

AND THE WINNERS ARE STUDENTS, ACADEMIC STAFF AND LIBRARIANS. INFORMATION LITERACY FOR NURSES: A CASE STUDY AT LA TROBE UNIVERSITY.

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ABSTRACT

This presentation is a case study of the experience from a library perspective introducing a new Information Literacy subject into the Bachelor of Nursing at La Trobe University in 2003. Lecturers in Nursing and Librarians from three campuses make up the teaching team with a variety of course delivery methods utilised. Subject delivery includes lectures, directed activities and an online component using WebCT.

INTRODUCTION

La Trobe University teaches nursing across the state of Victoria on three of its campuses located in Melbourne, Albury Wodonga and Bendigo. The University Library through its Information Literacy Directions Statement is committed to promoting and facilitating information literacy to encourage lifelong learners. This paper reports from the library perspective on our experiences in the delivery of information literacy in information searching and retrieval for the cross-campus course NSG11LIL: Information Literacy for Nurses.

Information Literacy is rated as an important professional activity for the Subject Librarians at La Trobe University Library. For example at the Bendigo campus librarians are involved in some innovative programs delivering Information Literacy as embedded skills in the Applied Science and Engineering courses. A paper on the Applied Science Group Research course was presented at the first Lifelong Learning Conference (Forsyth and Legge 2000) and another at ASET-HERDSA 2000 detailing the nature of the collaboration between academic teaching staff and the subject librarian (Legge and Wilkens 2000)

NURSING INFORMATION LITERACY AT LA TROBE UNIVERSITY

NSG11LIL was introduced into the Bachelor of Nursing at La Trobe University in 2003 as a core subject taught on three campuses and assigned 15 credit points. Lecturers in Nursing and Librarians from the three campuses make up the teaching team. Based on the CAUL Information Literacy Standards, the subject is designed to develop an understanding of the role of written communications, documentation and information technology in the practice of nursing. The subject objectives are described in the La Trobe University Subject Handbook (La Trobe University 2004) as one in which:

Students will be assisted to develop the information literacy and written communication/documentation skills required of a nurse in the 21st century. Informatics and Evidence Based Practice are key aspects of that contemporary nursing practice. Students will be assisted to meet the CAUL information literacy standards, develop an understanding of the role of written

communications/documentation and information technology in the practice of nursing, and a beginning appreciation of the role of evidence as it informs nursing practice. Further, the students will be provided with a foundation on information management and processing principles used to support the data, information, and knowledge needs in the provision and delivery of nursing and health care. In this subject students will become practised in the use of both electronic media and traditional written and oral communication skills in the communication of a well-developed argument.

The subject assessment for 2003 consisted of a 1,500-word report on undertaking an on-line search of a nursing practice topic and assigned computer tasks equivalent to a 2,500-word report of searching electronic databases.

THE ROLE OF THE LIBRARY

The aspects about this subject of particular interest to the Library are that it is:

1. Underpinned by the CAUL Information Literacy Standards. (Council of Australian University Librarians 2004) This is the first instance we are aware of where a La Trobe subject is constructed around the Standards (even more interesting is that the prominent use of the Standards was initiated by the subject coordinator rather than coming from the library).
2. Cross campus delivery – the course is the same on three campuses in what are different schools of nursing within La Trobe.
3. Library skills of information searching and retrieval in the catalogue, databases, the physical and electronic collections and all that entails is a significant component of the course.
4. Use of this subject as an exemplar/model for other subjects.

In order to understand the importance of NSG11LIL as an initiative in information literacy a brief analysis of the complexity of the environment is required.

LIBRARY STRATEGIC INITIATIVES IN INFORMATION LITERACY

Within the La Trobe University strategic plan for 2004–2008 there is an identified strategy to refine the Faculty Learning and Teaching Plans. The Library is also participating in this process with membership on the University Learning and Teaching Steering Committee. This provides the Library additional opportunities to influence and highlight the overall integration of information literacy into teaching and learning and the role that it plays within this objective. The University Library through its strategic plans and identified yearly priority areas is committed to further development of its role in Information Literacy as part of its profile as an integral part of the teaching, learning and research activities within the University.

