that emerged from the benchmarking project of 1999 was the establishment in 2000 of the University of Otago Library IL Core Group. The group aimed to facilitate staff awareness of IL initiatives, and the application these initiatives could have within the institution. Its first task was to organise a series of Journal Club meetings for staff at Assistant Librarian level and above, with the aim of stimulating discussion of IL viewpoints presented in the literature, and their applicability to the local situation. A wide representation of the Library's professional staff participated to varying degrees, including the University and Deputy University Librarians and Heads of Departments.

In May 2000, University of Otago IL efforts to date and future plans in the pipeline were documented by Vicki Darling and Rosalind Harwood-Stevenson (Reference Librarian, University of Otago Library) in a paper entitled "The Quest for Information Literacy - One University's Journey."

The *Inaugural International Lifelong Learning Conference* was held in Yeppoon, Queensland in July 2000, and three Library staff attended. The conference was organised into four concurrent strands:

- Models for teaching lifelong learning
- Information Literacy
- Using lifelong learning skills

- Creative and critical thinking

Andrew Higgins from the University of Otago's HEDC presented a paper entitled "Linking Lifelong Learning Outcomes to University Strategic Goals through Instructional Design." This conference provided stimulation for the ongoing development and understanding of IL. Several key issues were identified, including the need for:

- greater collaboration between academics and support services, to benefit student learning;
- students to develop lifelong learning skills, and the challenge of embedding this into the curriculum;
- assessment, and how to prove to stakeholders that results are being achieved.

In August 2000, Vicki Darling was the sole Australasian representative chosen to attend the ACRL² Institute of Information Literacy, *Immersion '00*, in Seattle, USA. This took the form of an intensive five day workshop that focussed on strategies for advancing IL within an institution, and revealed that all libraries sought to address similar sets of issues:

- how do we educate staff about IL?
- how is IL different from former practices?
- how can relationships between the Library and academic staff be strengthened?
- what is the role of IL standards?

In September 2000, the Council of Australian University Librarians (CAUL) conducted an *Information Literacy Standards Workshop* in Adelaide, Australia, in which Michael Wooliscroft and Pat Kittelson participated. The workshop examined the ACRL IL standards and adapted them for an Australasian setting. These revised standards were adopted as the CAUL IL standards and endorsed in October 2000.

The University of Otago Library funded an IL workshop in September, facilitated by June Laird who was actively involved in Lincoln University's IL programmes. The first workshop focussed on policy and strategic directives employed by Lincoln, and the second the practical aspects of delivering IL programmes. Since 1991 Lincoln University has led the way in introducing core papers in Professional Studies that cover key IL skills for a tertiary student.

The *COMLA 2000 Seminar* was held in Christchurch in October, following the LIANZA conference. Convened by Michael Wooliscroft, with considerable assistance and substantial contributions provided by Pat Kittelson and Vicki Darling, the Seminar theme was *User Education for User Empowerment*³, which provided a view of User Education and IL initiatives in different institutions across different Commonwealth countries.

Earlier initiatives of benchmarking User Education, Journal Club meetings and IL conferences attended in 1999-2000 provided a foundation that enabled staff to reap rewards from the two day workshop for Library staff which followed the 2000

² Association of College and Research Libraries.

³ The term 'User Education' was adopted as more recognisable for a number of Commonwealth participants than 'Information Literacy'.

LIANZA and COMLA conferences. Professor Peter Underwood⁴ and Judith Peacock were invited to share their IL expertise and experiences, and to meet with senior University administrative staff to promote the importance of IL in the academic community.

In preparation for these visits, in October 2000 an internal audit of Library teaching activities was undertaken by Elizabeth Tinker, User Education Librarian. Library staff were asked to contribute examples of lesson plans at 100-300 level, including objectives, learning outcomes, content, activities, assessment and resources. An IL matrix of teaching strategies at each level was subsequently developed. It became evident that learning outcomes were not always level specific but rather context and subject specific, and often overlapped. Assessment was also difficult to incorporate as many teaching sessions were not integrated with course assignments.

