The Experience of Collaborative Assessment in e-Learning

DAVID MCCONNELL
School of Education, University of Sheffield

ABSTRACT This paper examines the various ways in which students talk about their experience and perceptions of collaborative review and assessment as it occurs in e-learning environments. Collaborative review and assessment involves the student, their peers and tutor in thoughtful and critical examination of each student’s course work. The process involves two stages: review and discussion of the student’s work with a view to bringing different critical yet supportive perspectives to the work. This is followed by the use of two sets of criteria to make judgements on the student’s work: one set provided by the student, the other by the tutor. The purpose of collaborative assessment is to foster a learning approach to assessment and to develop a shared power relationship with students. From analysis of face-to-face interviews, examination of e-learning discussions and student-completed questionnaires, a set of analytic categories was built describing the learners’ experiences of collaborative e-assessment. These categories are: (1) the appropriateness of collaborative assessment; (2) collaborative assessment as a learning event; and (3) the focus for assessment. The paper focuses on analysing and discussing these categories of experience. The research shows that a positive social climate is necessary in developing and sustaining collaborative assessment and that this form of assessment helps students to reduce dependence on lecturers as the only or major source of judgement about the quality of learning. Students develop skill and know-how about self- and peer assessment and see themselves as competent in making judgements about their own and each other’s work, which are surely good lifelong learning skills.

Introduction

The case for involving students in some form of self- and peer assessment in higher education is well established in the literature (see, for example, Boud, 1995, 2000; Boyd & Cowan, 1985; Broadfoot, 1996; Falchikov & Goldfinch, 2000; Heron, 1981; McConnell, 1999, 2000; McDowell & Sambell, 1999; Shafriri, 1999; Somerville, 1993; Stefani, 1998; Stephenson & Weil, 1992). Student involvement in their own assessment is an important part of the preparation for life and work. Although by no means universal, there is now a wider belief in the educational and social benefits of self- and peer assessment.

Some form of self-assessment is also part of a philosophy of, or approach to,
education that seeks to work with students as self-managing people who can take responsibility for their own learning:

I have long argued that an educated person is an aware, self-determining person, in the sense of being able to set objectives, to formulate standards of excellence for the work that realises these objectives, to assess work done in the light of those standards, and to be able to modify the objectives, the standards or the work programme in the light of experience and action; and all this in discussion and consultation with other relevant persons. If this is indeed a valid notion of what an educated person is, then it is clear that the educational process in all our main institutions of higher education does not prepare students to acquire such self-determining competence. For staff unilaterally determine student learning objectives, student work programmes, student assessment criteria, and unilaterally do the assessment of the students’ work. (Heron, 1981)

What effects, if any, do self- and peer assessment have on students’ approaches to learning? We know from research into the effects of assessment on learning that many students are cue seekers: they actively seek out information about how they are to be assessed and try to find out about aspects of the course which are likely to be addressed in the assessment process. This knowledge helps guide them in what they focus their learning on, and often determines what they study towards for the course assessment (Miller & Parlett, 1974). Indeed, it has been argued that students’ views of university life are largely governed by what they think they will be assessed on (Becker et al., 1968).

The importance of this in situations where students work as collaborative and co-operative learners and where they are involved in collaborative assessment seems clear. If students are actively involved in decisions about how to learn and what to learn and why they are learning, and are also actively involved in decisions about criteria for assessment and the process of judging their own and others’ work, then their relationship to their studies will probably be qualitatively different from those students who are treated as recipients of teaching and who are the object of others’ unilateral assessment. Because students in co-operative and collaborative learning situations make important decisions about their learning and assessment, the need for them to seek cues from staff about assessment or seek to find ways of “playing” the system will be reduced. They determine the system themselves, in negotiation with other students and staff.

Ramsden points to the way in which assessment processes inform students of what is important to learn and what is not:

The evaluation process provides a signal to students about the kind of learning they are expected to carry out; they adapt by choosing strategies that will apparently maximise success. (Ramsden, 1988)

In collaborative assessment environments the expectation is for students to engage in helping each other develop, review and assess each other’s course work. It is the collaborative learning and assessment process itself that signals to the students what
form of learning is expected (McConnell, 2000). It can therefore be anticipated that collaborative assessment will be a central process in collaborative e-learning and will influence participants’ relationships to learning. In such a context it might be expected that students adapt to a learning situation that requires them to share, discuss, explore and support.

How does this work in practice, and what do students think about this form of assessment? In what follows I hope to answer these questions. The focus of this paper is on students’ experiences and perceptions of collaborative assessment as it occurs in e-learning environments.

