

**PROBLEMATIC FUTURES: EDUCATIONAL RESEARCH IN AN ERA OF  
UNCERTAINTY**

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**LAW STUDENT'S EXPERIENCES OF INFORMATION AND INFORMATION  
TECHNOLOGY - IMPLICATIONS FOR LEGAL INFORMATION LITERACY  
CURRICULUM DEVELOPMENT**

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**1. INTRODUCTION**

Information literacy is increasingly being well established as an important educational outcome for university graduates of all disciplines, both by universities and employers. The 1997 Goldsworthy Report *The Global Information Economy: The Way Ahead* recommended in the area of enhancing skills formation, education and training that "all tertiary graduates should be information and communication technology literate in their chosen fields of study and expertise by the year 2000" (Goldsworthy, 1997:79). In 2000 the "encouragement of universities to ensure that their graduates enter the workforce with the competencies needed, including information literacy skills and lifelong learning skills" was outlined as a strategic priority by the Australian Vice Chancellor's Committee in its' paper *The Way Forward: Higher Education Plan for the Information Economy* (AVCC, 2000). This is being

taken up by universities in their statements about graduate attributes which invariably refer to lifelong learning capabilities, information literacy or both of these. The significance of incorporating legal research skills training in law curriculum has been acknowledged since the Pearce Report, a discipline assessment of Australian law schools in 1987 (Pearce, 1987). Despite the growing emphasis on information skills training, research into this area of legal education in Australia has been scant. The aim of the research described in this paper was to examine the extent of students' use of information and information technology in undergraduate legal education, their success rate with using information and information technology, their views on the place of information literacy education and the implications for law school curricula in Australia.

The primary outcome of this survey is a picture of law students' present experiences with information and information technology previously unavailable to legal educators. In particular the results of the survey show that, despite the rich information and information technology environment surrounding law students and existing skills training, present legal curriculum does not seem to have succeeded in the task of educating students for effective information problem solving that is critical in legal practice. The remainder of this paper presents some key results of the survey and suggests principles for an alternative curriculum model which may strengthen education, lifelong learning and information literacy in legal curriculum.

## **2. LITERATURE REVIEW**

### **2.1 Aims of legal education**

The debate regarding the appropriate aims and objectives for the provision of legal education in contemporary Australian society has been an ongoing one and the subject of substantial reports in recent years (Pearce, 1987; McInnis, 1994).

A notable theme in the Pearce Report, a discipline assessment of Australian law schools in 1987, is the importance of the role of the law school in the training of law students for the legal profession and for the many other careers that involve legal work. Pearce indicates that law schools can not realistically teach all areas of law and that they quite rightly seek to achieve other aims in education than the mere imparting of knowledge. These are primarily the cultivation of intellectual skills and evaluative understanding. However, as Pearce states, "it is also appropriate for [ law schools ] to be concerned to some extent with the cultivation of *skills* of a kind which lawyers use and which enable them to cope with change" [ emphasis added ] (Pearce, 1987: 25). Conceivably then the skill of use of legal information and information technology in a changing information society is an appropriate aim of legal education. This is supported by the statement that " the teaching of skills....should not be pilloried as some form of technical training unsuitable for legal training" (Pearce, 1987:31). However the Pearce Report does not substantively address the issue of information and technology skills in its examination of law school curricula. The Report only briefly discusses the narrower concepts of legal research, computer skills and the importance of reader education because "one of the major skills a law student needs to acquire is the ability to independently undertake legal research into the materials both primary and secondary" (Pearce, 1987: 116-117, 132-133, 134-135, 821-823).

The McInnis Report in 1994 was a review of the implementation of the recommendations from the Pearce Report. Interestingly in the discussion of the development of skills teaching since 1987 no substantial treatment is given to information technology and the issue is mentioned in passing in comments such as the importance of the "relationship between university legal education and social and technological change" (McInnis, 1994:36,168).

More recently the Australian Law Reform Commission, in its report on managing justice, noted that the traditional content based approach of law school curricula had not adequately prepared graduates for the changing legal workplace and suggested that legal education should focus on *what lawyers need to be able to do* rather than anchored around restrictive and outdated notions of *what lawyers need to know* (ALRC, 1999 at para 2.21).

## **2.2 Developments in higher education paradigm - information literacy and graduate attributes**

In higher education the focus has traditionally been on the academic content of courses. Though the importance of content is not in question, there is an increasing emphasis on the process of education that requires universities to reconceptualise how they teach so their methods are appropriate to the education of diverse groups of people throughout their lives in both formal and informal educational contexts. Information literacy and graduate attributes play a significant role in addressing the process concerns of higher education.

Precisely what is meant by the term "information literacy" varies and the scholars tend to describe information literacy rather than define it (Bruce, 1997:26; Cheek, 1995:2; Booker, 1995:157). Cheek suggests that information literacy involves identifying an information problem, "knowing what information is available, where it might be, how it can be located and searched, how it can be retrieved and stored, and how it can be processed and presented" (Cheek, 1995:2). Five concepts associated with elements of the emerging information society have influenced the idea of information literacy according to Bruce - information technology literacy, library literacy, computer literacy, information skills and learning to learn (Bruce, 1997:20). Each of these concepts coexists with the notion of information literacy and are "systematically differentiated from, or incorporated into, contemporary descriptions of information literacy" (Bruce, 1997:20).

