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# Consistency in the application of a reflective tool designed to facilitate scholarly review and development of curricula

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This paper addresses the need for an objective and accessible system that assists academics in the quality review of their teaching and curricula. This is achieved via the Quality Review Instrument (QRI), which was trialled in a postgraduate research proposal course. The QRI provides a scaffold that can guide academics in the development and redevelopment of their courses, and facilitates reflection in and on the teaching process by teacher, peers and learners. At the same time, the QRI provides a robust and objective approach to evaluation of teaching for quality assurance. The comprehensive approach to review of teaching described in this paper facilitates a process that leads to the reshaping of academic and institutional practice in ways that can support and enhance the quality of teaching, learning and the student experience. The review template was constructed by the instructor and reviews of the course were completed by the instructor and two independent reviewers. Students completed the Student Evaluation of Teaching instrument (SET) and the Course Evaluation Instrument (CEI). Responses from the SET and the CEI were compared with the results of the QRI. The results demonstrated that the QRI has a high degree of reliability, even when used by reviewers with different backgrounds and different levels of experience. The instructor also rated the course in a very similar way to the two independent reviewers. The strong relationship between the student responses and the reviewers lends validity to the QRI.

**Keywords:** peer review, quality improvement, academic practice

# Introduction

Quality teaching transforms students' perceptions of their world, and the way they go about applying their knowledge to real world problems; it also transforms teachers' conceptions of their role as teacher, and the culture of the institution itself (Biggs, 2001, p. 222).

There has been considerable interest in Australia and internationally in strategies for improving the quality of teaching and learning in response to global, economic, technological and social changes requiring skilled graduates equipped to respond to these challenges (Ingvarson & Rowe, 2007). As the quote by Biggs (2001) above suggests, improving the quality of teaching has a transformative effect not only on student learning outcomes, but also

on teachers and the institution itself. While there is little debate about the importance of quality teaching and the relationship between teaching and learning (Murphy, MacLare & Flynn, 2009), there are varying opinions about what constitutes "quality teaching" and even less agreement about appropriate strategies for evaluating teaching quality (Ingvarson & Rowe, 2007; Kohut, Burnap & Yon, 2007).

Within this context, the scholarship of teaching and learning has emerged as a major area of interest in higher education that can address the need for quality assurance while also providing a scaffold to foster the professional development of teachers (Cosh, 1998). One of the critical aspects of peer review is that it seeks to achieve scholarly outcomes in course development through processes which are, of themselves, scholarly. This approach draws on the Boyer (1990) ideas in which the scholarships of discovery, teaching, integration and application are considered integral to an environment that stimulates and engages learners. Such an approach to scholarship is based on an understanding of the communal basis of scholarly activity that fosters the development of the individual academic as well as the profession through scholarly activity that is open to public critique. Central to this approach is reflection-in- and reflection-on-action (Schön, 1983, 1991) while also exposing the four Boyer scholarships to rigorous approaches of peer review as a way of gaining quality, transparency and accountability (Hutchings and Shulman, 1999; Shulman, 2002). These two dimensions recognise that peer review serves both a formative and summative function, and that peer review processes should aim to achieve multiple outcomes including: i) quality assurance of teaching; ii) identification of areas requiring improvement; iii) preparing academic staff for internal and/or external reviews; iv) summative review for promotion or awards and v) assuring the quality of teaching and learning outcomes (Gosling, 2005).

The project described in the following sections addresses this identified need for an objective and accessible system that both supports academics in the development or redevelopment of their own courses through reflective processes and enables them to use these same criteria to have their work evaluated. This has been achieved through the design and development of a checklist of agreed good practice incorporated into a comprehensive, integrated Quality Review Instrument (QRI) designed to engage academic staff in course development through the kind of reflective processes advocated by Schon (1983, 1991). In the next section, an overview of the QRI system is provided. Next, the findings from a trial of the instrument by three academics are reported. The discussion focuses on comparisons of reviews by external reviewers, the instructor and student responses to course and teaching evaluation questionnaires. In the final section, the authors discuss the implications arising from the findings of the trial and suggest possible areas for further research.

# The Quality Review Instrument

The QRI is based on the Boyer (1990) framework in which all four scholarships are considered essential for teaching and learning. The original project, which was funded through the support of an Australian Learning and Teaching Council (ALTC) grant in 2007, had as its initial focus, quality enhancement of online learning and teaching through peer review. In the following sections, we outline the development of the system from its initial focus on peer review of online learning and teaching to its extended focus on a broader system for quality review of curriculum and teaching.

