Developing peer review of teaching in blended learning environments: Frameworks and challenges

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The growth of blended learning environments in higher education has emphasised the need for better ways of describing and recognising good teaching that promotes student learning in these environments. Although the affordances of e-learning technologies have long been discussed, there has been little emphasis on developing systematic processes for recognition of good teaching in blended learning environments and developmental feedback for academics. This paper reports on work in progress on a two year ALTC project in which teams across the ATN universities are developing a scholarly framework and a sustainable process for peer reviews through a co-productive, action research approach. The peer review process is currently being developed and trialled, with team members focusing on aspects of their teaching in blended learning environments across a wide range of disciplines and contexts. The challenges encountered to date include: successfully combining formative and summative goals for reviews; balancing concerns about trust and independence; the extent to which blended learning and/or disciplinary expertise is necessary for reviewers and the ubiquitous time constraints. Peer review of learning and teaching in blended learning environments is complex. A significant challenge for this project is ensuring that the processes and resources developed are sustainable and helpful for a wide range of academics and universities, as well as useful for improving student learning.

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Blended learning environments, involving the 'blending' of face-to-face, online, print-based and other media to create an overall learning environment for students, are now commonplace in universities. The most recent ECAR report (Salaway, Caruso & Nelson, 2007) noted that 82% of their sample of US students used learning management systems (LMS) within their courses, although most also still valued face-to-face contact. This paper describes a current ALTC funded project that addresses two current issues related to the increasing spread of blended learning environments in Australian universities. The first is the need to enhance our capacity to improve the quality of teaching and learning in blended learning environments. The second, to extend the range of evidence for good teaching in blended learning environments beyond student feedback to include scholarly peer review processes that can be embedded in institutional practices and used across institutions.

Much has been written about the ways in which e-learning technologies may afford enhanced experiences for students (eg Alexander & McKenzie, 1998), including better access, improved attitudes and qualitatively different and enhanced learning outcomes. However, despite enormous investment by universities in technology there has been little evidence of widespread enhancement of student learning (Reeves, Herrington & Oliver, 2004). Cuban (2001) and Naidu (2003) argue that this is because blended learning approaches have often simply replicated what is already provided through face-to-face teaching. Much time has been spent in providing the same content in a range of delivery modes – face-to-face lectures, publication of lecture notes online, streamed videos of lectures and more recently lecture podcasts.

While access to content is necessary, learning theorists from various perspectives argue that it is not sufficient to support the kinds of learning that involve changes in students' understanding of the subject matter (or the world), or their generation of new ideas. Constructivist theorists such as Jonassen (1996) argue that more meaningful learning can be achieved through engagement with realistic, contextualised problems to be solved, while variation theorists (Marton & Tsui, 2004) argue that what counts is the student's experience of variation related to the critical aspects of the subject matter. Oliver and Trigwell (2005) argue that the idea of blended learning might be 'redeemed' if the 'blending' of different media enabled students to experience the patterns of variation necessary for coming to understand ideas in different ways, or seeing things from different perspectives.

There is insufficient research to conclude whether good teaching in blended learning environments is simply good teaching, based on well-recognised principles (eg Ramsden, 2003; Biggs & Tang, 2007) but enacted through a wider range of strategies and media, or whether there is something qualitatively different about good teaching in these environments. Universities are still seeking the most effective ways in which they might make judgments about the quality of blended learning experiences, and of teachers' contributions to these experiences, and many teachers would appreciate more formative feedback to improve their practices.

In our project, we argue for the need for a more holistic approach to improving and judging the quality of teaching and learning in blended learning environments, based on what and how students learn in these environments and on how teaching supports this learning. A peer review process is being developed to complement information that can be provided by students (eg Alexander & Golja, 2007), and to provide information for improvement of practice as well as evidence for recognition and reward of teaching.

Peer review is conceived of in this project as a process of making scholarly judgements about the quality of learning and teaching, and a process focusing on scholarly professional learning. There has been relatively little research on peer review in blended learning environments, although many resources have been developed for the peer review of face-to-face teaching and teaching (or course) portfolios, particularly in the US (Van Note Chism & Chism, 2007; Bernstein, et al., 2006). Peer observation processes (eg Bell, 2005) are also becoming more widely used for face-to-face teaching, particularly in foundations programs for university teachers. In the online environment, the main focuses, until recently, have been on peer review of online courses and course materials (eg Wood & George, 2003) and learning objects (Taylor & Richardson, 2001). The AUTC learning designs project (http://www.learningdesigns.uow.edu.au/) also used expert peer review to evaluate learning designs.