The widely accepted American Library Association definition of information literacy describes information literate persons as -

Those who have learned how to learn. They know how to learn because they know how knowledge is organised, how to find information, and how to use information in a way that others can learn from them. They are people prepared for lifelong learning, because they can always find the information needed for any task or decision. (ALA, 1989:1)

The recent *Australian Information Literacy Standards* (adopting and modifying the United States *Information Literacy Standards for Higher Education* (ACRL (2000))) define information literacy as "an understanding and set of principles enabling individuals to recognise when information is needed and have the capacity to locate, evaluate, and use effectively the information needed" (CAUL, 2001:1). The standards describe an information literate individual as able to:

- recognise a need for information
- determine the extent of information needed
- access the needed information effectively and efficiently
- evaluate the information and its sources critically
- incorporate selected information into their knowledge base
- use information effectively to accomplish a purpose
- understand the economic, legal, and social issues in the use of information
- access and use information ethically and legally
- classify, store, manipulate and redraft information collected or generated

- recognise information literacy as a prerequisite for lifelong learning (CAUL,2001:1).

The importance of undergraduate education as a link in the lifelong learning process in an information society was a significant theme in the Candy Report investigation into higher education (Candy,1994:xii). A vital finding of the Candy Report was that "access to, and critical use of information and information technology is absolutely vital to lifelong learning, and accordingly no graduate - indeed no person - can be judged educated unless he or she is "information literate" and, to an extent, computer literate as well" (Candy, 1994:xii).

More recently a number of reports on higher education and the information society have reinforced that discipline knowledge is only one of a broader set of components that influence the success of a university graduate in their chosen profession (DETYA,2000; ATN,2000; NCVER,2001). These reports have reinforced the need for universities to reconsider the attributes of the graduates they produce and prompted universities to consider methods of producing graduates capable of making a relatively seamless transition from university to the ever-changing workplace. Graduate attributes are the qualities, skills and understandings a university community expects its students to develop during their time at the institution and, consequently, shape the contribution they are able to make to their profession and as a citizen (ATN,2000). Information literacy and lifelong learning (or elements of these) frequently appear in descriptions of graduate attributes.

Collectively the influences of information literacy and graduate attributes are developing the higher education paradigm to a more learning-centred and student-centred approach where learning has a content as well as a process.

### **2.3 Legal research**

The development of information literacy education in institutions of higher education has been influenced predominantly by librarians in their delivery of library instruction, bibliographic instruction and user/reader education (Bruce,1997:43). The analogy that the law library is to lawyers what the laboratory is to the scientist and the museum is to the naturalist is one that has been used for decades to describe the pivotal role the law library plays in the life of lawyers and law students (Woxland,1989:456). As Woxland states "...legal research skills are essential because the law library remains today, as it was one hundred years ago, at the heart of legal practice...there is something unique about the relationship of law books and the law library to the practice of law.." (Woxland,1989:463). In the United States and the United Kingdom the consideration of law library instruction, legal research and information technology are evident in the literature (Kauffman,1986; Morse,1982; Howland & Lewis,1990; Wren & Wren,1988,1990; Berring &Vanden Heuvel,1988; BILETA,1991,1996). Wren (1988) provides one of the foremost discussions on the importance of a process orientated approach, to teach law students *how* to do legal research, rather than teaching the contents of books or legal bibliography. "Future lawyers need a sound understanding of the problem-solving process of legal research, and need a familiarity with law books only to the extent it advances that understanding" (Wren,1988:476). This type of discussion is a step towards developing information literacy models for law school curricula. In Australia the literature on law library instruction and legal research has tended to be a description of the content of legal research courses or a survey of what law schools are teaching legal research, the problems/issues and where in the curriculum it is being taught (Hutchinson,1991,1992; Barnett, 1995). It is acknowledged in the Australian literature that legal research courses in Australia law schools are no longer in their infancy, but have at best developed to adolescence and still need to grow and that there is no clearly accepted model for such courses (Barnett,1995:8; Hutchinson,1992:90; Hutchinson,1994:2; Cuffe,1999). This research seeks to fill that niche and respond to the

graduate attributes agenda and develop such a model using the conceptual framework of information literacy.

### 3. DESIGNING AND CONDUCTING THE SURVEY

As this research was seeking quantitative data on characteristics, behaviours and beliefs relating to information and information technology use by law students, **survey research** seemed most appropriate (Neuman, 1994:222). A survey researcher asks people questions in a *written questionnaire* ( mail out or hand out) or during an *interview*, then records the answers (Neuman, 1994:28). Surveys are often used in descriptive or explanatory research. The basic purpose of the descriptive survey is to describe characteristics of the population being studied, make specific predictions and "test" relationships (Powell, 1991:56).

The **descriptive survey questionnaire** technique was the most appropriate in this study for the following reasons:-

- it would be cost-effective and practical to administer (Anderson, 1993:7-8)
- it would provide hard quantitative data that would be relatively easy to collect and analyse
- a hand-delivered questionnaire results in a negligible response rate problem (Powell, 1991:8)
- it would allow for a significantly sized and representative sample which would improve the reliability of the conclusions to be made about the entire population under study - general rule of thumb is the larger the sample the better (Powell, 1991:73)
- questionnaires tend to encourage frank answers largely because it is easier for the researcher to guarantee anonymity (Powell, 1991:84)

The **population** of law students at QUT, UQ and GU in Queensland is approximately 4000. As a population group they are relatively homogenous and a smaller sample is appropriate in these circumstances (Graziano, 1997:149; Anderson, 1993:28). *Final year law students* were used as the *sample* because as the group exiting the legal education process they are in the best position to reflect on legal education and are also most likely to be at the highest level of skills development. In Semester 1 1999, when the survey was administered, the final year student groups at each institution numbered approximately 600 - GU (approximately 80), UQ (approximately 220) and QUT (approximately 300).

