ABSTRACT

In 2001, QUT Library released Learning for Life: Information Literacy Framework & Syllabus. Subsequently, this document has been adopted by QUT as a framework to guide policy and practice in relation to information literacy curriculum development across the University. This paper showcases the final product and discusses various development and implementation issues.

INTRODUCTION

As the impetus for developing generically competent graduates gains momentum in higher education, academic and library teaching staff are confronted with the need to develop new ways of teaching and learning for students. The imperatives for tertiary institutions to do so are, in no small part, directly attributable to a climate of increased economic accountability (to deliver value for money), educational accountability (to provide rewarding learning experiences for students), and industry pressure on institutions to produce graduates who possess a high level of generic competency and who can adapt to, and function efficiently in, highly changeable work environments.

In recent years, many Australian universities have recognised the role of the academic library in guiding and facilitating good practice with regard to the development of information literacy as a generic capability. In turn, many academic libraries have been looking for ways in which this may most effectively be undertaken. Most libraries recognise that systemic and systematic change is required in the design and delivery of core curricula which allows for mastery of information concepts and skills in a sequential, hierarchical and developmental manner.

Invariably, where adoption of information literacy and change in pedagogical behaviour has been significant, an underlying philosophy of strategic policy and resource provision has been inherent in planning and practice. There are many models which illustrate such an approach, with a number of Australian academic libraries (notably Griffith University, University of Wollongong and Central Queensland University) at the forefront of establishing information literacy policies, processes and methodologies for supporting the teaching and learning of their
parent institutions. Each of the aforementioned has undertaken different approaches but achieved similar successes.

Similarly, the recent development and release of *Learning for Life: Information Literacy Framework & Syllabus (ILF&S)* has facilitated understanding, acceptance and adoption of information literacy as a teaching and learning imperative for Queensland University of Technology.

In February 2001, QUT’s Teaching and Learning Committee endorsed the ILF&S. This document, produced by QUT Library to facilitate comprehensive and consistent information literacy and curriculum development, was thus adopted by QUT as a policy to guide teaching and learning practice in the University. This paper documents the development and implementation of the ILF&S and highlights issues considered throughout the process.

Readers Note: The acronym ILF&S will be used where reference is made to the full and combined resource. The titles, *Framework* and *Syllabus*, will be used in those instances to which one component is being specifically referred.

**RATIONALE**

The ILF&S seeks to inform the current and future teaching practice of QUT staff by providing a uniform framework, consistent terminology and common achievable goals. As part of a University-wide information literacy initiative, the Library has designed the ILF&S as a tool which will support, develop and enhance collaborative partnerships. It is anticipated that these partnerships will, in turn, facilitate the true embedding of information literacy throughout the curriculum of each discipline within the University.

Therefore, the ILF&S emphasises a strategic approach relating to the broader information literacy agenda for the University, and supports the Library's goal to promote information literacy as a key competency for lifelong learning, fundamental to the teaching, learning and research focus of the QUT community. It aims to promulgate models and strategies throughout the University for developing and evaluating information literacy initiatives in terms of student learning outcomes, curriculum structure and assessment (QUT, 2001).

**AUDIENCE**

QUT Library provides a range of information literacy services and resources targeting the education and research needs of students of the University. These services, which directly engage with the student, are provided as generic sessions and courses and/or, in varying degrees, as elements of faculty courses and units of study.
However, systemic curricula change requires the engagement of the *learning facilitator* as well as the learner. The ILF&S, therefore, is designed specifically for use by the educational practitioner, with a view to creating effective learning experiences for students. In this respect, students benefit from the by-product rather than from personal use of the product itself.

Indeed, it is expected that a range of stakeholders may profit from using the ILF&S as a guide to inform information literacy education. As well as faculty teaching staff, these groups may include university and faculty administrators, Library teaching and support staff, instructional designers and general QUT student support staff.

**DESCRIPTION OF THE ILF&S**

The ILF&S consists of two main sections: (i) the Framework and (ii) the Syllabus. Due to the close correlation of both these components to the *Australian Information Literacy Standards*, the ILF&S sends a consistent message to educators and creates a synergistic relationship with other initiatives and resources within the University.

**The Framework (the talk)**

The Framework forms the pedagogical and philosophical heart of the ILF&S and is divided into two main sections. Part 1, the *Information Literacy Principles*, outlines the guiding principles, aims and outcomes of the University's Information Literacy strategy as a whole, and in its constituent parts.

