Did I mention it's anonymous? The triumphs and pitfalls of online peer review

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The role of student peer review in teaching and learning in higher education has been discussed extensively in the literature (Topping, 1998; Carlson & Berry, 2003; de Raadt, Toleman, & Watson, 2005; Bernstein, Burnett, Goodburn & Savory 2006). It is seen to be particularly useful in online courses as a mechanism for providing students with the tools to conduct criteria-based critical reviews on the work of their peers (Mulder & Pearce, 2007; Cho & Schunna, 2007). This system can work well for both the online learner and instructor particularly when students are provided with specified assessment criteria, grade ranking system and set deadlines. However when factors relating to the management of such activities come into play, such as the misreading of requirements and criteria, the subjectivity of dealing with some material and the need for flexibility in the due dates, peer review as an assessment system can literally fall apart. This paper discusses these issues via two case studies, which showcase two approaches to using peer review to teach coursework Masters students how to write a research paper in arts administration. The first case study uses the anonymous and random online calibrated peer review (CPR™) (http://cpr.molsci.ucla.edu/) system developed by UCLA, while the second attempts to simulate the same system using computer mediated peer review (CMPR) within the discussion forum and assignment tools in My eLearning Vista UNSW. This paper presents the triumphs and pitfalls of both systems within the theoretical framework of the higher education literature on teaching and learning and online peer review.

Keywords: collaborative learning, editing, e-learning, art, online communities, peer review

Introduction

Online peer review plays an important role in Postgraduate coursework Masters courses particularly in assisting with the writing process of chaptered research papers that demand a higher level of research and writing skills not previously required in other coursework subjects. This type of peer support and constructive criticism if conducted appropriately, following a set criteria, can assist towards boosting the writer's confidence, provide a 'sense of community' and add others' points of view into a process that can be particularly isolating for Postgraduate students (Mulder & Pearce, 2007). The online environment can be particularly supportive of international students who tend to be less vocally responsive in open class. The online environment can also offer anonymity when arranged by the Instructor in an online course that allows the students to learn by 'trial and error' while working at one's own pace as well as providing a sense of 'think before you speak' not often available in the spontaneity of the face-to-face classroom. The value of having time to contemplate an answer leads not only to a sense of confidence in the writing process for the less accomplished student but also encourages the more confident student to be aware and to 'self review' their work. This in turn is enhanced by the further input of the students' peers. Cho and Shunn (2007) emphasised that writing skills could be improved if the learner was given the opportunity to use feedback for revision and rewriting. The peer review systems discussed in this paper provided students with the opportunity to improve their writing through utilising feedback from both peer as well as academics before submitting their final research paper for examination.

The philosophy behind the research paper course, a core course in the Master of Art Administration, offered at the College of Fine Arts (COFA), University of New South Wales (UNSW), recognises the importance of peer review, particularly for future art administrators who of necessity will be working in a collaborative context. It follows the constructivist premise that learning "is an active process of

constructing rather than acquiring knowledge" (Lefoe, 1998, p.454) in the elearning environment. This paper will outline the important role peer review plays in the landscape of educational technology while teaching students in higher education how to write a 10,000 word research paper in a coursework masters degree fourteen week structure. In the research paper course students research a topic related to the broad area of their Internship after the completion of the core courses towards the end of their program. The arts industry placement enables students to gain practical and supervised experience in the field of art administration including: gallery management in the public, private, commercial and not-for-profit sectors, curatorial practice, education and public programming and art writing. The aim of this paper is to compare two peer review online systems for teaching students how to write a research paper in a coursework masters degree in order to examine ways of improving the use of online peer review in the future. Two case study examples will be examined, the first, uses the tool of online CPR™ (calibrated peer review) and the second uses CMPR (computer mediated peer review) within the discussion forum and assignment tools in WebCT Vista to teach research and writing. While Web 2.0 has enabled guided collaborative learning on a reasonably large scale, these courses are not dependent on any particular technology, and could indeed be adapted for use with different software.

