1995

Curriculum based information literacy skills for first year undergraduate students

Lynne Wright
University of Wollongong

Catriona McGurk
University of Wollongong

Publication Details
Curriculum based information literacy skills for first year undergraduate students

Abstract
This case study centres on the information literacy program for first year undergraduate students at the University of Wollongong Library. The university has one central library servicing an eftsu student population of approximately 9,100. In 1995, 3,000 of these are commencing undergraduates. In global terms this is a small university and, mainly due to physical restrictions of the campus, it is not predicted to grow above 10,700 eftsu by the year 2000. Therefore, the impact of student numbers on the provision of service will not dramatically change in the near future. The library has always provided bibliographic instruction, either basic orientation to the library or detailed classes on the use of specific reference tools. During the 1980s, it would be fair to say that most of these sessions were conducted with little reference to the academic curriculum and usually consisted of a one hour, content based lesson, with a low level of active participation by students. In a minor way, classes were linked to the overall subject content of the student's courses.

Disciplines
Arts and Humanities | Social and Behavioral Sciences

Publication Details
CURRICULUM BASED INFORMATION LITERACY SKILLS FOR FIRST YEAR UNDERGRADUATE STUDENTS

Lynne Wright and Catriona McGurk
University of Wollongong NSW

BACKGROUND

This case study centres on the information literacy program for first year undergraduate students at the University of Wollongong Library. The university has one central library servicing an eftsu student population of approximately 9,100. In 1995, 3,000 of these are commencing undergraduates. In global terms this is a small university and, mainly due to physical restrictions of the campus, it is not predicted to grow above 10,700 eftsu by the year 2000. Therefore, the impact of student numbers on the provision of service will not dramatically change in the near future.

The library has always provided bibliographic instruction, either basic orientation to the library or detailed classes on the use of specific reference tools. During the 1980s, it would be fair to say that most of these sessions were conducted with little reference to the academic curriculum and usually consisted of a one hour, content based lesson, with a low level of active participation by students. In a minor way, classes were linked to the overall subject content of the student’s courses.

During the past three years, library staff have increasingly recognised and promoted the concept ‘that the development of information literacy skills can easily only occur when these skills are fully integrated into university curricula at all levels’. It has become one of the main objectives of the faculty librarians’ team to develop strategies to implement curriculum based or course integrated library instruction into a wide range of courses particularly, into all first year major or core subjects. Whilst aiming for this very challenging goal, it has been crucial to maintain and improve other library instruction services already in place. Strategies have been employed to ensure that all students have an opportunity, early in their studies, to be informed of the wealth of information and facilities available to them, but more importantly, to know how to locate, evaluate and use information.

Curriculum based information literacy skills program

The case study will plot the development of curriculum based information literacy skills programs in first year undergraduate subjects, highlighting significant achievements in core subjects and the establishment of a six credit point subject in the Arts Faculty, with one third of the subject being attributed to information literacy skills.

The present program is multifaceted, ensuring that all students have the opportunity to learn how to best utilise the resources within and beyond the library, regardless of the subjects they are studying. The need to offer such a wide range of information sessions reflects the state of change the university is currently experiencing. Currently the program consists of

Library survival skills — a one hour introductory presentation using a Powerpoint program to outline the library services and facilities, including a live demonstration of the library catalogue. This is conducted in a seminar room with a seating capacity of forty people. The same program can be used in any lecture theatre on campus that has the networked computer facilities and projection capabilities. Following the sessions, students receive a set of questions for compulsory completion at their own pace. This satisfies the library component of the university’s compulsory information literacy requirement.

Self paced workbook — based on the same information covered in the library survival skills program. Students can collect an information booklet from the information desk with a set of questions for completion in their own time. This should take the students approximately the same amount of time as attending the program.

Lunchtime and Saturday workshops — generic one hour classes which operate on a ‘drop in’ basis. Sessions consist of a wide range of learning experiences, from basic catalogue searching to more complex topics such as searching citation indexes. Unless otherwise specified, academics and students from all levels of study and disciplines are welcome to attend.