The *Information Literacy Plans* (Part 2) frame the *Information Literacy Principles* as broad developmental strategies for the three primary client groups of QUT:

1. Students (undergraduate and postgraduate; part-time, fulltime and external): in recognition that the information literacy knowledge, skills and understandings they develop throughout a course of tertiary study has the potential to position a student as a highly desirable citizen and employee;
2. Staff (academic and general): in recognition of the demands placed upon teaching staff to develop, maintain and demonstrate appropriate levels of information competence and to take on a proactive role in the fostering of information literacy in their students;
3. Community Outreach (industry, schools and community): in recognition that the University does not, and should not, work in a teaching and learning vacuum but rather participates in, and contributes to, all levels of the educational continuum.

Each *Information Literacy Plan* subsequently includes:
- **Rationale** - a summary statement indicating the principles underlying the plan for each client group;
- **Objectives** - statements of intent for University and Library administrators, leaders and educators;
- **Core & Discretionary Learning Outcomes** -
  (i) **Core Learning Outcomes** (CLOs) refer to those information literacy knowledge and skills considered essential for each client group;
  (ii) **Discretionary Learning Outcomes** (DLOs) refer to additional knowledge, skills and/or behaviours which may complement or support CLOs;
- **Evaluation** - brief statements addressing broad formative and summative strategies which may be used to measure achievement of the CLOs and DLOs.

The structure of the *Information Literacy Plans* follows a model similar to that of the Griffith University Blueprint, developed by Christine Bruce in 1994. Upon extensive investigation, this document proved to be an enduring exemplar of good practice. However, given the passage of time and a new information literacy landscape, and after further discussion with Dr Bruce, significant changes were made to the overall design and development of the *Information Literacy Plans*. The design of the Plans was further influenced, in part, by the *Curriculum Framework for Education Queensland Schools* released by Education Queensland and also draws upon the structure of the syllabuses developed by the Queensland School Curriculum Council.

The Framework also includes a reproduction of the *Standards*, a *Glossary of Terms*, and a *Summary Table of Responsibility* which identifies key players and partners, and associated responsibilities. This table is provided as an additional guide for administrators and teaching staff.

**The Syllabus (the walk)**

The Syllabus is the tripartite companion resource to the Framework and was completed in December 2001. As the primary target audiences for the resource are academic teaching staff and teaching librarians, the emphasis in design has been on facilitating good practice in curriculum design, development, delivery and evaluation pertaining to information literacy and teaching and learning. The three components can be used independently or interdependently.

(i) **Proficiency Map**

The *Proficiency Map* articulates generic levels of proficiency across Years 1 - 4 at the Examples level of the *Standards* [Figure 1]. For this purpose, three levels of demonstrated ability have been specified (and colour-coded for ease of use):
- **Elementary** (green) - the student has a basic understanding of the concepts associated with this task and can perform most of the relevant skills with little or no guidance.
- **Proficient** (yellow) - the student understands all of the concepts associated with this task, can demonstrate mastery of all the relevant skills, and apply them with no guidance.
- **Advanced** (red) - the student exhibits a thorough understanding of all the concepts associated with this task, understands the contexts within which they apply, and can perform all relevant skills independently and at the highest level.

<table>
<thead>
<tr>
<th>Standard</th>
<th>Outcomes</th>
<th>For example, the information literate person</th>
</tr>
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<tbody>
<tr>
<td>1.1.1</td>
<td>Confers with others including peers and experts, and participate in face and electronic discussions with peers to identify a resolved information need</td>
<td></td>
</tr>
<tr>
<td>1.1.2</td>
<td>Explores general information sources to increase familiarity</td>
<td></td>
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<tr>
<td>1.1.3</td>
<td>Identifies key concepts and terms by mapping the information that formulates and focuses questions</td>
<td></td>
</tr>
<tr>
<td>1.1.4</td>
<td>Defines or modifies the information need to achieve a more accurate understanding</td>
<td></td>
</tr>
</tbody>
</table>

**Figure 1: Information Literacy Syllabus: Proficiency Map (portion)**

(ii) **Resource Map**

This section links the practitioner to resources which support curriculum design and evaluation. Resources, clustered according to the Outcomes level of the Standards, include learning activities, assessment tasks, online resources and case studies [Figure 2].

