

Workshops available for HERDSA 2007 Conference

All workshops will be held at the conference venue, Hilton Adelaide, on Sunday 8 July 2007 between 1:00 - 4:00pm

1. An exploration of the elusive concept of critical thinking

Dr Jenny Moon, (Bournemouth University)

Developing pathways towards the understanding of critical thinking

Critical thinking is variably and inadequately understood by learners and tutors. This workshop is based on materials developed in the course of writing a book on critical thinking. The aim of the workshop is to provide supportive activities or 'a language' for critical thinking so that tutors and learners can better discuss its development. The materials will be 'run' and made available for further use to those in the workshop.

Abstract.

Ask a group of Higher Education (HE) teachers what critical thinking is and they will provide different answers. Yet critical thinking is central to what many would say HE is about: it is written into mission statements, into level descriptors and into the assessment criteria of much student work. We might well wonder what learners make of it. This workshop aims to provide some language around critical thinking so that we can better talk to each other and to students about it, and about the use and the development of it.

The theoretical basis of the workshop is developed in the writing of three quarters of a book (to be published in 2007 – London, Routledge Falmer). It leans heavily on styles of pedagogical work on reflective learning (Moon, 2004, 6), on an understanding of student learning and the literature of epistemological development (eg Baxter Magolda, 1992). The practical exercises are developed in the pedagogical section of the book. They break new ground, are non-discipline specific and focus on the development of depth and quality of critical thinking. One kind of exercise relates to a framework for depth and quality in critical thinking. Another endeavours to help learners to recognise what it means to shift from descriptive writing towards writing that effectively represents critical thinking.

The exercises can be used for staff or learner development and will be made available for participants.

Critical thinking is a concept that is used widely in higher education - in mission statements, in level descriptors, in comments on essays and so on. It could be said to epitomise higher education - but are we clear what it is? Does a student know what is meant when she is told that her writing is not sufficiently critical? This workshop is based on a new book on the theory and pedagogy of critical thinking by the workshop leader (to be published later this year).

The workshop will link the theory and practical pedagogy of critical thinking in brief presentations, discussion and, in particular in structured exercises. It is intended that the participants will:

- be better able to formulate a working 'definitional' statement about critical thinking that can benefit their teaching, the learning of students and their work within a team of academics;
- will be able to use materials (given at the workshop) with students in order to enhance the understanding of the students about what critical thinking means, its improvement and how it is represented in their work;

- will be aware of the influence of the students' developing views of knowledge on their ability to work with critical thought.

- and they will be able better to articulate conceptions of the progression of learning at different levels in higher education - because critical thinking is fundamental to this.

The workshop will be a balance of presentation, discussion and substantial (and entertaining) exercises that are designed to enhance the understanding of the concept of depth and quality of critical thinking. The exercises are for use with staff participants, but can be used directly with students themselves. They are contained in the resources section of the new book. The content of the resources section will be made available to participants at the workshop (in addition to a substantial handout).

Jenny Moon, who is to lead this workshop, works part time in the Centre for Excellence in Media Practice, at Bournemouth University, England. Her focus is pedagogy, and her background in a number of disciplines and professional development contributes to this. She is a National Teaching Fellow (2006/7) in the UK. Jenny is the author of six books on pedagogical topics, including reflective learning, the use of learning journals, critical thinking and programme structure. She also runs workshops in higher education institutions in the UK and abroad on a range of pedagogical topics.

2. What every PhD supervisor needs to know: Creating the seven habits of highly successful PhD students

Hugh Kearns, Maria Gardiner, (Flinders University)

Procrastination. Perfectionism. Overcommitting. Getting distracted.

You know what it is your PhD student should be doing; could be doing; would like to be doing: but it just doesn't seem to be happening. Despite your best efforts to support your student, it sometimes doesn't work. Why is this, and what can you do to make completing a PhD more satisfying for your students and for yourself?

The research in this field clearly shows that the relationship between a supervisor and their PhD student is a crucial element of higher degree study. However, it is often a very private relationship and it can be difficult for supervisors to get feedback on their approach and to explore other models. This workshop translates the theory and scholarship of research education into meaningful student experiences. We are fortunate in that we have worked intensively with over 100 PhD students and have drawn from their experience of what does and doesn't work. We draw on the latest psychological, educational and management research to create effective research education environments. If you are a research supervisor, research educator or even doing research yourself you will find this topic very relevant.

Workshop Format:

This workshop will be highly interactive with many opportunities for participants to draw on and contribute from their own experiences. We will make extensive use of case studies and examples, and participants will have the opportunity to assess their own supervision and learn from the experience of others. Participants will be involved in small group work and reporting to the larger group. Most importantly the workshop will be practical, applied and FUN! At the end of the workshop participants will identify specific actions they can try out and develop a plan to do so.