While peer reviews of online course materials, learning objects and learning designs are useful for highlighting some necessary conditions for learning, they most often focus on what Biggs & Tang (2007) describe as the 'presage' phase – how the learning environment is designed and set up. In our project, we are developing a scholarly framework that also focuses on the 'process' and 'product' phases – how teachers and students engage with each other and the subject matter in blended learning environments in different disciplines and contexts and what students learn as a result. We contend that peers have the possibility of learning to review how and what students are learning in blended learning environments and evaluating the connections between this evidence of learning and the teachers' intentions and practices. In part, we are using an action-research approach to enable peer reviewers and reviewees to learn from each other and improve practice (see Swinglehurst, Russell & Greenhalgh, 2007) but we are also seeking to develop a process in which peer review evidence can be used for recognition and reward. This poses several challenges that will be discussed later in the paper.

Methodology

The project is a two-year initiative. It is using a co-productive, action-research approach involving a core project team from five partner universities (the core team), along with a small teams of six academics in each of the partner universities (institutional peer review teams). Institutional team members were chosen on the basis that they were good teachers who were interested in teaching development. We sought to include team members across a range of disciplines and across a range of blended learning approaches, from subjects that were almost entirely online with a few face-to-face classes to those that were mostly face-to-face with some online support.

The teams are working collectively through a series of collaborative action research cycles (cf Kember 2000) to design, trial, evaluate, modify, implement and embed resources and processes to support peer review of learning and teaching in blended learning environments. The initial action-research cycles involve team members engaging in reciprocal peer review of aspects of teaching in blended

environments, using a common framework and protocols. After each peer review, pairs debrief the experience with each other then with the whole team, then their observations and reflections are used to modify the framework and protocols. Team reflections and modified resources are then shared across the partner institutions for the next cycle. Once the initial resources are refined, further action research cycles will be used to develop and trial guidelines for members of committees involved in recognition and reward processes, including academic promotion.

The project is in the process of creating the following main deliverables:

1. a scholarly framework for describing good learning experiences and related teaching practices in blended learning environments that can be used as a basis for peer review. The framework is informed by a range of sources (including literature, previous studies in the partner institutions and consultation with institutional peer review team members).
2. case studies illustrating aspects of the framework in a range of disciplines
3. protocols for conducting and reporting on the peer review
4. guidelines and staff development resources for peer reviewers, reviewees, academic supervisors, promotions committee members and others who make judgements about teaching quality for recognition and reward

This short paper reports on progress to date, focusing on the scholarly framework and protocol. The conference presentation will provide further evidence from trialling and evaluation by the teams.

Development of a scholarly framework and protocol for peer review

The current scholarly framework is being developed through an iterative process and trials are continuing. It is based on the principle that good teaching, whether in blended learning or more traditional environments, is a form of scholarly work, and is underpinned by the six standards of scholarly work developed through the Carnegie Foundation (Glassick, Huber & Maeroff, 1997), using broad descriptors and more specific points to consider in relation to each of these standards. The standards and descriptors are:

- *Clear goals:* for students' learning and for the design choices made within the blended learning environment
- *Adequate preparation*: focuses on preparation for the content and processes of teaching and learning, with consideration of students' prior experiences and preparation for learning
- *Appropriate methods and their implementation:* Methods are chosen thoughtfully, considering the learning objectives, students, subject, context and available resources. They are applied effectively and modified in response to feedback and changing situations.
- *Effective communication (presentation):* involves three different groups. It will always involve communication with students, but could involve communication with colleagues (including learning support and technical staff) and/or with the broader scholarly community.
- *Significant results:* focuses on student learning and engagement, but may also include achievement of additional intentions such as the adoption of an innovative approach.
- *Reflective critique:* This includes how the teacher critically reflects on teaching and learning and the design of the learning environment, makes use of a variety of forms of evidence and acts on the findings.

