



Using a Template to Facilitate External Peer Preview of Curriculum: A Variation on the PRoT Theme

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Peer reviewing of teaching and curriculum in Higher Education is a common practice aimed at both quality assurance and professional development. External review of curriculum prior to implementation appears less common. The aim of this project was to develop, implement and evaluate a user-friendly process for external peer preview of teaching (PPoT). A peer preview template was designed by a subject coordinator and following initial internal review, was used by two external academics and an external clinician to peer preview new curriculum. The template and curriculum were designed specifically to capture University, industry and professional accreditation requirements as well as University graduate attributes, course-specific learning outcomes and diversity of student learning styles. The peer reviewers reported that the template was easy to use and not overly time consuming. Identified strengths of the process were the inclusion of a variety of previewers and use of check boxes/circle responses (time efficient responses). The review was performed by a small sample; however, suggestions for further improvement included the reduction of repetition with open-ended questions and inclusion of a neutral response option. The user-friendly peer preview template has been included for multi-disciplinary involvement in future external peer previews of Higher Education curriculum.

Introduction

This article reports on a variation of the traditional peer review of teaching (PRoT) process: an external peer preview of teaching (PPoT). This peer preview process draws on the history and culture of PRoT in Australian Higher Education but with a distinct

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focus on curriculum review prior to roll-out. This peer preview process is aimed at maximising the potential for student engagement and for attaining student learning outcomes, for quality assurance checking in regards to professional accreditation, industry and Higher Education expectations, and for personal professional development through a scholarly approach to teaching and learning.

A key aspect incorporated into a scholarly approach to teaching and learning and ongoing professional development within the Higher Education sector is the process of reflective practice (Biggs, 2003; Blackwell, 1996). Brookfield's (1995) literature on the four critically reflective lenses speaks loudly of the responsibility of academics to view their work and their practices broadly in order to formulate a comprehensive understanding of the true impact of their teaching practice. The combination of self-reflection, student feedback, engagement with the literature and peer review (Brookfield, 1995) facilitates critical and exploratory observations and conversations that should lead to the empowerment or the re-shaping of teaching practice.

Peer review of teaching occurs through formal peer observations for promotion and performance management processes and via informal and indeed impromptu scholarly discussions around the lunch room and in corridors. Regardless of the context and setting, the act of peer reviewing is well-established within the Australian Higher Education culture and is heavily reported within the scholarly teaching and learning literature and provides an ideal medium for reflective practice (Bell, 2001). The works of Harris and colleagues (2008) and Bell (2002 and 2005) summarise the evidence and developmental processes associated with peer reviews and peer observations, providing an intuitive and scholarly platform for future peer review initiatives.

The available scholarly literature clearly identifies the benefit of peer reviewing within Higher Education across a variety of review methods. Direct observation of teaching and peer review of subject or course content and assessment performed internally have been reported as the typical methods of undertaking peer review of teaching (Kell & Annetts, 2009; Keig, 2000). Reported perceived benefits of the internal review process have included an

improvement in instruction quality and student learning (Keig, 2000), reassurance for new staff, feedback on innovations, addressing known problems and learning as an observer (Blackwell, 1996). Further, an institutional-based peer review of teaching scheme resulted in staff reactions that the process 'helped their practice by providing them with constructive criticism within a supportive environment' (Lomas & Nicholls, 2005; p146).

Alongside the reported benefits associated with peer reviewing, the literature has also highlighted reservations or barriers toward the internal peer review process. These inhibitive responses have included the perception of the peer review process as being audit-like and management-led (Kell & Annetts, 2009), infringing upon academic freedom and not capturing a typical teaching-learning situation (Keig, 2000), lack of time availability (Kell & Annetts, 2009), and implementation by imposition (Blackwell, 1996). These barriers to peer review participation should be considered and where possible, moderated, during any peer review process.