<table>
<thead>
<tr>
<th>Standard 1</th>
</tr>
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<tbody>
<tr>
<td><strong>The information literate person recognises the need for information and determines the nature and extent of the information needed</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Learning Activities</th>
<th>Resources</th>
<th>Case Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1.1</td>
<td>activity 1</td>
<td>html pdf</td>
<td>study here</td>
</tr>
<tr>
<td></td>
<td>activity 2</td>
<td>html pdf, doc</td>
<td>study here</td>
</tr>
<tr>
<td></td>
<td>activity 3</td>
<td>html pdf, doc</td>
<td>study here</td>
</tr>
<tr>
<td>1.2.1</td>
<td>activity 1</td>
<td>html pdf</td>
<td>study here</td>
</tr>
<tr>
<td></td>
<td>activity 2</td>
<td>html pdf, doc</td>
<td>study here</td>
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<tr>
<td></td>
<td>activity 3</td>
<td>html pdf, doc</td>
<td>study here</td>
</tr>
</tbody>
</table>
Learning Pathways

Given the diversity of skills inherent in the study of various disciplines, the Learning Pathways have been designed to articulate discipline-specific levels of proficiency, again at the Examples level of the Standards. In simple terms, the Pathways re-present the proficiency levels within a subject context. These resources will be progressively developed in collaboration with academic teaching staff throughout 2002.

While it is anticipated that the Proficiency Map and the Learning Pathways will be reasonably stable in nature, the Resource Map will be an evolutionary and fluid resource which will require ongoing development and maintenance. This characteristic is considered a strength of the Syllabus as it will allow it to (a) remain current; (b) retain ongoing relevance in a changeable educational environment; and (c) respond to specific contexts and disciplines.

Australian Information Literacy Standards

QUT Library adopted and implemented the Australian Information Literacy Standards, as endorsed by CAUL, in 2001. Consequently, the QUT ILF&S articulates the Standards as a critical element of all information literacy development at QUT. They are provided as an appendix in the unabridged document and the Syllabus applies the Standards as a "curriculum backbone" against which to map resources.

In addition, the Standards have been used as the basis of a number of significant teaching and learning initiatives undertaken during the year, both Library-initiated and faculty-based, including the revision of the student learning outcomes for PILOT: Your Information Navigator (QUT's online information literacy tutorial). Specifically, each module of PILOT was mapped to the Standards at the Outcomes level. The original Outcomes statements were subsequently rewritten for a student audience; however, for the benefit of practitioners, links are provided to an interim page listing the statements as originally published in the Standards.

Thus an interconnected loop has been created between the Framework, the Syllabus, the Standards and PILOT. To return to the biological analogy, the Standards form the skeleton, the Framework provides the skin and the Syllabus functions as the muscle. PILOT and the Syllabus have, in turn, been interlinked via a "Standards membrane".

DESIGN AND DEVELOPMENT

As a consequence of the Information Literacy Review in 1998, QUT Library recognised the need to develop a comprehensive, practical and sustainable plan to support and guide the University's educational goals and objectives. Such a plan was considered fundamental to the
understanding and promulgation of information literacy principles, knowledge and skills within
QUT’s educational framework. Furthermore, it was believed that the proposed plan would
position the University at the forefront of educational practice in Australia (QUT, 2001).

The development of this plan, subsequently titled the ILF&S, received extensive encouragement
and support from the Library Director and the senior administration of QUT Library and the
Division of Academic and Information Services (DIAS). The Framework was noted as an action
on the Library Strategic Action Plan 2000-2001 and recorded as an Operational Performance
Target (OPT) for 2000 for the DIAS. For 2001, the Syllabus was listed as a DIAS OPT and an
action on the DIAS Strategic Plan. As an OPT, the ILF&S returned central University revenue to
the DIAS on completion.

QUT Library’s Information Literacy Coordinator undertook design and development of the
Framework over a period of nine months. At various stages of production, feedback was
solicited from a range of individuals and groups with expertise in the area of information literacy
education. In draft, the document was subject also to critical analyses by a Reference Group
consisting of a range of stakeholders drawn from the QUT teaching and learning community
(including Dr Christine Bruce). After progressing through the necessary Committee approval
processes, the Framework was presented to the QUT Teaching and Learning Committee where
it was subsequently endorsed. In the ILF&S publication, the covering foreword and message by
the Deputy Vice-Chancellor and Pro-Vice-Chancellor (respectively) attest to this approval.

The Syllabus project was conducted in 2001 and completed to technical production stage in
December. A project team, consisting of reference librarians and the Information Literacy
Coordinator, undertook the pedagogical design and development of the Syllabus as a whole,
and in its individual sections. Emphasis was placed on constructing a resource which was
interdependent upon the Standards. While examples of similar practice, nationally and
internationally, were used to inform the development of the Resource Map, the
conceptualisation and representation of the Proficiency Map and Learning Pathways is unique.

Technical production has been the responsibility of the QUT Library Systems Group. At the time
of writing, technical production was underway and the online version due for public release in
early 2002. Due to internal policy governing DIAS and Library webpage design, the initial online
presentation will be constrained by the current environment of the eLearn section of the
Library’s website. However, it is hoped that funding will be secured in the near future to produce
a unique look and feel for the ILF&S for access via the Internet. The potential for concurrent
release on CD is also under consideration.

