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Empowerment for lifelong learning: Embedding information literacy into the Business curriculum

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Abstract

Success in modern business demands effective information literacy to address the ever-changing business context. This context includes changes in Government policy reflected through legislation and regulations, developments in case law and expectations of professional associations and the public. Students require the skills to continue their own learning beyond the completion of their degree, since learning the subject content of a course alone is insufficient. This paper considers the methods utilised to embed information literacy, in the context of generic skills and graduate attributes, into a Business degree's curriculum. The paper describes how information literacy has been embedded in two sequential third-year Taxation Law courses, allowing for the explicit development of information literacy. Through the development of legal reasoning and research skills, students are empowered to continue their lifelong learning, which successful professional practice demands. The study will draw upon the experience of the course convener in designing, teaching and evaluating the courses, and on students' experiences as illustrated through evaluation questionnaire responses and interviews. The findings of this study could be relevant to other business courses, especially company law and auditing.

Importance of generic skills in a changing business context

The Australian tax industry is incredibly dynamic. The legislation alone concerning income tax law is nearly 7,000 pages in length, almost 60 times larger than when first enacted in 1936 (Banks, 2003). If this rate of growth is maintained, then it is estimated the legislation would amount to 830 billion pages by the end of this century (Banks, 2003). These startling figures are just the beginning, as they do not encapsulate the extensive case law that affects the interpretation of this legislation, potential reforms, nor the advisory statements released by the Commissioner of Taxation through rulings, interpretative decisions, practice statements, product rulings and press releases.

There is an old adage that there are only three things certain in life: death, taxes and change. Unfortunately, students studying Taxation Law have the daunting task of studying two of these certainties together: tax; and the inevitable fact that what they are studying is going to change. Accordingly, knowing the content of Taxation Law alone is not enough. For students to be empowered, it is critical that research skills - information literacy - are embedded in the course. This paper describes how information literacy has been embedded in two sequential third-year Taxation Law courses. The paper discusses the questions:

- Why should information literacy be embedded in the curriculum?
- Do students see the importance of learning information literacy for professional practice?
- Do students think that the courses involved improved their research skills?

These questions are explored through reflections of the course convener, student evaluations and pilot interviews with students. Recommendations for future curriculum development are suggested.

Need for information literacy for undergraduate students

Griffith University (2004b) has articulated the importance of information literacy in a description of the knowledge, skills, values and beliefs that are demonstrated by its graduates. Griffith graduates will:

- communicate effectively;
- be information literate;
- solve problems;
- make critical evaluations;
- work autonomously and in teams;
- be creative and innovative;
- behave ethically in social, professional and work environments;
- and
- be responsible and effective citizens.

Griffith University defines the information literate student as one who will “recognise when information is needed and will be able to use a wide range of tools and systems to locate, evaluate and manage information effectively to construct new knowledge” (Griffith University, 2004a). In practice, information literacy involves students learning as they engage with information (Lupton, forthcoming).

The embedding of information literacy in curricula requires teaching, learning and assessment strategies where students have a seamless ongoing interaction and reflection with information (Bruce, 2002). Therefore, information literacy should be “woven into [the curriculum’s] content, structure, and sequence” (Bundy, 2004).

In recognising the importance of a sequential, developmental approach to curricula, Griffith University’s Academic Plan states that:

Our programs should explicitly recognise that they are seeking to engage students as an integral part of our learning community by incorporating a set of structured interactions that orient students to university life, their future professional or vocational identity, and develop beginning mastery over an area of scholarship. (O’Connor, 2004)

The case study described below includes teaching, learning and assessment strategies in two sequential courses where students have ongoing interaction with information in order to learn about tax law.

Case study overview: Lecturer’s reflections on a three year journey

The lecturer’s convenorship includes two third-year Tax Law courses, Revenue Law and Accounting for Tax, for Business students. His experience in private practice in law and accounting led him to appreciate that the ability to research was critical, as rarely would one know the correct answer immediately. Indeed, it is best practice for professionals to conduct research to ensure developments are taken into account and to confirm their understanding.

Consequently, in his first semester of lecturing, the lecturer demonstrated basic research on the library’s electronic CCH tax database, and the Tax Office’s web site. While this research demonstration was helpful for students, the lecturer found that students struggling to utilise these resources for their study frequently asked him to repeat the demonstration during the semester.

This experience from his first semester led to the design of a series of strategies aimed at developing students’ information literacy. These strategies included introducing a supervised research workshop, initially conducted by librarians, then in later years by tax specialists. Subsequently, a small assessment task was incorporated into Revenue Law. The lecturer realised there was a further opportunity to develop students’ information

literacy in the Advanced Taxation course in Semester Two. He altered the assessment for this advanced course from a mid-semester exam to a written assignment requiring extensive research. To support these students, tax specific advanced research and academic writing workshops were organised.

