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A breath of fresh air: reflecting on the changing practices of assessment online

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Abstract

"Prior to a flight we are reminded that in an emergency we are to place the oxygen mask on our own faces before we place them on a child to ensure we can assist the child. Unfortunately, with regard to teacher learning… we spend a great deal of time placing oxygen masks on other people's faces while we ourselves are suffocating" (Zederayko & Ward, 1999: 36 [28]).

To breathe in some new ideas on assessment for learners in the changing online world, academic staff need to have time, energy and will for fresh reflections and collective dialogue upon their innovations. This paper sets out the backdrop for an action research project which is proposed to investigate how we might improve our strategies for assessing student learning in the computer-mediated context of higher education.

Introduction

Action research has credibility and currency as a research tool within educational contexts. As such this method has been chosen as the basis for a research project in an Australian university which aims to:

- focus staff on their own adaptations to the changing situation of teaching and learning in the context offered by the online environment
- raise awareness of assessment possibilities offered by online approaches to teaching and learning
- assist staff to reconceptualise and improve assessment practices for the online context
- support staff in authoring and publishing their own action learning activities in journal articles and conference papers.

The paper describes a range of issues preliminary to the research project, and thereby drops the oxygen mask down within reach of academic staff.

Traditional notions of assessment

A traditional notion of assessment is that it is an event that is separate from and follows the teaching activities. In this case, assessment is considered to provide a measure of learning, and thus enables accreditation. Furthermore, this notion advocates a scientific approach in that efficiency, reliability, and technical defensibility must be evident in all assessments. Such a notion of assessment also implies a view of the general processes of teaching and learning – that knowledge is relatively stable and defined, and that learning occurs through the transmission of such knowledge. In this model, testing is required to confirm any evidence of learning, and the locus of control resides with the teacher.

There is now an increasing awareness that the purposes and roles of assessment are much broader than previously appreciated (Dochy and McDowell, 1997 [10]; Biggs, 1999 [4]). Far from being a post hoc activity, assessment is now clearly moving into the centre of our teaching and learning considerations (Morgan and O'Reilly, 1999 [20]) with student learning as its core priority. Research into student learning has consistently found assessment to be **the** focus of students' attention, determining how they prioritise their study time, what they regard as relevant to their goals, and the kinds of learning approaches they bring to bear (Dekkers et al, 1992 [9]; Lockwood, 1992 [16]; Ramsden, 1997 [25]; Rowntree, 1977 [26]). Assessment is now commonly seen as the primary mechanism through which several agendas are impacted – i.e. how learning opportunities are created, feedback is provided and learners are motivated – rather than simply being an end-of-term event that grades, sorts and reports on performance.

At the same time, developing effective assessment practices is a process considered integral to course design. While on the one hand the process of assessment needs to be efficient, reliable, valid and technically supported, it also needs to be internally consistent i.e. the learning objectives need to be clearly conveyed in measurable terms, and the learning activities must be both developmental in nature and in keeping with the final assessment task. Constructive alignment (Biggs, 1999 [4]) is a term which describes such an internal consistency within a subject between its learning objectives, student activities and the assessment tasks.

Now that constructive alignment is reasonably common currency in higher education, all the take-off and landing gear of our assessment practices can be said to be in working order, and there has been little need for emergency measures except in isolated cases within institutions.

Moving assessment online

Throughout this period of telecommunications innovation in higher education, now in its fourth decade,

a significant level of exploration has been occurring within universities regarding the ways in which to make full use of emerging opportunities. However, a good understanding of how can we improve the strategies for assessing student learning in the computer-mediated context of higher education is yet to develop (Alexander and McKenzie, 1998 [1]). From a more optimistic standpoint McDowell (1996) declares:

"The possibility that innovative assessment encourages students to take a deep approach to their learning and foster intrinsic interest in their studies is widely welcomed" (in McAlpine and Higgison, 2000: 4.1 [18]).