To help achieve identified objectives in the area of Information Literacy, the Library undertook to establish a cross campus coordinating committee to progress new initiatives and develop overall strategies to strengthen the

library focus on teaching information literacy skills for lifelong learning. The La Trobe University learning environment in which the Library operates consists of five libraries of varying sizes that are dispersed geographically. The largest library is located at Bundoora (Melbourne) with a student population in 2003 of 17084, while at Bendigo there are 4042 students and Albury Wodonga 1207. La Trobe also provides library services at Mildura and Shepparton, these libraries have one librarian that is dedicated to providing library services to La Trobe staff and students in shared facilities with TAFE libraries. Another small specialised library is provided at Mt Buller for students studying tourism and hospitality. Because of the diverse size, the separation by distance and the different courses and student composition the Library does not consider it feasible that one information literacy program will suit the needs of all. It is the flexibility to deliver training to students in a variety of ways that has been an important aspect of the strategies developed by the Library at La Trobe.

An official statement on the role of the library as a provider of information literacy at all the campuses has been developed and promulgated via the Library Web Site to assist in developing an understanding within the university community and beyond. The "Information Literacy Directions Statement" is linked to each of the campus library homepages at <http://www.lib.latrobe.edu.au/information/sjg-infolitdirections.html> . It articulates the variety of ways that the library contributes to promoting and facilitating information literacy to encourage lifelong learning.

The statement provides a framework for the subject librarians to operate within. When the coordinator for a new subject in the nursing degree, Keith O'Brien approached the Library in November 2002 with the outline of a new subject titled, 'Information Literacy for Nurses' (NSG11LIL) and asked the Nursing Subject Librarians to develop and deliver three of the units dealing specifically with locating, retrieving and critiquing information for this new course, we readily agreed.

DEVELOPING THE SUBJECT

The concept of the subject was exciting and differed from most other subjects. It was developed to be presented as a set of lectures published online in WebCT modules and also delivered in the traditional university lecture mode. The formal lectures were augmented with standard university tutorials, online directed activities and workshops. The different delivery modes allowed students to match their individual needs by choosing their preferred learning styles. By having the lecture content in WebCT and available to students prior to lectures, the librarians were able to focus on more advanced research techniques in class time. (Rockman 2003) Being able to mix and match by working through the lectures online and attending some, all, or none of the formal lectures, is congruent with some of the characteristics Hunt and Birks identified as best practices pedagogy for an information literacy program. This includes supporting diverse approaches to teaching, utilising appropriate information technology and responding to multiple learning styles. (Hunt and Birks 2004)

CAUL INFORMATION LITERACY STANDARDS

The subject is informed by the Council of Australian University Librarians (CAUL) Information Literacy Standards. As outlined in the subject objectives, students are assisted in meeting these information literacy standards. The three library lectures are framed by the Standards with the lecture content devised to support the students to attain the desired outcomes. The content of the library component for the subject on the finding, retrieving and critiquing of information was encompassed by CAUL Standard Number 2: *The information literate person accesses needed information effectively and efficiently* and CAUL Standard Number 3: *The information literate person evaluates information and its sources critically and incorporates selected information into their knowledge base and value system*. Other non-library units in the subject covered information as a concept, time management, managing and organising information, the legal and ethical aspects of information management, dissemination of information and information in clinical practice.

The CAUL Standards are used as a directed activity in week 1 with the students required to read the Standards. They compile lists of the competencies they consider they already possess or believe they will easily achieve and those competencies they feel they will need to spend time on. These lists form the basis of discussion in tutorial sessions.

The content of the locating and retrieving lectures was built around the CAUL Standards for accessing information effectively and efficiently, selecting the most appropriate investigative methods or information access tools for finding the needed information and using a variety of methods to retrieve the information. The lectures were designed to support the student in attaining the set outcomes by investigating the scope, content and organisation of information access tools, by identifying the tools needed and by constructing and implementing the best search strategy to use. For the lecture on critiquing information the content was designed to support the students to attain the outcomes by assessing the quantity, quality and relevance of the search results. They determined whether alternative information access tools or investigative methods should be utilised and examined and compared information from various sources to evaluate the reliability, validity, accuracy, authority, timeliness and point of view or bias.