‘One off’ tutorial or lecture slots — negotiated on a needs basis as and when the lecturer desires and usually based on prescribed topics. These sessions are usually one to two hours in length and quite often lecturers will ask for ‘everything’ to be covered in this time. Unfortunately, this can create a situation of information overload detracting from the effectiveness of the session. Measures are being taken to negotiate with lecturers to alleviate this problem in the future.

Subject integrated lecture or tutorial — usually occurring at the same time each year regardless of the subject coordinator, lecturer or librarian. With the agreement of the faculty librarian and lecturer, the sessions are written into the subject outline, ensuring definite arrangements each year. The library skills sessions may or may not include a library assignment but are directly linked to the subject content. They generally last from one hour to six hours and are normally conducted at the same time within the subject program each year. Close collaboration with the course coordinator in setting the objectives for the sessions is a feature of the success of these classes.

Included in this category are the fee for service library instruction classes conducted for the gateway program, foundation studies and the English Language Centre (entry programs designed for mature aged and international students).

ARTS101 — Analysis, research and technical skills in the arts

A six credit point subject with one third attributed to information literacy skills. This is a new subject taught for the first time in autumn session 1995. A one hour lecture each week for fourteen weeks is presented by the Arts Faculty librarian. The subject outline in brief is included in Appendix 1.

For the purposes of this case study, the focus will be on the development of the subject integrated sessions and the ARTS101 subject.

The development of the subject integrated sessions and ARTS101

The university’s mission statement, published in the document Towards 2000, states that the aim of the university is ‘to produce graduates and research of international distinction especially in the development, critical evaluation and application of science and technology for industry, commerce and society’.

This mission statement is followed by a list ‘Attributes of a Wollongong graduate’. The attributes are further defined in terms of particular competencies and attitudes a graduate should have acquired by the completion of a degree.
Attributes of a Wollongong graduate

Competencies include that the graduate
• is equipped for continued learning, intellectual development, critical analysis and creativity
• has coherent and extensive knowledge in a discipline
• communicates clearly and fluently in writing
• has capacity for team work
• has ability to solve problems and make decisions
• is self confident and orally articulate
• reasons logically and distinguishes fact from opinion
• is computer literate
• is statistically literate

Attributes include
• the desire for continuing intellectual development and creativity
• willingness to initiate and participate in change
• value of truth, accuracy, honesty and ethical standards in personal and professional life
• acceptance of responsibilities and obligations and asserts rights
• appreciation of his or her own and other cultures and customs

Librarians have identified a number of these competencies and attitudes that can be developed and enhanced through the integration of information literacy skills into the curriculum. By identifying and publicising library aims in this area, wider support will be generated for the library’s role in contributing to the development of these attributes of a Wollongong graduate.

Subject integrated sessions

The university had already stipulated that library catalogue skills was a compulsory component of its computer literacy requirement in 1989. Although this seemed an extremely minimal requirement, it did provide a basis for building a more meaningful, compulsory component for library skills. At the same time, in some sectors of the university, the term computer literacy was being used synonymously with information literacy and so it was critical that library staff have a greater influence on the overall policy issues. The library’s aim was to work towards changing the focus from simply knowing how to use computer catalogues for finding information, to providing the full range of necessary skills for locating, critically evaluating and using information. Whilst promoting the issues of information literacy, librarians recognised that the ‘integration of information literacy with other aspects of a student’s learning experience is fundamental to the success of any information literacy program’.

As this integration was lacking, librarians were not entirely satisfied with the manner in which library skills sessions were being conducted. However, there were exceptions such as the Learning Development Centre’s gateway program in which there was a high level of involvement of librarians in the planning and content of the curriculum. This program includes basic information skills which effectively link to other components of the gateway curriculum. Students are provided with the opportunity to put these skills into practice to locate, evaluate, and use information for their essays in other gateway subjects.