2001

In January 2001 a major review of IL initiatives took place. As a result the IL Core Group considered an IL Action Plan, resource needs, which IL standards to adopt, IL models and the establishment of an IL Co-ordinator position. The IL Action Plan covered five areas:

- an IL Framework;
- a University of Otago Library Teaching and Learning Plan;
- use of EduLib as a Library staff professional development programme;
- specific IL projects; and
- community outreach.

An important realisation with resourcing such initiatives was the need for an IL Co-ordinator with a system-wide overview. This had been signalled in the Library's Annual Report since 1999. Although university funding was sought for a fulltime permanent position the case was unsuccessful, and it was decided to second a staff member to a 0.5 fixed term position for one year, commencing in July 2001.

The Australian and New Zealand Institute for IL (ANZIIL) was established following the CAUL IL Standards workshop in Adelaide 2000. ANZIIL seeks to identify, facilitate, foster and support best practice IL education through professional development, promotion, marketing and advocacy, and research.⁵ The University of South Australia is hosting the institute for the first three years, with Irene Doskatsch as Chair. New Zealand, through CONZUL⁶, has two representatives in Vicki Darling, University of Otago Library, and Theresa Graham, University of Canterbury Library.

Development of an IL framework began following consultation between IL Core Group members and HEDC. The framework was intended to facilitate the assessment of the IL individual, and the embedding of IL in the design and teaching of IL projects. It was based on three composite parts:

- a definition of IL;
- IL standards; and
- IL teaching and learning resources.

⁴ Peter Underwood is Professor of Librarianship at the University of Cape Town and Director of South Africa's Information Literacy Project.

⁵ Irene Doskatsch, "What is ANZIIL?" *Library Life* 266 (April 2002): 28.

⁶ Council of New Zealand University Librarians.

With a definition of IL already established at Otago in 2000 the work of reviewing current standards began. Michael Wooliscroft and Pat Kittelson had attended the CAUL IL Standards workshop where ACRL standards were amended for Australasian application in academic libraries. Standards from SUNY, ACRL, CAUL, Wisconsin and Peirce College were compared in detail by University of Otago Library staff. SUNY standards, re-interpreted for Otago, were finally adopted. Six objectives with related performance indicators were developed and published on the Library's website in November 2001 for staff and students.⁷

Smaller IL projects related to the IL framework were developed during late 2001. Effective use of three major information resources, the Library catalogue, databases, and the internet, was facilitated by involving the expertise of professional and paraprofessional Library staff. Printed guides and booklets, and web tutorials have been developed and can be used as resources in the continuing development of the IL framework.

A review of the University of Otago's *Teaching and Learning Plan* 1996 began in late 2001 and an exposure draft is not yet publicly available. The document is eagerly awaited as it will influence the direction and development of the Library's Teaching and Learning Plan, and the integration of future IL initiatives.

2002

During 2002 the IL Co-ordinator worked with a Senior Lecturer from HEDC, Philippa Bright, to redevelop the University of Hull's EduLib package for Otago use. Michael Wooliscroft became aware of the applicability of this package, previously identified by Judith Peacock (QUT), during his visit to QUT in April 2000. From April to May Library staff with teaching and/or training responsibilities attended six half-day workshops. Topics included understanding learning and teaching, planning for learning and teaching, assessment and feedback. Follow-up professional reading was required between sessions for motivation and reflection. This university-funded staff training was a significant part of the IL Action Plan.

The latest initiative has been the Library's support for two staff to attend the June 2002 biennial *International Lifelong Learning Conference* at Yeppoon, hosted by Central Queensland University.

Issues underpinning the successful implementation of IL programmes

There has been a heightened level of collaboration, between Library staff and with academics, following the development of IL initiatives since 1999. Yet despite increasing contact with departments and involvement with academic staff and students, there is still a sense of adhoc development.