The study adds to the existing literature in two important ways:

- the focus is on collaborative assessment in distributed groups, and
- the collaborative assessment process is carried out entirely via the Web: there are no face-to-face meetings.

Background

The University of Sheffield MEd in collaborative e-learning is a 2 year part-time continuing professional education course. Its purpose is to help students understand the complexity of learning and teaching via the Internet. As well as gaining knowledge from studying the literature on e-learning, a great deal of the students’ knowledge is gained from experiential collaborative and co-operative group work in the e-learning environment itself.

Collaborative assessment is a central learning process on the course. Although assessment has the dual function of certification and assessment of learning outcomes, we wish also to emphasise the potential of assessment as a central learning process, as part of the “content” of the course. We do this by building-in time for collaborative review and assessment and believe that it is time well spent.

However, this is such a novel form of assessment that we need to have some understanding of how it is experienced. Understanding students’ experiences of collaborative assessment in e-learning is important in itself: it should help us understand something about who the students are and about their identity. More practically, perhaps, it should also help us develop and improve the collaborative assessment process.

The course is run entirely via the Internet using Web-CT, a Web-based course authoring and electronic communications system. There are no face-to-face meetings. The MEd is a global program, with students from the United Kingdom, Eire, mainland Europe, South Africa, Hong Kong, Singapore, Japan and Australia. It is run on a learning community or “community of practice” (Lave & Wenger, 1991; Wenger, 1998) philosophy and is designed to ensure that participants and tutors engage in meaningful practices through co-operative and collaborative learning processes, and to ensure that knowledge developed is demonstrated in the context of the participant’s professional practice. We develop a climate where commenting on each other’s work, and giving and receiving feedback is an integrated and normal part of the community’s day-to-day work.
The place of the tutor in this learning community is complex. The tutor exists between the boundary of the institution, which s/he represents, and that of the learning community. In the learning community the tutor adopts the “role” of tutor-participant. This implies a sharing of power with the course participants. The tutor has to work at ensuring that power is transferred to participants in the community, who in turn have to come to trust the tutor in that process. Power is shared along a series of dimensions such as decision making about the focus of assignments, design of learning events, and assessment. Tutors and participants relate in highly personal ways, and this relationship shapes a great deal of the learning on this course (McConnell, 2000).

The level and quality of interaction, discussion and collaboration is very high. Some researchers have suggested that this medium is impersonal (e.g. Keisler, 1992; Wegerif, 1998). Others report finding it difficult to engage some students in meaningful and productive work in these environments (Jones, 1998, 2000; Ragoonaden & Bordeleau, 2000; Tansley & Bryson, 2000), or find that virtual learning environments make no contribution to learning (Veen et al., 1998). This is not our experience. It is true that textual communication can be misinterpreted and that care, attention and sensitivity have to be given to them. However, when time and attention are given to a course design that develops and maintains a learning community, the quality of the experience can be very satisfying and very effective (McConnell, 2000).

Students’ work on the course takes place in a series of four e-workshops on different themes, culminating in a research dissertation e-workshop in year 2.¹

Collaborative Assessment

We use several methods to facilitate collaborative assessment. The method discussed here involves course participants, their peers and a tutor in a process where they review each participant’s assignment. They use a set of criteria provided by the participant after they have produced the assignment but before the review and assessment process and a set provided by the tutor at the beginning of the workshop. These guide them through the assessment process.

This takes place within a wider collaborative and co-operative learning environment where participants work together in groups of about 5–7 participants and a tutor. They explore their practice as it relates to e-learning and produce a series of group and individual products which are the focus for collaborative assessment.

Each group works in Web-CT asynchronous forums and synchronous chat rooms. Each e-workshop lasts for about 3 months, or 7 months during the research dissertation period. In addition there are other virtual synchronous and asynchronous spaces for the whole course cohort to meet, discuss issues and plan their course work. Each student must pass all workshop assignments and the dissertation in order to be awarded the MEd.

The process of developing skill and understanding about collaborative self- and peer assessment has to take place in a wider supportive learning context. It would be highly unlikely for us to be able to introduce these processes into an e-learning
course that does not function as a co-operative learning community. Learners and tutors have to develop a sense of trust and a common purpose, a belief that they are a community of learners, before they are likely to believe that self- and peer assessment will really be taken seriously and will work effectively. They are, after all, going to “reveal” themselves in this process (McConnell, 2000).