The success of the library component of the gateway program has been due to
• the amount of time devoted to library instruction—seven and a half hours
• instructional methods is student centred, activity based and integrated into the entire program
• the close collaboration with other teachers of the program to meet the needs of the students and to achieve the overall objectives of the program.

Feedback from the students of the gateway program indicated that the library program was extremely beneficial as preparation for their entry into undergraduate programs in the following year. Librarians recognised the need for implementing similar programs for all first year undergraduate students. By targeting core first year subjects and by exploiting a combination of lectures and tutorials this became a major objective of the faculty librarians’ team.

ARTS101

Throughout 1993, in various forums, staff from the Faculty of Arts and the library met to consider the development of a 100 level subject which could allow students to fulfil statistical, computer and information literacy requirements at one time. It became clear to participating Faculty of Arts members that library staff were keen to work towards a wider definition of computer literacy, that is if the library was to continue to remain involved in the implementation of the requirement. Fortunately, these group members had a long record of liaison with library staff, viewed information skills as extremely important for their students and had high regard for the teaching skills and dedication of library staff.

Rationale for ARTS101

A working group from the Arts Faculty felt that a new subject, to be known as ARTS101, would be attractive to Arts students as a convenient route for them to fulfil the literacy requirements. It was decided, at this stage, that the subject should not be compulsory. Such a subject would help the Arts librarian cope more efficiently with the increased load of library classes as well as eventually alleviating the problem of overlap. ARTS101 would have an initial enrolment of 50 students controlled by a quota and would be offered in Autumn and Spring sessions.

STAGES OF DEVELOPMENT

Identification of good practice in currently operating information literacy programs, such as the gateway program and other very successful library and academic collaborations which had been established on an ad hoc basis.

Building on the best by ensuring that established, successful information literacy programs were documented and integrated with the departments’ subject outlines. A number of early successes were achieved, most significantly in the Departments of Mathematics, Sociology, Engineering, Public Health and Nutrition and Nursing. For the first time a number of librarians were lecturing to as many as 300 hundred students in lecture theatres and then providing follow up tutorials in collaboration with lecturers. Some lecturers and librarians devised library assignments attracting marks from 5-10% of their grade.

Improvement of teaching skills of librarians

Librarians recognised the need for improved teaching skills as a significant factor in convincing academics that the time they were releasing for information literacy classes would be well utilised. A number of the faculty librarians already held formal teaching qualifications and were willing to share their knowledge, expertise and skills. However, the Faculty of Education subject, Introduction to tertiary teaching, designed for new academics with little or no teaching qualifications, was also considered suitable for faculty librarians. Support was provided for faculty librarians without a teaching background to attend this one session subject (three hour
Implementing change at all levels—university policy relating to our information literacy programs, resulting in a new set of information literacy faculties, was held in September 1995. The common denominator for these students will be the subject content they have chosen to study and the need to access information to successfully complete their studies.

Teaching development week
In February 1994, faculty librarians set aside time to devote to sharing their skills, expertise and experiences in the teaching arena. Guest lecturers from the Education Faculty were invited to teach the more formal skills of writing aims and objectives, structuring lesson plans and designing evaluation. The time spent on this was very beneficial, leading to further teaching development in 1995 with a guest lecturer conducting a questioning techniques workshop. Teaching in focus seminars have now been established to allow librarians to reflect on previous teaching experiences and share ideas and offer solutions to various teaching situations.

Academic support and approval
To promote dialogue between library and teaching staff, academics from all departments were invited by faculty librarians to attend a two hour forum in early February 1994. The forum was designed to provide:

- confirmation of direction from the wider academic community
- sharing of the information literacy vision
- assurance of support for information literacy
- an opportunity to air concerns

A second forum was conducted in February 1995 based on a format similar to the previous year. A review of achievements in 1994 set the scene for new academic staff and those not reached previously. A selection of academics from across sections of faculties addressed their 50 or so colleagues on the way in which information literacy had been integrated into their subjects. They highlighted the benefits of integrating skills into their subjects for both themselves and their students. Group discussions were conducted on a number of issues relating to our information literacy programs, resulting in a new set of information literacy objectives for 1995.