The use of online peer review for teaching writing skills

The students who were the subjects of these two case studies are being trained to work in the arts industry where the most successful management models are based on collaborative leadership rather than the standard hierarchical model. Therefore the ability to constructively critique peers plays an important role. Learning to see the positive side, as well as developing the skills of giving and taking criticism of writing and editorial processes, is seen in this degree as a useful professional tool and a graduate attribute worth developing. As it is believed that the learning environment "should stimulate learners so that their thinking is related to actual practice" (Honebein, 1992, p.20). The process of peer review is recognised as a useful skill particularly before entering a less supportive work context where comments intended to be constructive may too easily be interpreted as overly harsh, and where the process is not so closely monitored and supported as it is in higher education. Boud (1990) recognised that self-assessment was fundamental to learning and that traditional assessment practices neither match the real world of work nor encourage effective learning. There is an 'art' to giving and receiving constructive criticism, perhaps not so often recognised, and the process of developing skills in that area needs to be closely monitored within the learning environment. Within this procedure the student writer can feel a sense of ownership of the process as a self-directed learner in the online environment where they need to take responsibility for not only their learning but also the self-esteem of fellow students.

Wisker (2001) stated that an important factor of Postgraduate study is: "peer groups that help students to share ideas and develop a sense of communicative peer support and of ownership of their work" (p.19). Additional benefits of peer review proposed by Mulder & Pearce (2007) are that students are able to act on feedback and review and revise their work prior to final assessment, and that it can redress the dissatisfaction with the amount and quality of feedback that is often reported by students. Cho & Schunna (2007) report that the use of an online multiple peer review system for the development of writing skills has proven effective in improving writing quality in comparison with feedback from a single expert, and points out that it is useful for improving 'audience conception' – i.e. revising from readers' point of view. However the peer assessment process can literally fall apart if students are not sufficiently facilitated through certain predetermined parameters, which provide information as required through the criteria driven process.

An important aspect of this process that needs to be factored into the online system is flexibility. Both the student and instructor should still have the opportunity to adapt and make changes while not allowing the rigidity of the online system to dictate the direction of the learning process. As Robberecht (2007) advocates such "e-learning environments, in which the educator's pedagogical approach and expertise are encoded into the design, represent an effective and intelligent use of information technology for learning environments where each student is guided during independent study" (p.59). While keeping in mind the set course aims and objectives, there still needs to be a sense of taking into account the needs of the individual learner while working through small goals in the journey to the end result. The classroom situation usually allows for this, however the assessment driven nature of higher education does not always allow for students individual differences in learning styles, time management and the need for various levels of support from the educator. The online environment can, if the course convenors take a proactive role, offer a sense of nurturing for the individual learner and peer support as well as flexibility for the 'time deprived' student.

The use of the online learning environment for teaching research skills

It is often assumed that students in coursework masters degrees come with sufficient research skills from their undergraduate studies so they are able to confidently write a competent research paper. Therefore research skills training rarely appears as a necessary curriculum requirement of a coursework masters degree. However many degrees require students to write lengthy articulate in-depth research papers, requiring both field research and extensive literature reviews. In the once well-funded rich climate of higher education in Australia, students were provided with appropriate individual supervisors when writing research papers in their coursework masters degrees. These students were seen as 'worthy of the effort' to be allocated a specialist academic staff member to supervise their research papers. With the severe cuts to funding higher education in the late 1990s and the subsequent devaluing of teaching over research, coursework masters students ceased to attract significant levels of support, as their projects were not seen as research. As a result, in the College of Fine Arts, UNSW, the Master of Art Administration research paper had to undergo major changes in order to adapt to the new circumstances if it was to retain an appropriate quality of support for students. Online teaching does provide an ideal way to support a significantly greater cohort than face-to-face teaching, and many coursework masters degrees in Australia and other resource poor countries are utilising the online environment.

