



Peer review of teaching practice and resources: Exploring new spaces to embrace cultural change

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The implementation of systematic peer review as a professional development activity, and as a support for educational design activities is under-utilised in many Australian higher education institutions. This case study reports on the first stages of planning and implementation of an institution-wide project to enhance teaching and learning quality at a remote and regional university, where one of the major strategies for improvement is peer review. Through a systematic process of staff engagement in peer review, within and from outside the organisation, a substantial change in flexible learning is envisaged. A mix of new and different learning spaces are to be used in the project, including blended learning spaces for academic development. This paper describes the research framework that will guide the peer review process and examines the early findings of the design-based research. Leadership, awareness raising and development of a supportive community of inquiry are seen as key components for successful implementation of peer review. In addition, unique contextual elements add to the complexity of designing for transformative change within such a relatively new organization.

Keywords: peer review, academic development, flexible delivery, blended learning spaces

Background

Charles Darwin University (CDU) is a regional, dual sector organisation which provides over 85% of the higher education and vocational education and training in the Northern Territory of Australia. Whilst still servicing the same regional place it has recently extended the reach of its courses by offering more on-campus courses by distance education. It has therefore moved rapidly to a new delivery space which is changing the current teaching and learning culture. Many higher education institutions in Australia have implemented similar strategic change in recent years, but the context at CDU adds greater complexity to the planned transformation. Charles Darwin University is not only a regional university, but remote from all other major capital cities in Australia, which impacts its student base and staff profile. In the higher education sector of the University, 73% of all students are enrolled as distance students, and 72% are over the age of 25 years (mature age). Student growth has centred around the areas of national skills shortage in nursing and education. Located primarily in Darwin, but with eight campuses scattered around the vast distances of the Territory, CDU is one of the largest employers in the Northern Territory and like many organisations in the region has a highly mobile population. The push for rapid change in the teaching and learning design and delivery space, coupled with high staff mobility, relatively recent adoption of a Learning Management System (LMS) as a platform for flexible delivery, and three major upgrades of that LMS, present considerable challenges for academic development and management of cultural change.

Currently teaching and learning performance at CDU lags behind the national norms. This is measured by the Commonwealth Government Learning and Teaching Performance Fund indicators of student retention, progression, graduate destination and student experience data. In 2008 the University Council determined that improvement of teaching and learning quality was of the highest priority and funding was sought and granted, from the Commonwealth Government Diversity and Structural Adjustment (DSA) Fund to make a significant change towards best-practice flexible delivery. One of the aims of this three-year project is to utilise peer review as a strategy for facilitating improvements to pedagogic approaches and the development of learning and teaching resources. Twelve disciplines will participate in the project and external consultants will be engaged to conduct reviews of teaching and learning, making particular

recommendations about flexible delivery. Some consultants will directly contribute subject-specific knowledge for course development and/or strategies for blended and flexible learning, and funds are available for academic time release. In addition, the project aims to sustainably embed elearning within the organisation, a process that requires a holistic approach to academic development, and is best achieved via multiple strategies that avoid a 'one size fits all' approach (Oliver & Dempster, 2003; Marshall, 2004). This paper explores the context, the project methodology and the issues emerging from the early stages of the project.

Why peer review

Peer review of teaching can be described as 'academic colleagues giving and receiving feedback on their teaching practices and its effectiveness in promoting student learning' (Harris et al, 2009, p.5). This type of peer review is a means of evaluating and making judgements about current practice, often for benchmarking purposes, and can at the same time be developmental, acting as a means to advance teaching, as a tool for professional development and related educational design activities. It can be used for both summative and formative purposes. Along with student evaluation peer review helps provide a rich picture of teaching and learning in an organisation, and builds on the expertise already within that organisation. Peer review also has the potential to develop understanding of the scholarship underlying the design and development of teaching resources (Harris et al, 2009; Taylor & Richardson, 2001; Wood & Friedel, 2008). Nonetheless, peer review is often under-utilised, 'infrequent' and 'piecemeal' in Australian universities (Harris et al, 2009, p.3). The value of peer review as a support for academic development activities was confirmed in a study by Vaughan and Garrison (2005), where the development of a 'community of inquiry' in a blended learning environment (combining face-to-face and online learning strategies) was found to be a successful model. It should be noted that peer review for the CDU context includes review of resources as well as teaching approaches, and involves academics from within the organisation as well as experts external to the organisation, with national and international standing.