The literature elucidates a number of factors that are critical to the successful implementation and integration of IL programmes within the tertiary teaching context. These factors also emerge when current IL initiatives at the University of Otago

⁷ <http://www.library.otago.ac.nz/services/tandl.html>

Library are examined, and will be explored in the following section as recurrent themes that can acutely affect the impact and success of IL programmes.

Commitment

Senior management staff in the Library and across the University of Otago administration exhibit strong support for IL initiatives, not only within the institution itself, but also across the wider regional, national, and international library communities. This commitment is made manifest by support and funding for:

- the formulation and funding of the IL Co-ordinator role;
- a University of Otago Library representative (Vicki Darling) on the Executive Committee and Professional Development Working Party of ANZIIL;
- attendance at, and contribution to, local and international conferences and workshops, to engender staff awareness and professional development relating to IL;
- visits from distinguished figures to promote IL to academic, administrative and Library staff across the University;
- the EduLib package, and staff undertaking the Postgraduate Certificate in Tertiary Teaching, to improve the skills and capabilities of teaching librarians.

Collaboration and Collegiality

The successful implementation of IL programmes is most likely to occur when stakeholders (students and staff – academic, administrative and library) recognise that IL is an integral component of the educative process, and requires the co-operative input and efforts of many groups. Various collaborative relationships are essential:

Intra-Library

The EduLib workshops illuminated the importance of alliances among teaching librarians, with the following identified as key strategies:

- sharing of teaching resources to promote a degree of consistency across the different Library branches, and to avoid unnecessary duplication;
- team-teaching and peer review to obtain feedback and effect improvements in teaching methods and styles;
- the continuing fundamental role of the IL Co-ordinator in facilitating a unified approach to IL initiatives.

Library and academic staff

Visible support and enthusiasm from academic staff for IL programmes is critical if such programmes are to be recognised as an essential component of students' learning processes. Such collaborative support from academic departments is indicated by:

- the provision of resources (space, computer hardware and software, technical assistance, and time taken from the lecture schedule) for classes to develop IL skills;
- academic staff attending such classes with the students;
- the use of assessment to encourage student participation, and provide feedback on students' development of IL skills.

Library staff may find it difficult to make initial inroads however, as academic staff have formerly been somewhat reluctant to devolve teaching and assessment responsibilities to librarians. A pilot project can be an effective way to build acceptance and academic credibility, and convince academic staff of the value of IL skills development. The implementation of a single IL programme can stimulate interest among the academic staff of that department, with the result that more programmes are introduced.

Library and other campus services

Library staff work with other departments across campus to promote IL initiatives through the sharing of resources and ideas, and the strengthening of staff teaching skills. Such collaboration includes:

- Information Technology Services (ITS) providing expert training in software programmes such as Blackboard and Microsoft Office Powerpoint to enable Library staff to embrace technology in their delivery of IL programmes;
- HEDC (traditionally the preserve of academic rather than general staff) instructing Library staff in the Postgraduate Certificate in Tertiary Teaching and the EduLib package. Philippa Bright displayed special vision and leadership as the EduLib co-facilitator;
- a Library staff member appointed to the Committee for the Advancement of Learning and Teaching (CALT), which comprises representatives from other university departments including HEDC.

Institutional collegiality is specifically endorsed in the Division of Information Services' Service Manifesto, which directs Library and ITS staff to work in partnership and collaboration with staff in other areas across the university, and to exhibit a commitment "to give best advice and services to all members of the university - both staff and students."

Communication

For collaboration to occur, effective communication between the stakeholders involved is imperative. To this end, the IL objectives and related performance indicators developed and endorsed by the University of Otago Library were launched on the Library website in November 2001.⁸ This resource enables academic and Library staff to design teaching content that is informed by IL objectives, and gives students the capacity to measure their abilities against established IL standards.