Online learning has afforded the Master of Art Administration a new life as an 'any time, anywhere' semester long course with many students in the degree being able to continue with the compulsory arts industry placement or working in the arts locally, regionally and internationally while learning online. Another advantage of online learning and teaching is the social presence of students who would have in the past been isolated in their research in this course through limited face-to-face visits with a nominated supervisor and little social interaction amongst their peers. Collaborative peer review combined with the online learning environment has from the author's perspective and student feedback influenced student satisfaction, motivation, learning, engagement, understanding and overall assessment results. Proponents like Doiron (2003), Lindblom-ylanne, Pihlajamaki and Kotkas (2006), Topping (2003) and Boud (1995) believe that there are many benefits in education for using peer review and promoting student collaboration including students actively problem solving together. Brown and Knight (1994) suggested also that "receiving feedback can be an excellent motivator, especially when valid criticism is supported by appropriate praise and commentary" (p.33) which as mentioned previously, peer review could achieve if students are sufficiently motivated to become actively involved in the elearning environment. The current technology landscape in higher education has many benefits for educators and students alike, especially with the prominence being placed on assessment for learning and with the greater emphasis on student feedback and engagement driving the pedagogy.

Enhancing learning through enhancing pedagogy has been of vital importance to this degree as the changes in academic support, and shortening of the teaching session further affected teaching research skills in the coursework masters program. 'Learning to learn' online has been an issue, dealt with from the outset with a learning management system (LMS) introductory session in Week Zero and constant support for students through the university's help desk and course coordinator in WebCT Vista. Online learning and teaching as with face-to-face teaching must adapt to changes in each cohort for effective pedagogy, and with the students engaged as active participants in the LMS and peer review process it enables a constructivist environment to develop through a structured and managed space. The nature of online teaching and peer review has naturally developed as a collaborative environment where students work as producers, researchers, learners and teachers together. This constructivist-learning environment, as described by Wilson (1996) "is a place where learners may work together and support each other as they use a variety of tools and information resources in their guided pursuit of learning goals and problem-solving activities" (p.5). WebCT Vista as an LMS is not a particularly interactive learning environment, yet with its corporate template interface this linear teaching space alongside the cooperative shared space of peer review offers students the possibility to both learn together and for each other. It is a transparent process. The research paper course since 2002 has had a LMS component, which was originally a discussion forum for collaborative dialogue about each student's individual research topic and draft essay. It was not until 2006 that a fully online course structure was developed which took into account educational socio-cultural theories (Vygotsky, 1978).

Case study one: Using CPR™ and WebCT Vista to teach how to write a research paper in a coursework masters degree

For two semesters in 2007 the research paper course was conducted fully online where thirty percent of the assessments was dealt with by WebCT Vista and was graded online using CPR™. As part of the course assessment students were required to anonymously review other students work through CPR™.

This web-based instructional tool provides a platform where students submit assignments; review their work and other students, in a system that is managed by the CPR™ program. Each task is sorted and distributed anonymously to enrolled students in the course (Refer: Figure: 1). The instructor sets the submission dates and CPR™ provides average marks for each assessment task (Rourke, Mendelssohn, Coleman, 2008). This structured online procedure taught students how to write to criteria, while providing examples of poor, average and good writing to assist the learner with the assessment process.

Figure 1: The calibrated peer review process

Stage	Teacher – CPR admin and set up	System	Student
Peer review setup	Creates assignment in CPR, including review questions and criteria for evaluation of submissions. Uploads student list.		Enrolls in CPR Do pre-test for new users
Practice or calibration of reviewing skills	Creates and uploads examples of poor, average and good submission.	Manages calibration of reviewing skills	Logs in to CPR, performs practice reviews for calibration of reviewing skills
Submission of written work	Set dates for submission and review of written work.	Manages submission of written work	Logs in to CPR, submits written work in format provided.
Peer review activity		Manages distribution of submissions for review and assessing the review process	Logs in to CPR, performs review (grade and comment) on the submissions of three other students, and their own work.
Distribution of grades	Downloads grades for distribution to students/collation with other course grades.	Provides combined grade, moderated by level of review performance (as assessed in calibration process)	Accesses grades and feedback in CPR