Internal peer review has potential to facilitate feedback on many aspects of teaching such as horizontal and vertical alignment of curriculum and assessment within a degree structure, and alignment of the curriculum with the University objectives and intent. However, while internal peer review provides opportunity for peer-based professional development and sharing of ideas, it may not consider the standard of the curriculum and the teaching and learning processes in comparison to other similar Higher Education institutions, nor the impact of the curriculum on industry standards and expectations. The process of external peer review can address these quality and equality-based standards. External peer review of teaching can involve direct observation of video-conference or recorded lectures or the review of course materials including syllabus and assessment (Morehead & Shedd, 1997) and may involve academics from other Higher Education institutions (Morehead & Shedd, 1997), or peers from clinical or industry backgrounds (Harris, Farrell, Bell, Devlin & James, 2008).

Externalisation and broadening of the scope of peer review activities will provide opportunities for quality assurance and bench marking of teaching and learning and critically, for ensuring

opportunities for attainment of learning and graduate outcomes. With the introduction in 2011 of the Tertiary Education Quality and Standards Agency (TEQSA) legislation into the Australian Higher Education system, Universities are required to provide clear evidence of achieving threshold standards for five dimensions, including teaching and learning (TEQSA, 2011). TEQSA standards are focused on student experience and achievement, as well as on high quality teaching and learning with appropriate course and curriculum design. Specifically, the TEQSA Act (Commonwealth of Australia, 2011) includes the requirement for courses to undergo systematic internal and external review. These new teaching and learning-based standards requirements represent a timely expansion beyond dependence on student surveys and have potential to foster a scholarly approach to teaching and learning that includes PRoT activities.

Project aim – why PPOt?

It is common teaching practice to internally evaluate the effectiveness of teaching innovations and for professional bodies or affiliates to perform external reviews of curriculum; however, it appears less common practice for Higher Education curriculum to be externally reviewed prior to roll-out. In recognition of Barnard and colleagues (2011; p436) statement that scholarship of teaching ‘should reflect education practice that is evidence-based, open to critique and of concern to stakeholders’, external review of curriculum prior to its use facilitates a quality standards control process that has the potential to meet the demands of the regulatory authorities, professional accreditation bodies, industry expectation and university intent. The aim of this small-scale pilot project therefore was to report on the process of external peer preview of teaching (PPOt). Specifically, this article details the reflective process that took place throughout the development and implementation of the external peer preview process. The author’s (peer previewee) participation included the design of the curriculum and the design of a peer preview template that was specifically focused toward critical (priority) areas, thus ensuring feedback was provided for the priority areas, enhancing the efficiency of the peer preview process.

Procedures and Reflection

The context

A peer preview template was developed for use by external peer reviewers to assess a 4-week cardiac workbook that was to form part of a 13-week, fourth-year cardiovascular, pulmonary and metabolic clinical exercise physiology subject. The workbook to be previewed was designed to be a stand-alone learning resource that encompassed all on-course cardiac content (lectures, workshops and practical classes) plus self-directed learning tasks, assessment items and recommended readings. The first draft of the course workbook (the focus of the external preview) was developed by the University Course Coordinator and a Cardiac Scientist working within the public health system, over an 8-week period. The external cardiac workbook previewers included two academic lecturers from two different Universities within Australia (and not the same University as the author), and an Exercise Physiologist working in the Cardiac Investigations Unit of a public hospital. The external previewers were provided with a hard copy and an electronic copy of the cardiac workbook to be previewed, a two-page explanatory document outlining the workbook context, the student and degree context, the purpose of the external preview, the expected outcomes of the external preview, and the external peer preview template to be used for feedback. All participants provided written informed consent to participate in the project with all procedures approved by the Institutional Human Ethics Committee.

The process of developing an external peer preview template

The key themes that underpinned the initial design of the external peer preview template were that the primary purpose of the template was to facilitate the collection of appropriate and usable curriculum-based feedback; and that the template would need to be time efficient and simple to use whilst ensuring adequate scope and depth of feedback was achieved. The template needed to be able to assess whether structural alignment was appropriately addressed with consideration of horizontal and vertical scaffolding to align lecture, workshop and practical class content with intended learning outcomes, student self-directed learning tasks

and assessment items. This structural alignment process and initial template development involved reflection of the following items:

- Assumed prior knowledge and skill sets from previous years of University study
- Workplace expectations of new graduates
- National accreditation requirements of curriculum content and professional knowledge and skill competencies
- University graduate attributes
- Course-specific intended learning outcomes and
- Diversity of student backgrounds and learning styles.