Clearly we are challenged by this new medium which offers opportunities for dynamic and integrated presentation methods, high levels of activity and interactivity, as well as affording more and improved support for students as they progress through their studies (Peters, 2000 [24]). In terms of bringing assessment to life in an online context, our task as educators is to actively engage learners in assessment for learning.

The important thing will be to obtain assurances that the constructive alignment of our teaching is evident to our students, ourselves and to other stakeholders. While this principle of constructive alignment (Biggs, 1999 [4]) applies to all modes of teaching and learning, it is of special significance in the online environment since not all assessment tasks or methods might translate to the new medium. Alternatively the existing methods of assessment may not suffice to address the new skills and approaches to learning which might be the result of learning online. Assessment for learning online therefore also requires that the tasks we are asking students to undertake are authentic and relevant to the full list of learning outcomes we are hoping students achieve.

An abundance of anecdotal wisdom

From reading the current literature on teaching, learning and assessment online it seems that academic staff who have experimented and reflected upon their innovations, have yet to express their insights in a coherent way which adds to an appropriate theoretical framework. A framework for online assessment as it supports teacher-directed, student-directed or peer-directed approaches is available in O'Reilly (2002 [22]) and it is hoped to further develop this through research.

In general, the literature reveals assessment methods which cover both individual and group approaches e.g. the quizzes and tests which can be taken online by individual learners, as well as the interactive forms of dialogue, debate and presentation which require the joint engagement of more than one person. A recent publication of international case studies by Murphy, Walker and Webb (2001 [21]) provides four well articulated cases under the heading 'Teaching and Assessment Issues'. While the academic staff who have shared their experiences in these cases have provided exemplary critical reflection upon their own practices, once again reference to sustained research does not go beyond the evaluative format which examines one's practices in isolation from peers.

More critical research and that which provides a broader or more longitudinal perspective than "what we've done at our place, and how it worked" is urgently being sought (Mason, 2001 [17]). Educators now need to take some deep abdominal breaths rather than embark upon another trial and error style implementation of online assessment. For academics to deeply reflect upon the suitability of their assessment approaches for the online context there needs to be a focus of support through a process of practitioner based collaborative and self-review.

Quality assurance, benchmarking our teaching

While it is commonly assumed that academic staff who have been appointed to undertake assessment of student learning must be by definition competent and capable of doing so, this may be rather a shaky assumption, given that staff are usually appointed for their contributions to disciplinary research and scholarship. In order to enhance the capability of our staff in both teaching and assessment, the benchmarks of quality need to be made explicit and the achievement of these must be supported by staff development programs aimed at exploring the established institutional guidelines for assessment, marking and grading.

Workshops, 'clinics' and collaborative attention to the details of the art of assessment can often occur as a result of institutional strategy or as components of accredited courses e.g. Graduate Certificate in Teaching and Learning. In some cases in Australian universities such scholarship in teaching is mandatory and this effectively supports moves to enhance the nexus between teaching and research (Melrose, 2001 [19]).

In the online context, a coordinated and scholarly approach to assessment is even more critical, since staff are often simultaneously coming to terms with the technical demands of the environment while also concerning themselves with the substance of an assessment activity. The need for strategic support has been specified by Stephens, Bull and Wade (1998 [27]) who reported on collaborative developments across several institutions in the UK in the design and implementation of Computer Assisted Assessment packages. In their recommendations to structure support for pedagogically sound assessment approaches in the online context Stephens, Bull and Wade (1998 [27]) suggest coordination strategies at institutional and departmental levels, the establishment of liaison committees between schools/faculties and service units, the allocation of innovations and development funds, staff development programs, evaluation procedures and the establishment of standards (pedagogic, operational and technical).

To measure oneself and one's practice against such institutional benchmarks as reported by Stephens, Bull and Wade (1998 [27]) requires conscious attention by academic staff and is best achieved through collaboration with a critical friend (Brockbank and McGill, 1998 [6]), and as a focus for research.