The process of collaborative e-assessment typically involves:

- An extended period of negotiation by each participant with peers and tutor about the focus of the assignment topic, from an initial tentative idea to a fully confirmed topic. Each participant offers suggestions on what they would like to do for their assignment. Other participants and the tutor offer comment, and a dialogue evolves.
- A period of asynchronous discussion of issues, problems and viewpoints surrounding the topic. This usually moves between short, exploratory entries to more fully formed entries which focus on substantive conceptual and methodological issues.
- The sharing of resources related to the topic, such as research papers, useful Website addresses; personal and professional experiences; ideas.
- Submission of incomplete drafts of the assignment, followed by self–peer–tutor reviews.
- Submission of the final paper (e.g. as a Word file), which is subjected to collaborative assessment involving her/himself, two peers and the tutor. Criteria for assessment are mutually agreed. When all parties agree that the criteria have been met, a Pass is awarded. Disagreements are discussed by the group until resolved (McConnell, 1999). If they cannot be resolved the assignment can be submitted to the external examiner, though this has never been necessary.²
- Starting the review process by giving and receiving feedback. The exact way in which this occurs depends largely on the members of the group. Sometimes the writer of the paper begins a review of their work, mentioning those aspects which they see as being in need of clarification or modification, or talking about some of the learning issues that emerged for them in writing the paper. Sometimes the writer asks for others to start the review.
- Assessing each assignment on a pass/refer/fail basis (self/peer/tutor assessment) with reference to the participant’s set of criteria and the set supplied at the beginning of the e-workshop by the tutor.

Throughout the whole process we endeavour to develop and maintain a shared power relationship between the tutors and course participants. The review and assessment process is meant to be truly open and collaborative, with the tutor having no more or no less a role to play than the course participants. We strive to work in negotiation with course participants and not use our power of assessment unilaterally (McConnell, 1999).

The collaborative review and assessment process is supported by the groupware available (Lotus Notes or Web-CT) and the social scaffolding of the groups’ learning processes.
Methodological Approach

In preparing this paper I have drawn on three sources of research data relating to the experiences of course participants:

(1) Face-to-face interviews with participants about their experience of the course. These were conducted by me after the participants had completed the course. They took the form of an open-ended discussion between and the participants and me about their (and at times, my own) experience of networked learning. They were audio recorded and later transcribed for analysis.

(2) Examination of e-learning transcripts in which participants discussed the collaborative learning and assessment process

(3) Results of a questionnaire distributed to over 40 students from two separate cohorts who had experienced the same assessment system, in which they responded to questions about their experience of collaborative assessment.

These three forms of data provide a degree of triangulation (Patton, 1990, p. 464).

In describing learners’ experiences of collaborative e-assessment, I am trying to describe the ways in which they experience and perceive the phenomenon. In this respect, it has much in common with the phenomenographic approach described by Richardson (1999), and of that described by Asensio et al. (2000) in their research into the experience of online learning. In addition, the research also draws on ethnographic approaches. The analysis of the online work (through the use of transcriptions of asynchronous and synchronous discussions) is akin to what an ethnographer would be doing, with a view to explaining “what is going on” as the groups carry out their collaborative assessments.

From a grounded theory approach to the analysis of the data (Glaser & Strauss, 1968; Straus & Corbin, 1990) three broad analytic categories were built under which the experiences of course participants can be considered:

- the appropriateness of collaborative assessment;
- collaborative assessment as a learning event; and
- the focus for assessment.

Each category has sub-divisions, as shown in Figure 1.

Throughout what follows I have changed all names to ensure anonymity. I have chosen not to edit any of the e-discussion quotations. They are presented exactly as they appear in the e-forums.

Learners’ Experiences and Perceptions of Collaborative Assessment

The Appropriateness of Collaborative Assessment

The role of the tutor. Students involved in collaborative assessment agree unanimously (94%) that the tutor alone should not be the one to assess their course work.

Although participants are quick to appreciate the benefits of self- and peer
assessments, they also value the special perspective which the tutor brings to the process:

... The tutors are useful but its more useful in a way of actually showing that your work is I think—the only word to use is rigorous enough—and that your use of theory is appropriate and that you are not missing bits ... because of course you are working in fragments of time ... could miss a huge area which is essential. (Interview quote)

Allowing themselves to become free of the constant need for unilateral tutor validation indicates the development of new relationships with the “authority” of tutors:

It’s been an “eye opener” for me about how much I was stuck in a traditional model of assessment. In the past it was almost as if I couldn’t quite believe an assignment had passed until I got it back from a tutor with a big red “PASS” stamp on it. I think it says a lot about my own need for external validation of work. (e-Discussion quote)

Despite the wishes of the tutors to dismantle the major power differences and relations between themselves and the participants, some participants do still look to the tutor to take a firmer stance in the assessment process than they might take:

I think saying the really hard things is the responsibility of the tutor, because despite the fact that I know how keen you were on dismantling
those differences, the bottom is not possible, and there were times when I thought “no I want tutor intervention here”. (Interview quote)

*Appropriateness of the medium.* The use of computer-mediated communications in education has been shown to nurture student involvement and initiative (McComb, 1994), lead to higher commitment and higher critical thinking (Alavi, 1995) and generate more ideas than those using face-to-face options (Olaniran *et al.*, 1996). What are the merits of the medium compared with conventional face-to-face environments for conducting collaborative assessment?

