

Encouraging engagement with the research literature at Honours level: an integrated approach

Paper presented at *Assessment for learning: designing strategies to engage students and enable learning*, Napier University Staff Conference, Thursday 21st July, 2007

By Dr Hazel Hall
School of Computing
Napier University
h.hall@napier.ac.uk

1. Introduction

Given that, in general, individuals are motivated to act when it is easy to do, and the usefulness of acting is obvious (Hall, 2001), it is not surprising that strategic students take calculated short-cuts in their studies. One common approach is to rely heavily on mediated module content such as lecture overheads rather than to study the research literature in the original. Whilst this approach can give an overview of the current thinking in a domain of study, active engagement with the primary source material – especially at Honours level – provides greater opportunities for critical evaluation of the work undertaken, as well as the development of theory in the domain.

In recognition of the difficulties in motivating final year undergraduates to read the research literature in the original, in 2004/5 changes were made to the private study, tutorial and assessment tasks for the School of Computing's final year Knowledge Management module. The goal was tight integration of private study reading exercises focused on a set of papers with (a) advanced follow-up group activities in class, (b) group assessment, (c) individual assessment, and (d) a panel session with industry experts in week 12. The intention was that this would encourage deep student engagement in the research literature of the domain. The new approach, as outlined in detail below, has proved to be very successful in meeting this aim.

2. Step 1: paper selection

The first task in preparing to deliver the research literature to the students in this way is to put together the journal articles, conference papers and book chapters to match the subject content of the module. A range of material is selected: from established domain "classics", to recent conference contributions considered to be at the forefront of the discipline. It is also important to provide variety in the type of material presented so that students have the opportunity to appreciate that published research literature takes many forms, including, for example, conventional reports of the findings of empirical studies, literature reviews, and detailed case studies of single organisations. Experience over the past three years has shown that students prefer to study no more than two papers in depth per week. Therefore recently the set of readings has been organised so that students are aware of which papers are *core* to the module programme and *must* be prepared in advance of the weekly tutorial, and those which are included for "advanced study" purposes. Students who have a particular interest in the subject area, perhaps because the theme relates to their dissertation topic, are the most likely to follow up the "advanced study" option. (The additional readings also give a choice of focus in the individual course work assessment, discussed in greater detail below.) In 2006/7 a minimum of eight articles would have been required for the eight "regular" tutorials. However, the students were actually required to engage with at least ten papers, as can be seen below in Table 1.

3. Step 2: module programme planning

The module programme is designed in tandem with paper selection to ensure that the weekly lecture themes, tutorial exercises and reading exercises tie together neatly (and, of course, match with the learning outcomes of the module). For most weeks that the module runs, the module team members are committed to designing two exercises - one for the individual private study task based around the reading, and a second more advanced group exercise to be completed in class - as well as writing and presenting a lecture. It should also be noted that running the class as a single three hour block split between the lecture (1 hour) and the tutorial (2 hours) once a week has proved to be the most effective form of class delivery. Table 1 below shows how the module content was integrated achieved in 2006/7.

Table 1: Integration of module themes with reading and tutorial exercises

Week	Reading exercise to be completed <i>before</i> the lecture	Lecture theme	Tutorial activities related to reading
1	None	Introduction to the module, including a presentation on managing research literature at this level	(None: ice-breaker exercises including juggling)
2	Literature review journal article on knowledge sharing	Knowledge sharing	Reading questions reviewed in groups; case study exercise on knowledge sharing
3	“Classic” journal article on knowledge networking	Knowledge networking	Reading questions reviewed in groups; guidance on course work 1 - concept mapping exercise based on the content of the article on knowledge networking
4	Conference paper on empirical research; case study article from the popular business press also based on empirical research	Online communities and innovation	Reading questions reviewed in groups; review of corporate material produced to encourage community work and innovation at Oracle
5	“Classic” journal article on social capital	Social capital	Reading questions reviewed in groups; exercise on social capital
6	3 hours class time devoted to individual tutorials for students to discuss their individual KM concept maps with tutor		
7	Two theoretical journal articles on knowledge asset mapping and tacit knowledge	Knowledge asset mapping and tacit knowledge	Reading questions reviewed in groups; assessed tutorial work – consolidated concept maps created as a group activity
8	Journal paper on empirical research	KM and strategy	Reading questions reviewed in groups; guidance on course work 2 – exercise on structuring the report content
9	No formal classes – School of Computing Reading Week		
10	Literature review article on intellectual capital	Intellectual capital	Reading questions reviewed in groups; case study exercise on intellectual capital
11	Theoretical article on discourses of KM	Discourses of KM	Reading questions reviewed in groups; exercise on discourses of KM
12	Panel session with invited industry experts		

