Students: "WHERE'S THE LIBRARY?"
Lecturers: "DATABASES HUH?"
BEING COMPETENT IN INFORMATION LITERACY

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ABSTRACT

Scholarly inquiry for beginning students is often a moot point. Students coming to terms with the transitional process of university and academic life are often dealing with the basic elements of survival: change process and adaptation. Yet this is also true for academics who must teach content, sometimes with limited information literacy skills. This paper illustrates a foundation first-year unit in health that was developed to assist students at a regional university to acquire skills in information literacy using the content of the subject as the vehicle. It showcases the evolution of a subject as it matures, and the place where information literacy skills sits within the content. It was found at the completion of this subject that students and the lecturers had been prepared in a tangible way for scholarly activities – a move toward lifelong learning and, more importantly, being competent in information literacy. This reflective paper is a case study on how a successful teaching-learning model for a foundation first-year subject can be incorporated into curricula, and is also a way for academics to remain current with their own skills in this area.

INTRODUCTION

One of the lifelong learning skills characterised by Candy (1995) includes the notion of information literacy. This skill is essential, not only for success in the world of academia, but also in employment. Information literacy more broadly requires the acquisition of abilities and skills in retrieving, understanding, and the use of, and managing of, information. It is not just about being able to use technology (Booker, 1995a) but provides the impetus to promote information literacy as a necessary part of the learning process.

This paper will reflect on past work that was undertaken by a teaching team in a foundation first-year health subject where the combination of information literacy competencies with content was achieved (Orr et al., 1999; Hinton et al., 1999; Hinton, 1998). Incorporating information literacy with the content changed the nature of the teaching and learning process. It did this by endorsing and valuing those skills required to expand the content and deepen the learning process. From this approach, the curriculum became revitalised, and transformative learning occurred for the lecturers, which enabled them to facilitate student learning in a positive and creative way, thereby providing a strong foundation for lifelong learning (Lepani 1995, p 21). As part of this reflection, the author will analyse some key issues about the unfolding of this unit. This will encompass the covert superimposing of information literacy skills onto the content, and its relative success, as well as the maturation of the teaching team as it moves from being a 'sage on the stage' to 'guides on the side'. This transition approach is similar to an action research cycle where team members plan, act, observe, reflect, and theorise through a dynamic generation of quality improvement. The aim of the subject was to improve the quality of teaching and learning through innovative educational approaches using a multidisciplinary team approach.

HISTORY

From evaluations conducted in 1996-1997, it was found, in the first year of the Bachelor of Health program, that the voluntary generic university-wide library workshops were not perceived by students as an important area for academic success. Students were unable to see the relationship of skills transference from workshops conducted, to the subjects in their course. Other issues identified were that academics and library staff were spending increased time assisting students (mostly one-on-one and ad hoc group sessions), and promoting information literacy skills acquisition as a 'top up' to the university generic classes. There was no formal linking of these classes to the subjects taught. Complicating this were staff members' diverse attitudes to these skills often changing the emphasis of the content within subjects. Repeatedly, the content was 'side-lined' in an attempt to correct the lack of information literacy skills. It was necessary to improve the subjects in a more meaningful way that achieved the objectives of both skill and content acquisition. Utilising a multidisciplinary approach, the academic teaching team linked with the faculty liaison librarian, adopting an innovative

instructional design to develop this subject to the stage it is at today. For the teaching team, it was found that the literature supported such initiatives and legitimised the actions taken.

LITERATURE

In a broader sense, Booker (1995b) reported that, "Of equal importance is the necessity for all Australians not only to be able to access [this] information but to make informed decisions about the usefulness of that information to themselves" (p 10). Thus the notion of skilling students for their university experience has wider reaching implications – that of affecting life's decisions. For the students entering their first year, the notion of discerning what is important to learn and what is not, is often difficult. Initially, it seems that all information becomes important to the point of overload. Blandy & Libutti (1995) talk about students as being in a gathering rather than hunting mode when it comes to information and, unlike earlier generations, specific information literacy competencies are required in learning in order to be truly lifelong learners.

However, there are a number of assumptions about information literacy in higher education courses that need to be acknowledged. Kirk (1995, p 3) reported that these are as follows:

1) Information is an essential component in the learning process.

2) Information literacy enhances independent learning.

3) A planned process approach to the development of information literacy is appropriate.

These assumptions are also the basis of much literature written in this area, and support the work of this case study.