The ILF&S has been designed with the needs of, and constraints upon, the practitioner at the
fore. Therefore, several aspects have been taken into consideration. The tenor and voice of the
final document reflects a distinct University-wide perspective, with the Library positioned as the
critical player in the ultimate achievement of goals and outcomes. This strategic approach has
ensured University acceptance and a universal "buy-in" by administration and faculty. The
layout of the Framework is clear and uncomplicated, and text has been limited to the minimum
required to effectively articulate the principal ideas. The practical hub of the resource (the
Syllabus) has been designed to maximise the functionality of hypertext and web technology in
order to facilitate immediate desktop access for academic and library teaching staff.

MARKETING, PROMOTION AND IMPLEMENTATION

The ILF&S draws together information and resources for presentation in two formats - print and
online.

Substantial funding was provided by the Library Director to produce ILF&S publications of a
highly professional quality. As the theoretical underlay, the Framework has been published in
print format as a bound A4 booklet (28 pages) for executive distribution, and in an abridged 6-
page brochure for general distribution. A PDF version has also been made available from the
Library's website (http://wwwlib.qut.edu.au/elearn/).

The Library's Community Services Librarian, who worked closely with QUT Publications and the
Information Literacy Coordinator throughout the process, oversaw production and marketing of
the print publication. Copies of the Framework (executive edition) were distributed internally to
all QUT Deans, Heads of School and Course Coordinators, as well as externally to all CAUL
libraries and selected international institutions. The release of the document provoked
substantial interest in information literacy and prompted numerous requests from Faculties and
Schools to present the document at various University seminars and executive meetings. In
turn, several faculties adopted the Framework to inform undergraduate course review initiatives.

The necessity to accommodate the emergent needs of the students and staff of the University
has dictated the development of the Syllabus in an online format. As previously mentioned, the
technical configuration of the Syllabus is currently in production. It will become publicly
accessible from the Library's eLearn Education & Training website early in 2002
(http://wwwlib.qut.edu.au/elearn/).

Much of the promotion of the ILF&S has fallen to the responsibility of the faculty liaison
librarians, and their involvement in the design and development phases has been critical to the
success of the overall implementation process. Such a role has demanded that each librarian
not only have an indepth knowledge and understanding of the ILF&S but also be able to clearly
and consistently articulate the messages within. They must, likewise, be able to advise wisely
on ways in which it may be best used by course designers, course coordinators and faculty teaching staff.

The success of their lobbying and advocacy has relied heavily on existing professional relationships between librarians and faculty staff, and strategies such as personal selling, individual consultations and committee participation have been critical. To date, this approach can directly account for a number of significant achievements in embedding information literacy into the curriculum, notably in the areas of education and science.

Indeed, the University recently signalled their ongoing commitment to embedding information literacy into course curricula by awarding a Teaching and Learning Large Grant of $150 000 to the Faculty of Science, QUT Library and the DIAS. This project aims to significantly enhance the development of information literacy skills in Science graduates by adopting the approach detailed in the ILF&S. The project is, therefore, the first systematic and systemic attempt to turn the ILF&S into action in the classroom (Nulty et al, 2001). The 2 year project commences in 2002.

**CONCLUSION**

It is through the curriculum that educators will enable transferability of information skills from one context to another, and empower students to create knowledge and learn how to learn for life. For this outcome to be realised, universities need to emphasise information literacy as a core graduate capability and engage Library professionals in the ongoing planning, development and implementation of teaching and learning initiatives, particularly as they relate to information literacy.

QUT recognises the critical relationship between appropriate curriculum design, effective teaching and learning strategies, and the development of generic capabilities such as information literacy. QUT Library, in turn, has a deep commitment to the development of information literacy-related attributes and the delivery of quality learning experiences for the learning community of the University. In partnership with academic colleagues, QUT Library continues to seek to enhance curricula and create learning environments which support QUT’s teaching and learning goals.

The Library’s commitment and aims in this regard are illustrated by the development of the ILF&S. By promulgating a common language, facilitating common practice and enabling common outcomes, this resource has the potential to play a key role in the establishment of information literacy as a critical generic capability at QUT. Through the creation of the ILF&S, the Library has also clearly signalled a willingness to accept a leadership role in developing and fostering the information literacy knowledge, skills and understanding of the QUT community.
Ultimately, it is hoped that the influence and implementation of the IFL&S will facilitate learning opportunities whereby students can develop a sense of information competence and accomplishment which motivates each individual to self-develop, continue to learn and which serves to add meaning to future life and work experiences.

REFERENCES