Students' experiences of information literacy in tax law courses: Pilot study

Pilot interviews were conducted with four students commencing Accounting for Tax in Semester Two, 2004, in order to explore the ways students experienced information literacy in their courses. They were asked about the way they saw doing research in professional practice and what they learnt by doing the research workshops and research assignment in the Semester One Revenue Law course.

A dominant theme that emerged from the interviews was that students saw it as essential that a professional check their advice to a client by looking up the relevant information such as legislation, rulings and determinations. This advice needed to be the right answer for the situation. They described the information use of a professional as keeping up-to-date by being involved with the sort of research and types of sources that professionals use (email alerts, professional bodies, government information, software that automates tax returns). They saw doing the research assignments as a good preparation for the workforce.

When asked about the role of research in professional practice, students discussed the importance of verifying and confirming the answer, for the client and themselves:

As a practitioner you may get a client that has a problem that you may not have dealt with before, so being able to research will enable me to be able to help that client a lot better. (Student 1, female, local)

To support, not support, to confirm I'm doing right ... because legislation is complicated particularly in tax so, I'm not always sure. I may do something wrong, to research particular legislation means, not actually support but like to me, to confirm ... Yeah, even though professional, I think still need to say, I'm doing right. (Student 2, male, international)

I can just review that before I go and see the client, and so that when I get to the client I've actually got the information there. (Student 3, male, local)

If they were a bit confused about something, or not too sure, then that's when you would look just to clarify ... Just to make sure that you're on the right track about things. (Student 4, female, local)

It is of interest that a past student in Revenue Law and Accounting for Tax, now in professional practice, had articulated the same notion of confirming the answer in an unsolicited email to the lecturer:

My first job was to answer a client's question re: salary sacrificing (i.e., can salary sacrificing arrangements be made retrospective). Basically I knew the answer already, NO; but I was able to prove it by looking up the tax ruling as well to provide solid evidence ... the point of this email is to say thank you for running such up to date courses that are both strongly theoretical and practical at the same time.

3008ABF Revenue Law

Revenue Law 3008ABF is a first semester course with approximately 195 third year Business students, who are only studying two or three Law subjects in their Business degree. In addition, there is a similar post-graduate course, 7008ABF Income Tax Law, with 88 Business students. Within this cohort there is a large number of international

students who can find Australian taxation law extremely challenging, as the taxation system in their own country can be vastly different.

The aim of the course is to ensure that students have a grounded content knowledge of Australian taxation law, combined with the ability and confidence to research to ascertain the current status of the law. The importance of research skills for the course is emphasised, as students will need to locate and analyse cases, legislation and tax rulings throughout the semester.

Information literacy teaching, learning and assessment strategies

The following teaching, learning and assessment strategies were implemented and refined over a period of three years.

Lecture – week one

A live demonstration by the lecturer on how to research the library's electronic taxation databases, and taxation web sites, such as the Tax Office (www.ato.gov.au) and Australian Legal Information Institute (www.austlii.edu.au).

Research workshop – week two

This optional workshop incorporates research activities utilising a number of the library's tax databases, and a number of external tax web sites tied to material that students will require during the semester. For example, students are required to search for a tax ruling relating to nurses' stockings. This ruling is directly relevant to a later tutorial concerning nurses' tax deductions.

The lecturer, as a tax specialist, conducts the tax-specific proportion of the workshop. A librarian also does a small presentation on how to better utilise the library's general catalogue. In these workshops, a step-by-step approach is adopted, allowing students the opportunity to do the research activity with assistance at hand should they encounter difficulties. While conducting these activities some of the nuances of the law are highlighted to the students, as well as good research techniques. These include highlighting the use of headnotes in reported cases, the importance of precedent and the idea of developing refined search terms.

Students appreciated the tailored research workshop and have expressed the need to do the same in other courses. Attendance at these optional workshops has been good with 47 per cent of undergraduates and 65 per cent of postgraduates attending.