Establishment of ARTS101
The process and rationale for this has been covered in the previous section. This has been a significant achievement for the library and the Arts Faculty and provides a model on which to build for other faculties. A seminar for interested representatives from all faculties, reviewing the progress to date on this subject and offering suggestions for developments in other faculties, was held in September 1995.

Implementing change at all levels—university policy
At the 1994 academic forum a decision was taken to adopt a definition of information literacy that would be incorporated in policy documents within the library and at university level. Later in 1994 the following definition was accepted by the library executive and was submitted to the university's information policy committee for inclusion in its policy document. This was accepted and will appear in the university calendar for 1996.

To be information literate an individual requires skills which enable the recognition of the need for information, and the ability to locate, evaluate and use it effectively.

Target group — their needs and characteristics
Each year approximately 3,000 students commence as undergraduates. These students share common needs but they arrive with varied backgrounds of experience. Some students may be very familiar with school and public libraries but have no experience with searching computer databases for information. Other students may have extensive computer experience, feeling quite comfortable in the electronic world of information, but having little concept of accessing traditional library material. Some are matured aged and have been away from traditional study for a long time.

Key stakeholders
If, as stated previously, the university's aim is to produce graduates equipped for lifelong learning, stakeholders can be identified as:

- the students—receiving assistance with their studies; improving their career opportunities and developing lifelong learning skills
- academic staff—in collaboration with library staff developing students capable of effectively locating, evaluating and using information evidenced by high quality, researched, student work
- library staff—assisting students who are motivated to learn, know how to ask the right questions, continually seek professional assistance
- the university—achieving their objective of producing quality graduates equipped with skills for continued learning
- the employers—employing graduates who know how to locate the information needed to complete a project, to ask informed questions, to utilise their lifelong learning skills to benefit their place of employment
- families of graduates—providing a role model, as a parent tutor, for lifelong learning

THE LEARNER
Assessing the learner's needs
Experience has led us to believe that students' information needs vary as do their attitudes to learning. Frequently, for first year students, the academic library environment holds many fears to be quelled and mysteries to be unravelled. Few assumptions can be made about these students' prior information literacy skills. Students beginning their studies at university come from a range of backgrounds:

- directly from high school and equipped with a range of library skills
- from TAFE, including mature aged students often with basic library skills
- mature aged students new to an academic environment
- from non-English speaking backgrounds with varied library experiences

The common denominator for these students will be the subject content they have chosen to study and the need to access information to successfully complete their studies.

To better focus on student needs, faculty librarians created a list of basic information skills required by first year undergraduate students. This list, referred to as a 'skills inventory', was compiled by:

- identifying the basic skills required to simply locate and borrow library material
- noting the types of requests for assistance made by students at the information desk
- including suggestions from evaluations of library skills sessions
- including lecturers' requests for content in library skills sessions

This following extract from the 'skills inventory' (see Appendix 2 for full inventory) reflects the needs of first year undergraduates as perceived by library staff.

By the end of first year, students will
* know how to find their way around the library
* understand their rights and responsibilities regarding the use of the library

Curriculum based information literacy skills
Faculty librarians believe students should be able to gain a basic understanding of the these concepts through attending a minimum of two hours instruction. It is their aim to implement the skills inventory as part of the curriculum and in major or core first year subjects.

More recently, faculty librarians have endeavored to assess students' prior learning by using a simple preclass exercise distributed at least a week prior to the library information session. This has helped gauge the students' understanding of the more basic concepts of library searching and has enabled library staff to save valuable time on basic instruction whilst still feeling confident that students' needs are being met.

The needs of students taking the ARTS101 subject are similar to those of all commencing undergraduate students. However, their expectations of the subject will be much higher than for those receiving subject integrated library skills sessions. The aims and objectives of the ARTS101 subject are attached in Appendix 1.