# Peer review of online learning and teaching

The project was initially conceived as the design and development of a peer review of online learning and teaching tool (PROLT) building on Taylor and Richardson's (2001) recommendations. Their work identifies the need for an explicit and shared understanding of the scholarship underlying the design and development of Information and Communication Technology (ICT) based teaching resources (p. 8), which can also form the basis for validating the quality of the resources. As described by Wood and Friedel (2008, 2009), the principles underlying the development of this approach are as follows:

- the criteria for the standards of development have been gathered from the full range of relevant academic literature surrounding online teaching and learning. This affirms the work of academics in the area and provides it in a highly practical form which is accessible to a broadly-based audience;
- the approach locates responsibility for the quality of learning and teaching with the academic staff responsible. Staff can use the items to guide the development or redevelopment of their own courses through reflective processes;
- academics are empowered to construct their own tailored evaluation checklists and to contribute to the developing database of criteria;
- the instrument and its associated website provide an opportunity for just-in-time academic staff development by providing the accepted standards, information about how to meet these and exemplars contributed by academics themselves;
- the instrument is flexible and adaptable to accommodate changing technologies; and
- the supporting website is designed to provide a model of best practice, utilises latest web 2.0 and database technologies, and complies with W3C Web Content Accessibility Guidelines.

The distinctive component of this project is its focus on trialing and evaluating a research-based, web-enabled instrument for peer review of teaching and learning. The instrument incorporates banks of standards-based criteria for use in peer review, explanations of the meaning of these criteria, exemplars and an underlying database that can record peer or self-review results and make them available for development, benchmarking or promotion purposes. It has been developed as an open source platform, to enable it to be adapted by other institutions to suit their learning and teaching and technical contexts.

The original PROLT instrument was constructed around four sets of considerations: instructional design, interface design, the use of multimedia to engage learners and the technical aspects of interactive educational multimedia. The rating system used to measure the extent to which the specified metrics meet these criteria is a 5-point Likert scale ranging from 'strongly agree' to 'strongly disagree' for metrics that involve value judgments, and from 'always' to 'never' for metrics that consider the frequency of occurrence. Each criterion also provides a free form text area for comments since a combination of quantitative (Likert rating scale) and qualitative (open-ended user comments) measures will most likely yield comprehensive results. Users can create new criteria and customise the method for rating performance against each of the criteria. Supported response options in addition to the Likert scale metrics include 'yes/no', drop-down selections, multiple response, occurrence scales as well as the qualitative responses.

# Towards a more comprehensive quality review system

The PROLT was designed to incorporate dynamic functionality enabling academics to construct their own customised peer review templates. This flexibility of the instrument meant that it was possible to create customised review templates for any aspect of teaching and

learning. Initial feedback from BETA testing suggested that even though academics appreciated the opportunity to construct reviews for a variety of purposes, they found the complexity of the system overwhelming. Thus, the system has been redesigned to incorporate banks of criteria focusing on different areas of the scholarship of learning as built-in templates, while also retaining the option for academics to custom design their own review templates. The system was renamed Quality Review Instrument (QRI) to better reflect this extended functionality.

Recognising the complex nature of assessing quality and the need for a variety of sources of feedback about teaching and quality (Murphy, Maclare & Flynn, 2009), the QRI system has also been adapted as a scaffold for students undertaking courses in which they are required to make evaluative judgments about their work and the work of their peers. As reported by Wood (2009), the findings of trials of the use of the QRI with 72 students in a first-year media arts students at the University of South Australia demonstrated the potential of such an instrument as a scaffold for learners, providing structured opportunities for reflection on their work and the formative feedback prior to summative assessment. The preliminary findings also show the potential of the instrument in facilitating reflection in action by the teacher informed by students' self-reviews and by monitoring how students respond to and act on that feedback. Such reflection enables the teacher to adjust their feedback and also the structure and detail provided in the review and assessment templates for subsequent assignments.

The value of using a variety of sources of feedback for quality improvement of teaching is well documented (Berk, 2005; Murphy, MacLare & Flynn, 2009). A variety of sources of information about teaching quality is particularly important when one considers the wide variations in reliability of both peer and student ratings of teaching effectiveness (Paulsen, 2002). In the following sections, we consider the value of using a variety of sources of feedback in assessing the quality of teaching, as well the importance of ensuring the reliability and validity of instruments used for such evaluative purposes.