Methodology

The project will adopt a design-based research methodology, as the problem to be addressed is complex, a real-world problem, practitioners and researchers will collaborate on the solution, the research is iterative and will be implemented and refined over a period of at least two years, mixed methods will be used to build up a body of evidence from a range of sources, and a set of design principles will be iteratively derived from each cycle of the research (Design-Based Research Collective, 2003; Reeves et al, 2005). The four stages of research will be repeated at intervals of six months during a continuous cycle of investigation. The elements of each cycle will be: analysis of the problem by researchers and practitioners (how to improve learning and teaching within the discipline); development of solutions within a theoretical framework; evaluation and testing of solutions in practice; and finally reflection and documentation to produce design principles which will inform pedagogical practice. Two main theoretical frameworks will underpin the development of solutions: Garrison, Anderson and Archer's (2000) community of inquiry framework, and Dormant's (1997) stages of awareness framework for change (see below). The community of inquiry framework trialled at the University of Calgary, Canada, is underpinned by social constructivism and relies on close integration of three key elements as a means of supporting the academic development experience: community, blended support and inquiry-based learning. Overall, our research aims to address the following questions: (1) How effective is the model of engagement adopted for staff skilling and peer review of teaching and learning for an enterprise-wide initiative? (2) What are the enablers for implementation in this context and how can they be utilised so as to embed the new practices acquired during the project? (3) How can the barriers to embedding sustainable change in learning and teaching be overcome in this context? (4) What are the barriers and enablers to establishing communities of inquiry to support sustainable change and effective peer review activities across the organisation?

Issues impacting cultural change

Gunawardena et al (2003) in defining culture perceive it to be a diverse and constantly changing concept. It is both an abstract concept of self, and of the self in relation to groups to which the individual belongs. It relates to attitudes, values beliefs and behaviours. It can be readily learned and evident, and it can be tacitly acquired. Peer review in the educational context should therefore prove to be a useful tool for enabling cultural change as the process offers both the means for explicit and implicit learning about new methods of teaching. By providing opportunities to inquire into learning as individuals and as a collective, there is potential to broaden academics' experience and exposure to best practice. Forums where the

guidelines for peer review are explained, and negotiation and dialogue lead to improved and collaborative understanding will be important new learning spaces. However, as teaching practice is often based on tradition and belief rather than evidence, opening up the discourse to informed examination may prove to be an uncomfortable experience for some.

While CDU managers have shown leadership and demonstrated commitment to change, establishing and *sustaining* the necessary supports within a less well-established organisation is problematic. Bamber et al (2009), with reference to embedding educational change in the United Kingdom, and Wolcott (2003) in a substantial review of barriers and disincentives to faculty uptake of distance education and its technologies, stress the need to consider environmental and contextual barriers in order to successfully achieve transformation within the institutional setting. Lack of incentives, rewards, training, and administrative or technical support, and inadequate information or compensation, plus a clear commitment to policy on distance education will affect cultural change (Wolcott, 2003). Therefore, for this project to succeed, it is key that the regional and remote setting of the university within the national context be examined. For example, an issue seldom adequately addressed in our context is that of staff mobility. All disciplines and university centres must continually make interim arrangements for staff who travel long distances interstate and internationally to represent the university or their discipline, and undertake other academic duties off site. In addition, staff shortages frequently occur where colleagues move to other institutions. As a result there is a recurring need to recruit replacement staff and orientate and mentor new staff, all of which is time-consuming and difficult. This generates problems of continuity, and the loss of corporate and disciplinary knowledge, and attempts to build on-going 'communities of inquiry' are jeopardised. It highlights the crucial need to document practice, and build confidence and support at the discipline level. In addition, the academic development unit which provides much of the teaching and learning support is also impacted by issues of staff mobility. So, though the aim to promote inter-disciplinary and cross-disciplinary networks and communities of inquiry across campuses is admirable, and the benefits clearly understood (Garrison & Vaughan, 2008; Wenger et al, 2002), whether this is achievable within our context will only be known at the conclusion of the project.