In addition to this, Library staff engage in academic outreach wherever possible to promote awareness of IL initiatives and their value. This may include:

- emailed updates and offers of teaching sessions;
- classes in IL skills for academic staff;
- regular columns in the University of Otago's *Staff Bulletin*;
- establishment of a Library display at the annual Support Fair for New Academics;
- the production and dissemination of Library information brochures and user guides;
- Library staff attending academic board meetings.

⁸ <http://www.library.otago.ac.nz/services/tandl.html>

Curriculum

Students most effectively acquire IL skills when IL programmes are embedded into the curriculum, rather than provided as an optional extra to curricular studies.⁹ If students can learn IL skills by applying them to an immediate and subject-relevant context, they are better able to appreciate the value and relevance of such skills to their learning requirements.

The importance of an IL programme is further enhanced if it is assessed, and counts in some way towards the total grade for a paper. Significant collaboration with academic staff is again required, and may take the form of:

- lab and/or lecture time being made available for IL teaching components;
- academic staff working closely with Library staff to devise appropriate assessment mechanisms, mark work, and provide evaluative feedback to the students.

Lifelong learning skills now feature prominently in the policy statements of many tertiary institutions. The University of Otago *Teaching and Learning Plan* states that “Quality learning promotes the desire for lifelong learning and improves the ability of the student to engage in lifelong learning.”¹⁰ The attainment of such skills depends fundamentally on the successful development of IL skills, and their transferability to the workplace and the community. The University of Otago’s Committee on University Academic Programmes has set guidelines for the establishment of a graduate profile for each programme. Lifelong learning is included as a generic graduate attribute.

As a way of facilitating the development of lifelong learning skills, many tertiary institutions are now developing flexible learning initiatives that allow for “the adoption of a range of learning strategies in a variety of learning environments to cater for differences in learning styles, learning interests and needs, and for variations in learning opportunities.”¹¹ Flexible learning enables students to learn at a self-directed time, place and pace. For maximum effect, IL programmes must be embedded in the curriculum in terms of content, level and delivery. For example, if a course is taught using supplementary resources such as the Blackboard environment to facilitate flexible learning, the IL component of that course can be presented in the same flexible learning environment.

Cumulative

⁹ Christine Susan Bruce, “Information Literacy: A Framework for Higher Education,” *The Australian Library Journal* 44, no. 3 (August 1995): 164; Rigmor George, Holly McCausland, Dale Wache and Irene Dorskatsch, “Information Literacy - an Institution-wide Strategy,” *Australian Academic & Research Libraries* (December 2001): 278; Michael Wooliscroft, “From Library User Education to Information Literacy: Some Issues Arising in this Evolutionary Process,” presented at *Commonwealth Library Association (COMLA) Seminar* (July 1997): 18.

¹⁰ University of Otago, *Teaching and Learning Plan* (1996): 2. This document is currently being reviewed and updated by CALT.

¹¹ Andrew Higgins, “Linking Lifelong Learning Outcomes to University Strategic Goals through Instructional Design,” presented at the *Inaugural International Lifelong Learning Conference* (July 17-19 2000): 105.

Lincoln University's core Professional Studies paper complies with the model of all students working to acquire cross-disciplinary skills as a way of avoiding skill duplication whilst acquiring a skill base. However the alternative perspective is that IL skills should be embedded in each context specific learning situation and that skill repetition is part of increasing mastery for lifelong learning.¹² As Bruce warns, "It is the cumulative experience from a range of subjects and learning experiences that creates the information literate person."¹³

IL skills can be cumulative across levels of study and transferable across disciplines provided they are contextualised. There is a need for Library staff to maintain contact with students throughout their university life; it is not sufficient to introduce students to IL skills using one isolated session with no means for follow-up or consolidation.

Case Scenarios

Using examples taken from current practice to illustrate the issues explored above, University of Otago Library IL initiatives in particular areas are presented in the following section as case scenarios.