As previously mentioned, the CPR™ process for the students involves reviewing good, average, and poor examples of each assignment. In the CPR™ process students are scored on their calibration, and they are not allowed to proceed until the calibration tasks have been passed. In this system students submit their text to CPR™, before the time for text submission elapsed. When the text entry time was over, students log into the CPR™ system again to do the calibration exercises, reviews and to comment on and rate three student submissions, then review and rate their own work. This has to be completed before the time for calibration and peer review expired. When peer review is CPR™ system manages the submission and peer review process, which frees the instructor's time towards supplying regular answers to student questions posted on the Vista site (McAlpine, Reidsema, & Allen, 2006). Rada, Michailidis and Wang (1994) suggested that peer review could reduce the instructor's workload associated with the lengthy process of providing feedback progressively on student's writing thus allowing more time for them to spend on other teaching activities. Even though there are some advantages for both the students and instructor, many students found the CPR™ process technically challenging, as they had to set up their own enrollment in a different system, which was inflexible with submission formats and dates. The system however has the advantage of being able to calibrate the reviewing skills of each student. The process is scaleable to be used with large cohorts of students. The CPR™ system has been used at UNSW with several hundred students enrolled into the one assignment (McAlpine, Reidsema, & Allen, 2006).

This CPR™ process which was adapted towards assisting students in the procedure of peer reviewing writing was designed to develop both self awareness of writing ability as well as the skill to rank each student's own and others' writing against a set criteria. Carlson and Berry (2003) who have also utilised the CPR™ system in their teaching have suggested that peer review can promote higher-order thinking skills, a particularly important graduate attribute that is not always easy to accomplish in the learner. Evidence of this attribute was achieved in the Master of Art Administration research papers. During the year the CPR online system was utilised there were more high distinction grades (above 85%) than had

been achieved in the past ten years. In the past the research paper course was conducted using one-on-one supervision, which did not often involve providing assistance with research and writing skills and the standard of supervision varied depending on the personal commitment of individual supervisors.

In the LMS WebCT Vista the process of teaching both research skills and how to write a research paper in the Master of Art Administration is broken down as a scaffolded procedure to teach students how to write a proposal, contents page and literature review. Students are given concise easy to follow exercises with worked examples demonstrating how this can be done. These exercises move from the simple to the more complex with the end result being a finished piece of writing that the student submits to CPR™. The LMS provides information on research methods, writing an abstract, structuring writing, the writing process, writer's block, referencing, appendices and other pieces of useful information. It also provides exercises to complete to assist with the process of researching and writing a research paper. When students have completed the online activities and calibrated peer review of their proposal, contents page and literature review and finished their first draft, the paper is emailed to a supervisor for feedback on the content of the work before submitting the final paper. The instructional material on the Vista site and the CPR peer review process both assist towards greatly reducing the amount of work and input required of the supervisor.

The international students in particular have commented on how useful they found the structured format, guidance and feedback on their writing. Many indicated that it was unusual to receive this level of support in their Australian university studies. Many students also commented on the sense of collaboration that evolved and the fact that they feel less isolated in the writing process. They particularly discovered that receiving feedback during the process of writing a research paper was far more useful than receiving comments after the paper was completed. The main concern students had with the CPR™ approach is that the system does not offer enough flexibility particularly with the due dates, predetermined before the semester began. They indicated that the inflexible word limit provided by the CPR™ system, which was preset by the instructor, frustrating. As a result of this student feedback the instructor decided in 2008 to remove the hyperlink to the CPR™ system from My eLearning Vista and instead to mimic this approach to peer review in the Discussion forum as CMPR within the LMS so that more flexibility and greater student satisfaction can be provided. The new landscape of educational technology and online learning for effective teaching has the goal of being more student centred therefore it has become more necessary particularly in the 'content roll over' environment of elearning, that educators change and adapt to the needs of each new cohort. For as Biggs stated (1991) teachers should be prepared to "adapt their techniques to different students", and be "sensitive to different needs" (p.10) and in the case of elearning be prepared to revise the course material to meet the interests and needs of each new class of students. The CPR™ system requires a lot of extra work from the designer/instructor perspective to meet these goals, as a roll over of content from semester to semester is far more economical of time and resources, however when student dissatisfaction with the content prevails it would be advantages to adapt material accordingly. The CMPR system discussed next, has more provisions for this flexibility as the instructor can intervene in the learning process at any point and adapt and add to the instructional material as required.