# Reliability

# Between different reviewers

The concept of reliability addresses whether the same tool applied by different people will result in the same results (Creswell, 2007). We were particularly interested in determining whether two different reviewers would provide similar scores and comments when applying the QRI to a review of the same course. Although it is expected that different reviewers will have different backgrounds and thus there will be some differences in interpretation of criteria, the criteria need to be written in such a way that they will be interpreted in much the same way by different reviewers. Therefore, the responses between two independent reviewers undertaking the same course review were compared to determine the reliability of the instrument.

#### Instructor versus external reviewers

The QRI has also been designed to be used by academic staff as a way of evaluating their own courses for the purposes of professional development and course improvement. It would be expected that the instructor delivering the course should have a good understanding of the course design and materials, and some insight into strengths or weakness of the course. However, the structure of the review and the clarity of the criteria should be such that an external reviewer can identify similar aspects of the curriculum. Therefore, the review responses of the instructor of the course were also compared with those of the external reviewers.

# **Validity**

The concept of validity addresses whether the online review tool actually measures what it purports to measure (Marczyk, DeMatteo & Festinger, 2005). There are a variety of levels of validity, ranging from simple face validity, where an instrument appears to measure what it is intended to, to construct validity, which seeks agreement between the theoretical concepts and a specific measuring instrument. Criterion validity is used to demonstrate the accuracy of a measure or procedure by comparing it with another measure or procedure which has been demonstrated to be valid. However, there are a limited number of validated tools for measuring course quality with which to compare the QRI. Thus this project will also seek to establish face validity and some elements of construct validity by comparing responses to the instrument to two other measures of course quality and the quality of its delivery, the Course Evaluation Instrument (CEI) and the Student Evaluation of Teaching (SET), which are routinely administered at the completion of each course.

# Trial of the QRI in an online post-graduate research proposal course

In this next section, we describe the trial of the QRI in an online post-graduate research proposal course offered within the School of Health Sciences at the University of South Australia. The peer review template was constructed by the instructor and reviews of the course were completed by the instructor and two independent reviewers from two different disciplinary fields and institutions (health sciences and humanities).

# Method

# Course selection and description

The course selected for review was *Research Proposal*, a fully online course offered to post-graduate masters by course-work and Honours students. The structure of the course comprises a series of modules provided on a weekly basis, with a discussion board facilitated by the instructor. The aim of the course was for students to develop a clear understanding of the requirements, structure and function of research proposals through the development of a specific student directed research proposal.

# **Review template**

An online evaluation review template was developed by the Instructor in consultation with the intended reviewers. The tool addressed the instructional design of the course as well as the way in which the instructor interacted with the students. A total of 15 items were included across five criteria, as shown in Table 1 below. Either Likert scale (from 'strongly agree' to 'strongly disagree') or Frequency scales ('always', 'sometimes', 'never') were used for each item.

Table 1: Criteria and items included in the Quality Review Instrument

Criteria	Items					
Clarity of expectations	The course purpose was clearly stated	Learning modules include an overview of the content to be covered ant the processes by which it will be achieved	Objectives or learning outcomes are clearly stated and achievable for each section or module			
Learning activities	Learning activities are appropriate for the targeted learning.	Learning activities promote self assessment.	Learning activities reflect the increased complexity of the ideas			
Building knowledge	The materials include appropriate examples or case studies	The course provides ways for students to follow up ideas and scholarship	The materials use summaries to consolidate what has been learnt.			
Human interaction	Name of lecturer and contact details clear and correct	Online community activities provided	Teacher feedback is timely and appropriate			
Assessment	Assessment criteria are provided for each summative assessment task.	Opportunities for formative assessment are provided	Models or examples of summative assessment items are provided.			

#### Student evaluation

The students were asked to complete the standard Student Evaluation of Teaching (SET) instrument used by the university. This consists of a number of questions related to the student satisfaction with the instructor for the program. The questions and student responses are shown in Table 2.

# **Course evaluation**

The students were asked to complete the standard Course Evaluation Instrument (CEI) at the completion of this course. This instrument is used to evaluate each course (subject) each time it is offered. It is used to complement the SET, with the emphasis being on the course rather than on the delivery.

