Undergraduate Sequenced Information Literacy Program. University of Melbourne, Faculty of Education.

Aim: To assist students to become information literate to the extent where they can recognize a need for information, and successfully search, evaluate, document and use the required information.

Objectives: The sequential program will facilitate the development of information skills and knowledge, which will:

- Assist students to successfully complete their undergraduate studies.
- Assist students to succeed in the workplace, and to keep up to date with developments in the profession.
- Assist students to successfully complete further studies and research in the future.

Background: Staff in the Faculty of Education and the Information Division have long been aware of the importance of information literacy for students, both in terms of the successful completion of the course in which they are enrolled and lifelong learning. A sequenced information skills program for students enrolled in the Bachelor of Education (Primary) course was developed by Faculty of Education and Information Division staff and implemented in 2002. The extension of the program to cover both the Bachelor of Education (Primary) and the Bachelor of Early Childhood Education courses in 2003 was a logical step.

University of Melbourne's Teaching and Learning Management Plan

The *Nine Principles Guiding Teaching and Learning in the University of Melbourne* (James and Baldwin, 2002) was used as a reference guide in the development of the Faculty of Education *Undergraduate Sequenced Information Literacy Skills Program. Principle 8*, "Premium quality learning resources and technologies" states that information and communication technologies: "... are an integral part of the process of knowledge development and dissemination in all fields..." and "...provide previously unimaginable learning experiences and can greatly assist in exposing students to the frontiers of knowledge in particular fields...it is essential for Melbourne graduates to develop the skills of independent information searching, evaluation and utilisation using all available sources of information..."

The program will contribute towards the development of the qualities and skills outlined in the 'Attributes of the Melbourne Graduate', in particular:

- "profound respect for truth and intellectual integrity and for the ethics of scholarship"
- "awareness of advanced communications technologies and modalities, sound working skills in the application of computer systems and software, and receptiveness to the expanding opportunities of the 'information revolution'".

The Australian *Information Literacy Standards*, which were endorsed by Academic Board in April 2002, have also guided the development of the program.

References:

- Council of Australian University Librarians (2001) *Information Literacy Standards*. Adelaide: University of South Australia
- James, R. & Baldwin, G. (2002) *Nine Principles Guiding Teaching and Learning in the University of Melbourne*. Melbourne: Centre for the Study of Higher Education <u>http://www.cshe.unimelb.edu.au/pdfs/9principles.pdf</u>

OVERVIEW

Students arrive at the University of Melbourne with varying levels of information literacy and information technology skills. The program aims to facilitate the sequenced development of core information skills to support an information literate graduate. While the delivery of the program is the responsibility of Information Awareness and Literacy Services, Information and Education Services (Information Division), it is acknowledged that Faculty of Education academic and support staff, and other University staff, including the Language and Learning Skills Unit, Student IT, also contribute to this endeavour.

The program centres round a series of information literacy skills training sessions specifically planned for students enrolled in undergraduate courses delivered by the Faculty of Education, run during class time. Coverage includes a logical progression of skills and knowledge from 1st to 4th year. Online support will be delivered in the form of web-based guides, *Subject Resources* @ *Library* to supplement the face-to-face-program.

1st YEAR

General familiarization with relevant library based and online information sources and search tools, with an introduction to intellectual integrity, and critically examining information.

Searching the education literature: 1st Year students rely largely on reading packs and recommended reading lists for sources of information. Emphasis will be placed on locating set reading material, and on identifying and locating relevant books and curriculum material. Encouragement and support will be provided to those students who wish to go beyond the set reading and explore the education literature further.

Evaluating information sources: Most students at this level utilize free to air web based information sources. Students will be encouraged to critically examine such sources using an evaluation criteria, which can be easily applied to looking critically at information in all formats.

Documenting information sources: The importance of intellectual integrity, acknowledging the work of others will be reinforced. The elements of basic citations (books and Web-based sources) will be covered.

Orientation Tour & Tutorial 1 hour session in the ERC

- Orientation Familiarization with ERC collections and services. Emphasis placed on main collections including curriculum material.
- Library Catalogue Emphasis placed on-
 - 1. Locating recommended reading material, and curriculum material.
 - 2. Citation elements and the importance of documenting sources.
 - 3. Introduction to transferable online searching skills through keyword searching.
- Evaluating sources located on the Web- Demonstrate a range of resources (of varying quality) available on the Web, and use a basic criteria to evaluate their worth.

2nd YEAR

Familiarization with the range of different information sources which together make up the education literature. Development of skills required to identify and locate information relevant to a topic in local and international sources.

Searching the education literature: While students' reliance on recommended reading lists continues, some assessment tasks in 2nd Year require a basic search of the literature for relevant sources. Students will be provided with an opportunity to become familiar with information sources with which, until now they have had little experience. Experience will be gained in using major online international and Australian indexing tools, applying transferable online searching techniques and translating assignment topics into online search statements.

Evaluating information sources: The need to critically assess information sources will be reinforced, and the concept of refereed and non-refereed articles and papers will be introduced.

Documenting information sources: Efficient methods for keeping accurate records of all relevant sources referred to will be introduced. The ability to identify the major types of sources (including books, book chapters, journal articles and conference papers) by accurately reading citations will be developed.