Case study two: CMPR – using a discussion forum and WebCT Vista to teach how to write a research paper

For 2008 the Master of Art Administration research paper course was run using the same format on Vista as the previous year but without utilising the CPR™ system for peer review, instead the Vista discussion forum was adapted to mimic CPR submission process of task→calibration→peer review→ self assessment. (Refer: Figure 2).

As with the previous CPR™ system, assignments were staged: Stage one: writing a proposal; Stage two: writing a contents page and Stage three: writing a literature review all of which were assessed by their fellow students. The peer review process involved three other students anonymously assessing the work completed in all three stages of writing a research paper, which were submitted for peer review to the discussion forum on My eLearning UNSW Vista (Refer: Figure 3). To ensure that the process was fair, all students were required to look at the peer assessment examples provided on Vista. These examples demonstrate how to assess quality writing by reviewing good, medium, and poor examples of each stage, and answering questions on them. Feedback from the questions was a guide to assessment. Students then assessed two submissions, followed by their own. Marks were averaged to provide a mark out of ten for each stage. The key to achieving good marks involved submitting not only a good evaluation but also paying attention to other good reviews and rating students' writing in accordance with the criteria

Figure 2: Overview of the research paper course using CMPR in a discussion forum for peer review
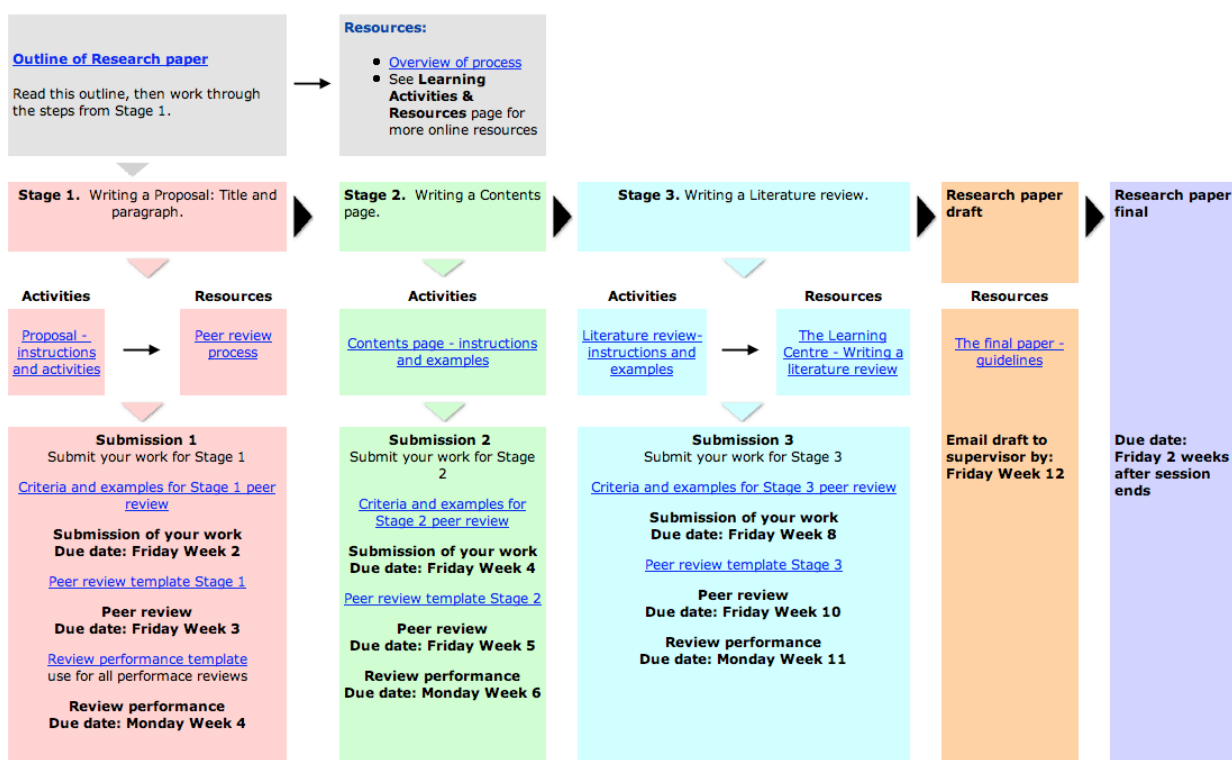
provided. Finally students assessed the effectiveness of the feedback provided by their reviewers. The entire process was anonymous so that students could freely provide feedback in a constructive less subjective manner. On Vista there was also detailed information on how to go about the process of peer review, justification for using this assessment and learning method and suggestions to assist students towards improving their critiquing and writing skills "Self-evaluation and evaluation of the contribution of one's peers … are not skills that can be undertaken without a certain amount of training" (Brown & Knight, 1995, p.52). This peer review process, when appropriately supported by the instructor, could provide the necessary training, constructive criticism and critical thinking skills to equip students through repeat practice, with the confidence and necessary tools to become competent assessors of their own and their peers writing.