The **questionnaire instrument** comprised of four sections that used a "tick a box" question format, and a matrix or grid, question to present in a compact way a series of questions using the same response categories. The final page of the questionnaire contained an "Any other comments" space and a terminology guide. The first section sought information on *Demographic* details such as gender, age group, status as a part-time or full-time student, whether law is first degree and GPA. The second section, entitled *Extent of use of information and information technology*, asked questions about the nature of students' access to a range of information technology and the frequency with which the information technology is used, frequency of visits to the law library, the nature of legal research training received at law school and their perceptions of that training. The third section on the *Nature of use of information and information technology* asked questions about the level of experience in completing a range of information and information technology tasks, such as whether you are always successful in downloading a file from the World Wide Web, and the nature of respondent's attitudes to information literacy. The fourth section of the

questionnaire comprised a test to verify answers to questions in the earlier sections of the questionnaire. This *Research Problem* focused on common legal research tasks for Australian law and was designed to test particularly the answers in the *Nature* section of the survey where respondents were asked about the success of their experiences in a range of I & IT activities.

The questionnaire was **piloted** in Semester 2, 1998 and administered in full to final year law students at Queensland University of Technology, University of Queensland and Griffith University in Semester 1 1999 in lectures in final year compulsory units.

The statistical analysis software used for data input, management and analysis was **SPSS** (Statistical Package for Social Sciences).

#### **4. KEY RESULTS FROM THE SURVEY**

The survey provides a detailed picture of the student population of three Queensland metropolitan universities as being frequent users of information and information technology, as having ample access to the necessary technologies, as considering themselves to be successful users, but as being apparently unable to transfer their supposed skills to relatively simple legal research problems. This inability raises questions about students actual, as opposed to perceived, levels of success in their use of information and information technology for legal problem solving.

##### **4.1 The typical respondent**

A total of 226 response were received from the three universities surveyed. The percentage breakdown of responses by university was 39.8% University of Queensland, 31% Griffith University and 29.2% Queensland University of Technology.

The respondents reflect a common statistic of a greater number of females in law schools than males. 55.8% of respondents were female and 43.8% were male.

The majority of respondents were in their twenties, with 82.7% aged between 20 to 25 years and 10.6% aged 26-30 years. Enrolment as a full-time student was most prevalent with 89.8% of respondents indicating they were full-time students, with 10.2% studying part-time. External law students were not surveyed.

The results of the question on whether the LLB was the respondents first degree indicates that for only 53.1% of respondents the LLB is their first degree. It is interesting that with the most represented age group being the 20 to 25 group that so many respondents would have another degree. Perhaps it is reflective of the increase in recent years in double degree combinations at law schools.

The final question in the *Demographics* section asked respondents to indicate what range their Grade Point Average (GPA) was in. 50.9% indicated that their GPA was in the range of 5.1 - 6, with 27.4% indicating the 4.1 - 5 range.

Thus, if there is a typical respondent it is a full-time female student, aged between 20 and 25 with a GPA between 5.1 and 6 for whom the LLB is their first degree.

##### **4.2 Extent of use of information and information technology**

Information and information technology use amongst the final year law students in Brisbane who responded to the questionnaire is quite extensive. Students surveyed report a high level of access to information and information technology and they use the resources frequently.

Approximately 75% of the final year law students in Brisbane visit the law library almost daily or once a week. This response reflects the special relationship between law students and law libraries. The analogy that the law library is to lawyers what the laboratory is to the scientist and the museum is to the naturalist is one that has been used for decades to describe the pivotal role the law library plays in the life of lawyers and law students (Woxland, 1989:456).

Almost all have computer access, including word processor, at home, with roughly 60% also having World Wide Web and email access from home. Interestingly only 77% are aware that computer access is available to them at university. Table 1 summarises the nature of access to information technology that final year law students in the three Brisbane universities indicate is available to them in 1999.

**Table 1 - Nature of access to information technology**

	Home	University	Work	No access
<b>Computer</b>	91.6%	77%	29.6%	.4%
<b>World Wide Web</b>	59.3%	85.8%	22.1%	1.3%
<b>Email</b>	60.2%	74.8%	22.1%	3.1%
<b>Word processor</b>	89.8%	65.9%	25.2%	.4%
<b>CD-rom</b>	54.4%	77.9%	18.6%	3.5%

The frequency of use of information technology amongst respondents is also significant. Approximately 70% use a computer daily with roughly 50% using the World Wide Web, email and word processors each daily, and approximately 30% use cd-roms weekly. Table 2 outlines the frequency of use of information technology of final year law students in the three Brisbane universities in 1999.

