



Higher Education Research and Development Society of Australasia, Inc

Enhancing Higher Education, Theory and Scholarship

Proceedings of the

30th HERDSA Annual Conference

8-11 July 2007

Adelaide, Australia

Benson, R., Brack, C. & Weaver, D. (2007) Supporting scholarly e-teaching: lessons learned from a faculty-based initiative, in *Enhancing Higher Education, Theory and Scholarship, Proceedings of the 30th HERDSA Annual Conference, Adelaide, 8-11 July 2007: pp 30.*

Published 2007 by the
Higher Education Research and Development Society of Australasia, Inc
PO Box 27, Milperra, NSW 2214, Australia
www.herdsa.org.au

ISSN: 0155 6223
ISBN: 0 908557 71 X

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Supporting scholarly e-teaching: lessons learned from a faculty-based initiative

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This paper reflects current views of scholarly teaching which focus on improving student learning through good teaching practice. Consistent with these views is acceptance of the idea that the scholarship of teaching involves being informed by scholarly discourse on learning and teaching, reviewing practice in the context of this discourse, and communicating new understandings back to the scholarly community. The paper also reflects a view of scholarly e-teaching founded in principles emerging from the same discourse, but extended by perspectives and experiences associated with the e-learning environment. We illustrate this view of scholarship by describing a faculty-based initiative to support scholarly e-teaching and commenting on what we have learned from it.

Keywords: e-teaching; e-learning; scholarship

Introduction

The Faculty of Medicine, Nursing and Health Sciences at Monash University, Australia, is a large multidisciplinary faculty committed to teaching and research. It offers undergraduate and postgraduate programs across six locations in Victoria (Australia), as well as Malaysia, South Africa and Singapore, using multiple teaching sites, including University campuses, clinical schools, hospitals and community-based teaching facilities. E-learning is important in the Faculty for several reasons, including the need to teach across diverse teaching sites, the need to support students who are studying off-campus to extend their professional qualifications, and the opportunity to include high-quality visual content in teaching resources for use in the classroom or beyond.

The Faculty offers Graduate Certificate and Masters degree programs in health professional education but these do not focus specifically on teaching in the e-learning environment. Hence, in 2006 we initiated an academic development program with an emphasis on e-teaching. The program, incorporating face-to-face, paper-based and web-based components, is designed to accommodate staff requiring short programs supported by just-in-time resources. This paper examines the lessons learned from this initiative, placing them in the context of

what it means to support scholarly e-teaching, and considering how insights associated with e-teaching can contribute to the scholarship of teaching in higher education.

Scholarly e-teaching: some theoretical issues

Shulman (2000, p. 49) distinguishes scholarly teaching from the scholarship of teaching (Boyer, 1990), defining it as:

... teaching that is well grounded in the sources and resources appropriate to the field. It reflects a thoughtful selection and integration of ideas and examples, and well designed strategies of course design, development, transmission, interaction and assessment. Scholarly teaching should also model the methods and values of a field, avoiding dogma and the mystification of evidence, argument and warrant.

In scholarly e-teaching, information technologies become important aspects of the teaching strategies described above. The mode and the media used influence course design, development, transmission, interaction and assessment. When the field is higher education, the sources, resources, methods and values used in scholarly e-teaching must also be appropriate to this field.

Trigwell, Martin, Benjamin and Prosser (2000) add a further dimension to scholarly teaching by placing the focus on student learning. They suggest that the aim of scholarly teaching is 'to make transparent how we have made learning possible' and that this requires teachers to be 'informed of the theoretical perspectives and literature of teaching and learning in their discipline, and be able to collect and present rigorous evidence of their effectiveness...' (p.156). According to this view, essential aspects of scholarly e-teaching lie in the evidence of how learning is made possible in the e-learning environment, considered in the context of perspectives from the field of higher education relating to the discipline concerned. Their model of the scholarship of teaching includes: engagement with the scholarly contributions of others; reflection on one's own teaching practice; communication and dissemination related to theory and practice; and a conception of teaching focused on student learning. Scholarly e-teaching would therefore contribute to the scholarship of teaching across these dimensions and would include students in scholarly practice (Trigwell & Shale, 2004).