The process of navigating this new terrain through conducting peer review on Vista is somewhat less complicated for students than CPR™, particularly as students do not have to log into a separate online system and the format for submission was more straightforward. The instructor is therefore able to be more flexible with submission dates. But from the students' point of view the process was definitely more complicated than CPR. This is particularly so in the administration of the review process and collation of grades, which are somewhat laborious. This approach also depends on extensive input and ongoing planning from the instructor who is required to email students firstly their identification numbers and then progressively identification numbers of their peers for each assignment (proposal, contents page and literature review) in order for the peer review process to remain anonymous. Although this peer review format is more labour intensive for the instructor, it does provide the flexibility that students had previously identified they wanted. If as "teachers we are not gaining insight into the nature of our students' learning, then we are not teaching properly. The teacher's enquiry into their students' learning is not only valuable form of educational enquiry, it is also the most valuable approach to teaching" (Rowland, 2000, p.8). As previously mentioned, it is important that the online instructor listen to the feedback of students and adjust their material, communication and assessment accordingly which should result in not only improving student learning but also enhance their satisfaction with the learning process itself.

The advantage of CPR™ as previously discussed, is that it automatically randomly allocates students their peer reviewers as well as providing the instructor with a spreadsheet of marks. CMPR as previously mentioned is labour intensive for the instructor but it does offer more control and understanding of the assessment process for both the students and the educator. The student numbers for the research paper

Figure 3: The Vista discussion forum peer review process

Stage	Teacher – Vista administration and set up	System	Student
Peer review setup	Creates assignment in Vista, including review questions and criteria for evaluation of submissions. Distributes student 'aliases' to allow anonymity.	Review templates and criteria are located in Vista	
Practice or calibration of reviewing skills	Creates and uploads examples of poor, average and good submission.	Examples and instructions are located in Vista	Logs into Vista, performs practice reviews for development of reviewing skills
Submission of written work	Set dates for submission and review of written work. Sets up anonymous discussion forums for submission of work.	Submission tool (discussion forum) is located in Vista	Logs into Vista, submits written work in format provided.
Peer review activity	Distributes review allocation. Creates templates for submission and grading of reviews. Sets up anonymous discussion forums for submission of reviews.	Submission tool (discussion forum) is located in Vista	Logs into Vista, performs review (grade and comment) on the submissions of two other students Submits the reviews back to Vista forum. Grades the performance of the reviewers for their work.
Distribution of grades	Collates all student review submissions, reconciles aliases with student IDs, creates aggregate mark for each student. Uploads grades to Vista.	Feedback and grades are accessed in Vista.	Accesses grades and feedback in Vista