**Table 2 - Frequency of use of information technology**

	Daily	Weekly	Monthly	Occasionally	Never	No answer
<b>Computer</b>	72.1%	22.1%	1.3%	1.8%	.9%	1.8%

<b>World Wide Web</b>	42.9%	39.8%	6.6%	7.1%	2.2%	1.3%
<b>Email</b>	52.2%	31%	4%	4%	7.1%	1.8%
<b>Word processor</b>	56.2%	28.3%	8%	3.5%	1.8%	2.2%
<b>CD-rom</b>	11.1%	29.6%	20.8%	27.9%	6.2%	4.4%

#### **4.3 Success rates with using information and information technology**

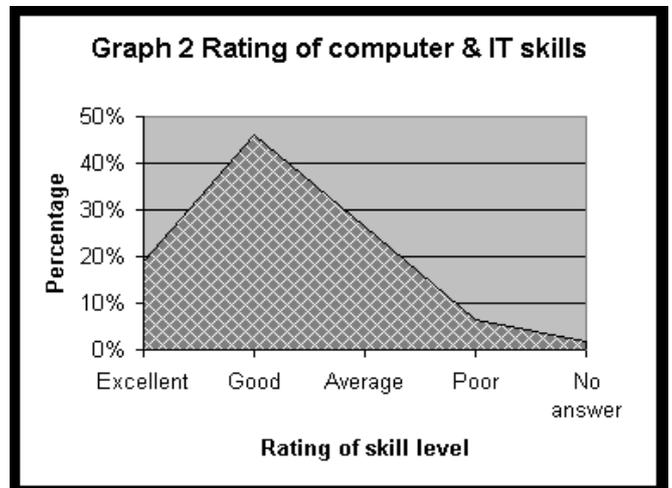
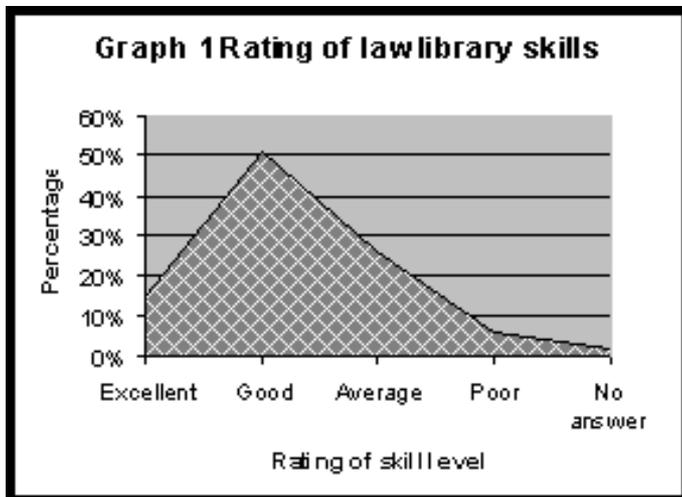
Respondents were asked to rate their level of success in a range of information and information technology activities that focused on common legal research tasks for Australian law. Table 3 outlines the results for each of the activities. The results for the two ends of the response spectrum of "Always successful" and "Not used" are particularly interesting in painting a picture of the way in which the students approach law related information and information technology activities. Typically in law schools the assessment of the success of these types of activities is in the form of the result of the activity, such as an assignment, rather than the information processes involved.

**Table 3 - Success rates with using information and information technology**

<b>TASK - SUCCESS</b>	<b>Always successful</b>	<b>Usually successful</b>	<b>Seldom successful</b>	<b>Not used</b>	<b>No answer</b>
<b>Using a word processor to complete an assignment</b>	84.5%	12.4%		.9%	2.2%
<b>Downloading a file from the World Wide Web</b>	27%	54%	9.3%	7.5%	2.2%
<b>Using email to communicate with lecturers and students</b>	51.3%	29.2%	3.1%	13.7%	2.7%
<b>Using legislation annotations to find reprints of legislation</b>	27.4%	40.7%	8.4%	20.8%	2.7%
<b>Using AustLII to find unreported cases</b>	20.4%	52.2%	10.2%	14.6%	2.7%

<b>Using case citators to find case citations</b>	24.3%	46.5%	8%	17.7%	3.5%
<b>Using the library catalogue to find a book on a topic</b>	46.5%	44.7%	3.5%	2.2%	3.1%
<b>Evaluating whether legal information found is current</b>	14.6%	59.3%	11.1%	11.1%	4%
<b>Finding second reading speeches in Hansard</b>	8.4%	24.8%	10.2%	53.5%	3.1%
<b>Listing keywords about your research problem</b>	23.9%	59.3%	4%	8.4%	4.4%
<b>Finding out whether Australia is a party to a treaty</b>	7.5%	17.7%	6.6%	65%	3.1%
<b>Searching full text cd-rom databases of cases</b>	23.5%	38.9%	11.5%	22.6%	3.5%

Overall the respondent final year law students rated their law library skills as slightly better than their computer and IT skills, with 65.9% rating their law library skills as "Excellent" (15%) or "Good" (50.9%) in comparison to 65% rating their computer and IT skills as "Excellent" (19%) or "Good" (46%). Graphs 1 and 2 graphically display these results.



#### 4.4 Analysis of research problem

The *Research Problem* section of the questionnaire focused on common legal research task for Australian law and was included to test or verify particularly the answers in the *Nature of use of information and information technology* section where respondents were asked about the success of their experiences in a range of information and information technology activities. The respondents were presented with a brief and simple research problem and asked to answer a series of questions relating to the problem. The answers to the research problem were evaluated alone and then crosstabulated with the respondent's ranking of the success of their experiences. A few examples of the crosstabulations are included below together with the basic analysis of the answers to the research problem.