By the conclusion of these lectures it was expected the students would be able to locate key components from the library homepage, know how to search the catalogue, recognise a bibliographic citation in a catalogue and database and understand and be able to navigate the path from the citation to the source document. We also expected them to be able to differentiate between indexing, abstracting and full text databases and to identify the key features of three health sciences databases. They were required to demonstrate an understanding of the difference between refereed and non-refereed journals and establish and apply criteria to critically assess Internet web sites.

Although we planned for a standardised suite of teaching materials and presentations, local variations in delivery of the course material occurred due to availability of lecture theatres and computerised tutorial rooms.

LIBRARY CROSS CAMPUS COLLABORATION

The librarians preparing the units shared their subject-related resources across three campuses: Albury Wodonga, Bendigo and Bundoora. Each of the campus libraries have on hand lesson plans and deliver classes tailored to the needs of the lecturers, however under the existing setup each library is an independent, autonomous service provider and creates their own teaching programs and materials. For NSG11LIL the resources and expertise were pooled and a common set of lecture notes, tutorials and workshop materials was developed and published on the WebCT subject site at each location.

THE LIBRARY TEAM

Initially, the librarians with responsibility for the course were Jill Stokes, Linda Sheridan and Sue Porter. Beverley Forsyth (deputizing for Jeanette Dazkiw who was on leave during the planning process) convened the group. The team was joined by Chris Wanklyn and Donna Outtrim. Beverley continues as the cross campus coordinator for the library team. This team holds planning and review meetings and also communicates by an email distribution list. The three lectures, two powerpoint presentations, two/four tutorials and workshop materials that were developed for the subject in 2003 were the result of a close collaboration and mutual sharing of ideas and existing programs. Relevant academic staff also met with and collaborated with the librarians, particularly at Bendigo where the course coordinator was based.

PREPARATION

This subject demanded a significant expenditure of professional staff time which is quantified in the table below. It must be noted though that there is no benchmark for class preparation used by the library to measure this amount of time by and judge it as reasonable or otherwise. Feast identified one of the major problems in integrating information literacy in first year undergraduate courses arises from the lack of time for reflection and redevelopment of course material. (Feast 2003) Any new initiative requires extra time to create the structure to serve as a basis that should only require modification when the subject continues to be offered in subsequent years. While not generic, the set of lectures can also be adapted to other subjects.

Estimated time (combined person hours)

Task	Albury-Wodonga	Bendigo	Bundoora	Sub totals
Delivery of lectures	3	4.5	3	10.5
Preparation	12	18	7	37
Delivery of tutorials	12	10	6	28
Preparation	9	7	10	26
Workshops	-	2 *	-	2
Course development	3	5	-	8
Meetings	4	10	9	23
Evaluation	5	8	3	16
CAMPUS TOTALS	48 hours	64.5 hours	41 hours	150.5 hours

* Librarian in attendance and available to assist for an additional 36 hours

**Personal consultations increased due to the higher profile of the Subject Librarians to first-year nursing students but this increase was difficult to quantify. Bundoora librarians estimated the increase was in the order of 3 hours.

EXPERIENCES IN DELIVERING THE COURSE FOR 2003

As may be expected, the NSG11LIL experiences of librarians at each of the campuses differed according to local situations and technology setups. The following is a synthesis of our combined experience.

Our objectives were to:

- Deliver a range of information literacy skills to undergraduate nurses in a lecture/tutorial format, within a subject curriculum, grounded in information literacy theory.
- Develop a course outline and specific lectures in collaboration with librarians across the three main campuses.
- Collaborate with academic staff in promoting the CAUL Information Literacy Standards.
- Liaise with staff and students.
- Deliver three lectures in a lecture series of 13.
- Deliver two tutorials after each lecture.
- Wodonga delivered an extra series of tutorials after lecture two, instead of the Workshop.