Ramsden (2003) states the principles of good teaching do not alter when information technology is appropriately used to help make learning possible. This recognises a common epistemological basis for e-teaching and traditional forms of teaching in higher education, with both emerging from current educational theory which supports the negotiated nature of knowledge from a number of theoretical perspectives about how learning occurs. However, we suggest that perspectives from literature and experience relating to e-teaching have potential for enriching discourse on the scholarship of teaching.

For example, Trigwell and his colleagues draw on phenomenographic theory while the e-learning literature has been particularly influenced by constructivist perspectives derived from cognitive psychology (e.g., Duffy & Cunningham, 1996; Jonassen, 1999). Like phenomenography, this literature emphasises the centrality of the learner but the nature of the discourse differs because of the different theoretical underpinnings. Constructivism offers more scope for acknowledging the role of collaboration and conversation in learning because 'phenomenography appears unable to handle interindividual identity' (Richardson, 1999, p. 67). Other theoretical perspectives which have already broadened understandings about the scholarship of teaching include those which emphasise the reflective element of scholarship,

particularly the transformative potential of critical reflection (Kreber & Cranton, 2000; Kreber, 2004), with rigour achieved through responsiveness to practice (Schön, 1995).

In addition, supporting the experience of e-learning provides scope for exploring how learning occurs and informing teaching strategies. For example, emphasis on communication, collaboration and the development of online communities of enquiry, often relating to social constructivist perspectives (Lave & Wenger, 1993; Vygotsky, 1978), has resulted in the development of practical approaches for supporting learning. These include Salmon's (2003) model for using online communication in teaching, widely recognised in the e-learning literature. Goodyear, Salmon, Spector, Steeples and Tickner (2001) have noted how democratic values not necessarily associated with the online environment have pervaded the field of online learning, thus raising opportunities for scholarly discourse which may also have implications for face-to-face teaching.

Disciplinary perspectives of e-teaching should also be acknowledged. While Healey (2000, p. 169) argues that 'the scholarship of teaching needs to be developed within the context of the culture of the disciplines in which it is applied', Brew (2006) notes the problematic aspects of this, particularly in disciplines which are less familiar with educational ways of thinking. Our approach has been to begin with generic principles of teaching, while recognising the potential impact of approaches associated with particular disciplines, such as the use of problem-based learning in medicine and the health sciences (Boud & Feletti, 1997). Methods for implementing approaches such as these online offer additional opportunities for scholarly teaching, reflection and communication.

Planning for academic development in relation to e-teaching

Our planning for academic development in relation to e-teaching was influenced by the above perspectives, as well as by considerations about staff development raised in the e-learning literature.

In assuming that e-teaching is a scholarly activity (and not just a matter of obtaining the necessary technological skills), we identified three main dimensions of scholarship that our activities needed to address. Firstly, we needed to engage staff on the nature of good teaching principles and apply these to the e-learning environment. Secondly, our own teaching needed to reflect the principles we were supporting. And thirdly, our practice should also reflect characteristics of the scholarship of teaching. A fourth dimension, where program participants themselves engage in the scholarship of teaching, was our ultimate aim which would be achieved through collaboration with them as partners in learning (Trigwell & Shale, 2004).

There has been substantial attention given to staff development in the e-learning literature. Often the concept of diffusion of innovations (Rogers, 2003) is used to consider technology adoption patterns of academic staff, leading to the alignment of support with staff levels of need or readiness (Wilson & Stacey, 2004). Wilson and Stacey identify three other common approaches: accredited courses, staff development online (often alongside more traditional approaches) and localised faculty-based peer support. Our plan included elements of the last two. One of the main online components was a showcase of e-learning approaches adapted from one previously offered University-wide (Brack, Samarawickrema & Benson, 2005), which had been prepared on the basis of evidence that staff benefit from seeing examples of how others have designed learning experiences for this environment (Bates, 2000).

Implementing the program

The program consists of three main components: workbooks, face-to-face workshops with online components, and the showcase website.

The workbooks

Each workbook is prepared as a self-instructional resource for use on its own (in conjunction with the showcase website) or with a related workshop. The workbooks are designed to reflect good practice for off-campus teaching materials (e.g., Rowntree, 1990) since many staff who teach off-campus students continue to use a combination of paper-based and electronic teaching approaches.