**Indications of success**

**Evaluation**

The importance of evaluation should be stressed at this point. Subject integrated information literacy should be evaluated by the lecturer within the normal evaluation process of the subject and independently by the faculty librarian either during the skills session to gauge understanding or at the conclusion to evaluate the content of the session. Informal and formal feedback have both proved valuable. For example, the formal evaluation sheets distributed to students at the conclusion of some information sessions have allowed faculty librarians to reflect on the content and format of the session and to implement improvements or changes in future classes.

Since the participation of faculty librarians in the teaching development sessions and the introduction to tertiary teaching subject, they have been evaluating their sessions more consistently. It is now common practice to evaluate a proportion of all classes and share the feedback with other librarians in the 'teaching in focus' sessions.

**Reflective journal**

A reflective journal, similar to a portfolio, was included as one of the assessment tasks for ARTS101. This served as a valuable evaluative tool, particularly when assessing the students' research methodologies and understandings of information resources. Although a commonly used tool in library instruction situations, a reflective journal only seems appropriate to use in a subject such as ARTS101 where contact with students occurs regularly over a 14 week period.

Samples of feedback received from students, academics and a client survey currently being conducted in the university library, pay testimony to the value of subject integrated information skills sessions.

**Student feedback — through evaluation and surveys**

Feedback from a current survey, in answer to question 38 (see Appendix 3 for the section of the survey relevant to information literacy)

**Have these classes assisted you in your use of the library? Please comment**

The following comments are taken from first year undergraduate replies.

- Yes, although learning to use CDROM should be a compulsory part of 'literacy'. This will become more important in future...
- Yes, they were good in specifying material for your subject, where to find it, and how to use it and helpful hints...
- Yes, they certainly have. These classes are very important to new students
- Yes, the classes taught me how to use the catalogue on the computer (all aspects of it) and how to gain access to journal articles from printed indexes
- Yes, but session time needs to be increased ie one needs more than one class to get used to all the resources
- Yes, well presented — just needs to be at a slower pace or more time devoted for me
- Yes, the library component was of great assistance to my research and information gathering skills
- Yes, especially in my first year when I had no idea of where things were

**Lecturer feedback**

Basically all the students felt the exercise to be immensely useful... Since it (the session) was around essay time, they had clearer ideas of what they might want, and found what you had to say to be directly useful. Your exercises were also very useful and to the point, and if anything some of the students would have liked to have spent longer in the library.

Adrian Vickers, lecturer in HIST107 (First year history subject)

This lecturer's viewpoint is representative of other academics' statements in support of the benefits of subject integrated information literacy sessions. The desire expressed by the students to spend longer in the library can be a useful starting point for negotiations to extend the information literacy component.

In the years students did not have such tutorials, the general lack of library search skills showed up clearly in the quality of the submitted work.

Paraphrased from the comments of Dr Kelly, lecturer in ECON142, first year economics

ECON142 students receive a library assignment, prepared by the faculty librarian, worth 10% of the assessment for the subject. In the subject outline it is specified that students "...are expected to develop library skills in finding source material." The value placed on library and
information skills is evident to students, academics and library staff when statements such as these are included in the subject outline provided to all students. It is the library’s aim to have statements such as this included in all first year core subjects.

**Desired outcomes—learner’s perspective**

From the student’s perspective, subject integrated information literacy skills, whether in the ARTS101 format or at a more reduced level, would:

- introduce them to the world of information
- provide all students with a basic set of information literacy skills on which they can build
- allow students to develop a level of independency when using the library
- provide confidence in their ability to seek information
- enhance the quality of submitted work

Formal assessment should form one of the indicators of a student’s ability to locate, evaluate and use information. Ideally, in addition to attending a combination of lectures and tutorials, students would complete a library assignment that attracts a minimum of 10% of their grade. The assignment would be set by the librarian in collaboration with the subject coordinator. Marking would be undertaken by the tutor as part of the overall subject assessment. This type of instruction and assessment is already occurring in a number of first year core subjects. Timing of library instruction to coincide with assignment lead up time is crucial for this type of assessment to work.