The framework has been informed by earlier versions, a range of literature and other sources: literature on good teaching (eg Ramsden, 2003; Biggs & Tang, 2007; Prosser & Trigwell, 1999); peer review of courses and teaching (eg Bernstein et al, 2006; Van Note Chism & Chism, 2007; Bell, 2005); student experiences of learning with technologies (eg Salaway, Caruso & Nelson, 2007); principles of good practice derived from previous ATN evaluations of staff and student experiences of e-learning (eg Alexander & Golja, 2007); and the promotions criteria of the five partner institutions.

Consistent with the co-productive approach we are seeking to use in the project, development of the current framework has been shaped by several rounds of discussion and feedback within the project team and discussion and feedback from some institutional team members. It has also been developed with consideration of the need for it to be used across all disciplines and a wide range of institutional and teaching contexts and to be able to be useful for peer review of teaching across a whole subject/unit, as well as for peer review of more specific aspects of teaching and learning in a subject context.

In developing a peer review protocol, there has been considerable discussion of principles to be considered, particularly given the aims of using the reviews both for developmental purposes and for recognition and reward of teaching, including in promotion. Current principles include:

- *Availability of formative feedback:* The peer review process should allow for feedback to the teacher whose work is being reviewed, in addition to providing evidence for promotion and other purposes.
- *Teacher choice:* Teachers should be able to make choices within the process about what is peer reviewed and how the evidence is used. For example, peer review might focus on a newly introduced teaching innovation, or on a particular component of the blended learning environment.
- *Consideration of the teacher's intentions:* Peer review should take into account the teachers' goals. These will include goals for student learning and choices of blended learning approach, as well as other goals.
- *Consideration of how any aspects chosen for peer review fit with the whole subject/unit* (if the whole subject is not the focus for review). For example, an online discussion forum that complements tutorial discussion might be designed and facilitated differently from a discussion forum that replaces tutorials.
- *Consideration of the institutional and subject/unit context:* Peer review should take into account the context, for example class size, the role of the teacher (eg co-ordinator, lecturer), the availability of blended learning options, the nature of the students and their contexts (eg on campus, distance).

The trial protocol involves completion of a short template by the teacher whose work is to be reviewed (which includes outlining the extent of the review), a pre-meeting with the teacher, the review itself, a debrief meeting with the teacher and the compilation of a short peer review report. A briefing statement for students in the subjects taught by the peer review participants has been developed for posting online prior to the peer review.

The framework and protocol are being trialled during the second half of 2008. Team members are choosing aspects of their teaching in blended learning environments, and participating initially in reciprocal peer review. We are seeking to trial the framework and protocols across a wide range of disciplines and contexts. Examples that have been chosen for review so far include: student tasks based around student-directed online 'collaboratories'; use of online discussions and reflection combined with face-to-face tutorials in a very large enrolment subject; and face-to-face sessions supported by online resources in a subject taught mainly through lectures and tutorials.

Challenges of developing peer review in blended learning environments

A number of emerging challenges are being addressed through the project and this section will simply outline a few of these. A particular challenge is posed in developing a process that provides both developmental feedback and evidence for recognition and reward. The latter requires a level of independence in order to maintain institutional credibility, while the former typically requires a high degree of trust and is most valuable if the teacher seeks feedback on aspects that they are seeking to improve. As teachers are at varying stages in their engagement with blended learning approaches, trusted feedback can be particularly productive for those relatively new to teaching in these environments.

Peer review in blended learning environments involves a greater degree of complexity than peer observation of face-to-face classes or peer review of learning objects or course materials. In addition to the usual concerns about the level of expertise in the discipline that is required of peer reviewers, there have also been questions raised around the level of expertise in blended learning environments that might be useful, or necessary, to enable reviewers to provide meaningful feedback or make useful judgements.

In addition, team members have noted that a detailed peer review of all aspects of a subject could take many hours (or days) to complete. Unlike peer observation, in which reviewers attend a particular class in a limited time period, reviewing teaching and learning in online learning activities and relating these to other components of a subject was seen as an activity that could easily expand. In order to maximise the likelihood of academics participating on an ongoing basis, it will be necessary to scope the extent of the peer review in order to enable the process to be manageable within academics' time constraints. Consideration is being given to ensuring that the processes we develop are sustainable and practical, as well as helpful for academics, for institutions and for improving teaching and student learning in blended learning environments.

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