Carrying out this form of assessment can be a complex process no matter what the medium. Reading and reviewing others’ work involves offering comments and insights on it and addressing and commenting on the appropriateness and degree of achievement of the assessment criteria (those of the learner him/herself, and those given by the tutor). All this requires a high degree of online communication skill, and an equally high level of supportive, yet critical, judgement. It might be assumed that carrying it out in an e-learning medium, where participants and tutors cannot see each other, and where all communications are reduced to text, could prove to be a major barrier to its effective execution. As we shall see below, it is not problem free; but the overwhelming perception of the students surveyed (82%) is that it is not too complex to carry out online. This is an important outcome. It indicates that despite the narrowness of the communication medium and all the missing social cues, it is still possible to participate in a process that can be, at worse, damaging if not carried out sensitively.

In fact, the e-learning medium seems to add important dimensions to the collaborative assessment process: asynchronous communication supports reflective learning, allowing students time to read and reflect on what is going on in their learning sets, and to contribute thoughtful comments (McConnell, 1999). The textual nature of the medium also allows direct manipulation of communications by incorporating sections of each other’s text into their responses, permitting direct links to what has been said and using it to build an argument or summarise a series of different points by highlighting who has said what.

The comments and reviews which form the basis of the collaborative assessment process are embedded in threaded discussions which can be reread and manipulated in various ways (e.g. to find out who said what about a particular topic). Participants can see the relevance of this compared with similar verbal face-to-face processes.

In addition, in an e-learning environment anyone who has been away from the group’s work for a period of time can easily catch up on the proceedings, and continue their contributions in the knowledge that they know what has been happening.

Using a system that logs everything you “say” and makes that available for anyone to revisit and remind you about may, however, be somewhat intimidating for newcomers to this form of learning. It is important to ensure that participants feel safe in doing this.
Collaborative Assessment as a Learning Event

From Unilateral to Collaborative Assessment

A major objective of collaborative self/peer/tutor assessment is to change the focus of assessment from unilateral tutor assessment (which is usually a summative evaluation, after the event) into a formative learning event. This allows students to learn from the event itself and incorporate what is learned directly into the piece of work they are currently working on. This takes the form of a review of the assignment which the learner is currently writing, in which peers and tutor thoughtfully read the piece and comment on it in ways which help the learner gain alternative insights into it.

Having a definite audience can make all the difference:

I really, really like the cooperative stuff. Partly because there was a definite feel of audience, do you know what I mean? This was stuff that genuinely was going to be read and reflected upon. Some people I felt were … very thorough and that was really helpful. To think that someone has not only read what you have written but thought about it, it becomes really valuable … that’s the effect of peer reviewers on me and cooperative learning on me, the way other people contributed, the way other people could dismantle your thinking for you and assist in your reflection. (Interview quote)

These insights are used to help the learner rethink the piece and go on to editing and rewriting it before finally submitting it as a finished assignment. Nearly all students (94%) think that collaborative assessment is a learning event as much as an assessment process.

At the centre of this form of assessment is the learner her/himself. The collaborative assessment process focuses on them and the assignment they are writing; it is for their benefit. As well as peer and tutor reviews of their work, the learner also reviews it and has to assess for her/himself what they have learned:

I think the assessment has been a breath of fresh air. For me it was just what I needed. It was nice to experience a situation where you weren’t getting graded … For me as an individual it was nice not to be graded because it meant that you had to assess your own learning and that was what was important—what you felt you had learned not what somebody who was marking your work felt you had learned … I knew what I had learned. I think that has been one of the strong features of this course, the fact that as far as I was concerned I had to look at what I had learned during that workshop and that was good. (Interview quote)

Enjoyment, Frankness, Anxiety and Tension

Collaborative assessment processes appear to be positive, enjoyable events. Many
participants spontaneously talk about how pleasurable it is to have their work read and assessed by peers:

... we were required to mutually assess ... Again I was worried about this, but I feel it turned out to be an interesting and useful experience. I generally hate being assessed—but found it not to be a problem in this case—in fact I rather enjoyed it! (e-Discussion quote)

Although the vast majority of students say they enjoy the collaborative assessment process, it has to be noted that it can be an uncomfortable event. Students are not unaware of the potential of a process that puts them and their work “on the line” to “go wrong” or to cause pain and anxiety:

It was good to get feedback from your peers because I think people were genuinely truthful but in a sort of positive sort of way and it was again, there is a skill to that and I think everybody I have worked with handled it really well because it could have gone drastically wrong. (Interview quote)

As this student observed, the process is generally very positive. The comments that participants make of each other’s work are generally insightful and to the point.

But it can happen that they are sometimes unwilling to offer really critical comment in case it offends. One person said that when he felt a peer’s assignment was not very good, he sometimes felt “incredibly uncomfortable” in giving feedback. He coped with this by trying to be ultra positive (“I tried to make really constructive comments, and that stretched me”). But he felt he was being dishonest:

Well the dishonesty was not actually turning round and saying what I would want someone to say to me: this [piece of work] isn’t good enough. (Interview quote)

So in this case he avoided saying that the piece of work was not “good enough” by only providing positive, supportive comments. Throughout the course, this particular participant had voiced concern about the quality and “MEd Level” of his own work: he was never sure that he was working at a Master’s degree level. One way for him to learn about “quality” and standards was to compare his own work with that of his peers:

... if I compare somebody’s work to mine and I find it a lot worse then I think they have got a real problem because I’m assuming that I’m down there in your C’s and D’s ... that’s to do with me, that’s a “Graham thing”. (Interview quote)

Another participant believed that the comments given by some are not always as frank as they might be. She thought that it is impossible to offer “correct” views on someone else’s work. There are no right and wrong ways of writing or doing something: it is all a matter of interpretation. She felt, therefore, that it was sometimes “impossible” actually to provide comment on someone’s work. This, in my experience, is an extreme case. But it does perhaps point to the need for
participants to develop understandings of how to go about reviewing and assessing their peers’ work, a point to which I will return below.

All of this is not to suggest that the comments given and received are not beneficial, nor to suggest that they are never critical. It does highlight, however, the need to be careful in wording comments in an e-learning medium. Those involved have spent considerable time and energy developing positive relationships online—throughout the process they have been supporting each other as a learning community—and perhaps at the time of assessment this is potentially in danger of being damaged if they are not sensitive to each other’s concerns and needs.

It is a fine balance between continuing to work in the supportive learning environment that they have been cultivating over some months, and pushing the edges of this in order to offer critical, insightful and valuable feedback. Neither discounts the other, but getting it right is a skill that requires considerable insight into the nature of the collaborative assessment process itself, and this is something that students (and indeed tutors) usually have to develop over time.

Anxiety, pain and tension in a learning community can be important for the development of its members, and for the development of the community itself (McConnell, 2000, 2001). Helping yourself (education) and helping others (therapy) are important supportive elements of a third dimension, that of development (Pedler, 1981). Development in the context of a learning community (and e-learning communities are no different) suggests “a movement away from the individualistic and personal towards the altruistic and transpersonal” (Pedler, 1981). For this to occur, a real meeting of minds and personalities has to take place. Reconciliation and coexistence are sources of reflection, learning and development (Wenger, 1998). They require to be worked on by the community members. The fact that participants comment on this is evidence that this medium is not barren and sterile, as some commentators suggest. At least in the context of our use of it, it is a place of considerable social and intellectual complexity.

Responsibility to Others and Submission of Assignments

The process of collaborative review and assessment has to be scheduled into the course timetable. A set period of time is devoted to it. We usually timetable 3 weeks for it at the end of each workshop and 4 weeks for the dissertation. Each participant has a personal responsibility to ensure that their own assignment is submitted to the group in time for the review to take place. And each reviewer has a similar responsibility to ensure that they read and comment on their peer’s work sufficiently early on in the period to allow discussion to take place, and some rewriting if that is required.

Inevitably it sometimes happens that a participant is not able to submit on time (often due to the intervention of demands from their paid work). In an adult learning context it is advisable to be reasonably flexible about this, permitting late submissions. But this is an issue for the learning set to address, as late submissions affect everyone, submitter and reviewers alike. Submitting late holds up the review process. Participants are busy people, and in order to meet their commitments they
usually put aside time for these activities, and sometimes cannot work outside these scheduled times. When someone is late submitting, especially when they have not let their reviewers know they will be late, annoyance can ensue. Participants are usually good hearted about the flexibility required in the process. They know that collaborative learning survives on a reciprocal learning relationship (McConnell, 2000). If this is not forthcoming, then relationships can be damaged and the goodwill associated with this form of learning can be undermined.