Strategies for professional development

Lifelong learning

How many University teachers are in a constant search for understanding and continuous improvement of their professional practices? Without fully searching the literature, I would hazard a guess from my experiences in working with a whole host of staff across the tertiary sector, that **most** academic staff endeavour to have consideration for their own effectiveness as teachers. At times this may be called 'the will to survive' and might relate to either the need for securing a job within the current context of casualisation of employment, or the need to survive an allocation of some challenging teaching duties.

In some cases, this desire for effectiveness is driven by a sincere wish to support student learning, to share knowledge and its construction. In other cases, the imperative for reflection and improvement can become overshadowed over time by contentment with a familiar and workable status quo. If you feel you know how to use the oxygen mask, do you bother to pay attention with each and every presentation on take-off?

Academic staff development

Whatever constraints or affordances accompany each of our situations, as educators, we have responsibilities to our students to be active in our ongoing pursuit of understanding and continuous improvement of our professional practice. But how do we do this? Where do we turn for some non-punative assistance with improving our teaching? Reflections on our own teaching and learning approaches can be supported through a number of avenues such as – regular collection of feedback sheets from students, internal or external peer review of our teaching resources and lesson plans, collegial review of our performance by staff in the Academic Staff Development Unit (or similar), and the more formal processes and documentation involved in subject and course review.

Even with the support of professional development and quality review systems within our own institutions, how do we keep abreast of the changing dimensions of higher education as it seeks to incorporate technological advances into its mainstream activities? Studies have revealed that academic staff development practices in Australian Universities either lag behind the pace of innovative teaching activities (Ellis, O'Reilly and Debreceny, 1998 [11]), or the details of such programs are closely guarded behind firewalls. Each institution which does not work on the principle of open access to staff development information, seeks to reinvent resources and staff development activities for their own context. This conveys an impression that professional development is a key to the organisation's competitive edge rather than a fundamental and ubiquitous obligation to our students (O'Reilly, Ellis and Newton, 2000 [23]).

Critical reflection and action research

As well as institutional professional development programs and accredited courses, self-reflection is also a powerful mechanism by which to develop a deeper understanding of one's own familiarity with current educational theories, as well as one's competence and confidence with the teaching and learning process. Using a professional journal in the course of one's practice is a commonly suggested strategy for staying with the immediate concerns and working them through using critical reflection (Holly, 1984 [13]).

Critical self-reflection is, however, easier said than done (Fisher, unpub [12]). The difficulties in critical self-reflection as described by Fisher are not insurmountable when finer grained elements of the reflective process are made explicit, these being one's values, beliefs, assumptions and biases. Through a reflective action learning cycle, such elements can be noted as the lenses through which our decisions and actions are implemented. When considering our approaches to teaching, learning and assessment, a clear process of questioning and challenging ourselves can help to inform regular revisions and justify adjustments as appropriate to improving student learning.

In some action research literature, distinctions between 'innovation focused' and 'action learning focused' professional development highlight the differences between learning from respected others versus learning through our own problem-solving in context (Brooker et al, 1998 [8]). At Southern Cross University, innovations in teaching, learning and assessment have been centrally supported and encouraged from 1998. More recently, the University has established a Key Research Area in action research. It therefore seems both timely and relevant to be preparing for an action research project which investigates how we can improve the strategies for assessing student learning in the computer-mediated context of higher education.

Action research for conceptualising reflection in professional development

"Action research points in the direction of a Copernican revolution in professional development and school improvement by placing teacher learning, rather than teacher training, in a prominent position in the teacher-education sky" (Auger and Wideman, 2000: 124 [3])

Both the literature on pre-service teacher education and that of academic professional development in the university sector touches on the usefulness of action research. In a context of educational change, action research can assist teachers to reflect upon their role as change agents (Lock, 2001 [15]). Furthermore, the action research process is one in which it is possible to investigate situations or practices occuring in reality in order to change them.