Lecturers usually request information classes during the first two to three weeks of session. In some cases this may coincide with students' essay preparation time but, more often, the time is chosen only at the convenience of the department to assist lecture and tutorial schedules.

Students frequently lack motivation at this early stage as assignments are not looming. This concentration of library classes in a two to three week period, early in the academic session, also places enormous pressure on library staff and the physical resources.

**Venues, facilities and equipment**

Three seminar rooms located in the library are now equipped with computers connected to the campus network: high powered overhead projectors, colour display panels, wall mounted screens and whiteboards. One room accommodates 30 students and the other two can cater for up to 40 students.

A room, which is equipped with eight catalogue terminals, a whiteboard and seating for a maximum of 16 is also used for information sessions. The room is open for general catalogue searching but can be closed off for teaching purposes.

From the catalogue terminals students have access to the catalogue, Liblink and Carl unCover. This room is also used to teach access to these resources.

One of the heaviest used facilities in the library is the CDROM room which provides access to a range of networked and stand alone databases. The room houses two standalone fulltext database workstations, a multimedia Macintosh and twelve networked PCs with built in CDROM drives linked to laser printers. This room is occasionally booked for hands on CDROM instruction. However the majority of CDROM instruction involves demonstrations conducted as part of a tutorial in seminar rooms.

Two main deficiencies have been identified which, if remedied, would enhance the range and type of classes currently provided: firstly, a lecture theatre attached to the library capable of holding up to 100 students, and secondly a computer lab that could be used for teaching hands on Internet training. Increasingly, students are requesting a 'hands on' approach to computer related information tools such as the CDROM databases and the Internet. Plans for these would have extensive resourcing implications and will need careful consideration.

**Delivery methods**

Over the past three years attention has been increasingly devoted to instructional methods in library skills sessions. Faculty librarians have adopted new teaching strategies, moving from content based sessions to more activity based sessions to cater for all learning styles. The shift in teaching styles has resulted from: teacher training, feedback from students and lecturers, librarians' personal dissatisfaction with classes, and increased knowledge of learning theories.

The eight faculty librarians and reference librarians operate as a strong team, sharing ideas, resources, expertise and the workload. Strategies have been employed to avoid duplication of effort, particularly in the area of lesson preparation and support material. A central file of resources has been developed which includes:

- Powerpoint demonstrations for various lessons, for example Services for postgraduates
- group work activities materials, for example a collection of superseded indexes with worked examples, sample CDROM searches for various databases
- activities to use as openers to the session or linked with a particular resource, for example CDROM search strategy sheet designed for completion in class as a brain-storming exercise
- overhead transparencies, for example showing a step by step approach to using a reference tool such as citation indexes

Feedback from individual classes has shown that the visual presentations and the activities have been positive improvements to information skills classes.

**INSTITUTIONAL FACTORS**

The providers can be divided into two categories for the purposes of this case study: The library, specifically management and support personnel, and the faculty librarians who provide the information skills classes.

**The library**

The library document, Prospect 2001, published in 1991, indicated the expectation that paraprofessional staff would need to develop a broader range of skills. As part of this commitment to multiskilling, and the increasing demand by clients for information services, library technicians were trained to staff the information desk. This in turn allowed faculty librarians more time to concentrate on developing and teaching information skills classes.

Library management supported many initiatives and suggestions from faculty librarians which led to improved teaching skills and facilities and a higher profile in the academic community. Examples include:

- management support for faculty librarians lacking teaching qualifications, to participate in a six credit point subject—Introduction to tertiary teaching—taught in the Education Faculty
- money earned from fee for service library instruction diverted to funding casual library staff to assist at the information desk which relieves faculty librarians for other duties
- funding for improved presentation equipment and facilities to enhance the quality of presentations

The library management promotes and supports the aim to integrate information literacy skills into the curriculum. In all recent documentation, such as the library's annual reports, the
We have already seen a significant change in the recognition of faculty librarians as partners in the educative process. The faculty librarian for Arts for instance has increased her profile in the resistance by some academics through lecturing in the ARTS101 subject. Although previously valued as a librarian, as the increasing volume of classes, duplication of classes for some students and continued discussions including planning, examination and faculty education committee meetings.