course were usually no more than twenty students, this system may have been difficult with larger cohorts of students, if this was the case CPR™ would probably prove to be the more beneficial. The Vista discussion forum provided students with more personal attention from the instructor than the previous CPR™ as they were receiving individual messages from the instructor and as a result more individual needs were catered for. The instructor also became more aware of each students individual chosen topics, writing styles and quality of reviews during each stage of the writing process rather than at the end of each stage as in CPR™.

The future of peer review in elearning

It has been widely acknowledged that the collaborative nature of peer review and peer feedback is an important graduate attribute at most universities. The ability to engage in independent and reflective learning is an important UNSW graduate attribute as is the importance of developing the skills required for multidisciplinary work and collaboration. By including peer review in online courses these two attributes can be met if the focus is on pedagogical goals and student engagement rather than assessment grades and deadlines. As Beckstead (2006) stated, "providing opportunities for students to practice working in teams has become a necessary aspect of higher education" (p.144). There are many web based online peer review systems and assessment systems of which CPR™ is an example. As previously discussed CPR™ has its pitfalls; particularly as it has a vertical streamlined structure with both rigid word limits and deadlines. Some students have expressed dissatisfaction with the lack of flexibility and many commented about the limited interaction that this peer review process provided (Refer: Figure 4).

The student cohort who provided feedback expressed a general feeling that the CPR™ system also disengaged them from the community discussion forum on Vista. However the less accomplished writers found the CPR™ system easy to follow and their writing improved dramatically due to the authentic

Figure 4: CPR™ system discussion forum: Student's questions (class total 12)

☐ ⊞ The contents Page ⊕	5
☐ ⊞ contents page ⊕	4
☐ ⊞ Kate...trouble with entering onto contents page ⊕	6
☐ ⊞ Another question Kate ⊕	2
☐ ⊞ CPR time ⊕	3
☐ ⊞ case studies ⊕	2
☐ ⊞ Hi Kate - need assistance in regard to uploading proposal and contents page ⊕	2
☐ ⊞ PAINFUL!!!!!!!!!!!!!!!!!!!!!!!!!!!! ⊕	5
☐ ⊞ just wondering.. ⊕	2
☐ ⊞ Word limit??? ⊕	2
☐ ⊞ Content Page - What is HTML for indenting? ⊕	3

nature of the task. As Rourke, Mendelssohn and Coleman (2008) have indicated, the CPR™ method "is especially beneficial to students who struggle with their writing as it provides concrete examples of good, average and poor levels of writing" (p. 10-11). However it is recommended that future use of the CPR™ be integrated into a blended online approach that includes approximately 4-6 workshops throughout the teaching semester where ongoing concerns can be resolved and face-to-face interactions can be facilitated. The less socially isolated method of the CMPR promotes more of a sense of community amongst the students when peer reviewing, as they are able to collaborate as a result of viewing the work of the whole class and as everything was happening in the same space they were more inclined to utilise the discussion forum. This system however was heavily reliant on using emails in order to keep the anonymity of the students. This form of distribution system could be improved in future as this method proved very time consuming for the instructor whose time would have been better utilised facilitating more online discussions with students on improving the review and writing process. The use of email for immediate conflict resolution was particularly necessary in the CPR™ system, as previously mentioned students were in some cases frustrated by the inflexibility this method provided.