Study Guide¹⁴

The recognition of a common study skills need in a large group of distance students prompted action by three University of Otago staff in 2000. The Sports Studies Administrator had been fielding basic study skills questions similar to those asked of the Remote Services Librarian, and the Academic Director of the Student Learning Centre suggested the value of a study skills booklet to address this need. Following collaboration a multi-disciplinary *Study Guide* was born.

The logistics of writing, designing and publishing this work took considerable time and energy. As no extra time or funding was available for preparation, writing the guide took place alongside other work. Academic departments were approached for publishing funding but all declined, with some having their own equivalent guide. A CALT Initiative Improvement Grant was secured as one-off funding. Debate arose over online versus print publications but due to time and cost constraints a print run of 1500 was decided upon as the best option.

The target audience was students enrolled in undergraduate and some 400 level distance papers at Dunedin, Christchurch, Wellington and Auckland campuses. This included those returning to study after an absence of many years and those who lacked peer-support.

The Remote Services Librarian distributed the *Study Guide* to departments for inclusion in enrolment packs.

Accolades arrived quickly from students and academic staff. Feedback centred on the clear, simple, logical presentation of each study skill.

¹² Rigmor et al., *op cit.*

¹³ Bruce, *op cit.*, p.164.

¹⁴ Student Learning Centre, University of Otago, *Study Guide: Strategies for Effective Learning*, 2000.

For 2002 the idea of a revised print run lasting three years was proposed but web clips and links quickly date such a publication. Departments were now seeking copies for on and off campus students, so content was altered to suit all undergraduate students studying at Otago. An alternative source of funding from the University of Otago's Marketing & Communications Division enabled a print run of 5000. The target audience this time was new Otago undergraduate students at any level, and the *Study Guide* was included free in enrolment packs. The surplus is available for sale on campus with any profit going towards the next edition. A further project initiative enabled an online version of the *Study Guide* to be produced.¹⁵ This has increased availability for all staff and students.

This initiative highlights ongoing issues concerning the importance of resourcing, promotion, and needs analysis. It also reflects well on staff collaboration, and how IL skills and strategies can be delivered in conjunction with flexible learning programmes, and usefully introduced as part of the lifelong learning process.

Commerce Division

In order to spread the growing load of the User Education Librarian, in 1999 several subject areas were devolved to other Assistant Librarians. A new Library staff member with previous IL experience as a faculty librarian in Australia undertook support of the Commerce subject area.

Previous Library involvement with the School of Business had included the provision of library tours to facilitate students' physical orientation with building services and collections. The librarian encouraged increased contact with academics, and working with student needs prior to assignments. As a result of this offer, academics became aware of further Library resources to support them professionally, their papers and their students. The librarian gained acceptance and academic credibility and so did the Library.

Following a meeting with the newly appointed Assistant Vice-Chancellor - Commerce, who was very receptive to new initiatives, the librarian was granted observer status at Commerce Divisional Board meetings, and was encouraged to approach other departments for further curriculum involvement. This provided a valuable outside-library perspective, and increased opportunities for academic and social networking. During the new Library building phase, departments were twice invited to reorientate themselves, check print and electronic resources, and stay for afternoon tea.

Other methods of academic communication were employed by the librarian, including:

- seeking an invitation to curriculum planning retreats;
- offering lunchtime departmental meeting talks on IL;
- offering to run a postgraduate seminar on effective use of Library resources;
- emailing new booklists and websites to departmental email lists.

¹⁵ <http://slc.otago.ac.nz/studyskills/studyskills.asp>

Other methods of bridging the gap between School of Business academics and the Library have occurred. The first assignment for a large first year Management paper had a significant impact on the Library, with many similar questions repeatedly fielded at Information Desks. After networking with course co-ordinators, the librarian trained the lab tutors (third year students) before giving a course lecture on tackling the first assignment, using feedback from Information Desk staff on enquiry types. The librarian also attended a markers' feedback meeting. These multiple approaches to course management allowed for a successful IL input.