Responses from the SET and the CEI were compared with the results of the QRI.

# Results

The QRI responses from the two external reviewers and the instructor were collated (Table 2). Overall, there were agreement between the two external reviewers and the instructor on all major criteria with the exception of Clarity of Expectations and Learning activities.

Table 2: Responses to evaluation of the online course Research Proposal

Clarity of expectations	The course purpose was clearly stated		Learning modules include an overview of the content to be covered ant the processes by which it will be achieved		Objectives or learning outcomes are clearly stated and achievable for each section or module				
Reviewers Ratings	Inst 1	Rev 1	Rev 2	Inst 1	Rev 1	Rev 2	Inst 1	Rev 1	Rev 2
	A	SA	A	S	Al	Al	S	Al	Al
Learning activities	Learning activities are appropriate for the targeted learning.			Learning activities promote self assessment.		Learning activities reflect the increased complexity of the ideas			
Reviewers Ratings	Inst 1	Rev 1	Rev 2	Inst 1	Rev 1	Rev 2	Inst 1	Rev 1	Rev 2
	A	A	A	S	A	A	A	SA	A
Building knowledge	The materials include appropriate examples or case studies			The course provides ways for students to follow up ideas and scholarship		The materials use summaries to consolidate what has been learnt.			
Reviewers Ratings	Inst 1	Rev 1	Rev 2	Inst 1	Rev 1	Rev 2	Inst 1	Rev 1	Rev 2
	A	SA	A	A	A	A	A	SA	A
Human interaction	Name of lecturer and contact details clear and correct			Online community activities provided		Teacher feedback is timely and appropriate			
Reviewers Ratings	Inst 1	Rev 1	Rev 2	Inst 1	Rev 1	Rev 2	Inst 1	Rev 1	Rev 2
	A	SA	A	A	A	A	A	SA	A
Assessment	Assessment criteria are provided for each summative assessment task.			Opportunities for formative assessment are provided		Models or examples of summative assessment items are provided.			
Reviewers Ratings	Inst 1	Rev 1	Rev 2	Inst 1	Rev 1	Rev 2	Inst 1	Rev 1	Rev 2
	Al	Al	Al	S	S	S	Al	Al	Al

(A: Agree, SA: Strongly agree, Al: Always, N: Never, S: Sometimes, Inst: instructor score, Rev: reviewer score)

Fourteen students completed the course, and ten completed the online evaluation questionnaires. Both the SET and CEI results were very positive, with most students agreeing or strongly agreeing with statements (Table 3). In particular, students rated the instructor highly, with all strongly agreeing to the statements regarding the instructor's provision of timely feedback, demonstration of interest in student learning and the instructor's overall performance. The only items where students responded to the neutral option were in items relating to the development and assessment of the qualities of University of South Australia graduate.

Table 3: Results of the Course Evaluation Instrument and the Student Evaluation of Teaching

Course Evaluation Instrument (CEI)	Strongly agree	Agree	Student Evaluation of Teaching (SET)	Strongly agree	Agree	
1. I have a clear idea of what is expected of me in this course.	40%	60%	1. The staff member made the aims and objectives of the course clear from the outset.	80%	20%	
2. The ways in which I was taught provided me with opportunities to pursue my own learning.	40%	60%	2. The staff member made the subject matter interesting.	60%	40%	
3. The course enabled me to develop a number of the qualities of a University of South Australia graduate.	60%	20%	3. The staff member motivated me to do my best work.	100%	0	
4. I felt there was a genuine interest in my learning needs and progress.	80%	20%	4. The staff member provided adequate opportunities for me to pursue my own learning.	80%	20%	
5. The course developed my understanding of concepts and principles.	40%	60%	5. The staff member helped me to develop my understanding of concepts and principles.	80%	20%	
6. The workload for this course was reasonable given my other study commitments.	40%	60%	6. The staff member displayed a genuine interest in my learning needs and progress.	100%	0	
7. I have received feedback that is constructive and helpful.	60%	40%	7. The staff member gave me helpful feedback on how I was going.	100%	0	
8. The assessment tasks were related to the qualities of a UniSA graduate.	60%	20%	8. The staff member used up-to-date teaching and learning approaches.	60%	40%	
9. The staff teaching in this course showed a genuine interest in their teaching.	100%	0	9. The staff member made it clear how her/his teaching developed the qualities of a UniSA graduate.	20%	60%	
10. Overall I was satisfied with the quality of this course.	40%	60%	10. Overall, I was satisfied with the performance of this staff member.	100%	0	