The instructor found the Vista announcement tool particularly useful for calling impromptu class meetings to resolve any common problems (Refer: Figure 5), however not surprisingly these were not well attended. Not only because these Postgraduate students were time deprived with work and family commitments, but also it was discovered that once students felt comfortable using the online system, many would share and resolve any research or writing problems in the discussion forum. Across the two year period where both the CPR™ and CMPR systems have been running, the majority of students were content to post messages on Vista for the instructor, these were answered regularly on a weekly basis. Although the instructor offered individual student consultation to any students who felt they needed extra assistance with writing their research papers, very few students took up this offer, supporting the notion that the online peer review system and material provided was in the majority of cases sufficient to meet most of the students and learning teaching requirements for this course. According to Robberecht (2007) "effective e-learning materials fundamentally stern from the educator's pedagogical expertise and close personal interaction with the learner" (p.59) which the research paper course has endeavoured to achieve and will continue to improve upon.

Figure 5: CPR™ system showing the instructors use of announcement tool

📝 **Announcements**

Title	Post Date	Status
URGENT: If you missed the meeting in Week 10	17 October 2007 6:00 PM	Received
Meeting in Week 13 - change of room	16 October 2007 12:00 PM	Received
CPR review extended	24 September 2007 1:00 PM	Received
Research paper meetings	18 September 2007 4:00 PM	Received
Meeting for students with concerns or problems	14 August 2007 7:00 PM	Received
CPR open until midnight - 13th August	13 August 2007 9:00 AM	Received

Conclusion

Peer review is a useful tool for assisting students towards writing a successful research paper, especially as it teaches them to take responsibility for their own learning process, to value the opinions of others, and to improve their time management as they work collaboratively towards a common goal. The two peer review systems discussed in this paper provided an avenue by which the peer assessment process could become more transparent, less subjective, and (by the time the five marks were averaged out) more fair. In both the CPR™ and CMPR systems, students have commented on the way this approach to writing a research paper gives them a sense of achievement. Overall they felt less stressed about meeting deadlines as they were forced into writing earlier than they normally had in past written papers. Students commented that breaking down the structure of the paper into stages made the paper more manageable within the fourteen-week semester period (UNSW semesters were later reduced to twelve weeks in 2008). Overall the majority of students throughout the four University semesters that the research paper course has been running as a fully online course have been positive towards the use of peer review particularly as they felt that they had some input into the assessment process and they felt that their opinions were valued (Refer: Figure 6).

Figure 6: Student responses in the discussion forum on the stage 3 literature review

Topic: Assignment submission
Subject: Assignment 3 - Literature Review - Student 29
Date: 18 September 2008 10:34 PM
Author: -

Hi all,

Still researching (and will be until the bitter end) but nice to get the wheels into motion.

This literature is slightly over the word length to accommodate a small intro, and a simple summary of research methods and paper content.

I will be very grateful to receive any commentary and feedback from this.

Student 29

Attachments:
Assignment 3 - Literature Review (Student 29).doc
[Reply] [Forward]

Topic: Assignment submission
Subject: Re:Assignment 3 - Literature Review - Student 29
Date: 20 September 2008 10:38 AM
Author: -

Dear 29er,
interestingly, your literature review almost is your paper. Its almost an interesting examining of the matrix of arts writing which accompanies international exhibitions.
you seem to tick all the boxes with this one: hou hanru, Magiciens de la Terre, Melissa Chu.
I recommend ' The Manifesta Decade', its in the reference section of the COFA library. Articles by Hanru, Obrist etc
81

▷ In Reply to: Assignment 3 - Literature Review - Student 29

The peer review process allowed students to "become more autonomous learners able to stand on their own feet without the kind of passive dependence on the tutor for information and assessment that has been traditionally the case" (Brown & Knight, 1995, p.52). The peer review procedure provides ongoing support progressively throughout the process of writing a research paper. This teaching and learning process has allowed students to reflect and reassess their writing; learn the valuable skill of constructive reviewing of their writing and their peers as well as learn how to work collaboratively in a self directed way. All these self and peer critiquing skills could led students towards developing higher order thinking skills, an attribute highly valued in the current landscape of educational technology in higher education and the profession these students will be entering.

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