Workshop Outcomes:

By the end of the workshop participants will:

- be aware of the seven habits of highly successful PhD students

- have a range of practical strategies to deal with common problems such as:
 - writer's block or putting off writing
 - procrastination
 - getting distracted and overcommitting
- develop an action plan for implementing changes to their own supervision

Participants will receive a copy of the book "*The Seven Secrets of Highly Successful PhD Students*".

The Presenters

Over the past five years, Hugh Kearns and Maria Gardiner from Flinders University have researched the emotional and psychological aspects of undertaking higher degree research. They have developed a comprehensive suite of programs for PhD students and supervisors, and have published the highly regarded *The Effective PhD Candidate Series*.

In 2006, Hugh Kearns and Maria Gardiner, received a prestigious national teaching award from the Carrick Institute for their outstanding contribution to teaching and learning.

Carrick Citation 2006

For innovation in applying the latest psychological and educational research to enhance the quality and effectiveness of the research higher degree study experience

In 2007 the IRU-A group of universities provided funding to enable a series of masterclasses, based on their innovative work and research, to be held at each of the member universities.

More information about the presenters and their work can be found at:

<http://www.flinders.edu.au/staffdev/rhds/phdcandidate/index.html>

3. Using Visual Tools in Adult Learning

Rob Burton, Nichola Barlow, Caroline Taylor (University Of Huddersfield)

The purpose of this workshop is to introduce the participants to the use of visual tools within higher education and adult learning. The outcomes will be that the participants will be exposed to the various types of tools including, structural, representational, differential, causal, temporal, numerical and organisational and how to use them (Caviglioli and Harris, 2002).

These tools have been used successfully in pre-registration nursing programmes. The Participants will be involved in exercises where they will use the tools to analyse materials and information through varying levels of sophistication for example nominal, ordinal, interval and ratio. They will be introduced to the various tools and their uses, and can work as individuals and in groups to analyse and present information. There will be opportunity for discussion of the strengths /weaknesses of such tools.

The main author conducted a study (Burton, 2004) which suggested that student nurses prefer the visual modality in relation to their learning. These findings will be discussed as well as how the findings led on to the development of utilising visual tools within a problem based learning approach.

Dimopoulos et al (2003) state that although messages and meanings reside in language, a Visual illustration is a relatively transparent and unproblematic window to reality. They argue that they are autonomous systems of communication that produce images of reality bound up in the interests of social institutions. Visual images can be assessed in an independent way from

written text. They suggest that the function of Visual images can be analytical and not merely descriptive of the situation.

According to Caviglioli and Harris (2002) Visual tools transform the normally invisible, abstract act of thought into a concrete and public media. It appears that Visual tools can be used at differing levels of learning, from simplistic to abstract. Cohen (2000) argues that hierarchical structures of representation have cognitive functions that operate on four principles, control, access, analogy and economy. Memory stores representations economically and includes methods of effective access to them. Concept maps and mind maps are examples of visual tools that might demonstrate these aspects. Akinsaya and Williams (2004) found that the use of concepts maps in the classroom setting were beneficial in assisting students to learn at the conceptual level and provided a schematic summary of learning. In this way it is a format for explaining rules, concepts and their relationships and the intricacies of theories to the learner and vice versa, and also a way in which they can externalise their thoughts, values and understandings.

An interesting factor, however, is that by using Visual tools a person is able to recreate such schema and maps from their internal representations in the public domain and compare and contrast them with others. By representing schema externally they can be added to adapted and changed. Particular aspects can be scrutinised in detail and exploded for further analysis. The Visual tool can be used to develop maps that students can absorb and understand and also for the students to utilise to identify and externalise their models of understanding. In doing so problem-solving approaches can be used and the Visual tool used as a method of drawing together conclusions. This will be demonstrated in the workshop.

It is anticipated that all these factors will be demonstrated and debated in the workshop.

References:

Akinsaya, C. & Williams, M. (2004) Concept Mapping For Meaningful Learning. *Nurse Education Today*, **24**, 41-46.

Burton, R.L (2004) *Learning Styles and Neuro-Linguistic Programming Representational Systems in Nurse Education*. Unpublished EdD dissertation. University Of Huddersfield.

Caviglioli, O., Harris, I. & Tindall, B. (2002) *Thinking Skills And Eye Q: Visual Tools For Raising Intelligence*. Stafford. Network Educational Press Ltd

Dimopoulos, K., Koulaidis, V. & Sklaveniti, S. (2003) Towards An Analysis Of Visual images In School Science textbooks and press Articles About Science and Technology. *Research In Science Education*, **33**, 189-216.

4. The development of student research skill through the remodelling of assessments in coursework programs

John Willison, Kerry O'Regan, Eleanor Peirce, Mario Ricci, Said Al-Sarawi, Brian Ng, Frank Donnelly, Mofazzal Hossain, Steven Begg, (University of Adelaide)

Remodelling Assessments of coursework programs to explicitly, coherently and efficiently develop student research skill

Whilst the relationship between being a quality researcher and being a quality teacher at university may be tenuous at best¹ the correlation between undergraduate student engagement

in research and positive learning outcomes has been shown to be positive. Those who experienced research in their undergraduate degree, when compared to those without that experience, had higher levels of student satisfaction with their program of study and perceptions of greater generic skill development² and significantly higher participation in postgraduate research³.

