Assessment of collaborative learning in online discussions

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This paper will examine how an online forum can be used in work integrated learning as a vehicle for students to demonstrate their learning in the workplace and to facilitate collaborative learning. Collaborative learning is valuable in work integrated learning subjects because it enables students to make linkages between their experiences and those of others, share positive and negative aspects of placements with their peers and gain an overall picture of work in the relevant sector. It also enables students to demonstrate to their peers what they have learned. Collaborative learning can be readily facilitated in face to face classes, for example, in teacher or student led discussions or by means of student presentations. However, where a work integrated learning subject is offered to external students or where face to face classes are minimal, the collaborative aspect of student learning needs to occur by other means, such as an online forum. The use of an online forum can also enable students to demonstrate their learning by reflecting upon their work and self evaluating their own performance. This paper will review the literature regarding the benefits of using online discussion forums to promote collaborative learning and reflection and the design and assessment of such forums. Despite the value of online discussions in work integrated learning, it has been argued that a truly objective tool to measure learning evidenced by online discussions has not yet been developed. This paper will suggest a model for assessable online discussion forums that will facilitate student collaboration in legal work placement subjects.

Keywords: *online discussion forum; assessment; technology; work place learning, work integrated learning; collaborative learning; collaborative refection; legal internship*

Introduction

The emphasis on work preparedness as a goal of university education has resulted in workplace learning subjects being increasingly incorporated into undergraduate courses. One challenge that is presented by workplace learning is how it can be appropriately assessed (Vonderwell, Liang, & Alderman, 2007). It is generally acknowledged that assessment is the fundamental driver of student learning (Boud & Falchikov, 2007) and therefore the design of assessment activities that drive essential learning outcomes is essential. The ability to take responsibility for one's own learning is generally a goal of workplace learning and accordingly it is essential that assessment is learner centred, that is, that it encourages students to reflect on the process of learning itself. Students do not necessarily know how to engage in the reflective practice required in workplace learning and it is essential that the ability to think and write reflectively be taught (McNamara & Field, 2007).

One method of teaching reflective practice is to scaffold reflection through online interaction (Rose & Devonshire, 2004). This paper will review the literature regarding the use of assessable online discussion forums to create learning communities that facilitate student to student interactions and reflection in work placement subjects. First we consider the

importance of collaborative learning and reflection in workplace learning. Second we discuss the benefits identified by the literature of using an assessable online discussion forum to promote collaborative learning and reflection particularly in work placement subjects. Third we consider some principles relevant to the design of an assessable online discussion forum for a work placement subject in law and identify some issues that need to be addressed in such design. Fourth we discuss the assessment of online discussion forums. Finally we will propose a number of principles that should be incorporated in the design of online discussion forums for the assessment of workplace learning. We will conclude that while online discussion forums are an extremely valuable learning tool for work placement, they need to be carefully planned, moderated and assessed.

The importance of collaborative learning and reflection in workplace learning

Collaborative learning and reflective practice are essential aspects of workplace learning. The importance of reflective practice in workplace learning has been well documented (Brodie & Irving, 2007; Hinett, 2002; Elkins, 1985). The role of collaborative learning in workplace learning has not been so explicitly stated, however, in the authors' view, the link between collaborative learning and the ability to learn from work is clear. According to Moller (1998) a collaborative learning process is necessary to promote the kind of learning necessary for present and future work preparation**.** Further, the value of learning communities is supported by powerful learning theories; an active learning community and a sense of connectedness to others are critical to real learning (LaPointe & Reisetter, 2008). Collaborative learning in legal work placement subjects allows students to demonstrate to their peers what they have learned during their placement (Merrill, 2002), make connections between their own experiences and those of students in different placements, share experiences (both positive and negative) and gain an overall picture of the various roles undertaken by lawyers.

In order to make effective reflective and collaborative workplace learning possible for students, the design of appropriate and effective reflective assessment tasks is essential. Indeed, one of Ramsden's (2003) six principles of effective teaching involves the provision of appropriate assessment and feedback. The use of an assessable online discussion forum is suggested as a means of encouraging reflective thinking and practice thus enhancing the learning experience (Williamson & Nodder, 2005). Online discussion is also valuable as formative assessment because it enables intrinsic feedback to be provided to students on their learning and the quality of their reflection.

Benefits of an online discussion forum

Cox and Cox (2008) argue collaborative and reflective learning is effective regardless of whether facilitated by classroom or online activities. Despite this, some studies have suggested that an online learning community cannot meet the learning expectations of all students (LaPointe & Reisetter, 2008). However an online discussion forum is a feasible means of facilitating collaborative learning and encouraging reflective practice between students where face to face contact is not possible.