The first question about the research problem asked respondents to indicate the keywords they would use to start researching the answer to the problem. Of the four choices, 76.5% selected the most appropriate combination of keywords. The crosstabulation below of the answers to the keywords for the research problem correlated with the respondents rankings of their experiences in listing keywords shows that 79.6% of respondents who indicated they were always successful in listing keywords selected the most appropriate combination of keywords ("contract and breach and Queensland") for the research problem presented (43 of 54).

Listing keywords experience \* Keywords to research problem Crosstabulation

			Keywords to research problem				Total
			Damages	Contract and breach and Queensland	Contract law	No answer	
Listing keywords experience	Always successful	Count	6	43	4	1	54
		% within Listing keywords experience	11.1%	79.6%	7.4%	1.9%	100.0%
	Usually successful	Count	11	104	15	4	134
		% within Listing keywords experience	8.2%	77.6%	11.2%	3.0%	100.0%
	Seldom successful	Count		6	2	1	9
		% within Listing keywords experience		66.7%	22.2%	11.1%	100.0%
	Not used	Count	2	15	1	1	19
	% within Listing keywords experience	10.5%	78.9%	5.3%	5.3%	100.0%	
	No answer	Count	1	4		4	9
		% within Listing keywords experience	11.1%	44.4%		44.4%	100.0%
	Don't know	Count		1			1
		% within Listing keywords experience		100.0%			100.0%
Total		Count	20	173	22	11	226
		% within Listing keywords experience	8.8%	76.5%	9.7%	4.9%	100.0%

Another interesting result from the research problem was the last question that asked students to indicate the best process for locating up to date Queensland legislation. The options combined annotations, current awareness services, full text hard copy reprints and the OQPC web site with electronic reprints in a variety of ways and specific orders. Only 44.2% of respondents selected the most appropriate answer (Queensland Legislation Annotations, Queensland Legislation Update, OQPC web site) with 31% selecting the next

most appropriate answer (Queensland Legislation Annotations, Queensland Legislation Update, Queensland Legislation Reprints). The crosstabulations of World Wide Web downloading experience, Legislation annotations experience and Evaluating legal information currency experience with the responses to the Best process for locating up to date Queensland legislation, show a low level of correlation between those respondents who indicated they were always successful at those tasks with the selection of the most appropriate answer for the research problem. For example, in the World Wide Web crosstabulation, below, only 45.9% of those students who indicated they were always successful in downloading from the World Wide Web selected the most appropriate process for locating up to date Queensland legislation which includes a component of downloading from the Web.

World Wide Web downloading experience \* Best process for locating up to date Queensland legislation Crosstabulation

			Best process for locating up to date Queensland legislation						Total
			Federal Statute Annotations, Aust Current Law Leg, Q reprint	Qld Legislation Annotations, Qld Leg Update, QGPC site	Qld Legal Indexes, Aust Legal Monthly Digest, Qld reprints	Qld Leg Annotations, Qld leg update, Qld reprints	No answer	Don't know	
World Wide Web downloading experience	Always successful	Count	2	28	4	13	13	1	61
		% within World Wide Web downloading experience	3.3%	45.9%	6.8%	21.3%	21.3%	1.6%	100.0%
	Usually successful	Count	2	57	10	42	10	1	122
		% within World Wide Web downloading experience	1.6%	46.7%	8.2%	34.4%	8.2%	.8%	100.0%
	Seldom successful	Count	1	9	1	7	3		21
	% within World Wide Web downloading experience	4.8%	42.9%	4.8%	33.3%	14.3%		100.0%	
	Not used	Count	1	5	1	7	3		17
	% within World Wide Web downloading experience	5.9%	29.4%	5.9%	41.2%	17.6%		100.0%	
	No answer	Count		1		1	3		5
	% within World Wide Web downloading experience		20.0%		20.0%	60.0%		100.0%	
<b>Total</b>	Count		6	100	16	70	32	2	226
	% within World Wide Web downloading experience		2.7%	44.2%	7.1%	31.0%	14.2%	.9%	100.0%

In brief, similar patterns to the above emerged with the responses to the other questions in the research problem, which asked respondents:

- to rank four research tools in the order in which they would use them to research the answer to the problem - the responses were (1) textbook (2) looseleaf (3) Internet (4) journal articles
- what is the best Australian legal journal index - only 57.5% selected AGIS
- what resource to use to determine if legislation has been amended - 71.7% selected legislation annotations
- what is the URL for AustLII - only 69.9% selected the correct URL.

#### 4.5 Nature of legal research training received

The questionnaire enquired of respondents whether they had received legal research training at law school and the nature of that training. For example, whether the training was

compulsory, when it was received, the nature of the content of the training and the type of trainer.

The results indicate that 94.7% of the respondent final year law students **received legal research training** at law school. This figure is reflective of the increase in legal research training offered in law schools in the 1990s after the 1987 Pearce Report criticism of the lack of such training in law school curriculum. In a 1992 survey of legal research activity in solicitors' firms in Brisbane city and its suburbs less than half of the respondents had received legal research training in the first year of their law degree (Hutchinson, 1994:96). Hutchinson suggested in the early 1990s that this was the usual stage for such training within the law degree (Hutchinson, 1994:96).