Tutorial 1 1 hour session in the ERC

- Research literature journal articles, conference papers, reports etc.
 - 1. Physically handling different types of material. (Concentrating on hard copy to give students a feel for the different types of material, and the field in which they are working.)
 - 2. Learning how each type of information source is cited, and applying this in an exercise.
- Evaluating sources using criteria introduced in 1st Year, and differentiating between refereed and non-refereed journals and papers.
- Methods for keeping accurate records of all information sources referred to.

Tutorial 2 1 hour session in Computer Lab

- Searching the education literature using some of the major online indexing tools (ERIC, A+ Education and Proquest): hands on experience.
 - 1. Translating questions and topics into online search statements.
 - 2. Standard features of databases: keyword searching using Boolean Operators and Truncation, viewing results, obtaining a copy of citations and full-text when available (print, download, email).
 - 3. Selecting appropriate, relevant sources from search results applying evaluation criteria, and where possible considering whether a source is refereed.
 - 4. Assessing which online indexing tools are most appropriate for the topic and task in hand.

3rd YEAR

Further knowledge and skill development to enable students to confidently approach and undertake a literature search making use of the resources and support available.

Searching the education literature: Opportunities provided to develop more advanced online searching techniques and to use the WWW as a research tool. Tools used to locate sources in other locations will also be covered.

Evaluating information sources: Introduction to free-to-air, Web based tools, which assist in the evaluation process, including subject directories and gateways

Documenting information sources: Emphasis will be placed on secondary citation.

Tutorial 1 hour session in Computer Lab

- Literature search process a holistic view where elements of the process (planning, including an initial search to obtain background information; searching; evaluating and documenting information sources) will be presented and discussed.
- Major online indexing tools- advanced features of ERIC and A+ Education explored, including controlled vocabulary. Additional specialized indexing tools (for example Lexis-Nexis for newspapers) will be introduced.
- WWW as a research tool -Locational tools, including other library catalogues, Coolcat, and SIAL
 -Subject Directories and Gateways
 -Curriculum material
- Secondary citation.

4th YEAR

Students work towards attaining the ability to independently search the education literature. Applying information skills and knowledge to successfully conduct a search of the literature to meet present information needs, and future needs in further study or in the workplace.

Searching the education literature, evaluating information sources, documenting information sources: Continue to develop, and bring together, the information skills and knowledge developed over the four years of the program. Assessment requirements are more demanding in 4th Year in terms of the information skills and knowledge, which students are expected to possess.

Lecture 1 hour session in regular Lecture time

- Demonstration, using a specific topic as a case study, of a literature search utilizing key online indexing tools. (Identifying key authors)
- Frequently Asked Questions regarding citation
- Searching the literature in the workplace: provide students with information on a range of online sources, which will be available to them in the workplace including current awareness and indexing tools.
- Offer further information sessions (voluntary attendance) for students who require additional support.

2005 Information Skills Training Sessions	, ,
1st Year	
 BECE 472-103 Orientation to the Profession (Jane Page) 485-103 Learning Area (EC) Health & Phys Ed 1 (Val Webster) BEd 485-102 Learning Area: Science & Technology 1 (Christina Har 	
2 nd Year	
 BECE 472-201 Cognitive Development (Sharne Rolfe) BEd 485-220 Learning Area: Health & Physical Ed.2 (Val Webster) 485-229 Learning Area: Health & Physical Ed 2 (advanced) 	Sem.1 Sem.1
3 rd Year	
BECE 483-302 Learning Area: Language & Literacy 3 (Janet Scull)BEd 483-365 Learning Area: Language & Literacy 3 (Pam Macintyre)	Sem.1 e) Sem.1
4 th Year	
 BECE 460-425/428 Project Design (Christine Ure) BEd 460-424 Research Project (Christine Ure) 460-427 Honours Project 	Sem.1 Sem.2

2005 Program Evaluation

The sequenced information literacy program has been running in all four year levels of the Bachelor of Education (Primary) for four years, and the Bachelor of Early Childhood Education for three years.

The aims and objectives of the program are being evaluated, initially via a series of student surveys, consisting of a combination of qualitative and quantitative questions. Core questions allow comparisons to be made across year levels. Additional questions relevant to specific years have also been included.

Commencing 1st year students in both courses completed a pre-test survey early in 1st Semester. Post-test surveys (each year level) were administered in core subjects towards the end of 2nd Semester.

1st Year Pre-test

B.Ed 485-102 Learning Area: Science & Technology 1 (Christina Hart)BECE 460-108 Teaching and Professional Practice 1A (Jane Page)

1st Year Post-test

B.Ed 485-101 Learning Area: Health & Physical Education 1 (Val Webster)BECE 485-103 Learning Area: Health & Physical Education 1 (Val Webster)

2nd Year Post-test

B.Ed	485-202/204	Learning Area: Mathematics 2 (Helen Chick)
BECE	485-201	Learning Area: Mathematics 2 (Helen Chick)

3rd Year Post-test

B.Ed	485-349/355	Learning Area: Science & Technology 2 (Christine Redman)
BECE	472-303	Professional Roles & Relationships (Jane Page)

4th Year Post-test

B.Ed	485-448	Learning Area: Science & Technology 3 (Rod Fawns)
BECE	472-403	Navigating Professional Contexts (Jane Page)