The notion of redesigning subjects to incorporate information literacy skills which link to the content, encourages a more independent student-centred mode rather than teacher-centred mode. These student-centred methods promote deeper approaches to learning and greater understanding and application to content (Klease et al., 1996). Thus, the educational principles of this case study are based upon the development of a deeper level of questioning and reflection that is essential in promoting deeper levels of learning. This questioning and reflection is undertaken firstly by the teaching team, to ascertain appropriateness to the curriculum, and secondly, by the student in reaching deeper levels of understanding the content. It is not a surface approach to teaching and learning for both stakeholders. Supporting this move, it has

been found that information seeking, retrieval, and management are changing the nature of learning behaviours in academia (Barry, 1997). He goes further to talk about information behaviour as 'craft knowledge' which is seen to supplement the other essential but more visible forms of knowledge. Thus, for the teaching team and students, this craft knowledge can form the basis of a 'value added' component to the subject knowledge. It can broaden and deepen the subject content and its direction.

From a practice perspective, the re-design of the subject was about reflection in action. Yerbury & Kirk (1990) reported that practice provides the opportunity to test principles, theories, and generalisations that form the body of theoretical knowledge which underpins practice. Reflection in action provides feedback to that process. Often the application of theoretical knowledge to specific concrete situations is difficult, particularly when the concrete situations are rapidly changing. Reflection in action allows practitioners to accumulate their own knowledge bases, and to make sense of their own unique situations. Drawing on, and contributing to, the development of the theoretical knowledge base through reflection in action and critical inquiry, is a fundamental aspect of the continued redesign of this subject and, ultimately, its current structure. This is also true of the teaching team themselves in expansion of their own teaching repertoire, and knowledge gained from the delivery of this unit, interactions and feedback from the students, and reflection of practice with colleagues.

PHILOSOPHY AND APPROACH TO THE SUBJECT

All students enrolled in undergraduate health programs are required to undertake this core subject. It is a subject designed to provide students with a basic understanding of abstract concepts like health, community, culture, ethics, politics, socioeconomics, history, and health systems. This is an applied unit where students model good learning experiences as identified by Gee & Breivik (1988) which undertake to:

- imitate reality,
- be active,
- make provision for a range of learning styles,
- be up to date,
- occur in an environment which is least threatening.

In recognising and valuing these characteristics, a re-evaluation of the more traditional instructional tools of formal lectures, textbooks, and tutorials, and a move to the adoption of different approaches to

learning, was necessary. These approaches were made explicit to students from the commencement of the subject through discussion at the first lecture about the philosophy and aims of the subject. Moreover, these approaches were made explicit to the students in orientation through a session illustrating the place of this subject in the total curriculum as an introduction to transformative teaching and learning. The first encounter – a student experienced in this subject was the lecturers openly discussing the notion of valuing the individual's previous experiences (whatever these may be) as the basis from which learning takes place. This allows the individual to commence searching for relevant information from their personal level of familiarity. This movement from their own experiences to that of the proposed professional discipline they intend to study, is the next incremental stage of progression within the subject. From here the student is introduced to scholarly work and discussion. In this description, it appears that this process is linear and hierarchial; however, it is not intended to be, as the student is immersed in the three roles for the duration of this subject. Appendix 1 illustrates the student as individual, professional, and scholar, and how the assessment is integral to this role development. This is the milieu in which information literacy is introduced to students.

INTRODUCING INFORMATION LITERACY

With changes to the lecture format, assessment, study materials, and tutorials, the teaching team identified that the CQU Information Literacy Framework (based upon the State University of New York (SUNY) competencies, 1997) would be a framework to use in the organization of this subject. A principle-based approach was used to underpin the content and how it is presented to students. The traditional lecture consisted of a structured time where the student cohort gathered together to explore the central concepts. As this subject is taught at distributed campuses, each teaching team (consisting of lecturer(s) and a librarian – as adviser) is given resource-based teaching kits for the redesigned lectures and tutorials. These kits included content information, information literacy skills to be role-modelled to the students, and discussion issues about scholarly work in the relevant topic areas.

Information literacy within the lecture broadly covers the introduction of information and identifying the sources. As well, an elaboration of the differences in scholarly works is regularly highlighted to students during this teaching time. Tutorial sessions consist of a reinforcement of the lecture format and identified concepts, and takes the

form of experiential learning, debates and discussion forums. Each weekly tutorial has a similar structure, with a session on information literacy using activities in conceptual understanding of information principles as well as training in searching, databases, the Web, evaluation of sources, search strategies, ethical implications, and so on. As well, within the tutorial session, a critically reflective writing session occurs that allows students to write, reflect, and analyse information given in the lecture and the tutorial. This type of teaching and learning format has been described in the literature by Cranton (1994) who describes students as being critical thinkers, intellectually curious observers, creators, and users of information who routinely feel the need to know how to access the data and display their knowledge for public scrutiny. This type of intellectual development is explored in an environment immersed in the principles of information literacy.

The general information literacy principles and roles students learn are covered in this subject and include the following:

1) Recognises the need for information (*organiser*).

2) Develops skills in using information technologies (*technology user, information searcher*).

3) Accesses information from appropriate sources (*information user, technology user*).

4) Critically analyses and evaluates information (*information user*).

5) Processes and organises information (*information user, organiser*).

6) Applies information for effective and creative decision making (*information user*).