The first draft of the template included nine separate sections comprising a total of 67 rated questions and 20 open-ended commentary questions. The rated questions allowed the previewers to select one of the following responses: 1 = strongly disagree, 2 = disagree, 3 =neutral, 4 = agree; 5= strongly agree. The first draft underwent self-preview by the author and internal peer previews performed by the Discipline Director and an Associate Dean of Teaching and Learning from a different Faculty. Multiple amendments were made including content reduction to eliminate repetition, changing the response scale and altering language. The template was reduced to five sections with a total of 41 rated questions and 16 open-ended questions. The response scale for the rated questions was amended to strongly disagree, disagree, agree, strongly agree, and no comment. The language of some questions was altered to ensure that the questions were purposive and were more likely to elicit exploratory-based (how, to what extent) responses as opposed to categorical (yes/no) answers.

The revised external peer preview template was then used for external peer preview with the final template questions listed in Table 1 and Table 2. Note that Section 2: alignment with industry standards comprised of 21 separate discipline-specific questions; however, for the purpose of multidisciplinary use, the questions displayed have been reduced to reflect the key action-wording of each question and not the discipline/industry specific attributes and competencies.

Table 1. *Items in the external peer preview template*

<p style="text-align: center;">SECTION 1: WORKBOOK DESIGN AND CONTENT</p> <p>Please rate the extent to which you agree that the workbook meets the following design standards</p>
1.1 The workbook is well organised, flows logically and is easy to navigate through.
1.2 The tables and figures are appropriate and contribute to the learning experience.
1.3 The language used is appropriate for the student cohort.
1.4 The workbook is professionally presented to a standard expected of a learning resource.
1.5 The workbook content reflects a contemporary (current) command of the field.
1.6 The content scope (breadth and depth) is relevant and sufficient for the course requirements.
1.7 The content is relevant to and is indicative of professional accreditation standards and practice.
1.8 The workbook content, the assessment items, the self-directed learning tasks and the intended learning outcomes provide clear evidence of structural alignment.
1.9 Overall, the workbook is a suitable learning resource.
<p style="text-align: center;">SECTION 2: ALIGNMENT WITH INDUSTRY STANDARDS</p> <p>Please rate the extent to which you agree that the content and activities included in the workbook provide students with the opportunity (and resources) to meet the following industry standards</p>
2.1 Understanding of <i>[INSERT CONTENT]</i>
2.2 Knowledge of <i>[INSERT CONTENT]</i>
2.3 Accessing and using information on <i>[INSERT CONTENT]</i>
2.4 Explaining to clients <i>[INSERT CONTENT]</i>
2.5 Experience with <i>[INSERT CONTENT]</i>
2.6 The ability to <i>[INSERT CONTENT]</i>
2.7 Recognition of <i>[INSERT CONTENT]</i>
2.8 Overall, the workbook meets industry standards for the course topic.

Table 1. (Cond.) *Items in the external peer preview template*

<p style="text-align: center;">SECTION 3: STUDENT LEARNING EXPERIENCE</p> <p style="text-align: center;">Please rate the extent to which you agree that the workbook provides students with the opportunity to achieve the following learning experiences</p>
3.1 The workbook provides students with a stand-alone and valuable learning resource.
3.2 The workbook provides students with a sufficient number and variety of opportunities to undertake self-directed learning.
3.3 The workbook provides students with information and examples that are relevant to the workplace.
3.4 The workbook provides students with the opportunity to undertake assessment items that are indicative of and relevant to duties that might be undertaken in the workplace.
3.5 The workbook has made effective use of and provides opportunities for students to engage in authentic problem-based learning.
3.6 The workbook has made effective use of and provides opportunities for students to engage in resource-based learning.
3.7 The workbook has made effective use of and has provided opportunities for students to engage in work-integrated learning.
3.8 Overall, this workbook is likely to provide an authentic (work and real-life based) and meaningful learning experience.
<p style="text-align: center;">SECTION 4: OVERALL RATING</p>
4.1 In consideration of all of the above criteria and of your personal and professional experience, please rate to what extent you agree that the workbook will provide students with a worthwhile and rewarding learning experience. Please answer in respect to the expected breadth, depth and type of learning experience provided.