4. Step 3: course work assessment task design

The next step in completing the processes of embedding the research literature within the module is to write the assignment specifications. There are three forms of course work assessment for the module. (There is also a conventional exam in week 14 or 15.) The first course work assignment (worth 30%) requires the students to work together in groups to create concept maps of knowledge management themes encountered in the first five weeks of the semester. This is achieved in tutorial time in week 7. Individual entitlement to take part in this assessment is dependent on the formal submission of an individual concept map on the day before the group activity takes place. As well as ensuring that all team members start the group assessment prepared to

contribute, the tutors use the individual submissions to determine group composition for the following day's assessed exercise.

The output produced in for the group task in week 7 shows that the students have a genuine knowledge of the concepts encountered in the module to date, largely on the basis of reading the research literature in the original. They are able to relate the content of the set reading material to the main module themes, articulated in the mainly in the graphic form of the concept map, and also verbally in the presentation of a rationale for the concept map's form. This level of achievement is primarily due to the careful structuring of the module: by the time the group work is assessed the students have considered each of the set readings for at least six separate activities, as shown in Table 2 below.

The details of this first assessment task are made public at the start of the module. In contrast, the requirements for the individual task (worth 50%) are released after the group work is completed. This individual assignment requires the students to select three of the papers encountered in the second half of the module to analyse in depth in a written report. Here the students are expected to evaluate each of the three papers separately, first by summarising their main arguments, and then by judging each paper's quality with reference to criteria such as authority and accessibility. Then the students are required to consider the three papers selected together. First the papers are compared and contrasted as a set, and in the last section of the report they are related to the module content as a whole, taking into account the rest of papers studied in the module to date. Again, at the point that the students complete the work for submission, they are very familiar with the three texts to be discussed: they have already considered the reading in five separate activities, as shown in table 2 below. The requirement to relate the three papers to the wider module content as a whole makes obvious the value of engagement with all the papers covered throughout the course of the module, whether or not they be examined in depth for the individual course work submission. A further benefit of this approach is that the work towards this major component of the course work assessment is completed over the full twelve weeks of the module. This eradicates some of the problems associated with assignments completed as rush jobs chasing a tight deadline, such as under-developed, incomplete, or plagiarised content.

Table 2: Building familiarity with the reading material

	Engagement with each paper	Applies to the preparation of the group assessment work?	Applies to the preparation of the individual assessment work?
1	In private – reading paper(s) in private study time, making notes guided by reading exercise questions	Yes	Yes
2	With student colleagues – discussing responses to the private study exercise questions in teams in class in the first part of each week's tutorial	Yes	Yes
3	With student colleagues – applying what has been learnt in a team exercise completed in the second part of the weekly tutorial (e.g. analysis of a case study with reference to the theory covered in the paper prepared ahead of class)	Yes	Yes
4	In private – preparation of draft assessment work	Yes	Yes
5	With a tutor – by discussing draft work and then acting on feedback given for the preparation of the individual submissions	Yes (week 6)	Yes (week 11)
6	With colleagues – by discussing and presenting work	Yes, with other students and tutors in the construction of group concept maps (week 7)	Yes, with other students, tutors and industry experts in the panel session (week 12)

The third element of course work assessment for this module is class participation (worth 20%). Although attendance in class is relevant here - it is difficult for students to participate if they are not in attendance - in this context "class participation" is understood as *active engagement* in the class activities. At the most basic level this means that students must come to class prepared to discuss the private study exercise in teams, and able to apply the knowledge gained from the private study exercise to the specifics of the tutorial exercise. The implication, of course, is that to gain reward for class participation, students are obliged to have completed the private study work prior to the weekly tutorial. As is the case for the group and individual assessments, the value of completing the reading to pick up marks for this course work element is obvious. It is also worth noting that peer pressure plays a role here: less motivated students soon learn that if everyone else is putting effort into preparing for class, then so should they.