The initial Educational Design and e-Learning Orientation Workbook covers broad principles and practical tips for e-teaching. Workbooks on specific aspects of e-teaching are progressively being developed (e.g., educational design and online communication; developing e-learning activities; online assessment). The workbooks aim to reflect general principles of good teaching in higher education. For example, Topic 1 of the Orientation Workbook covers identification of the learning and teaching context, developing objectives, supporting active learning, assessment and feedback issues, constructive alignment (Biggs, 2003) and some evaluation principles and approaches, with a view to applying these in the e-learning environment. The issues are raised through activities (aligned with the topic's objectives) supported by resources which include readings from Ramsden (2003) and Biggs (2003), as well as from sources related to e-learning.

Topic 2 deals with preparing off-campus print materials and in Topic 3 the principles covered in Topic 1 are applied to teaching in the University's e-learning environment (*WebCT Vista*). Additional models and strategies are introduced at appropriate points from discourse about e-learning. For example, the five-step model developed by Salmon (2003) illustrates issues to consider in designing online communication, and Oliver's (1999) model illustrates the inter-relationship of content, learning activities and learner supports. This also offers the opportunity to introduce the constructivist principles on which it is based. Finally, Topic 4 introduces other e-learning options and related issues in the context of the teaching principles already established.

Subsequent workbooks follow a similar pattern of grounding e-teaching perspectives and practices in basic teaching principles.

The workshops

The combination of face-to-face and e-learning experiences offered in the workshops is, in part, a response to the practical issue of being unable to resource the development and offering of fully-online workshops. However, this has also allowed us to model 'the thoughtful integration of classroom face-to-face learning experiences with online learning experiences' in a 'blended' learning environment (Garrison & Kanuka, 2004, p. 96).

The workshops parallel each related workbook in terms of the perspectives offered and the issues raised, but their design differs in order to take advantage of the face-to-face and online opportunities. Each participant receives a copy of the relevant workbook and we refer to it throughout the workshop, particularly to introduce ideas which can only be addressed briefly in the limited workshop timeframe. The balance of face-to-face and online components varies between workshops in order to tailor each to the aspects of teaching that are covered. For example, the Orientation Workshop begins with a face-to-face discussion to introduce some

key teaching principles. Participants then break into groups to build an online teaching component which applies these principles. In contrast, the Online Communication Workshop begins a week before the face-to-face workshop, when participants are asked to complete online discussion tasks before the group meets. Theoretical and practical ideas related to these tasks are introduced at the beginning of the workshop which then continues with further online tasks and associated discussion. The workshops thus support scholarly e-teaching in the opportunities they offer staff (acting as 'students') to experience the teaching principles that are addressed.

The showcase website

The showcase website, *Designing Electronic Learning and Teaching Approaches (DELTA) for the Health Professions* (Brack, Samarawickrema & Benson, 2005) is integrated with both the workbooks and the workshops to provide examples of how University staff have implemented e-teaching. Learning activities in the workbooks suggest that staff consult particular examples at points where they illustrate aspects of e-teaching covered by that topic. This strategy also models one way of integrating online and print-based teaching. In the workshops, DELTA provides a resource to support face-to-face and online engagement, contributing to scholarly e-teaching by providing a wide variety of teaching strategies.

Evaluating the program

Evaluation of the program allows us as its developers and teachers to engage in the scholarship of teaching through the experience of supporting the scholarly teaching of others. The following sub-sections summarise the processes used and results so far.

The workbooks

Feedback on initial impressions of the workbooks is requested of workshop participants on feedback forms (to encourage attendance the book is not provided in advance). Initial reactions are typically positive:

The workbook is just great – well laid out, clearly written, incorporating both theoretical framework and readings – and the boxes for personal comments and summaries. Thank you – a really useful resource.

To gain more detailed information for revising the developmental version of the Orientation Workbook, we implemented a peer review process, approaching a mix of Faculty colleagues who either had interest and experience in teaching, or who were new to e-teaching. (Following workbooks have yet to be reviewed but a similar process is planned.) Eight colleagues agreed to review one section of the book in detail and provide general comments via a brief questionnaire consisting of five open-ended questions which covered:

- useful aspects;
- suggested general changes;
- identification of errors;
- specific comments for improving one allocated section; and
- other suggestions to improve the workbook.