The benefits these 150 hours of preparation time achieved included:

- Suite of detailed lecture notes published in WebCT.
- Students formed relationships with library staff more quickly.
- Library information skills integrated into core curriculum.
- Having an extended period to cover the library based material within the course.
- Enhanced reputation of librarians as academics.

- Attendance at tutorials was high. At Albury Wodonga it was a requirement of the subject and was included in attendance counts.
- Enormous support from cross campus reference staff in sharing materials and advice.
- Excellent professional development for library staff.
- Raised library profile.

PROBLEMS FACED IN DELIVERY IN 2003.

However not all was plain sailing. The problems we noted included some confusion for us and the students about our roles. Were we 'guest lecturers' or coordinators? We would like those boundaries clearly defined so that the students do not direct questions to us that we are unable to answer. For example, some students were very confused about their assessment tasks and this created tensions in tutorials, where students are accustomed to seeking clarification on administrative matters. The librarians at Bendigo were introduced to students as fellow teachers and specialists by the subject coordinator at the introductory lecture but this did not happen at the other campuses.

The lectures were delivered in lecture theatres on each campus but the tutorial arrangements were less satisfactory: at Albury Wodonga they were conducted in computer laboratories, in the Library Training Room at Bendigo and in a standard class room with no 'hands-on' facility at Bundoora. The workshops were set as an optional extra for students to complete in their own time.

TECHNOLOGY ISSUES

- At Bundoora students were unable to have 'hands-on' tutorials.
- At Bendigo Internet connections in the lecture theatre were excessively slow.
- At Albury Wodonga there were problems connecting to CINAHL in the computer laboratories - possibly slow connections on that particular day.
- At Albury Wodonga lecture notes and profiles were not mounted on WebCT until many weeks after the semester began. It would be preferable if library staff had publishing rights as well.
- Insufficient computer facilities for students on all campuses.

TEACHING RESOURCES

Some of the technology problems we faced in delivering the early lectures in 2003 forced us to rethink our method of delivery and to provide some backup teaching materials which we found to be a marked improvement on our initial resources. For example, the excessively slow internet connections in the lecture theatres led us to create powerpoint slides and canned demonstrations to illustrate the concepts and replace the live datashow connections to online databases and electronic resources.

Many standard library lectures are based around effective searching of the online catalogues and journal abstracting and indexing tools. They rely on being delivered to small groups of students in computer laboratories or training rooms where the students can read their screens and refer to the tutor's screen projected on a datashow as an 'anchor'. These techniques do not scale upwards to a formal lecture in a full sized lecture theatre as the bibliographic screens are too text dense and impossible to comprehend. Using the full screen dumps inserted in the WebCT version of the lecture supplemented by online tutorials using 'canned' demonstrations of the searching strategies, which were created in Camtasia and schematic illustrations on a powerpoint presentation provided different options to suit different learning styles and supports student-centred learning.

Workbooks covering the library modules devised were too lengthy (ie. expensive) for students to print out. We are planning to replace them with WebCT questionnaires in 2005. At the beginning of the 2004 academic year the library introduced a suite of interactive self-paced tutorials 'Library Skills Online' to help new students in using the catalogue and databases. The librarians teaching this nursing subject requested that one of the modules be based on using the premier nursing indexing and abstracting resource CINAHL so that it could also be a teaching resource for NSG11LIL.

Students without computing skills were referred to the University resource 'International Computer Driving Licence' to develop their skill set in the use of computers and information technology. This is a self-paced interactive tutorial program covering all aspects of computers, file management and software use.

TIMETABLING

- Library Lecture One needed to be scheduled earlier in the subject, as the students needed to know basic catalogue techniques to commence any research.
- At Bundoora the scheduling of lectures resulted in some tutorials being held before the content had been delivered in lectures.
- Subject Librarian's involvement in this subject placed strains on the Information desk rosters.

EVALUATION

After two years experience in delivering this subject evaluation still remains quite problematic. In 2003 the evaluation was conducted as part of the overall Teaching Quality Assurance for the course. The QA survey instrument is administered by the Academic Development Unit and it is not compulsory for students to respond. As a result the sample submitted is too small a proportion of the students polled to be able to make any valid claims (29 out of 130 responses from the Bendigo student cohort). It tends to be the very satisfied and very dissatisfied students who make the effort to register their opinions.