Almost 95% of respondents indicated that the legal research training they had received at law school had been of a **compulsory** nature. This is very positive. In a 1991 survey of ALTA (Australasian Law Teacher's Association) law librarians, the object of which was to establish the level of legal research teaching in Australasian law schools, it was found many of the courses were being reported as being optional or pass/fail and not counting towards Honours, with the result that "students quite understandably choose to put their energies into other areas with more immediate and concrete rewards" (Hutchinson, 1999:90).

Table 4 outlines the **years of their law degrees** that the respondents received legal research training. It is encouraging to find that 96.7% of respondents received training in the first year of their degree. In Hutchinsons' 1992 survey of solicitors in Brisbane only 41.4% of respondents reported receiving compulsory legal research training in the first year of their law degree, with 12.3% in a final year compulsory subject and 11.2% undertaking a voluntary subject/training on legal research at some point in their law degree (Hutchinson, 1994:96).

**Table 4 - Years legal research training received**

	Year 1	Year 2	Year 3	Year 4	Year 5
Yes	96.7%	9.8%	5.1%	5.1%	10.3%

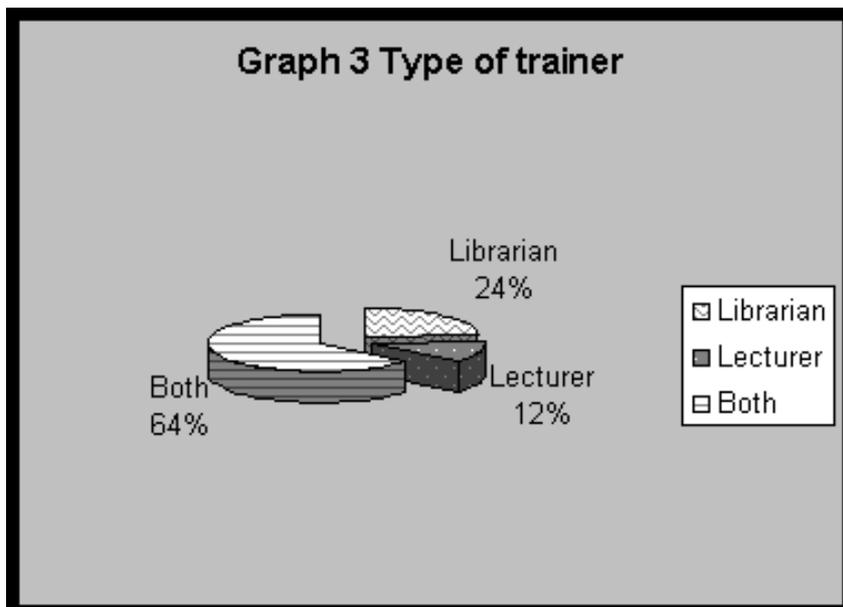
Analysing the results on the **content** of the training collectively, over 70% of respondents indicated that they had received training in the areas of researching case law and legislation, using cd-roms, legal reasoning and writing, legal citation, researching secondary sources, using the library catalogue and a law library tour. This array of training areas accords with the range of areas reported in the literature to be covered in legal research and writing courses in the 1990s, particularly the early to mid 1990s when the phenomena of legal research subjects in law schools was truly taking off (Hutchinson, 1992:88). Collectively, less than 40% of respondents received training in using the Internet, researching international law and researching law from overseas jurisdictions. Table 5 displays the breakdown of responses by category.

**Table 5 Nature of content of legal research training received**

Content	Percent received training in content area
Law library tour	87.9%

How to use library catalogue	80.8%
Researching case law	93.5%
Researching legislation	92.1%
How to use cd-roms	71%
How to use the Internet	39.3%
Researching international law	14.5%
Researching law from overseas jurisdictions eg. US,UK	22.9%
Legal reasoning & writing, legal citation	76.6%
Researching secondary sources eg. journal articles	72.9%

63.6% of respondents indicate that they received legal research training by both librarians and lecturers. Graph 3 outlines the break down of the **types of trainer** who offered the respondents legal research training. In a 1991 survey it was found that that law library staff were involved in legal research subjects at either a teaching or consultancy level, whilst the subjects were mainly co-ordinated by law academic staff (Hutchinson,1992:88).



#### 4.6 Perceptions of legal research training and skills

Various sections of the questionnaire canvassed respondent's perceptions of legal research training and skills, such as their preferred position for legal research training in the curriculum, whether the training should be compulsory or optional and pass/fail or graded, the teaching and assessment methods that assist respondents in learning legal research and the perceived importance of legal research and information technology skills to the study of law and legal practice. Table 6 depicts respondent's **preferred position** for legal research and information technology training within law curriculum. Just over 50% of respondents supported the approach of a separate first year legal research subject. This is currently the most common position for this type of training in law curriculum. In the early 1990's it was also common for legal research training to be incorporated as a component of another compulsory first year subject (Hutchinson,1992:88). It is interesting to note the questionnaire result that there is less student support for such a model, with only 26.2% of respondents preferring training to be integrated within another first year subject. An optimistic explanation for this would be that students appreciate the necessity for such training and that it is sufficiently important to warrant a separate first year subject. A 1992 survey of Brisbane solicitors showed that the solicitors rated legal research training they had received in a compulsory first year setting as less useful than training at the vocational or professional stages, or very late in the law degree. Voluntary training at law school was judged least useful (Hutchinson, 1994:98). 34.1% of respondents to this survey support the ongoing learning of legal research throughout the degree with training integrated within one subject in each year of the law degree. This ongoing learning process is also supported by comments from respondents from all three universities, such as :