Three reviewers were senior academic staff from the Centre for Medical and Health Sciences Education. The other five were teaching staff, each from a different department, one with e-teaching experience, and four relatively new to e-teaching.

Comments on *useful aspects* of the book included reference to its value as ‘an excellent overview of ... essential concepts and skills in teaching in any mode’, and its relevance for developing e-learning strategies. Positive comments were made about its sequential and activity-based structure, the use of DELTA and the fact that ‘the workbook demonstrated clearly, in practice, the principles which were being discussed.’ Particular aspects identified as useful included the copyright information, new technologies and ideas related to them, and its role in filling the gap in current support offered by the University. One reviewer summarised its usefulness as follows:

It had a terrific mix of general theory with very practical suggestions. For once, something that actually seemed useful to the practising teacher rather than some idealised fantasy of what a university academic can actually achieve in a life of teaching, research, administration – and having a family life too.

There were a small number of *suggested general changes*. Two reviewers offered ideas for improving navigation and one suggested that the title was misleading as it offered more than an orientation. A potentially major issue, also raised by two other reviewers under *other suggestions*, was whether staff would be motivated to work through it. Offering an additional summary booklet was suggested as one way to address this.

Most suggestions in relation to *identification of errors* offered ideas for improving or clarifying expression at identified points. *Specific comments* on allocated sections included suggestions on additional content (e.g., on learner diversity), additional theoretical perspectives (e.g., on ‘meaningful learning’), finetuning of some of the advice given on online communication, and further suggestions for clarifying or expanding points. Comments on Topic 4 (which covered additional e-learning options, copyright and evaluation issues) referred to the disjointed aspect of bringing together disparate topics, and some concern that this topic was technology-focused rather than learning-focused.

Finally, *other suggestions* to improve the workbook were a mix of positive statements (‘overall, fantastic’, ‘a terrific resource’) tempered by comments from three reviewers who were concerned about ‘getting staff to use the book’. They offered suggestions about the need to present the material ‘in a way which doesn’t give the feeling of being overwhelming.’ A related comment from another reviewer was that it was not clear whether the book was intended for independent learning or use in training sessions.

Issues raised in this feedback have now been addressed in a subsequent edition of the book.

The workshops

Workshop feedback is requested via feedback forms (either on paper or online). The two dominant themes regarding the most useful aspects of the Orientation Workshop have been appreciation of the learning design principles and the practical application of these through designing an e-learning component in the group activity. Participants also often mention the potential value of the workbook and/or the DELTA site and several comments have referred to the usefulness of the workshop as a whole. For example:

I have found the entire workshop to be eye-opening and very valuable. This is my first experience of education in this form – when I come to try to implement these skills it will be very interesting.

There have been no strong themes emerging from suggestions for improvement. However, occasionally removal of the learning design principles is suggested (‘familiar with these’) or removal of the DELTA demonstration (‘we can go through these ourselves later’). An

underlying theme in some responses refers to the need to upgrade technical skills – some participants expect the focus of the workshop to be on these skills rather than on learning design. Nevertheless, responses indicate a definite interest in attending further workshops on specific aspects of educational design and e-learning.

All staff who participated in the first of the subsequent workshops (on educational design and online communication) responded positively and appreciated the combination of online and face-to-face components:

It worked very well – helped me to get in touch with some of the issues in teaching/learning in this environment. This format might also work in some of my teaching – ie student activities online intermingled with face-to-face discussion.

Immersion in the online communication experience (from the student's point of view) is frequently mentioned as the most valuable aspect:

Being thrown in at the deep end is good as it mirrors the experience for many students and alerts us to how they will feel. Also, getting a sense of what it's like by actually doing it and experiencing the nice things as well as the frustrations and limitations.

Other positive comments have referred to ideas on online assessment, managing online discussion, supporting students, and 'breaking down some of my prejudices about this mode of learning.' Again, there have been no dominant themes in suggestions for improvement though a few have suggested 'more time' and a need for 'technical designing skills'. Many have considered 'it was great' in its present form and this is reiterated in the additional comments where all responses have been positive ('great course – covered exactly what I was hoping for'; 'great stuff, really enjoyed it').