7) Generates and effectively communicates information and knowledge (*information user, technology user*).

8) Understands and respects the ethical, legal, and socio-political aspects of information and its technologies (*information user, technology user*).

9) Develops an appreciation of the importance of lifelong learning (*information user, organiser, technology user, information searcher*).

ASSESSMENT

There are three assessment items for the subject. The first recognises the student as the individual with their own life experiences. It requires the student to write a letter to an aged aunt who

requested health information for a member of the family. The criteria and sample letter are given to the students. The task requires the student to identify and search for appropriate information, and covers the first two principles, and to a lesser degree, the third to fifth principles listed above. The students access a variety of appropriate sources – both formal and informal. The second piece of assessment requires the student to be a health professional dealing with the relative with a health concern. The task is to prepare a portfolio of information, a letter to the relative about the use and navigation of such information, and a memorandum to the supervisor commenting on why such information is included. Again, criteria and a sample portfolio, letter, and memo are supplied for the student to model their assessment piece on. The principles used in this task include principles one to eight. The third item is a scholarly paper on an identified health concern applicable to the relative in the previous assessment. This task requires the student to write a paper similar to those submitted for journal publication. A sample paper and criteria are enclosed for the student. All information literacy principles are covered in this assessment item. The best thirty papers submitted by the student cohort are to be edited and published by the School of Nursing and Health Studies at CQU. Not only do these assessment pieces utilise the content as the vehicle for introducing the principles of information literacy, but also allow students to see their role in the more diverse world of employment. A covert agenda is about the students learning to write for clarity and comprehension in different work and study environments through tasks such as letter writing, professional memoranda, and essay writing. In combination, these activities reinforce the notion of lifelong learning.

BENEFITS OF INFORMATION LITERACY

As information literacy is integrated into the subject and informs the content, the approach to teaching and assessment all contribute to its further enhancement. Information literacy is a vital component of self-directed learning and reflective practice, so students need opportunities to become fully information literate. This subject commenced such a journey. Thus, it is important to ensure that other subjects within the program of study also enhanced and continued this process. For the lecturers, it meant 'living' the experience by increased awareness of information literacy processes that the students undertook in the subject. It also meant a re-visiting of the principles through the teaching process, and even reached the point of impacting upon other aspects of academic work. As Kirk (1995) identified, information literacy "...as a

means to an end contributes to the development of students" (p 7). In this instance, Kirk's comments extend to academics as well. In evaluating this subject, it has consistently demonstrated positive outcomes in the area of defining, locating, selecting, organising, presenting, and evaluating information relevant to the abstract concepts of the content. However, the outcomes of this subject go much further. It involved what Yerbury & Kirk (1990) identified as "...the development of personal or transferable knowledge and skills, self-confidence and self-awareness, initiative, autonomy and commitment to action". As well, students expressed, through formal feedback, that they developed skills in learning how to learn, and the learned importance of such subjects as the basis of development as a professional. Interestingly, these issues were also reported by Kirk et al., (1989) and Yerbury & Kirk (1991).

CONCLUSION

In conclusion, the aim and commitment of those involved was to improve the quality of teaching and learning through an innovative educational approach. In doing so, this subject utilised a cross discipline team approach by placing information literacy within the content, thereby enhancing its breadth and depth. To a large extent this subject demonstrates the characteristics of good learning experiences as identified by Gee & Breivik (1988). Interactions within the teaching team of academics and information professionals in the design and delivery of the subject ensured that the information literacy practice both shaped the subject and was shaped by it. This process also ensured that students were active participants of their own learning and behaviour. This subject also supported the notion of individual learning styles and needs, where information was continually critically assessed for relevancy and currency in the health domain. It was also recognised that the environment in which this process took place was one that was supportive and encouraged lifelong learning. The teaching team believe that upon deeper analysis and continued evaluation of this subject and its framework, this model of integrating information literacy into the content of a subject would be useful for any foundation subject in any program throughout the university, or indeed, more widely.

[I would like to personally acknowledge the work done by the teaching team – Mrs Margie Wallin, Mrs Sue McIntosh, Ms Jennifer Jones, Ms Jenny Klotz and Ms Trish Robins, and to those students who over the years have contributed to the growth and development of this subject and the model by which it now operates – thank you].

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Appendix 1

HOW THE ASSESSMENT FITS THE UNIT

Assessment piece 1 ————————➤ **You the Student and your knowledge** ◄————➤ SOURCES

INFORMATION SOURCES

Assessment piece 2 ————————➤ **YOU the PROFESSIONAL** ◄————➤ CLIENT ◄————

Informed choices and new knowledge ◄————

Assessment piece 3 ————————➤ **YOU the Scholar □□□□ contributing to new knowledge** ◄———— INFORMATION SOURCES & LITERACY

Outcome of the Unit ➤ *YOU the Lifelong Learner*

The Future