#### **Discussion**

There was agreement between the two external reviewers and the instructor on nearly all criteria. In all criteria there was a maximum of one point score difference between the reviewers (for example 'agree' and 'strongly agree'). The source of this variability was investigated further by discussion between the reviewers. Whereas the instructor had scored the item "Learning modules include an overview of the content to be covered and the processes by which it will be achieved' and "Objectives or learning outcomes are clearly stated and achievable for each section or modules" as 'sometimes', Reviewer 2 had scored these as 'always' and commented "Module well designed. Students were constantly reminded where they were, i.e., at which stage as they progressed through each module". The external reviewer commented that "the course guide and the clearly highlighted learning activities provided clarity and clear learning outcomes". Further, in response to "Objectives or learning outcomes are clearly stated and achievable for each section or module" the disparity in this item was explained by Reviewer 1 that "the course guide and the clearly highlighted learning activities provided clarity and clear learning outcomes".

Another area of disagreement between the instructor and the external reviewers was in the category of *Learning Activities*. While the instructor had scored "*Learning activities promote self assessment*" as 'neutral', both the external reviewers had selected 'agreed'. This difference was explained thus:

#### Reviewer 1:

...the adoption of various learning strategies reading, self-reflection, in particular the collaborative discussions online, had the effect of promoting students to reflect on their own learning and assessing not only their individual work but that of their peers. The act of (deep) reflection should result in students assessing their work, and consequently evaluating how their own work compares to that of their peers. This is especially so in the way the discussion forum has been structured in this course to support student learning.

# Instructor:

The instructor was reflecting on experience of running the course, where the level of self assessment was not as high as had been anticipated by the reviewers from viewing the course materials.

The reviewers had quite different backgrounds, one from the health sciences and the other from a humanities discipline. The reviewers were co-authors of this paper, and have different levels of experience in curriculum evaluation. Despite this, there was a high level of agreement between their responses. One of the reviewers has a particular interest in web accessibility; leading to a comment that one diagram should have text to explain the content to assist students who may have a visual impairment. This was reflected in a difference 'agree' versus 'strongly agree' for the item "*The materials include appropriate examples or case studies*".

It was possible to map some items in the CEI and SET questions against items in the QRI. This allows comparison between student perceptions of the course and the instructor with the reviewer and instructor responses to items included in the QRI. This gives an element of

comparative validity to the findings of the QRI. For example, the Clarity of Expectations items in the QRI related closely to question one of the CEI and SET. The students' responses indicated that the Course and Instructor were both clear about the Clarity of expectations.

Item 5 in the CEI and the SET addressed the course and the instructor's input into developing concepts and principles. Students rated both the course and the instructor highly in this area, with scores for the instructor at a higher level than for the course. This item relates to all three items in the building knowledge bank, all of which scored highly by the instructor and both reviewers.

Item 7 in both the CEI and the SET relates to the provision of feedback to students. This issue was addressed in the Human Interaction Bank as "Teacher feedback is timely and appropriate". The student rating in the SET was more positive than in the CEI, although the items were very similar. Similarly, the instructor and the reviewers scored this item highly in the QRI.

The flexibility of the QRI enables the instructor to include and therefore evaluate items that were not available in the standard CEI and SET tools. For instance, under the Assessment bank, the inclusion of both formative and summative assessments items enabled the instructor in this instance to seek feedback from external reviewers regarding this important aspect of the course. Thus, the ability of the QRI to include question bank(s) to cater to different course context is critical in ensuring widespread adoption.

The aim of the QRI is to facilitate and support reflective and reflexive practice. The QRI instrument must not be viewed as a mechanical checklist for processing but rather a resource which academics can use as a catalyst for review and reflection of his/her work. Thus, the value of the QRI lies in its capacity to assist the teaching staff to reflect on his or her own teaching and curriculum design based on peer and learner feedback.

#### Conclusion

This paper has shown that the QRI has a high degree of reliability, even when used by reviewers with different backgrounds and different levels of experience. This is an important consideration when using a tool, so that the results are not unduly influenced by the background or experience of the reviewer. Likewise, the Instructor rated the course in a very similar way as the two independent reviewers. The strong relationship between the student responses and the reviewers lends validity to the instrument.