Growth in the volume of information available and its dispersion across the Internet increases difficulties associated with identification and use of appropriate material. While libraries have always had an educative role, information literacy skills will be recognised as an essential attribute for effective scholarship. Ideally, course curricula should encompass such skills so that individuals gain competencies appropriate to their needs. The teaching of such skills may be handled differently across the university but the library should have a dynamic role in ensuring that all members of the university have the necessary skills. Relevant members of the library staff will need to possess teaching and curriculum skills, and to be recognised by the academic community as colleagues in the learning process.

We have already seen a significant change in the recognition of faculty librarians as partners in the educative process. The faculty librarian for Arts for instance has increased her profile in the faculty, through lecturing in the ARTS101 subject. Although previously valued as a librarian, she is now regarded as a fully participating teaching member of staff. She receives financial recognition from the faculty for subject preparation and teaching and participates in high level discussions including planning, examination and faculty education committee meetings.

Faculty librarians
Faculty librarians have embraced the challenge of integrating information literacy skills into the curriculum. They have sought to alleviate, where possible, problems associated with this such as the increasing volume of classes, duplication of classes for some students and continued resistance by some academics to effective advanced planning. Some of the strategies employed have been

- requesting academics to assign lecture time for library instruction to reduce the pressure of teaching numerous small classes in tutorial times
- increasing liaison with academics to improve planning for library instruction
- linking assignments to information skills sessions to maximise the benefit to students
- ongoing development of teaching and presentation skills for librarians
- enrolling faculty librarians in the Introduction to tertiary teaching subject
- developing a pool of teaching resources to avoid duplication of effort
- continuing improvement of teaching resources and facilities through budget requests
- increasing participation in the broader campus network to better contribute in wider policy issues (for example, through the education committee and computer policy committee)
- increasing attendance at departmental meetings and library committee meetings in each faculty in order to promote the information literacy agenda
- reducing ‘overkill’ of information literacy classes for some students by identifying core first year subjects in which to implement curriculum based information literacy skills

The faculty librarian for Arts has embraced a more complex challenge by teaching in the ARTS101 course. Catering for an enrolment of 50 students has had implications for the practical components in the 14 week subject. Three library staff have been involved each week in teaching ARTS101 in the latter part of the subject although Arts funding has only been available for one person. This has naturally raised issues about resourcing. Although the library has been prepared to divert resources to such an important initiative subject, it could not withstand similar cost implications should such a subject be implemented across a number of faculties. A review held in late September addressed this issue, among others.

Issues will be further discussed by members of a recently formed working party on information and computer literacy. The author has been invited to participate in this group along with the Dean of Students and members from several faculties.

Stakeholders
Early in this case study, stakeholders were identified as the students, academic staff, library staff, the university, employers and the graduates’ families. In this section, however, the relationships between library staff, students, academics and the university only will be discussed.

Valuable liaisons between faculty librarians and certain academic staff have been occurring for a number of years. However, more needed to be done to increase commitment to information literacy and to place it as an issue on an increased number of agendas on campus. The first formal approach to strengthen partnerships came when librarians invited academics to a forum in February 1994. All academics were invited to attend a morning of reflection, discussion and planning. Approximately 40 academics attended on the morning resulting in valuable dialogue which led to a set of future goals. Academic staff and librarians worked in groups discussing topics which covered information literacy, time restrictions for library instruction, critical evaluation of library sources and making library instruction relevant. This dialogue was continued and expanded in the 1995 information literacy forum.