In response to the question, "How useful did you find that workshop?", students in the pilot study replied:

Very useful actually ... mostly because I didn't know about the CCH website. So having done the workshop let me know that, okay, these resources are here for me to use and so that I know now that they're there. (Student 1, female, local)

I have attended a lot of library [workshops] library tour, on how to use database or how to search, but [the Lecturer's] workshop was a bit different from the library tour provided by the library, because [the Lecturer] actually asked us to use a particular website, like Austlii or Factiva or the CCH database ... from [the Lecturer] I learn[ed] how to find a particular topic in those databases. (Student 2, male, international)

I didn't know that there was so much on the internet or in the library for just tax ... I learnt where to look. (Student 4, female, local)

Supporting materials

Screen dumps of the research activity steps are made available to students via the *Learning@Griffith* site after the workshops, for those students unable to attend or for a reminder to students of the steps undertaken. Additionally, the study guide contains internet activities directing students to various web sites to search for particular information, and students are required to research in order to answer tutorial questions. Student answers are then checked via spot checks in tutorials, which students find motivating:

The focus is very much on combining self-learning with lecturing instruction. Sufficient material is gained within the class structure to understand the subject, but tutorial focus is also encouraged to extend that through investigation of legislation and court cases. (Student email, 2003)

Research assignment – week three

A week after the research workshop, students are issued a small research assignment (two per cent weighting) in their tutorials. Each research assignment requires students to provide evidence that they were successful in finding two pieces of tax information. The tax information could be to find a particular section in the Act, a tax ruling, an interpretative decision by the Commissioner of Taxation or the head-note to a case.

The evidence obtained by the students for their research assignment is handed back to their tutor the following week. The tutors, then, are able to quickly assess the student's success, allocating one mark for each correct piece of evidence. Because of this easy format, tutors are able to mark these within one week, giving timely feedback to students and without too much administrative burden.

The learning that students received from this appears to have been effective, as a student stated the following in response to "When you did that small assignment last semester, what do you think you learned when you were doing that?"

I think it was more to get used to being able to go in there and get the information out ... It helped me be able to go in and be comfortable moving around, because there were two parts to it ... it built your confidence, I mean it's one thing doing it in a workshop where you've got someone there, you get stuck, you put up your hand and they come and help you, whereas going off and doing it on your own, you've got to think a little bit more about it and it helps build your confidence. (Student 1, female, local, 2004)

How effective was attending the workshop in terms of successfully completing the research assignment? As demonstrated in Table 1, undergraduates who attended the workshop had a failure rate of two per cent for the research assignment, while it was nine per cent for postgraduates. This compared favourably to those students who did not attend the workshop as their failure rates was nine per cent for undergraduates and 19 per cent for post-graduates. There appears to be an increase in the likelihood of passing the research activity by attending the workshop, especially for postgraduate students.

Table 1: Failure rate for research assignment (RA)

	Undergraduates	Postgraduates	Both undergrad/postgraduate
Failure for RA – students attending workshop	2% (N=2/19)	9% (N=5/57)	5% (N=7/148)
Failure for RA – students not attending workshop	9% (N=9/104)	19% (N=6/31)	11% (N=15/135)
Total failure for RA regardless of attendance at workshop	6% (N=11/195)	13% (N=11/88)	8% (N=22/283)

Even though the research assignment's weighting is small (two per cent), 96 per cent of undergraduate students and 91 per cent of postgraduate students submitted it. Students obviously found the research activities worthwhile, in that the activity enabled them to:

Develop the related knowledge and promote the self study to expand my knowledge.
(Student comment, teaching evaluation, 2004)

3005ABF Accounting for Tax: Bringing it home

In second semester, students have the option to enrol in an advanced taxation course, Accounting for Tax, which builds upon and develops their knowledge obtained in Revenue Law. There are approximately 60 students in this course. It is likely these students want to practise in taxation law, either directly or indirectly. There are a number of strategic steps that have been developed to further enhance students' information literacy skills through demonstrations, workshops and assessment.

Teaching, learning and assessment strategies

Lecture – week one

In lecture one, the written assignment is highlighted to students; in particular the allocation of 20 per cent of marks for evidence of thorough research. A discussion takes place as to what sources students should use in their assignment to provide a rich context, such as parliamentary debates, newspaper articles, refereed journal articles and lobby group statements.

Research workshop – week two

The advanced research workshop follows a similar format to the research workshop conducted in the introductory course, the difference being that alternative resources are displayed, such as:

- Tax Office discussion material;
- Parliamentary Hansard;
- Newspapers; and
- Commentary material on legislation.

Academic writing workshop – week four

Liaising with Learning Assistance Services, an optional workshop is conducted to discuss how to write a good academic paper and business letter.

Supporting materials

Similar to the first semester, in the advanced course the students' study guide and tutorials require them to do additional research, together with random spot checks for tutorial preparation.

Assignment – week ten

The assignment requires students to write in two styles: an academic paper; and a business letter of advice to a client (1,000 words each). To complete each assignment successfully, students have to do extensive research, then analyse and critically evaluate their findings as well as make recommendations for the future development of the legislation. Evidence of thorough research, application and analysis of the law are assessment criteria for each of the pieces. This assessment therefore brings together and evaluates, amongst other things, essential aspects of information literacy.