The use of an online forum encourages deeper reflection by students than working alone or in a face to face situation with other students. This is because students have time to carefully consider their own and other student's responses leading to deeper discussion and also because the results of the discussion 'are available for revisiting and reconsidering in a way that cannot happen with more transient verbal conversation. It is possible to "rewind" a conversation, to pick out threads and make very direct links between different messages' (Salmon, 2002).

Students may also benefit from discussions initiated by other students, seek clarification from other students, and build a sense of a scholarly community (Laurillard, 2002; Brown, 1997). According to Revill and Terrell (2005), online community discussion has been well received by students and results in discussions that are engaging, vibrant and active.

Designing an online discussion forum

While the potential benefits of online discussion forums are clear, Brooks and Joeng (2006) point to research that suggests that online discussions often produce discussion that lacks coherence and depth, with students often not responding to what other students have said. In order to create the "engaging vibrant and active" discussions noted by Revill and Terrell (2005), discussion forums must be appropriately planned and moderated. Students can not simply be "given" an online forum and told to use it. Such an approach is likely to result in little collaboration and learning, even when the forum is assessable.

Three factors should be considered in planning an online discussion, the organisation of the forum, the motivation of students to participate and the ability of students to participate effectively. Vonderwell, Liang, and Alderman (2007) found that the structure of the discussion forum is essential for successful learning and assessment. Brooks and Jeong (2005) suggest that online discussions should be organised into discussion topics and that within each topic there should be pre-established threads within which arguments are clustered. It is suggested that pre-structuring threads in this way may be an effective method of facilitating in-depth critical discussion. Where discussions are not threaded, discussion may become repetitive, thereby discouraging student participation (Vonderwell, Liang, & Alderman, 2007).

In relation to motivation of students, Klemm (2000) suggests that the goals and purpose of the forum should be stated and clearly explained, feedback should be provided and students should know that the forum is monitored by important people. In addition, input should be rewarded, negative feedback should be avoided and communities should be developed in order to avoid lurking.

The third consideration in planning online discussions is the ability of students to actively participate in the discussion at the required level. Salmon (2002) argues that a scaffolded approach needs to be taken to the facilitation of online activities so that students move through five stages of learning. The five stages are: access and motivation, online socialisation, information exchange, knowledge construction and development. For the purposes of the assessable component of an online discussion forum used to facilitate collaborative learning and reflection in a work placement subject, students need to be at the development stage, where they are responsible for their own learning and are more critical and self reflective. Adopting the approach suggested by Salmon, it is therefore necessary to scaffold student participation in the discussion forum so that they are able to contribute to the forum at the level required. It is suggested that introductory topics be established to introduce students to the online discussion and to help them to understand the value of learning together and contributing online.

On completion of the introductory topics it is expected that students will be at the third stage of development, knowledge construction. At this stage, students take control of their own knowledge construction by active thinking and online interaction. Learners build their existing knowledge by linking it to their personal experiences and interacting with others. The

key roles of the moderator at this stage are to weave together the key points from the different student responses, provide summaries, suggest new topics when discussion goes off track and acknowledge student contributions (Salmon, 2002). It is suggested that at this stage students be required to complete set activities or readings and comment upon them. An open ended discussion, with no black or white answer, encourages students to build on their previous experience and accommodate the views of other students into their own understanding.

At the fifth and final stage, development, students become responsible for their own learning. The crucial role of online activities is to promote and enhance reflection and maximise the value of online learning for the students (Salmon, 2002). Reflection can be encouraged by posing reflective questions for students to address (Hulkari & Mahlamaki-Kultanen, 2007). This is referred to by Salmon (2002) as the "spark" for the online activities. The questions should where possible refer to the subject content such as readings relevant to the question posed.

Assessment of online discussion forums

Assessment is a fundamental driver of what and how students learn (Ross & Siegenthaler, 2006). Ramsden (1992) suggests that "assessment is fundamentally about helping students to learn and teachers to learn about how best to teach them." Accordingly, for online discussion forums to be effective in facilitating collaborative learning in workplace learning they must be assessed appropriately. This means that the purpose of the assessment, the criteria for assessment, and the intended outcomes must be established (Gaytan & McEwen, 2007). The main purposes of an assessable online discussion forum in workplace learning are to enable students to demonstrate their learning, to enhance student's reflective practice and to promote collaborative learning by student interaction.