The Development of Collaborative Assessment Skills

Assessing your peers in e-learning environments is a skill that is likely to require some development. Participants are sometimes anxious about doing this, and early on in the process often feel they do not have the necessary skills and insights to carry it out effectively. Participants have different relationships to the concept, and participate in the process from different perspectives:

Maybe James could have critiqued me a little more, I don’t know. I mean there is a sort of relationship part and there is also how you see that sort of process and that is developmental. But there are two aspects of development. Development in terms of just critical thinking and commenting skills and peer review skills. There is an aspect of getting to be comfortable with each other as a group and the more comfortable you are as you are going through the programme, the more easy you find it to be quite fair. (Interview quote)

Early experiences can have a profound effect on the reviewer:

... I was remembering the first workshop and I reviewed Adrian’s [assignment] ... and I did quite a lengthy critique on it and afterwards I felt really, really bad. Yes I felt bad because I had seen what other people had written about other people’s work and I had been ... almost as though I was marking a student. (Participant quote)

In the first review period, this particular participant approached the assessment of his peers as if they were students taking one of his courses in his own university, and not as co-learners in a learning community. It was only after the exercise was completed, and he had read the reviews of other participants, that he realised how inappropriate this was in this context. It became clear to him that peer reviews needed to be carried out within the context of the wider social learning relationships being fostered on the course where he was required to relate to his peers as co-learners rather than distant “students”. He said he had been “a bit extreme” in that first review and “backed off” in later ones.

Access to Others’ Learning

From the viewpoint of the learner, perhaps the most beneficial outcome of collaborative assessment—as a learning event—is access to other students’ work, and the
insights into the processes of learning and writing which this affords. Students say they learn a great deal about other participants’ work through the collaborative assessment processes and through the sharing of course assignments. This in turn helps them make judgements about their own work: its standards, the quality of the content, the quality of presentation, the ways in which they make reference to literature and the ways in which literature can be used to support arguments. They have access to the ways in which their peers think and how they approach the examination of relevant course issues and problems. Additionally, they have access to the examination of “practice” and the ways in which their peers approach their professional practice. Because all of this is highly contextualised and grounded, it helps students go beyond the literature and begin to question it in relation to each other’s practice and circumstances.

Alongside the development of skill in reviewing and assessing, participants are also developing new skills in learning and writing. The opportunity to reflect on their own writing over time has clear beneficial effects:

for me this is the big thing that has come out of it [ie peer reviews]. From workshop 1 to workshop 4 the fact that I have been able in a way to be far more reflective, far more prepared to be able to look at things from a different perspective, in as much that my writing style has changed and I think my view on it has changed. I think my view on it has changed by working with other people whose writing styles are quite different. Whose opinions are different and the way they look at things are different. (Interview quote)

He feels it has been the challenge to be more open about his approach to his learning and writing that has helped him develop. As an engineer he was used to writing in a particular, “objective” style. He now feels he would write the upcoming dissertation in a completely new and different way:

I am convinced that the dissertation will be totally different from anything that I would normally write, in a way that I would be prepared to write. I think this, and I would like to do this, whereas before I would have to write in a very cool, detached view, very objective. I know now I don’t have to worry about that … And I think that has directly come out of the discussions and debates that we have had online and in fact even some of the more kind of heated debates that we have had, the middle of workshop 1, about what we were going to do. (Interview quote)

Motivation to Learn

Knowing that their peers are going to read their assignments appears to influence participants’ relationship to the production of the assignment. They are motivated by the knowledge that there is an audience:

So the learning has certainly been enhanced for me because of the collaborative element, because of the peer group, not demands exactly but the
challenge of knowing that your peers are going to be looking at your work has actually been more of a spur to me to make as much an effort as I can. And I think a traditional course where the tutor reads through, gives me a grade, puts a few red pen marks throughout. I don’t necessarily agree with what he or she has said. So the peer review aspect of the course I think has been quite definitely a good influence on motivating me to try my hardest because I didn’t want to let them down. I didn’t want to let myself down but I didn’t want to let them down either. (Interview quote)

Embedding assessment into the overall learning process of an e-learning course signals to the students that learning and assessment should go hand in hand. This seems to be appreciated by those involved:

... the assessment process is a lot more integrated into the whole learning process. Instead of being something “out there” and threatening, it can actually be a supportive and motivating process. For example, having peers and tutor bother to take the time to go through your work bit-by-bit and comment on it is a very positive experience—it certainly motivated me to make changes and do further reading, and I’m sure this resulted in a better piece of work than if I’d just handed in a final draft for marking. (Interview quote)

This kind of peer support and assessment also works to help participants extend their academic skills and abilities. It seems that sharing their work in this way and reviewing each other’s assignments motivates them to extend their normal approaches to learning and, for some, the openness of collaborative assessment helps them become more sophisticated in their thinking.