SCORING: SD = strongly disagree, D = disagree, A = agree, SA = strongly agree, NC =no comment

Table 2. *Open-ended response items that were included in the external peer preview template*

SECTION 1: WORKBOOK DESIGN AND CONTENT
1.1 In what ways is the workbook design and content likely to stimulate and promote student learning?
1.2 Additional comments (strengths, weaknesses etc) regarding the workbook content and design:
SECTION 2: ALIGNMENT WITH INDUSTRY STANDARDS
2.1 In what ways is the content of this workbook likely to promote and enhance student competence and confidence with industry specific skills and knowledge?
2.2 Additional comments (innovations, strengths, weaknesses etc) regarding the workbook content with respect to industry requirements:
SECTION 3: STUDENT LEARNING EXPERIENCE
3.1 In what specific ways (that is, by which teaching & learning methods) do you think that this resource will promote student learning? Please explain your answer.(Examples of methods may include – problem-based learning, scenario-based learning, work-integrated learning, resource-based learning, reflective practice etc).
3.2 Please comment on the extent to which you think that the teaching and learning methods used in the workbook are appropriate for the content and the students.
3.3 Additional comments regarding the potential/expected student learning experience:
SECTION 4: OVERALL RATING
4.1 Please provide additional comments that you wish to make about the workbook that has not yet been addressed in this peer review document. (Eg: comments on unique/innovative practices used; expected student experiences; content depth and breadth; resources; presentation etc).

Table 2. (Cond.) *Open-ended response items that were included in the external peer preview template*

SECTION 5: FEEDBACK REGARDING THE PEER REVIEW PROCESS
5.1 Was this peer review template easy to use? <i>Please explain your answer.</i>
5.2 Was this peer review template relevant for assessing the workbook content, design and pedagogical approach? <i>Please explain your answer.</i>
5.3 Did completing the peer review template provide enough opportunity to comment on all items relevant to the workbook AND to the profession? <i>Please explain your answer.</i>
5.4 How many hours did it take you to review the workbook and complete the peer review template?
5.5 What do you think are the strengths of the peer review template?
5.6 What do you think are the weaknesses of the peer review template?
5.7 What specific suggestions do you have that might improve the peer review template and the overall peer review process?
5.8 Did the peer review process assist you in terms of providing a Professional Development activity? <i>Please explain your answer.</i>

External peer previewer use of and feedback on the design of the external peer preview template

These results refer to the comments provided in Section 5 of the template: feedback regarding the peer preview process (questions 5.1 to 5.8 in Table 2). The three external previewers agreed that the template was easy to use, with comments including ‘easy to navigate through’ and ‘well organised and easy to use’. The previewers agreed that the template was relevant for assessing the workbook content, design and pedagogical approach. One previewer commented that ‘the check a box format for most questions allowed the previewer to directly answer a large volume of questions with ease, in the time available.’ One of the academic previewers did suggest that it ‘might be better to structure the template to report on the workbook in sections (lectures, workshops, practicals)’ rather than criteria (design, content, experiences). This alternative structure would allow the external

reviewer to work methodically through the workbook and the preview template simultaneously, providing feedback on each specific section of the workbook instead of providing feedback on overall processes. The industry reviewer reported feeling a little out of their depth with the section regarding student learning experience (Section 3) as this required understanding of learning pedagogies and associated jargon. In retrospect, it may have been useful to provide the industry reviewer with an overview of teaching and learning pedagogies; however, the strength of the current external peer preview process was that multiple reviewers were involved in the process, thus allowing for a variety of perspectives based on individual experiences. The author recommends that instead of modifying the template to meet the expertise of the reviewers, teaching staff should ensure that multiple reviewers with varying backgrounds/expertise are involved in the preview process.

The external peer reviewers completed and returned the peer preview feedback within four weeks. While the industry reviewer reported taking 15 hours to perform the preview, the two academics reported completion times of 8 hours and 11 hours. The academic reviewer who required 11 hours to complete the preview noted that this time frame was due to the stop-start nature of the preview and this would have been reduced if the preview had been completed in a single sitting. One specific comment was ‘the preview template in its entirety wasn’t that arduous or time consuming.’ This comment provides important feedback to the author because one of the key concerns with any peer preview process is the time commitment required.

