Discourses Influencing OU Students' Participation In, and Engagement With, Online Collaborative Learning

Thesis

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Discourses influencing OU students' participation in, and engagement with, online collaborative learning

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"We do not ordinarily recognize collaboration as a valid way of learning. Traditionally, indeed, collaboration is considered irresponsible; in the extreme, collaboration is the worst possible academic sin, plagiarism"

(Kenneth Bruffee, 1973)

"I just thought you're on here to learn like everybody else and the tutors know more than everybody else combined so let the tutor answer and then it will be right"

(Open University student, 2013)

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Abstract

Constructivist learning theories have inter-subjectivity at their core, and collaborative learning, where learners work together to build knowledge, is widely considered good pedagogy. In distance learning, collaboration usually occurs online. The Open University includes online collaborative learning across the curriculum, but there is evidence of non-participation, and some students report they do not wish to collaborate.

There is little published data on student attitudes towards collaborative learning. This study investigated Open University students' talk and practice around online collaborative learning, and placed it in the context of learning discourses within the University and elsewhere. It was conducted using focus groups, quantitative analysis of social presence during online collaborative learning activities, discourse analysis of University scholarship texts, and evaluation of policy and practice in UK education.

Identified issues included lack of trust in other students, cost-benefit analysis including expectation of extrinsic reward through assessment, and reluctance to both share knowledge and value knowledge of other students. Collaborative activities were viewed as discrete tasks to be completed, and to demonstrate transferable skills rather than as learning processes. There was little social presence during the activities, which it is argued indicates lack of engagement with the community.

It is suggested that presenting knowledge as bounded within a tightly defined and assessed curriculum conflicts with the exploratory nature of collaborative learning, and can discourage student participation and engagement. There is also conflict between the employability agenda and collaboration as a constructive learning tool. It is recommended that learning collaboratively is presented as an ethos rather than as discrete, formal, product-focused and assessed activities. Group trust and cohesion should be fostered. These recommendations are not limited to the Open University or to online learning.

Glossary

Associate Lecturer (AL)	Interchanges with 'tutor'. ALs are appointed to work on particular modules, with particular sets of students. The AL role is to provide study support and assess coursework for students in their group(s). Support is in the form of phone, e.mail, online forums, online group tutorials and for some modules, face to face group tutorials. ALs are also responsible for monitoring the engagement and progress of their students.
Collaborative Learning activities	This is the term used in this thesis to refer to any formal collaborative activity students are directed to take part in with their fellow students as part of the study and/or assessment strategy of the module.
First Class	A proprietary online e.mail and conferencing system that included discussion forums used by the OU from 1994 to 2010. Use of First Class for discussion forums was replaced by Moodle forums in 2010.
Forums	Online discussion spaces. In the OU these are usually open only to a select group of people. All staff and all undergraduate students have access to a number of these forums.
Modules	The OU undergraduate degree is composed of a number of credit-bearing modules, mostly worth 30 or 60 CAT (Credit Award and Transfer) credits and designated levels 1, 2 or 3 which align with FHEQ (Framework for Higher Education Qualifications) levels 4, 5 and 6 respectively. Each module is individually assessed through coursework and end of module assessment, and both components must be passed in order to pass the module.
Module codes	Modules are labelled according to faculty/unit and level, X123 where X is the faculty/unit, 1 is the level, and 2 and 3 are numbers which historically had universal significance but no longer do. Module codes may include more than one faculty. S=Science, D = Social Science, K = Health and Social Care, T = Technology, M = Maths, A = Arts, E = Education, L = Languages, U = cross faculty. Module codes are supplemented by the year and first month of presentation. Months are labelled A-L for January-