**Intrinsic versus Extrinsic Validation of Learning**

Collaborative assessment methods seem to challenge learners to develop approaches to learning which are validated by intrinsic criteria, rather than solely by the more usual external ones which underpin most traditional forms of assessment:

I’ve set myself a personal goal to get better at self-assessment. I want to actively work on reducing my need for external validation of work and improve in being able to judge the quality of my own work. (e-Discussion quote)

This participant said she had previously only felt satisfied when a teacher passed her work and gave it approval. Now she is much more relaxed about the need for this as she has understood the benefits of self-assessment.

This is a feeling shared by all participants. It would be possible for participants to do the minimum and go through the act of participating in this form of learning and assessment. But the experience of taking part in collaborative assessment helps them understand and appreciate the benefits of managing their own learning, making personal choices about what to learn and how to organise it:
... getting out of that straight jacket traditional ways of assessing people. It was personal assessment. It was important to me because I knew what I had learned or hadn’t learned—that is what it was about. You could have kidded yourself as well. I suppose the opportunity was there that because you weren’t getting formal grades then I suppose you could have done minimum at the workshop. Just enough to satisfy you that you had met the course requirement. But that never happened because you knew that what you had learned was the best effort and I think that was really a positive aspect, you decided what you had learned. (Interview quote)

This kind of personal knowledge is surely important for the lifelong ability to judge one’s own learning.

**The Focus for Assessment**

The issue of what to assess in collaborative learning environments causes some debate amongst students.

*Should Participation be Assessed?*

Many students (59%) think that their participation in the group work should also contribute to the overall assessment of their course work.

In these circumstances we might ask why participation in the process of the collaborative work itself cannot be assessed. Some participants correctly point out that a great deal of their time, thought and energy goes into the procedural work of the group, and this should be rewarded, like anything else they do. It might also be expected that an assessment weighting for maintenance of the collaborative learning environment might reduce any social loafing and free riding (Goldfinch, 1994; Michaelsen et al., 1982).

This raises a question about collaborative learning generally: what criteria, if any, can we apply to help define the nature and extent of participation that is necessary for us to be able to say that “collaborative” learning is occurring? Students say that, even if they are not “participating”, they learn a great deal by reading others’ comments and responses. The incidence of vicarious learning has been shown to have useful learning potential in computer-mediated communication environments (McKendree et al., 1998). But in a collaborative learning environment, where participation is expected and necessary for the group work to take place, what is the role and limits of vicarious learning? Can someone offer comment and response infrequently and still be “contributing” to the work of the group? At what point do we say that the level of contribution is so minimal as not to be sufficient or acceptable? When course tutors define the level of necessary contribution, for example by saying how many times each student has to logon per week; or by indicating how many comments students have to make each week—some students inevitably use this as a minimum criterion and only participate to this level and not beyond it. By defining it, you can encourage a mechanistic relationship with the phenomenon.
Is all participation the same, and is participation always a “good” thing? In a community of learners, where critical reflection on the issues being investigated and discussed is encouraged, what are the limits of participation? We do not always know what is going on when a student is observing. It is likely that they are as cognitively involved as other students (McKendree et al., 1998).

If this is the case and non-actively participating students are engaged in some form of knowledge construction, then they are clearly benefiting from the experience. How acceptable this is to other active participants is the issue. I am sure that in an adult learning context most students would support non-active participation from time to time. However, it is unlikely that it would be accepted as a sustained form of participation.

Assessing Participation by Sharing Perceptions of Participation

Collaborative learning and assessment relies on reciprocation: each person involved has to give to their peers in addition to receiving from them. Without this reciprocal relationship, goodwill diminishes and competition is likely to emerge (Axelrod, 1990; McConnell, 2000).

The place of individual accountability in the group collaborative work needs to be addressed by the community (tutors and participants). And it is the responsibility of the group to look after itself and its members and to find a level of performance (and therefore also individual accountability) which they feel is acceptable to them (McConnell, 2000; McGrath, 1990). When learning groups are working with such an open contract, the degree to which it successfully works out can vary from group to group.

