



Reflections of embedding information literacy into a postgraduate multi-cultural institution

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Introduction

- Cranfield University
 - College of Defence and Security
- Background to embedding information literacy
 - Information Literacy Tutorial
- Research Methodology Module
 - Explosives Ordnance Engineering
 - Systems Engineering for Defence
- Future Directions

Explosives Ordnance Engineering

- One year full-time course & 5 years part-time
- Students
 - Aimed at military officers, defence industry staff, government servants and civilian students
 - Aimed at those practising explosives and ordnance engineering
- Information Literacy
 - Two library run sessions during the academic year

Research Methodology

- Introduced in October 2007
- Perceived lack of academic literature in coursework and final dissertation
- Plagiarism issues
- Teaching shared between academic and Information Specialist

Module content

- To provide the students with the tools to carry out a critical literature survey on a topic related to explosive ordnance engineering.
 - Session on types of written material, ranging from general interest journals to specialised journals, books of all types, reports and theses.
 - Session on searching strategies and using the digital library. Exercises in the use of databases. Referencing conventions and plagiarism.

Has there been an improvement?

- Dissertation marks
- Module marks
- Awareness of academic literature
- Feedback
 - Hard work but valuable (Student)
 - There is a fluency with the academic literature which can be seen in the project reports and presentations and is somewhat absent in some MSc courses. (Module Leader)

The beginning...



La FruU's photostream

<http://www.flickr.com/photos/lafuu/> accessed 9 April 2011



Supersimbo (2008) <http://search.creativecommons.org/> accessed 9 April 2011

Systems Engineering for Defence Capability MSc Course

- ✓ Mature students with a practitioners background
- ✓ Many military or ex-military
- ✓ Majority of students are distance learners
- ✓ Issues with referencing
- ✓ Issues with sources of information used to support arguments

ISE Workshop

- Discussion and reflection on unstructured research
- Search strategies
- Key resources
- Exercise
- Discussion
- Plagiarism and referencing

The proof is in the pudding...

- RESULTS....



Yogurtland (2007) <http://search.creativecommons.org/> accessed 9 April 2011

Referencing – 2009 Cohort (pre-ISE Workshop)

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2010 Cohort

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Survey results – unstructured research

- At the beginning of the week, prior to the Library Workshop, you were asked by the ISE module lecturers to research systems concepts. How effective were you in this task and which resources did you search?

Spent a little time on the internet with some success.

Searched known sources, e.g Incese guide. Research was effective but not enough evidence to back up answer

Poor

Having previous experience in these topics I had some information with which to start

Effective but with limited ability to trawl breadth of resources

Survey results – structured research

- At the end of the week you attended the Barrington Library ISE Workshop where you were introduced to search strategies, key resources, effective use of the Internet and referencing & plagiarism. Please explain which parts of the presentation you found most and least useful

I found learning about the range of resources most useful. Learning specifically about text searching in book titles was least useful.

If I am honest I should have paid more attention - when I attempted it on my own it was far harder than I realised!

Search methods and specific websites to use

All of it was useful as I haven't studied for some time

The most valuable part so far has been the use of RefWorks & referencing. Otherwise the use of the resources section on searches was very useful

Survey results – application

- During the workshop you were split into groups and asked to research the systems concept 'holism' using one key resource. Following this there was a discussion with each group about the pros and cons of their resource. Was this task helpful in understanding the search strategies you had just been introduced to and in understanding what you could expect from each resource?

It was of more value to determine the worth of the resources rather than develop search strategies. The use of search strategies only came to the fore when pursuing research for my assignment

Useful - but hindsight I relied to much on the others an individual search may have proved more fruitful

Yes, I learnt to avoid Wikipedia!

Yes it was helpful. It help show which strategies were the most effective

Useful but require far more time on this task, were not given enough time to research terms using specific strategy

Survey results – reflection of the workshop

- Looking back over your experience of the ISE Module assignment and the guidance provided in the Barrington Library Workshop, do you have any further comments or issues you would like to highlight?

None of the searches work as well from home resulting in searches taking a disproportionate amount of time. I'd often find a resource I was interested in via Scopus, only to be unable to download it.

Having access to the presentation afterwards was most useful.

Library staff excellent and very helpful.

i just need to get more familiar with some of the other search tools. the lunchtime sessions would be great if they lined up with the modules. i appreciate that they take up alot of the library staff's time. thanks for those i did manage to attend.

If time allows add in a short task on independent research.

Survey






- Have you used the reference management software package RefWorks?
 - Only two out of the 11 respondents do not use Refworks (with one comment “Started but had problems compounded by inability to use search engines correctly so now reference manually”)
- The training provided on referencing and plagiarism was sufficient to guide me through my assignment
 - 10 out of the 11 respondents agreed (with one comment “to be honest by the end of the Admissions and ISE weeks I was fed up with hearing about plagiarism - over kill to be honest.”)

Survey results

- Do you consider yourself more efficient and effective in locating relevant and better quality results following the Library Workshop?
 - 10 out of the 11 respondents agreed or strongly agreed
- For future assignments, I will apply search strategies and refer to Library subscribed resources
 - All respondents agreed or strongly agreed













Survey results

Which resource did you refer to most regularly for your ISE assignment?

10. Which resource did you refer to most regularly for your ISE assignment?		
Barrington Digital Library:		23.1% 3
Scopus:		23.1% 3
IEEE Xplore:		0.0% 0
ScienceDirect:		0.0% 0
Wiley Online Library:		0.0% 0
Jane's Online:		0.0% 0
Knovel:		0.0% 0
e-Books:		15.4% 2
Scirus:		0.0% 0
Google:		0.0% 0
Google Scholar:		23.1% 3
Other (please specify):		15.4% 2

Survey results

Which of the following resources do you use for your research?

9. Which of the following resources do you use for your research:			
Barrington Digital Library:		n/a	12
Scopus:		n/a	9
IEEE Xplore:		n/a	8
ScienceDirect:		n/a	4
Wiley Online Library:		n/a	3
Jane's Online:		n/a	1
Knovel:		n/a	3
e-Books:		n/a	7
Scirus:		n/a	1
Google:		n/a	6
Google Scholar:		n/a	10
Other (please specify):		n/a	2

Anecdotal evidence

A most useful session

SEDC Student

A number of students told me subsequently that the library session was both interesting and useful in providing an understanding both of what types of reference was suitable, and where it/they may be found

ISE Module Leader

As a result of the library session, I have found that students tend to ask more precise, directed questions than before

ISE Module Leader

library session was useful in setting the 'research context'

SEDC Student

“a particular aim of ISE is to contrast the ‘unstructured’ research approach with a more ‘structured’ version (the latter facilitated by the library session). Since this aim was instituted two runs of ISE ago, the contrast in the student’s approach to research/referencing has been marked – especially in the area of student assignment, where the quality is greatly improved” – SEDC Module Leader

“It is also important for the students to see the teaching role of the librarians (and this rapport is there with students and the library throughout the year)” – EOE Module Leader

The future

- Permanent feature of SEDC & EOE course
- Formalised analysis of results for all courses
- Introducing it to other courses
 - [Barrington Library home page](#)
 - Academic Liaison
 - Embedding ourselves within departments
- Mapping embedded IL & Lib training against Information Literacy Standards, such as Vitae, into introductory modules

Any questions?



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