In a whole of organisation project such as this, there is a critical need for developers to be aware of the readiness of stakeholders to embrace change. In this case study, it includes a willingness to accept the findings of external reviewers and use the findings as formative data rather than as information that threatens staff professionalism; readiness to examine new teaching methodologies and technologies; and the willingness of individuals to learn about peer review and submit their online teaching space and assessment practice to the scrutiny of colleagues from the same discipline. Littlejohn and Margaryan (2007) in a discussion of the cultural factors that impact the sharing and reuse of learning resources, point to organisational, professional, disciplinary and national issues that inhibit sharing and engagement. Dormant's stages of awareness framework for change (1997) is a useful support for addressing these issues, as it can inform the choices that academic and educational developers make regarding staff engagement in both formal and informal peer review activities. Dormant's framework describes levels of awareness in staff that range from the passive to the fully engaged. Staff may begin with *awareness* of change, then move to a more active period of *curiosity*, to *envisioning* where the change will take them and how they might connect with their peers, to a point where they are ready to *tryout* and pilot new tools and methods. Finally they may reach the most active *use* stage, where recognition of achievement and reinforcement pay dividends. The literature (eg Oliver & Dempster, 2003; Dormant, 2007), and our own early analysis of the project so far indicate that stages of awareness may differ amongst individuals within the same discipline, and from one discipline to another.

Strategies to support peer review

One of the initial strategies for managing change was a top-down initiative, but one that might also be regarded as informal peer review. University management invited educational consultants from the US company Blackboard to conduct workshops with over twenty senior managers to identify and map new strategic directions. Through a process of engaging senior staff in frank debate, an organisational strategic plan for flexible learning was developed. It is well recognised that strong institutional leadership is an important strategy for raising awareness and effecting significant change in higher education organisations (Garrison & Vaughan, 2008; Marshall, 2004).

In tandem with top down strategies, a bottom up consultative approach was taken by the academic development group. A needs assessment of staff was conducted to gauge institutional readiness for change. Academic developers met over 90 teaching staff in small, discipline-based forums. Staff were asked about their vision for elearning, their own and their students' needs in this context, and the supports required to achieve their vision. This combined top-down and bottom up method is regarded by Weedon

et al (2004) as a successful strategy for managing change. Over 456 written responses to the needs analysis questions were collected. Predictably, staff concerns clustered around the themes of reliability of the online delivery system, the ability to apply online learning theories to practice, the need for a suite of exemplars, including examples of best practice from within the organisation, and the need for support in terms of time release for development and delivery of courses. Staff indicated that the main barriers to staff engagement in the new online environment were the fear of loss of control, and the perceived difficulties of simultaneously teaching on campus and distance students. This anxiety about the unknown is a commonly reported pressure for staff confronting change (Wolcott, 2003).

Peer review activities over the first six months of the project, in addition to the above, have included discipline-based consulting with visiting external experts, discussions about teaching practice in discipline-based forums, development of new strategies and guidelines for course delivery, collaborative examination of assessment rubrics, plus one-to-one mentoring. Further, the educational and academic developers share their experiences in fortnightly peer review meetings. The Garrison and Vaughan (2008) blended community of inquiry framework which underpins the approach indicates that collaborative, systematic and sustained support such as this effectively reduces isolation of teaching and support staff. The final review activity for the first cycle of this design-based research will use a blended learning approach bringing researchers and teaching staff together to evaluate progress and begin development of the first set of design principles. An online peer review forum and resource sharing space will complement peer review workshops. These are all new spaces for academic and educational developers, as much as they are for teaching staff, however, and can be subject to resistance and suspicion from both camps.

Conclusion

The extent to which new peer review learning spaces, in combination with new technologies, resources, developmental methods and opportunities for learning can support significant change, leading to improvement of flexible learning at the university, will depend on a mix of complex social and cultural factors: professional, organisational, disciplinary and national. For academic and educational developers this will include: (a) the skill with which they facilitate formal and informal peer review processes; (b) the methods used to foster learning communities; (c) the effectiveness with which Dormant's framework is implemented; and (d) their readiness to model new methods of professional development delivery themselves. For teaching staff, their capacity to (a) implement the recommendations of external reviewers; (b) engage with discipline-based methods of peer review; (c) move into new flexible and blended learning spaces; and (d) survive the challenges of technical and pedagogical 'upgrade', will impact the outcomes of the project, and ultimately student learning.

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