*[Training should be-]*

- *In all subjects*
- *Maybe as part of moots and assignments*
- *All subjects require legal research and information technology skills*
- *Also in 3<sup>rd</sup> and 5<sup>th</sup> year*
- *Integrated in years 1,2 and 3 (progressive)*
- *Continuous - lesson for each subject*
- *more continuous training and updates would be useful as you progress through the degree..... different subject areas involves the use of different resources*

**Table 6 - Preferred position for legal research and IT training within law curriculum.**

<b>Position in curriculum</b>	<b>Percentage preferring this position</b>
Separate first year subject	50.5%
As an elective	4.7%
Integrated within one subject in each year of the law degree	34.1%

Integrated within another first year subject	26.2%
Separate final year subject	12.6%

Respondents have a strong preference for compulsory legal research and information technology training in law school, with 93% preferring the training to have a compulsory **status**. Early in the 1990's many legal research subjects or training was reported as optional (Hutchinson,1992:90).

The survey results also indicate that:

- 71% of respondents favour legal research and information technology training being **assessed** on a pass/fail basis, rather than being graded.
- Students respond to hands-on (73.4%), demonstrations (57%) and small group tutorials (59.8%) as **teaching methods** that assist them in learning legal research. Less support is evident for lectures (30.8%) and Web-based teaching materials and exercises (29.9%) as teaching techniques.
- Students prefer **assessment methods** such as library exercises (50.5%) and essays requiring a structured research methodology (43%) rather than short-answer exams (26.2%) and multiple choice exams (11.2%).
- 96.9% of final year law students felt that legal research and information technology skills were either very (81.9%) or moderately (15%) **important to the practice of law**. In comparison, 95.6% felt that these skills were very (78.8%) or moderately (16.8%) **important to the study of law**. One person felt that they were not important to the study of law at all.

## 5.IMPLICATIONS FOR LEGAL INFORMATION LITERACY CURRICULUM DEVELOPMENT

### 5.1 Introduction

The survey results show that the following scenario prevails in contemporary legal education:

- Students use information and information technology heavily and have considerable access to the necessary resources
- Students claim to be using information and information technology heavily , but they do not appear to be using these resources as effectively as they should be
- Students are apparently unable to transfer skills they perceive themselves as having to novel situations
- Information skills instruction is presently largely confined to first year and is not integrated into the teaching-learning experiences of subjects other than legal research
- Students would like to have better integrated and further instruction within their LLB programs.

These findings suggest that the present curriculum model for legal education has several drawbacks in relation to contemporary directions recommended for information literacy education. The present model largely isolates information skills instruction within the legal research program. This effectively separates it from the broader legal curriculum. Legal research courses assume a level of information and information technology skills that is not reflected across the range of varying levels of skills and experiences of students. It appears that students needs remain largely unaccommodated by legal research courses, which may be said to concentrate on bibliographic instruction rather than legal information literacy.

Further, legal research courses do not influence or shape legal curriculum to the extent that they could. So, although they are considered core to the curriculum, they remain somewhat isolated.

Modifying the situation that has emerged from this survey to make it consonant with what is considered to be 'best practice' , suggests the need for a new model of legal education. In this new model curriculum is designed according to principles of lifelong learning and information literacy education. Legal research is core to a process driven curriculum and is subsumed within the content that is the essence of core legal curriculum. Collectively graduate attributes and legal information literacy inform and are infused within legal curriculum.

This research and a large teaching and learning grant on embedding graduate attributes in law (see generally Cuffe (2001) and Christensen and Cuffe (2002)) have prompted the development of:

- some general principles for information and information technology use in undergraduate legal education that encourage these as lifelong learning skills
- a set of relevant information and information technology skills for contemporary legal education
- a conceptual model for the application of information literacy principles and assessment to legal research courses and more broadly law school curriculum.

Aspects of these developments are outlined briefly below.

## ***5.2 Legal information literacy principles***

- Information literacy must be seen as a shared university wide responsibility.
- Universities statements about graduate attributes should incorporate information literacy.
- As information literacy is a key element of lifelong learning (Candy et al, 1994) it should be made an explicit aspect of teaching, learning and assessment in law schools and reviews of LLB degree programs. LLB degree program and individual unit aims and objectives should incorporate the development of legal information literacy skills and knowledge.
- Learning always has a content as well as a process. "Learning to be information literate cannot be achieved in a decontextualised scenario" and "should be learnt whilst engaging in discipline specific subject matter" (Bruce,1997:60). LLB units should focus attention on the learning of legal information processes as well as on the content product of the learning and provide opportunities for discussion of the processes.
- Incorporating information literacy in stand alone units or individual subjects will have limited impact unless they are "supported by, and integrated with, other parts of the overall course" (Candy and Bruce, 1995:249) to form an integrated and incremental range of legal information experiences. Legal information literacy learning

opportunities should be mapped into law degree units and their content in a motivating fashion.

- Legal information literacy education needs to be promoted to staff, appropriately resourced by law faculties and staff need to be provided with suitable training and support. It also needs to be promoted to students in terms of its relevance in the real world in legal practice and to success in their studies.
- Student centred approaches to teaching and learning such as problem-based, resource-based, enquiry or action learning provide useful vehicles for information literacy (Bruce and Candy, 2000:7). Law students should be required to complete assignments and other learning activities that require them to undertake legal research, receive feedback on their development and reflect on the process. As student learning is driven by assessment, law schools should strive to find ways of helping law students learn legal content through the process of effective legal information use.