Research methodology skills have also been taught at 300 and 400 level, and although teaching workload has not increased greatly, further departmental contacts and important links have been established. The librarian now contributes to course workbooks, and academics that already collaborate with Library teaching staff are sharing the benefits involved with their academic colleagues.

Health Informatics

The University of Otago has Medical Schools in Wellington, Christchurch and Dunedin. For at least the last five years a postgraduate paper in Health Informatics has been offered at the Wellington School of Medicine (WSM), strongly driven by one academic staff member. The paper involved use of statistical software and health information sources, with Library staff co-opted to provide assistance with literature searching. In more recent years Health Informatics has become a thread in the WSM fourth year curriculum, for which Library and academic staff have closely collaborated in the development of two online self-directed information searching modules.

Following a University of Otago Medical School (DSM) review, the need for undergraduate (second and third year) IL skills was realised. To facilitate this two senior University of Otago Medical Library staff visited WSM in 2000 to participate in the marking of *Medline* and web assignments, and to see how the WSM IL modules could be adapted for DSM students.

In 2001 DSM student numbers at the 200-300 levels were approximately 400. The WSM module was adapted into a lecture and hands-on workshop, in which *Medline* and web assignments were to be completed. The lecture time was used for a presentation that included:

- a course introduction;
- literature searching; and
- use of research tools.

Six Library staff were then rostered to cover four streamed two-hour labs wherein students gained the hands-on opportunity to explore literature searching techniques whilst undertaking their *Medline* and web assignments. Student assessment was based on displaying an understanding of literature search content and skills.

During 2002 the course has been run for 200 level. Resulting from Library recommendations a number of modifications have been made to the content and process of the 2002 programme. Library orientation tours have been scheduled into the second year students' timetable at the beginning of the year. Collaboration with

academic staff has resulted in the literature search assessment forming part of the students' course project. Library staff have contributed to the course workbook, and there are now two lectures instead of one to allow greater modelling of the literature search process. The tour, lectures and two-hour labs are all scheduled into the Medical School curriculum timetable.

Recognised benefits of this programme include:

- commitment and recognition from the Medical School related to the need for IL skills development;
- growing liaison between academic and Library staff with Library representatives on the Medical School Information Technology Committee;
- opportunities for IL initiatives to be embedded into the Medical School courses. Thus there has been very recent discussion about including an IL component within a redesigned Medical Laboratory degree in 2004;
- Library staff across the three Medical Schools discussing teaching and learning ideas, and seeking consistency.

Surveying

In recognition of the need for surveyors to utilise effective information and communication skills during their professional work, Surveying Department staff enthusiastically embrace IL initiatives and collaborate closely with Library staff to embed IL skills within the course curriculum.

In 2000 the Science Library was invited to conduct an assignment for 200 level Surveying students that required Library catalogue, database, and internet searching skills. That year a virtual tour¹⁶ of the Science Library was developed, and 100 level Surveying students (SURV 113) were asked to evaluate it as a learning tool for user orientation of the library building and resources. This exercise was repeated for the SURV 113 class in 2001. Students identified advantages with self-learning, as facilitated by the virtual tour, including the ability to focus on individual interests, and take the tour at one's own pace, place and time. Students also appreciated its accessibility from remote locations, and the use of straightforward explanations to navigate it easily. Some disadvantages were identified; students commented on the inability to ask library staff questions while taking the tour, or feel the 3-dimensional space that would be achieved by a physical visit. Others noted the possibility that some users may lack the computer access or skills needed to complete the tour successfully¹⁷.