When asked to comment on the specific strengths of the peer preview template, themes included the structure of the template and the explanation of the purpose and expectations associated with the preview process. Specifically, the reviewers liked the use of subheadings to focus the feedback and the item sections were very specific and easy to answer. The industry reviewer felt that the template was ‘the most efficient way to gather and collate subjective information from several individuals’, while one of the academic reviewers noted that the template allowed for ‘opportunities to provide open-ended responses and constructive

feedback relating to the content and layout of the module.’ Perhaps most importantly to note by those wanting to undertake an external peer review process, the information pack that accompanied the cardiac workbook and the peer review template ‘explained well the reason for conducting the review and made clear the expectations of the reviewer.’

The reviewers were able to suggest some areas for improvement with the current external peer review template. As reported earlier, the ‘neutral’ response category was removed from the template at stage two (internal peer review); however, one reviewer specifically suggested that a category between ‘agree’ and ‘disagree’ should indeed be included because the reviewer ‘was forced to choose and my answers look more severe than the issue really is.’ The reason for eliminating this ‘neutral’ column during an earlier stage of the review process was to avoid ‘fence-sitting’; however, the author acknowledges that the removal of the ‘neutral’ response option removed the reviewers’ opportunity to provide passive agreement to any particular item. The author recommends that future peer review criteria include the ‘neutral’ response option.

While one reviewer highlighted the open-ended questions as the principle strength of the template, another reviewer commented that the open-ended questions needed to be more specific and that some of the open-ended questions seemed repetitive. For example, the reviewer noted that the open-ended questions 2.1 and 3.1 (Table 2) were very similar and indeed overlapped each other. These questions asked the reviewer ‘in what ways is the content of this workbook likely to promote and enhance student competence and confidence with industry specific skills and knowledge’ and ‘in what specific ways (that is, by which teaching & learning methods) do you think that this resource will promote student learning? Please explain your answer. (Examples of methods may include – problem-based learning, scenario-based learning, work-integrated learning, resource-based learning, reflective practice etc).’ While the author had attempted to capture how the content and then how the pedagogies might promote student learning, these questions could have been more succinctly phrased to ensure a clear differentiation between the two, or the questions could have been combined. An alternative

combined question might have stated ‘in what ways (for example, teaching pedagogies, learning styles) do you think this resource is likely to promote student learning and industry-based competence?’ It is important that this question (or one similar) is included in the peer preview template as it seeks to uncover the scholarly approach to the teaching or teaching resource, that is, in the words of Martin and associates ‘to make transparent how we have made learning possible’ (cited in Healey, 2000; p170-171).

With respect to the peer preview process assisting the previewers in terms of professional development, the response was mixed. The external peer preview process provided one academic reviewer with ‘the opportunity to reflect on their own teaching and professional practices, particularly in how best to engage student learning and maintain a critical appraisal of learning content’, and provided the industry previewer with the opportunity ‘to undertake reflective analysis of their own role and skills’. The other academic previewer responded ‘no’ to this question.

Conclusions and Implications for Future Use

Overall, the external peer preview template design successfully allowed three external peer previewers (academic and industry) to review new Higher Education curriculum prior to roll-out. The template has been included in this paper so that academics across a variety of disciplines can use the template in its entirety or in part to receive external peer feedback on their curriculum. The current template could be strengthened by reducing the repetition associated with the open-ended questions. The strengths of the current template, which the author recommends be included in future external peer preview of curriculum processes, are the inclusion of multiple previewers, thus providing varying view points from differing areas of expertise; and the use of check box/circle responses, allowing for very time efficient feedback, albeit with the future re-inclusion of the neutral answer. The outcomes of external peer preview processes should be integrated with student feedback and contemporary teaching and learning literature to enable informed self-reflection and continued enhancement of teaching and learning in Higher Education. This article has provided an overview of the process associated with

preparing for and receiving external peer review feedback on curriculum. It is hoped that this variation on the traditional PROT process, the PPOt process, will encourage readers to explore other alternative pathways for peer reviewing in Higher Education. While the results of this pilot project suggest promise for external review processes, more extensive investigation and collection of data from more participants is necessary.

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