There is a particular focus on class participation in week 12 when the panel session with industry experts takes place. Here all students are expected to take part in the academic debate, either as a presenter on the subject of one of the papers covered for the individual assignment task, or as a "supporter" of a presenter. In practice the tutors select the presenters on the basis of the content of the individual course work submissions and of their knowledge of the students. They partner the presenters with other students who have considered the same papers in their course work submissions. Each 5-10 minute presentation, chaired by one of three industry experts, is followed by discussion by class members. The supporter role is to help the presenters prepare prior to the session, and to play an active role in the discussion that follows. Once again, familiarity with the research literature is important for this activity, and has been achieved through the integration of module components.

This panel session in week 12 is the high-point of the module. By this stage it is evident that the students have gained from the papers an appreciation of how research is conceptualised, designed and implemented, and are aware of how findings are disseminated in the broader research community. Through the requirement to regard the set readings as a whole, the students understand how new knowledge relates back to established work, and the role that networks of research themes, and of influence, play in domain growth. The attention paid to analysing and evaluating the research literature, as well as the means of doing so, gives the students the confidence to be critical in their assessment of other work encountered in the course of their studies, not least the material that they need to identify and critique for the literature review chapters of their final year dissertations. In addition, this practice makes them more aware of the requirements of high-level research literature, and helps them in self-appraisal of their own efforts at academic writing.

5. Value and impact of the approach

There is little doubt that the students benefit from this approach. The comments that they make on feedback forms for this module is always very positive. Many compliments are paid on the quality of the teaching, the module content and its delivery, the output of the learning activities, the highly participative nature of the class activities, the applicability of skills learnt to this module and other areas of study, and assessment strategies. One student last year wrote on the evaluation form "I just like everything about [the module]". The following quotations are of particular relevance to the practices described in this paper:

- *On learning*: "This is a module where I feel like I have been able to achieve a great deal... I feel that I have developed a 'deep' understanding of the topic and this is very satisfying" (2005/6); "It is an interesting module that has provided me with new information and techniques that help in managing lots of things to do with knowledge management" (2006/7).
- *On motivation to engage, and the impact of engagement*: "You are actually made to do work... As a result I feel confident about passing the module" (2005/6); "Having tasks set for each week forces me to study" (2006/7).
- *On the participative nature of the module*: "Class participation helps with understanding of difficult topics" (2006/7); "[Group work in class] is valuable, occasionally very entertaining, and worthwhile to have the experience because this is how work is often done in industry" (2006/7).

Feedback from the industry experts has also been very favourable. In short, the guests are very impressed at the level of debate exhibited at the panel session amongst a set of students who knew nothing of the research papers under discussion three months earlier.

This impact of this approach includes high levels of class participation, student satisfaction and achievement, as evidenced in excellent attendance, and good assessment results: last year, with the exception of two students who had mitigating circumstances, all students passed the both the exam and course work assessments at first attempt. Fundamental to this is student motivation encouraged by two clear messages. First is the recognition

that it is easy to follow the recipe for success: in short, *complete the reading exercises and turn up to classes*. Second, by week 2 it is clear that the strategy merits adoption when it is realised that unless the private study reading exercises are completed, it will not be possible for individuals to remain in the class after the lecture to join in the main tutorial activities. Added to this is the peer pressure to contribute, and the knowledge that all three components of the course work assessment depend on intimate knowledge of the set reading. This is an approach that can be implemented in other modules - regardless of subject domain - where there is a drive to motivating students to immerse themselves in the research literature.

Acknowledgements

Professor Davenport is the other member of the teaching team on this module. Her contribution to the success in the design and delivery of this approach is acknowledged here.

Reference

Hall, H. (2001). Input-friendliness: motivating knowledge sharing across intranets. *Journal of Information Science* 27(3) 139-146 (DOI 10.1177/016555150102700303)

For further information, please see the module web pages for 2006/7

<http://www.soc.napier.ac.uk/module/op/onemodule/moduleid/CO420297>.