It is argued that a comprehensive approach to evaluation of the quality of teaching requires the use of a variety of sources of feedback used in both a formative and summative manner. The QRI described in this paper provides a scaffold that can guide academics in the development and redevelopment of their courses, and facilitates reflection in and on the teaching process by both teacher and learners, while also providing a robust and objective approach to evaluation of teaching for quality assurance. This comprehensive approach to quality improvement of teaching has the capacity to reshape academic and institutional practice in ways that can support and facilitate the quality improvement of teaching, learning and the student experience (DEEWR, 2009).

It should be acknowledged that all three reviewers of the course described in this papers are also the authors of this paper and that this may lend bias to the results. Further studies with a

larger number of reviewers from a wide range of disciplinary backgrounds will be required to further determine reliability and validity of this tool. In addition, the consistency of application of the instrument will need to be investigated across a wide range of delivery approaches and in different settings.

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#### References

- Berk, R. (2005). Survey of 12 strategies to measure teaching effectiveness. *International Journal of Teaching and Learning in Higher Education*, 17(1), 48–62.
- Biggs, J. (2001). The reflective institution: assuring and enhancing the quality of teaching and learning. *Higher Education*, 41(3), 221–238.
- Boyer, E. (1990). *Scholarship reconsidered: Priorities of the professoriate*. Princeton, N.J.: The Carnegie Foundation for the Advancement of Teaching.
- Cosh, J. (1998). Peer observation in higher education a reflective approach. *Innovations in Education & Training International*, 35(2), 171.
- Creswell, J. (2007). *Qualitative inquiry & research design: Choosing among five approaches*. Thousand Oaks: Sage Publications.
- Department of Education, Employment and Workplace Relations (DEEWR). (2009). *Transforming Australia's higher education system*. Retrieved February 22, 2010, from
  - http://www.deewr.gov.au/HigherEducation/Documents/PDF/Additional%20Report%20-%20Transforming%20Aus%20Higher%20ED\_webaw.pdf
- Gosling, D. (2005). Peer observation of teaching. SEDA, Paper 118. London.
- Hutchings, P., & Shulman, L. S. (1999). The scholarship of teaching: New elaborations, new developments. *Change*, *31*(5), 10–15.
- Ingvarson, L., & Rowe, K. (2007, 5 February 2007). *Conceptualising and evaluating teacher quality:* Substantive and methodological issues. Proceedings of The Economics of Teacher Quality Conference, Canberra.
- Kohut, G. F., Burnap, C., & Yon, M. G. (2007). Peer observation of teaching. *College Teaching*, *55*(1), 19–25. Marczyk, G., DeMatteo, D. and Festinger, D. (2005). *Essentials of research design and methodology*. Hoboken, N.J.: John Wiley & Sons.
- Murphy, T., MacLare, I., & Flynn, S. (2009). Toward a summative system for the assessment of teaching quality in higher education. *International Journal of Teaching and Learning in Higher Education*, 20(2), 226–236.
- Paulsen, M. (2002). Evaluating teaching performance. New Directions for Institutional Research, 114, 5–18.
- Schön, D. (1983). Educating the reflective practitioner. San Francisco: Jossey-Bass Inc.
- Schön, D. (1991). The reflective practitioner: How professionals think in action. Cambridge: Ashgate.
- Shulman, L. (2002). Inventing the future. In Hutchings, P. (Ed.). *Opening lines. Approaches to the scholarship of teaching and learning*. Menlo Park: The Carnegie Foundation for the Advancement of Teaching.
- Taylor, P., & Richardson, S. (2001). Constructing a national scheme for external peer review of ICT based teaching and learning resources. Evaluations and Investigations Programme, Higher Education Division, DEST, Commonwealth of Australia.
- Wood, D. (2009). A scaffolded approach to developing students' skills and confidence to participate in self and peer assessment. Proceedings of the ATN Assessment Conference, Melbourne.

- Wood, D. & Friedel, M. (2008). Peer review of online learning and teaching: new technologies new challenges. *Proceedings of ASCILITE 2008: Hello! Where are you in the landscape of educational technology?* (pp. 1126–1135).
- Wood, D., & Friedel, M. (2009). Peer review of learning and teaching: Harnessing collective intelligence to address emerging challenges. *Australian Journal of Educational Technology*, 25(1), 60–79.

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