### **5.3 Legal information literacy skills**

The author has developed a table of information and information technology skills relevant to contemporary legal education. It is recognised that this approach is taking a behaviourist and information processing view of legal information literacy learning, reducing it to a list of skills and abilities that can be measured. However the author submits that this is a necessary starting point for both academic staff and students as it is one that most could easily understand. Once an understanding of the behavioural approach is achieved it should be possible to encourage staff and students to develop a deeper level of appreciation more in line with the constructivist and relational approaches to information literacy (see generally Bruce (1997a)).

It is beyond the scope of this paper to reproduce the table in full. In essence the table articulates the legal information processes of legal research, predominantly problem identification and analysis, information search and retrieval, and effective communication of results, by using the recently endorsed *Australian Information Literacy Standards* as a framework (CAUL, 2001). Information technology skills such as use of email, the World Wide Web, word processing packages, databases and presentation software such as Powerpoint is also included. The table enunciates the information and information technology skills in levels recognising that there are stages of skill development starting at a generic simple level moving to a sophisticated legally complex point.

### **5.4 Legal information literacy curriculum model and assessment**

The design of appropriate legal information curriculum requires a consideration of the content, teaching, learning and assessment approaches to both substantive law content and legal information literacy. Traditionally research training courses addressed the search and retrieval aspects of information use. In recent years the courses have been designed to encourage critical thinking and look at the research process as a whole rather than as individual research products. The phasing of the delivery of information literacy education and the placing of it within the content of LLB units is crucial to ensure an integrated and incremental approach to the development of legal information processes. Collective wisdom rightly suggests the need for a separate compulsory legal research and writing unit in the **first year** of the law degree. Indeed the majority of Australian law schools have a such a unit or a unit in first year devoted in part to legal research. At this stage, it is recommended the content of legal research and teaching approach should be based on focused narrow problems as this is preferable when initially learning skills. By keeping the content simple students can concentrate on understanding the new skill and its context. After students have received feedback on their attempt at the focused problem then their knowledge and

confidence should be consolidated by an unfocused problems that stems from the focused problem. An unfocused problem would contain a mass of information, some relevant and some irrelevant to the problem solving process. The unfocused problem is a good tool for developing overall information skills after having developed some basic legal research ability. It is recommended that in the **final year** of the law degree an advanced research unit be incorporated that consolidates student's information and information technology skills and challenges them with sizeable unfocused problems in areas of law unfamiliar to them, replicating the "real world" legal information and problem solving environment they are about to enter. Some Australian law schools already have such a unit and the QUT Law School is a notable progressive example.

The **middle years** of the law degree is where legal information literacy is most commonly neglected and where it is vital to inculcate ongoing information literacy learning through the assessment of legal research and information technology skills within the context of knowledge subjects. Reinforcing legal information literacy skills outside of the legal research and writing skills units should enhance the ability of students to transfer their skills to novel situations. Unfocused problems in familiar areas of law would be an appropriate teaching strategy at this stage. Often during the middle years assignments, moots and oral presentations that would require legal research to be undertaken are optional and even if compulsory the assessment focus is on the outcome, the production of the assignment, rather than the information processes involved. It is recommended that learning experiences requiring information problems to be solved become a requirement of a unit in each year of the law degree and that **research methodologies** be attached to the assessment of the learning experience whether it be assignments, moots or oral presentations. The survey results outlined above indicate support for this approach. Research methodologies would require students to articulate the information processes undertaken by documenting:

- an outline of keywords and their development
- a concept map/outline and initial analysis of the problem
- an identification of a range of primary, secondary and reference sources, both paper and electronic, relevant to resolve the legal information problem and an evaluation of their appropriateness and articulate the evaluation criteria
- their reflections on their strengths and weaknesses in the research process and identifying the aspects they need to work on.

The **marking scheme** and criteria sheet for the item of assessment should include a specific allocation for the elements of legal information literacy otherwise the assessment of the skill and information process becomes submerged within the assessment of the knowledge of the law. The table of legal information literacy skills discussed above can form a basis for the development of appropriate assessment criteria. For example, a criteria sheet for a research methodology might include the criteria below and example of how to meet that criteria. The example is important for both the students to have an idea of what they need to achieve and for the markers to know what they are looking for in assessing the methodology. It may be quite a new way of learning and assessing for both students and markers and they may have little experience in articulating the information processes behind the legal content argument development to which they are so attuned.

**Revise search and locate additional information as needed** ( eg. Used "native title" as a search term for cases in AustLII, got too many hits so used boolean to refine it to "native title and extinguishment and Yanner" and found four pertinent cases )

Opponents to information literacy curriculum may claim it is not able to be measured. Obviously, as with assessment of any learning, information literacy assessment needs to be designed so that is valid and reliable. As Catts maintains:

"given the importance of information literacy as an outcome of higher education (Candy et al 1994), the achievement of information literacy should be a demonstrated outcome, rather than an assumed benefit of the tertiary experience.....assessment of information literacy in undergraduate education is essential both to convince employers and government of the quality of higher education, and also to make it necessary for faculty members and students to address the skills required to achieve information literacy" (Catts, 2000:271).

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