In a self-managed learning environment, one way of approaching the issue of participation (and accountability to the group) is to ask each group to manage the process themselves. We are currently involving our students in forms of self- and peer assessment of individual participation, which is proving challenging for them but also surprisingly useful too. We require each participant to review their contribution to the groups’ work against a set of criteria, and then have their peers and tutor also present their review of that person’s contribution against the criteria. The various reviews of those involved are shared within the group and become the basis for a discussion about the nature of participation. This open, reflective process helps each member communicate why they participated in the ways they did, and helps other members “hear” those explanations while also providing their views on the nature of that person’s participation. This has the beneficial effect of forcing discussion of the issue whilst reducing the possibility of a purely negative approach being taken: of people “accusing” each other without knowing the particular background and circumstances of each person.

It also has the benefit of members approaching the issue as a learning event, one from which they can learn about the various ways in which people participate and the reasons for that. From examining each person’s experience of the group work, members can make suggestions about future group work processes, and they can begin to define a set of procedures or protocols—grounded in the experience of real
group work—which suit the various personal needs and requirements of the various members.

Conclusions

Collaborative assessment in e-learning groups is not only possible, it is desirable. It supports the collaborative work of the community. It is not merely a technique to be applied to students, but a value-laden approach to learning and teaching which seeks to involve students in decision making about the assessment process and how to make judgements on their own and each other's learning. It seeks to foster a learning approach to assessment.

This research indicates that students involved in collaborative e-assessment actively and critically reflect on their learning and on the benefits of collaborative assessment. It also shows that these new Web-based electronic learning environments are well placed to support the complexity of this form of assessment. The architecture of e-learning systems such as Lotus Notes and Web-CT supports students in the reflective learning and assessment process.

The outcomes of this research indicate that collaborative review and assessment help students move away from dependence on lecturers as the only or major source of judgement about the quality of learning to a more autonomous and independent situation where each individual develops the experience, know-how and skill to assess their own learning. It is likely that this skill can be transferred to other lifelong learning situations and contexts. Equipping learners with such skills should be a key aspect of the so-called “learning society” (Boud, 2000).

In addition, a move towards a situation where each person comes to appreciate that unilateral assessment can often be based on the personal values of the assessor is surely desirable and necessary. Collaborative assessment strives to bring a variety of viewpoints and values to the assessment process and in doing so helps make the process of assessment more open and accountable (McConnell, 1999).

The openness of the collaborative assessment process is crucial to its success. Whereas most assessment techniques are closed, involving only the student and their teacher, collaborative assessment has to take place in an open environment (cf. Ames, 1992, as quoted in Boud, 2000, who thinks all feedback should be private). As we have seen, learning relationships have to be fostered, and trust developed and maintained in order for collaborative assessment to succeed. The balance between critique and support is very important, yet at times very fragile. Peers and tutors are involved in collaborative learning and support throughout this course. But they are also called on to review and assess each other's work. In a learning community this is not only possible but is desirable. We cannot invite strangers into this community to assess learning. That would endanger the sense of community and undermine the learning relationships that each group has developed. The community “knows” itself and has developed a very strong sense of identity (McConnell, 2002). But it also has to be able to reflect on its work, and be critical of each member’s learning. This, I think, is achieved with some success in our context. As this research has shown, participants are aware of the possibility of deluding themselves. But it is
my experience that the openness of this form of assessment, when carried out thoroughly and conscientiously, maintains a strong check on that.

Overall, this research shows the importance that students attach to learning and assessment processes which take place in a social environment. This is a major theme which is constantly referred to throughout the interviews and the e-discussions. Its importance cannot be over-stated. It is not only a major factor in supporting and motivating distant learners and in helping them overcome feelings of isolation. It also points to the benefits of social co-participation in learning generally, especially in continuing professional development contexts. Not only do adult learners enjoy learning in social settings they are also quick to appreciate the potential benefits afforded by collaboration in the learning and assessment process: no less so in collaborative e-learning environments.

Address for correspondence: David McConnell, School of Education, University of Sheffield, 388 Glossop Road, Sheffield S10 2JN, UK. E-mail: d.mcconnell@sheffield.ac.uk

Acknowledgements

I would like to thank Sarah Mann and Teresa McConlogue, and the three anonymous referees, for their helpful comments on early drafts of the paper. I would also like to thank all the MEd course participants who took part in this research: too many to mention by name, but their co-operation is greatly appreciated.

Notes

1 More details can be found at http://www.shef.ac.uk/uni/projects/csnl/
2 In the United Kingdom, all courses have an external examiner who can be called on to moderate course work.

References