Participatory action research (Kemmis and Wilkinson, 1998 [14]) can be readily applied to the kind of professional development, problem solving in curriculum development and improvement of practices which is being proposed by this author. By nature, participatory action research is both participatory and a social activity involving mutual observations and discussions in the context of the principle thematic concerns of the project. It is practical and collaborative, providing opportunities for engaging in examinations and interactions over issues of mutual interest. It is emancipatory, giving rise to insights which enable attention to constraints and solutions to frustrations which have accumulated in the ordinary momentum of work. Finally it is critical and reflexive, providing a framework by which to question and challenge one's own ways of working and to move beyond unproductive or alienating practices to find ways to change and improve.

Reflection on practice: Case study

In anticipation of the action research project mentioned in this paper, a 4-week intensive staff development workshop was carried out online. The main aim of the workshop was to immerse staff in the online environment for a hands-on experience of online interactivity through a series of individual and group, synchronous and asynchronous activities. The second principal aim of the workshop was to promote ongoing reflection on practice.

13 participants took part over the month-long series of readings, discussions, group work and reflections. It is beyond the scope of this paper to describe in detail the events of the online workshop and the responses of both participants and facilitator. However, it may be useful to consider the feedback received from participants on conclusion of the workshop. While the focus topics were principally about questions of interaction and facilitation, respondents also provided some ideas to inform future staff development projects on the questions of online assessment.

7 participants returned their evaluation comments (54% response rate). The majority of respondents commented on the value of experiencing online interaction from a student's perspective, together with all its concomitant challenges of time and technology. Several key ideas were reported as intended innovations for the future teaching e.g. incorporation of online interaction for both on-campus and off-campus learning tasks; use of the synchronous virtual classroom to replace teletutorials; the use of discussion archives for assessable tasks requiring analysis and synthesis of the work of peers; inclusion of an online librarian to assist in assignment completion.

Using an online reflective journal

Ideas on future innovations were generated not only from participants' experiences but also from reflections they recorded during the workshop. Ideas appeared in the evaluation comments and were also evident throughout forum areas as well as in personal reflective journals that were trialed by 6 of the 13 participants. 2 of these 6 staff who used the reflective online journal, explicitly appreciated its effectiveness for noting their thoughts within an unstructured area. Their enthusiasm translated to plans for inclusion of such a reflective learning task in their teaching. One respondent, who in the privacy of the personal journal mused that she might not be "suited to discussing online", said in the evaluation that she gained most benefit from considering students experiences including the use of an online personal journal. Another commented that even though she sets the journal activity as one of her assessment tasks, she planned to review her expectations of students after personally experiencing the effect of the journal task in the workshop context.

The project ahead

Given that the workshop experience was an engaging and collegial trial of experiential and reflective activities, it seems that productive academic reflection on the practices of assessment could also benefit from participatory action research. For the promises of participatory action research to be fulfilled, the outcomes of each evaluation cycle can be used to inform staff development, and to foster the energy and willpower to question and proceed beyond existing limitations.

In the forthcoming project, reflection will be stimulated and reinforced by the keeping of journals pertaining to critical events in the design and development of assessment tasks, marking criteria and grade descriptors, and the interactions occurring around the assessment events. Fortnightly meetings with staff in action learning sets will provide additional data on their approaches to assessment and their critical reflections on these. Peer involvement in these meetings will represent the critical friend relationship for most, though some staff may also choose to discuss details of their work with other peers. Publications by academic staff will be encouraged on completion of each cycle of planning, action, observation and reflection.

Concluding comments

Together with the defined approaches of participatory action research, questions of how learning opportunities can be created online, how feedback might

best be provided to sustain students' progress and how learners can be motivated and supported, will all inform the picture of improvements to assessment practices online. We must now reach for the oxygen mask, take another deep breath and proceed into a series of reflective cycles in order to achieve a dialectic of studying the online assessment practices in order to change them.

Initial data from this action research project about online assessment will be presented at the conference.

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