Notwithstanding these findings, calls for inquiry-based undergraduate coursework⁴ do not have a widespread empirical basis, with a scarcity of research findings upon which strategies for evaluation might be grounded⁵. As one starting point to remedy this situation, the Research Skill Development Framework (RSD)⁶ provides a conceptual basis for considering, developing and evaluating undergraduate research across all disciplines.

This workshop presents an approach that is being trialled and studied in 5 diverse disciplines. The approach develops explicitly, coherently and efficiently student research skills in keeping with the RSD framework. This RSD approach has enabled the revisioning of undergraduate and masters-level coursework assessments in a way that enables such development. There are four streams of research that are presently considered in the RSD study; literature research, laboratory research, fieldwork research and numeracy-rich research, with literature research a common denominator across the other types. Methods of evaluating the success of the approach have been emerging in this study, and will be critiqued by the audience.

The workshop will be run by the authors of the RSD framework and lecturers from the disciplines that have applied it. In it, you will be asked to join into discussion groups that critically analyse the RSD framework, to consider specific RSD assessments and determine types that may apply to your context. You will also be asked to design a diagnostic assessment based on existing examples.

Therefore the Workshop Outcomes are that participants will have

- Analysed the RSD conceptual framework
- Determined relevant discipline-specific applications of the framework
- Designed a draft diagnostic assessment

Please note: the workshop will be of more benefit if you visit beforehand www.adelaide.edu.au/clpd/materia/projects/rsd/ and look at the RSD framework, and discipline-specific examples of its application. It is also advantageous if you bring existing assessments of a specific course and one or two initial readings that are provided to students in this course.

The workshop matches closely Theme 3, by showing how a theoretical framework is being translated into practical applications, the outcomes of such experiences and ways in which we know the approach is working. It also matches Theme 1 as it helps participants apply theory to curriculum development and assessment design frameworks.

References

¹ Review of Educational Research, Vol. 66, (4) 507-542.

² Journal of Educational Psychology, 92(1), 191-201.

³ The Journal of Higher Education 74(2), 210-230.

⁴ <http://naples.cc.sunysb.edu/Pres/boyer.nsf/>

⁵ Science Education, 88(4), 493-534

⁶ Willison, J.W. & O'Regan, K. (in press). Commonly known, commonly not known, totally unknown: A framework for students becoming researchers. Higher Education Research and Development.

5. Writing Groups for Doctoral Programs:

Claire Aitchison, (University of Western Sydney) and Alison Lee (University of Technology Sydney)

This workshop describes our current research and practice with the use of writing groups to address the complex writing needs of doctoral students. We explain why writing groups are a particularly suitable site for doctoral pedagogy, one that recognises the increasing importance of attending to writing within a context of intensifying institutional imperatives for completion times and enhanced research output.

The workshop will be of particular interest to supervisors, doctoral program coordinators and doctoral students. The presentation is divided into three sections: 1) an exploration of the different kinds of writing groups, 2) an analysis of our practice as revealed through program evaluations and the experiences of group participants, and 3) an opportunity to discuss the practicalities and challenges of such programs.

We begin by detailing different models of writing groups, from which we draw out common elements and pedagogical principles for the purpose of sharing practical strategies for implementing and managing writing groups. The value of a writing group, we argue, is that it provides opportunities for students to produce text within a supportive community of peers; it facilitates their skill development in regard to the particularities of their discipline, and research genres; it builds their capacity to critique and to edit their own and others' texts (Aitchison & Lee, 2006; Kamler & Thomson, 2006).

The group environment is a rich site for individual learning. Evaluations of groups we have been associated with demonstrate quantum leaps in students' awareness, skills, confidence and productivity. Within this context as well, students cannot help but learn about the full range of the research process: methodology and research design, positioning of the self in the research and the text, and the experience and the practice of undertaking research.

We illustrate the actual practices of a writing group with a range of materials including writing group activities, focus group discussions and student dialogue for the purposes of generating discussion about some of the following issues:

- Sustainability challenges and strategies for managing diverse groups
- The relationship of supervisory practice and writing groups
- How talking about text facilitates doctoral learning
- How to embed writing groups into doctoral education programs

At the end of this workshop participants will have strategies for the successful establishment of doctoral writing groups including the development of an integrated program, recruitment, ongoing facilitation and evaluation. Participants will be given a collection of materials that will assist them in this task.

References

- Aitchison, C. & Lee, A. (2006). Research Writing: problems and pedagogies. *Teaching in Higher Education*, 11(3), 265-278.
- Kamler, B. & Thomson, P. (2006). *Helping doctoral students write: Pedagogies for supervision*. Oxon: Routledge.