A compulsory paper in Research Methods at second year level (SURV 209) included a literature review and the compilation of an annotated bibliography as part of its assessment. In 2001 the Science Library was invited to assist students with the successful completion of this assignment by teaching a series of workshops dedicated to the Research Process, which comprised the following steps:

¹⁶ <http://www.library.otago.ac.nz/libs/science/scivtour/scitour.html>

¹⁷ Pat Kittelson and Sarah Jones, "Touring by Design: Using Information Architecture to Create a Virtual Library Tour," *Australian Academic & Research Libraries* 33, no.1 (March 2002): 39-48. Also available at <http://www.conference.co.nz/LIANZA2000/papers.html>

1. Identify and develop search topic
2. Devise search strategy
3. Undertake a search using:
 - Library catalogue
 - indexes and databases
4. Find internet resources
5. Evaluate resources, and search process
6. Cite information appropriately

Although the steps of the Research Process are represented in a logical flow, students were encouraged to construe the process as recursive rather than sequential, involving the completion of all steps at some point.

To encourage a hands-on interactive approach, the workshops that focussed on catalogue, database and internet searching were held in the Surveying Department Computer Lab with additional Library staff available to provide support. An 'Open House' session was also included at the Science Library so that students could apply the Research Process using Library resources *in situ*, with staff to assist and advise.

In 2002 a greater emphasis was placed on research methodology in the first year Communications paper (SURV 113), and the second year Research Methods paper was disbanded. Building on the success of previous initiatives, the Science Library was again invited to teach a component on the Research Process during the lecture schedule, comprising four workshops held in the Surveying Department Computing Lab. The course co-ordinator attended the first and last sessions. Two staff members from the Science and Central Libraries collaborated on workshop content, and undertook team-teaching. A third member of staff provided 'roving' support to assist students with use of the computers.

With the exception of the second workshop (which covered the development of search strategies and use of the Library catalogue), the student intake of 60 was streamed into two groups. As part of one workshop, students were asked to follow a datashow 'walk through' of the virtual tour to help them complete an assignment (marked by Library staff and worth 3% of their total grade for the paper) on Science Library resources and services.

At the conclusion of the 2002 workshops, students were asked to evaluate the impact of the Library's teaching sessions. This revealed that the students were being introduced to the Research Process at a very early stage in their university career, and its value and relevance to their studies was not always fully realised. As an improvement for next year, students will be taken to the Science Library to apply their research skills to resources first hand, and search examples used in workshops will be mapped onto the subject matter of impending assignments.

In the second semester of 2002, the Science Library was asked to teach a component of the SURV 205 (Land Planning Systems I) paper, to provide the 2002 second year students with the opportunity to develop their research skills in a curricular capacity. This took the form of three workshops run during the lecture schedule, with the class

of 62 students streamed into two groups. The course co-ordinator attended all sessions.

The librarian worked closely with the SURV 205 lecturer and course co-ordinator to develop a 10% assignment on research skills. Students chose one of three topics directly related to the course content, and were asked to devise a search strategy and select two resources (print or electronic) with an explanation of why those resources were appropriate for their search topic. This was submitted to Library staff as a terms requirement, and collective feedback was supplied to the class. Such an assessment process encouraged student participation and enabled the teaching librarian to gauge impact on student learning. Students then conducted a literature search, reflected on their learning processes by keeping a search log, and submitted a short annotated bibliography along with their search strategies. The search strategy earned a maximum 6% (assessed by the course coordinator in consultation with Library staff), and the bibliography a maximum 4% (assessed by the lecturer).

This initiative demonstrates the value of academic staff support and enthusiasm for IL programmes, displayed in the:

- provision of resources, including technical support and the allocation of lab space;
- time dedicated from the lecture schedule;
- attendance of academic staff at Library classes;
- use of course assessment to measure student development of IL skills.

Furthermore, it illustrates the value of team-teaching to facilitate the sharing of teaching resources and to encourage peer support between teaching librarians. The subject-relevant SURV 205 assignment also provides an example of IL skills development being embedded within the curriculum.

Continuum

These case scenarios illustrate the University of Otago Library's position on a continuum. Many improvements are still possible as we progress along this continuum, and the final section of this paper will explore future developments intended to facilitate such progress.