Significant developments in relationships between academics and library staff

- a formal negotiation process for library instruction requiring academics to complete an outline of what their expectations are for the library session. This can be completed on a proforma sheet sent via email or internal mail
- the invitation to the Arts faculty librarian to join the planning committee for the development of the new subject ARTS101
- recognition of library staff as partners in the education process
- invitations to attend planning meetings which would influence the inclusion of information in the curriculum
- establishing information literacy classes in subjects such as engineering and maths where historically library instruction activity has been low

Significant developments in the relationships between the library and university

- inclusion of the information literacy definition in the university information literacy policy
- closer liaison with information technology services in order to better provide joint support for staff and students such as joint presentations on accessing and using the Internet
- statements of commitment to the continuation of information literacy programs in university publications: for example, the commitment to continue first year Mathematics information literacy programs as stated in the *Towards 2000 progress report* published in 1993
- recent invitation for library staff to participate in the new working party on information and computing literacy
Relationship between library staff and students
This relationship is particularly important as it is imperative that students have a positive view of the library and staff. Their attitude towards attending library sessions is not only influenced by lesson content but also by student impressions of library staff, their dedication, professionalism and willingness to assist.

Students who have attended library sessions
• accept librarians as trainers and therefore regard them as part of the teaching and learning process
• perceive librarians as professionals guiding them through the maze of information
• have commented favourably on the quality of presentations and publications
• are more appreciative of the range of skills displayed by librarians
• consider librarians as partners in the research process

Reflection
The ‘bottom up’ approach taken by the library in implementing information literacy skills into the curriculum has resulted in a very gradual process and has involved a heavy workload for faculty librarians. In the early stages it would have been advantageous to have had the opportunity to exert more influence with high level policy makers through forums such as the university’s education committee. Instead the library has worked hard at the grassroots level and has now reached a stage where to continue with further developments in curriculum based library instruction in all faculties would need support at higher levels. Through the library’s participation in forums such as the working party on information and computer literacy, it is anticipated that its current programs can be consolidated and streamlined.

The problem of student overlap in information literacy classes could possibly be solved with the introduction of a compulsory subject similar to ARTS101 for all first year undergraduates. However, the library would encounter major resource implications if a similar but comprehensive first year information literacy subject were to be introduced.

Faculty librarians are also reluctant to move towards a generic first year information literacy subject as this detracts from one of the better features of our current program where each skills session is linked with the curriculum by using examples and exercises that relate to the subject content.

THE FUTURE
The library is committed to focusing on a comprehensive curriculum based information literacy program. This will require changing the teaching and learning environment in the university by introducing information literacy objectives into curriculum design. These objectives need to appear attractive and relevant to all stakeholders. Despite the fact that the library has accomplished much already, library staff will need to operate effectively in forums such as the working party on information and computing literacy. Only then can their agenda be furthered and policies formalised.

References
1 Wright, L and McGurk, C Information literacy: towards a credit point subject Proceedings of the conference: Integrating the teaching of academic discourse into courses in the disciplines Melbourne, La Trobe University 1994 p211-227
2 University of Wollongong Towards 2000 progress report University of Wollongong 1994
3 Wright and McGurk op cit
4 University of Wollongong Library Prospect 2005: strategic vision draft University of Wollongong 1995

Lynne Wright is the reference librarian at the University of Wollongong Library. She has held a variety of educational positions which included primary classroom teacher, teacher librarian and Tafe librarian. Lynne is primarily interested in the implementation of curriculum based information skills and is active in the development of university policy to achieve this objective. Address: University of Wollongong Library Northfields Avenue Wollongong NSW 2522 lwright@uow.edu.au

Catriona McGurk has held the position of Arts Faculty librarian at the University of Wollongong Library since 1990. She has previously held positions in a variety of university, polytechnic and school libraries in the United Kingdom. Catriona has pursued opportunities for developing and enhancing teaching techniques and strategies and is currently working towards a qualification in adult education and training. She is one of the lecturers in the ARTS101. Address: University of Wollongong Library Northfields Avenue Wollongong NSW 2522