Vonderwell, Liang, and Alderman (2007) suggest that the use of a variety of assessment methods and strategies can increase student interest and engagement in discussion. The assessment of an online discussion forum could be varied by using different assessment techniques, such as a reflective summary, an online survey, peer or self assessment tasks (Vonderwell, Liang, & Alderman, 2007), web quests, concept maps and problem solving scenarios (Klecker, 2005). Lee (2004) suggests that peer assessment by use of a peer rating system is one way in which the workload associated with grading an online discussion forum can be minimised while at the same time increasing student engagement.

Regardless of the type of assessment technique employed, a key issue in the design of online discussion forums is that assessment should be fair and reliable. Hulkari & Mahlamaki-Kultanen (2007) suggest that a truly objective tool to measure learning evidenced by web discussion has not yet been developed. Salmon (2002) suggests that assessment of online activities should be aligned with and should flow directly from the online tasks and that criteria should be established that indicate the level of acceptable performance.

The use of criterion referenced assessment for online discussions is particularly important because it encourages cooperative learning and the sharing of ideas (Klecker, 2005). Vonderwell, Liang, and Alderman (2007) suggest that detailed assessment criteria are essential in guiding student participation and contribution to the discussion and enabling fair assessment of student contributions. Further, the criteria should be specific to topics rather than general across all discussion topics. It is suggested that the criteria for assessment of a discussion forum in the workplace learning context should be the quality of reflections, the extent of collaboration with other students, evidence of links to professional practice and

written expression. These criteria are consistent with the stated purposes of the forum. In some disciplines it may be argued that written expression is not an appropriate criterion for an online forum, however Vonderwell, Liang and Alderman (2007) note the importance of writing skills in online assessment. For law students, this is particularly so because of the high level of written expression skills that will be required of them as lawyers.

Principles for assessment of online discussion forums in work place learning

The authors propose that a number of principles should be considered in designing assessable online discussions that enable effective learning in work placement subjects in law.

- The purpose of the online discussion forum, that is to encourage reflective practice, to demonstrate learning in the workplace and to enable collaborative learning, should be made explicit to students.
- The value of the collaborative learning that is expected to occur via the forum should be explained to students.
- The forum must be appropriately planned and organised. Pre-structured threads within each discussion topic should be established to assist students to organise the discussion.
- Online topics should include a spark in the form of an activity or reading together with positive reflective questions that are to be addressed in the discussion.
- Facilitation of the forum should be scaffolded to enable students to participate in the forum at the required level.
- The discussion should be appropriately moderated; feedback should be provided to students, students should be aware that the discussion is monitored and positive input by students should be rewarded.
- Where online discussion forums are assessed clear criteria for assessment should be established. It is suggested that the criteria appropriate for a discussion forum to promote collaborative learning and reflection in workplace learning in law are the quality of the reflections, evidence of links to professional practice, the extent of the collaboration and written expression.

This model has been applied by the authors in LWB421, Learning in Professional Practice, a subject in the Queensland University of Technology undergraduate law course offered for the first time in semester two 2008. In LWB421 students complete placements in private legal offices. Face to face classes are not feasible for practical reasons including timing of placements and the participation of external students. Consistent with the sector wide shift towards online learning in university programs (LaPointe & Reisetter, 2008), an online discussion forum has been used in the subject to facilitate the collaborative learning that would otherwise take place in face to face classes. While a detailed evaluation of the online discussion forum in LWB421 is outside the scope of this paper, there is some indication that the discussion forum has been successful in replicating the sense of scholarly community and improving the level of reflection that would occur in face to face classes. At the end of the final week of semester, a total of 829 posts had been made by the 36 students enrolled in the subject, an average of 23 posts per student. Students consider the forum to be a way to talk about problems in their placement, make friends and develop a support network. They have also demonstrated that they have taken away valuable strategies to apply in the workplace, both as a result of the online activities and of the ensuing discussion. One student commented on the forum 'I think this discussion forum is a great way for anyone with problems to talk it out and hopefully make friends so that when we are working in a law firm we have a support system around us. ☺'

Students gave well-considered and detailed responses to online activities and readings completed by them. In particular in a forum relating to legal professional ethics, where students were initially unsure how to resolve to ethical conflicts they were able to take time to complete further reading and to reflect upon their own values before making a post to the forum.

Conclusion

This paper has considered the literature relating to assessment by the use of asynchronous online discussions, particularly in the context of workplace learning in law. It has been demonstrated that online discussions can be a valuable way of assessing for learning. However, discussion forums need to be carefully structured and managed to ensure that they result in the deep level of collaborative reflection that is desired. The application of the identified principles to the asynchronous online discussion forum in LWB421 will be evaluated at the end of semester by a survey of students and an analysis of the level of reflection evidenced by the contributions.

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