Planning of a long term vision that will enable the Library to assist with embedding IL skills into the curriculum is underway. Resourcing, promotion to stakeholders, benchmarking and IL framework projects will be essential parts of the plan.

Resourcing is an ongoing factor that underpins the success of all such initiatives. Whether it be available staff time, dedicated IL teaching staff, or further staff training, each must be adequately addressed. In order to plan, prepare, teach, assess, evaluate, train, promote and network with academics and students, IL resourcing will be given a high priority as IL is to remain a key strategy in the immediate future.

Well trained Library staff with IL responsibilities face a further hurdle in promoting themselves in the academic community. The adhoc approach currently used for each contact made from the bottom up means that acceptance and academic credibility take

time to build.¹⁸ For the IL teaching librarian role to be valued, academic outreach must gain momentum. This is planned for through promotion of IL initiatives and through the role of the IL Co-ordinator.

Promotion of IL initiatives needs a profile established from the top down. With the support of the Deputy Vice-Chancellor – Academic and the Director of Information Services, the Library can further raise its profile in the academic community. While the content is of utmost importance, marketing, packaging and presenting IL materials with a common branding will also increase awareness. Raised awareness of IL initiatives must occur outside the Library, both on and off campus, as the Library can be viewed a multi-disciplinary service for all. The key conduit is the Library representative on the Committee for the Advancement of Learning and Teaching (CALT).

The concept of designing credit papers in core IL skills is yet to be explored. During the recent Bachelor of Commerce review this issue was also raised. The educational benefit needs to be convincing, and considerable work would be required for this initiative to succeed if it gained credence in academic boards.

A proposed benchmarking of IL in the next two years would be a significant move in reviewing progress since 1998, and would enable evaluation of initiatives developed since that time.

The Library has looked inwards to establish its own planning first. The position of IL Co-ordinator was tasked with working on policies, procedures, promotion and liaison relating to successful IL integration. The University of Otago Library is committed to the development of its IL programme as a major strategy and is currently considering how best to continue and enhance the leadership role taken by Vicki Darling in her fixed term, 0.5 EFT position as IL Co-ordinator which ended in June 2002. Moves are underway at the time of writing to provide a permanent solution at a senior level of Library management.

Following the current review of the University of Otago's *Teaching and Learning Plan*, the Library intends to develop its own Teaching and Learning Plan in order to integrate its IL initiatives with the teaching and learning objectives of the institution. To achieve such alignment the differing needs of different courses must be considered, as well as responsibilities for elements within each course. The Library's Plan will address the realities of the goals we are striving to achieve, by providing a philosophy of teaching as a contextual guide for the practical work already taking place, and the processes necessary to meet these goals. Reflection on graduate attributes will lead to Library staff focussing on student outcomes. Promotion of the Library's Teaching and Learning Plan within the university community through CALT to Senate will enhance the collaborative nature of IL initiatives, and the fundamental role of such initiatives in the University of Otago's mission to develop lifelong learning skills for all students.

¹⁸ Larry Hardesty, "Faculty Culture and Bibliographic Instruction: An Exploratory Analysis," *Library Trends* 44, no. 2 (Fall 1995).

A critical mass of acceptance of IL, both within the Library and across the institution, is fundamental before the solid practical gains and close collaboration with individual academic staff already achieved by the teaching librarians can be effectively enhanced. It is essential for the Library to demonstrate that it has carefully considered the underpinning pedagogical issues, and has developed a corpus of staff with practical teaching expertise, before it can be fully appreciated as an appropriate channel for the delivery of IL skills, and recognised as an effective partner in achieving the University's teaching and learning goals.

This paper cannot conclude without acknowledging the significant contribution all University of Otago teaching librarians have already made through their ongoing liaison and collaboration with academic staff, their teaching support of students in small and large group situations, their efforts to keep up to date with relevant subject resources and their commitment to continuing professional education.

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Vicki Darling, Assistant Librarian –Medical Library
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