Our response to suggestions for improvement made by workshop participants has been one of iterative development, incorporating these suggestions into our own critical reflections.

The showcase website

The showcase website has not been separately evaluated as part of this program, though we have evaluated previous versions of it (e.g., Samarawickrema, Benson & Weaver, 2005). Our interest in it here has been in its use in relation to other program components.

Our critical reflections

To facilitate our scholarly consideration of the program as developers and teachers, we documented our individual reflections as a basis for engaging in discourse about them. Through this process we identified aspects of e-teaching which we regarded as scholarly, relating to participants' responses as teachers, and to our own teaching. In particular, we recognised that the hands-on nature of the workshops allowed participants to experience for themselves, as learners, some of the advantages and limitations of e-learning to inform their teaching, and the structured nature of the activities allowed us to model good educational design:

... (the) workshops were a powerful way to experience roles of e-teaching and e-learning.

... these workshops got people thinking how they could implement similar ideas in their own teaching.

Modelling scholarly teaching allowed us to demonstrate a learner-centred approach and provided the basis for future scholarly activities:

...the f2f workshops gave us the opportunity to build (strong) relationships with staff in a friendly yet scholarly environment, and created the opportunity for future collaborations.

While the workbooks were useful as a resource to supplement the workshops, we acknowledged that the extent that staff are consulting them after the workshops, and their usefulness as a standalone resource, has not been determined, and that this 'impacts on the role of these books in supporting engagement with scholarly e-teaching.'

Preparation of both the workbooks and workshops offered an opportunity to support our own scholarly discourse and teaching:

Articulating underlying principles of good teaching provided a sound framework for working with academics.

Devising activities for the workbooks and workshops provided opportunity to try out some different ways of engaging learners....

A critical strategic component of both the workshops and the workbooks was the use of DELTA as a primary source of examples of good practice:

If we didn't have it [DELTA] we would be struggling to produce examples to illustrate important concepts in relation to e-teaching and how they have been implemented... but perhaps we could consider whether there are any other ways we could use it in relation to the workshops, particularly to support the idea of a scholarly approach to e-teaching.

Finally, we acknowledged the need for adequate technical training to complement the academic development program:

While the focus of our program is not on this upskilling, and I wouldn't regard it as directly related to scholarship, nevertheless I think that worries about being able to drive the technology often create barriers to engagement in scholarly e-teaching. .. it's hard for people to engage well with some of the subtleties of e-learning design if they are not familiar with the capabilities of the tools they are using or could potentially use.

Conclusion

We have indicated how we have supported scholarly e-teaching through the use of sources, resources and strategies appropriate to the field of higher education, and to perspectives and experiences related to e-learning. In endeavouring to show how we have made learning possible, we have collected and presented evidence of effectiveness, providing for rigour through an iterative approach which facilitates continuing improvement. Action is guided by the visibility of responses to e-learning activities which makes learning particularly transparent. Our focus on student learning, engagement with the scholarly contributions of others, reflection on our teaching practice, and communication about this program have been directed at participating in the scholarship of teaching through understandings related to e-teaching. These are reflected in the strategies used in three inter-related components of the program.

From the responses of participants we have learned that embedding perspectives and principles in a 'blended' learning environment has been particularly helpful for making learning possible. It allows participants to experience e-teaching as learners but to engage in scholarly discussion as e-teachers. Additional learning opportunities offered through the

workbooks and the DELTA site appear to be appropriate but need to be explored further to establish optimal ways of using these components across the Faculty. We will also investigate the impact on staff teaching and scholarship, and on student learning and scholarship, in future research and evaluation activities.

We recognise clear benefits to our own development as scholarly e-teachers from the design, teaching and evaluation of the program. Using reflection to inform iterative development enhances our potential contribution to the scholarship of teaching. We acknowledge that further involvement of participants in evaluation through reflection and dialogue could enhance and accelerate their involvement in teaching scholarship. Through this experience we have aimed to demonstrate how the additional theoretical perspectives emerging from discourse about e-learning, together with the added opportunities for understanding learning and developing new teaching strategies associated with experience of this environment, offer fruitful contributions to the scholarship of teaching.

Acknowledgements

We acknowledge with thanks the peer reviewers and workshop participants who have contributed to the above program.

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