For the 2003 QA questionnaire the questions that addressed the library component of the course were:

- The library component assisted in developing skills and knowledge to access information sources.
- The library component assisted in developing skills and knowledge to retrieve relevant information sources.
- The library component assisted in developing skills and knowledge to evaluate information sources.
- The library component was relevant to gaining understanding and delivering learning outcomes for this subject.

Some written responses about the best thing about this subject included:

- The tuition about how to access information sources.
- Interacting with librarians.
- Learning about databases > it's useful for all subjects.
- Learning to use the computers and databases, it gave me the knowledge for other subjects as well.

These have to be counterbalanced with some of the suggestions on how this subject could be improved:

- Less library sessions, these were useful, however there were too many of them and they tended to get repetitive.
- Less time in the library.
- The library lectures could be taken out, as its more helpful to have a show and do session.

In 2004 the subject coordinator will be conducting a detailed analysis on the course content and delivery using the Student Evaluation of Teaching (SET) questionnaires that have been used at La Trobe University since 1995. The process, as well as the explanatory and support materials related to it, have been evaluated and enhanced several times. The SET instrument has been designed by the Academic Development Unit to help staff evaluate those aspects of teaching and subjects which will, if enhanced, result in improvement of the quality of student learning in higher education ((Academic Development Unit 2004)ADU Website http://www.latrobe.edu.au/adu/student_eval.htm#8)

The issue of evaluation of the library's information literacy program is one that the Library Information Literacy Coordinating Committee is addressing during 2004. The identified strategy is to review current methods of evaluation undertaken at the various campus libraries and incorporate a literature review to establish a set of evaluative methods that librarians can select from and apply to the particular type of program they deliver.

A decision by the committee has been that one type of evaluation method is not going to suit the range of involvement in delivering training to students to develop information literacy skills. To establish the breadth of contact the library has in this area of delivering training to students the statistics show that in 2003 the Librarians (at the 3 larger campus libraries) delivered 798 classes or training sessions to over 15,000 clients. Establishing the appropriate

evaluative tools for library based programs remains a key focus for 2004 to measure in a more quantified way, if our programs are meeting the objectives set.

OUR VISION FOR THE FUTURE – CHALLENGES

The library classes in this particular subject were based on CAUL Standards 2 and 3. We are interested in establishing and teaching the concepts of information retrieval and being able to transfer these into other subjects and resources.

There has been ongoing debate among the reference librarians at La Trobe regarding generic versus specific information skills programs. From 2003 the Library developed and published a suite of generic online interactive tutorials using the WebEzy product. These can be used as standalone modules accessed independently of any formal classes or as adjuncts for teaching resources in information literacy.

We believe that a well constructed (pedagogically correct or informed by pedagogical tenets) set of lectures, tutorials and workshops anchored to the immediate needs of the students that are delivered in one subject area provides increased comprehension and builds a skill set that students can use in other subject areas. The skills are transferable and indeed they have to be as 'the one constant in the information world is change'. This has been stated in so many different contexts that it has become a truism (Pace 2002).

In the nursing discipline at La Trobe the interfaces of the core databases CINAHL and PsycINFO changed from the ERL platform to Ovid during the 2003/2004 summer break. While the data remains the same the search strategies and methods of interrogating these databases are very different. Students and staff who had developed competencies in CINAHL on ERL were seriously challenged by the new interface, however the students who had done the NSG11LIL subject seemed more equipped to make the transition than others in the School. This observation is not supported by data but was noted by staff handling reference enquiries at the Information Services Desks.

While these assertions are based on anecdotal evidence it should be noted that Academic staff have commented to librarians that NSG11LIL has influenced the quality of student assignments. Feedback from lecturers who taught the students in semester two, 2003 was that they noticed a tangible improvement in their literature searching and presentational skills relative to previous cohorts. Other Librarians at the Information Services Desk consider the nursing students on the whole seem equipped with a more developed set of information retrieval skills at the conclusion of their first semester of study. Hence the title of our paper "And the winners are students, academic staff and librarians".

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