Discussion

As evidenced by the pilot interviews and evaluation comments, students recognised the value of the research component of the course:

Develop analytical and research skills towards understanding the content of the course. (Student comment, teaching evaluation, 2003)

The small research project in the introductory course was seen as useful:

Now I've got a bigger research project to do, I'm not thrown in the deep end. I've had that, I've had that exposure to doing that research in that field, so now it's going to be a little bit easier for me to do the bigger lot of research. (Student 1, female, local, 2004)

Students who attended both the introductory and advanced workshops appeared to appreciate the development in their information literacy skills:

Even though I'd done some of that in Revenue Law, but some of the other websites I hadn't gone to, so I thought that was interesting. (Student 3, male, local, 2004)

A positive outcome is evidenced by student evaluations. In 2003, 65 per cent of students in the initial tax courses strongly agreed or agreed that the course improved their research skills, while in Semester One, 2004, this figure increased marginally to 67 per cent of students. This is supported by the following student statements:

He [the convenor] has managed to develop, incorporate and manifest interest and curiosity. Forced me to research and use the web more. (Student comment, teaching evaluation, 2003)

Helps to develop an understanding of the Australian Revenue Laws. Helps develop research skills to find tax related material. Helps satisfy personal as well as commercial thirst for taxation knowledge. (Student comment, teaching evaluation, 2003)

Students also were asked whether the course had improved their use of the internet for research. In 2003, 66 per cent of students in the initial tax courses strongly agreed or agreed that the course improved their use of internet for research, while this increased to 71 per cent in Semester 1, 2004. Perhaps this perceived improvement could be due to the primary focus on this search tool; in particular, the use of the computer lab to conduct the workshops.

It is interesting to compare this result to a Company Law course for Business students that the convenor supervised in Semester 2, 2003 where there was no research workshop. This comparison is useful because it may be that the very nature of a Law subject requires students to do more research. In this Company Law course, students were required to do research for a tutorial presentation worth 15 per cent. In student evaluations for that course, 62 per cent of students considered that the course improved their research skills, while only 44 per cent of students considered that the course improved their use of the internet for research. These results are compared with those of the initial Tax Law course in Table 3.

Table 3: Tax law and company law course comparison

Student evaluation question	Initial Tax Course (research workshop)	Company Law (no research workshop but tutorial research)	Difference
Course improved my research skill (strongly agree and agree)	67%	62%	5%
Course improved my use of the internet for research (strongly agree and agree)	71%	44%	27%

It appears that Business students do consider an improvement in their research skills in a Law course with an assessment item requiring research. It is suggested that providing students with a research database workshop to demonstrate topic specific web sites and electronic databases, significantly improves students' ability to use the internet for research. This finding supports the success of the strategic steps undertaken to embed information literacy skills in the curriculum.

Looking to the future

Good teaching is similar to taxation law in that it is continually evolving and adapting. According to Bruce (2002), embedding of information literacy needs to include ongoing reflection. Recommendations for improvements to include formal reflection include:

- A 10 minute research meeting in Accounting for Tax with the lecturer or tutor in week five so students can discuss their assignment research strategies
- Additional reflective writing piece in Accounting for Tax with a self-evaluation of research strategy and outcome

At the moment, the research workshops are not compulsory. Consideration will be given to making the workshops in first and second semester a compulsory tutorial.

Some changes have been made to the academic paper research assignment in the advanced course for 2005. The academic paper research assignment has been changed from 1,000 words to 2,000 words in response to student feedback regarding the difficulty of synthesising and analysing information and critiquing legislation within 1,000 words. Additionally, students are now required to hand in their reference lists to tutors in week six, allowing tutors to give feedback about the extensiveness of students' research prior to submitting the assignment.

It should be noted that the strategies adopted in these courses to embed information literacy could have broader application to other business courses, such as Company Law and Audit. The publication of these results will hopefully stimulate ideas on embedding information literacy in the business curriculum.

There is also an opportunity to uncover the range of understandings that students have regarding the role of information literacy in professional practice. As evidenced by the students in the pilot interviews, students saw professionals as using information to verify, confirm and keep up-to-date. However, it would be interesting to explore further a glimpse of a more complex idea of research as expressed by one student:

Research is more about trying to learn more about what I'm doing. It's going in and looking behind the scenes as to why we do the things we do ... Research to me is going in and looking at what's happened in the past and seeing how I can use that now, or how it's being used in other areas now. (Student 1, female, local)

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