	December respectively. For example S294 2012J refers to a level 2 Science module for which the presentation began in October 2012.
Module Teams	Each module is headed by a Module Team (MT) who manage the module presentations and support the ALs tutoring on that module. The MT is responsible for module content and assessment, and for the support type and hours contributed by ALs.
TMA	Tutor Marked Assignment. A piece of coursework marked by the tutor. Depending on the module assessment strategy, TMAs may be formative-only, threshold formative, or summative. Formative: These assignments are purely for teaching and learning purposes. Threshold formative: students must achieve a minimum overall coursework (usually 40%) mark to pass the module, but any mark above that has no effect on the module grade, and the main purpose of the TMA is for teaching and learning. Summative: Dual purpose assignments, for teaching and learning, but where the overall coursework mark can affect the module grade.
SRPP	Student Research Project Panel. This OU panel evaluates proposals for research that involves student participants and determines which students may be approached with an invitation to take part.
Tutor	This term is used interchangeably with Associate Lecturer.
Tutor Group	The students on a particular module assigned to a particular tutor. On undergraduate modules this is generally 15-25 students. The group will usually share tutorials and a forum, and might work together on collaborative activities.
Tutor Group forum	This is a forum open to students in a particular tutor group. It is where the tutor interacts with their students, students interact with each other, and if a collaborative online activity requires students to talk to each other, it is where the discussion will normally take place.
OCL	Online Collaborative Learning. This is the term used in this thesis to refer to students learning online collaboratively or cooperatively with other students.
ORO	Open Research Online. The publically available repository of all OU authored research outputs.

OU Knowledge Network	An OU internal online space for storing and sharing research outputs and developments.
OU Live	The OU version of the proprietary video conferencing package Blackboard Collaborate which provides an online teaching and learning space
QSR NVivo	A proprietary package designed for storing, manipulating and analysing qualitative data
SEaM	Student Experience on a Module. The current OU end of module questionnaire which invites all students to respond to questions regarding their experience relating to study of a particular module.
Senate	The OU academic governance ruling body.

Thesis Overview

The work reported in this thesis was undertaken in the setting of the Open University (OU) beginning in 2009 and culminating in 2015. The contents of the thesis detail the research setting, my journey through the research, my findings, and the implications of this study both within the OU and in other institutions that use online collaboration as a tool for learning.

The first three chapters together provide scene setting for the inquiry that forms the basis of this study. Chapter 1 presents a picture of online collaborative learning (OCL) as understood by various members of the University at the time this research was initiated, explains my interest in the topic, sets out the need for the research, and maps the research questions. Chapter 2 underscores the position from which I conducted the research, by exploring both my theoretical position on teaching and learning and my thinking towards qualitative discourse analysis. Finally, Chapter 3 positions the study in the light of prior research through a review of the literature concerned with OCL, thus affording the third triangulation that together with the first two chapters firmly anchors this inquiry within the research setting, myself as the researcher, and already established knowledge and thinking.

Having positioned the inquiry in Chapters 1-3, Chapter 4 introduces the actual investigation by detailing the chosen research methodologies. Each methodology is described and critiqued, and the rationale for its choice is discussed. This chapter serves to justify the selection of particular methodologies, and augments the specific method details and critiques provided in the investigative Chapters 5, 7, 8 and 9.

The investigation began with a pilot study consisting of focus groups with students and Associate Lecturers (ALs); this produced a strong set of findings and is reported in full in Chapter 5. The pilot was a stand-alone investigation which, alongside changes to my own involvement with collaborative learning within the OU, increased opportunity to gather data, and new facilities to run synchronous online focus groups, led to a

revisiting and refinement of the original research questions and researcher approach. This change in direction is laid out, explained and justified in Chapter 6. Chapters 5 and 6 are therefore pivotal in underpinning the direction taken through the main investigative stages reported in Chapters 7, 8, 9 and 10.

Chapters 7 to 10 provide the core of the main study. Chapters 7 and 8 together report the dual strands of a case study on collaborative learning activities undertaken by students on two science modules. Student participation and engagement, measured by a quantitative analysis of social presence in online collaborative activities, is considered in Chapter 7. Chapter 8 concerns the second strand of this case study; a qualitative discourse analysis of talk by students who had recently completed the two modules, gathered in online focus group settings. These case study chapters are then complemented by two further investigations reported in Chapters 9 and 10. Chapter 9 contains a quantitative discourse analysis of institution-wide scholarship, policy and practice, whilst Chapter 10 returns to a qualitative analysis, looking at potential external and political influences on internal University discourses of teaching and learning. Although Chapters 9 and 10 set the scene for the case study, this content is explored subsequent to the case study findings to enable discussion back to already-reported student participation in, engagement with, and discourses of collaborative learning.

Chapter 11 acts as a summary of the research, consolidating the conclusions from the investigations described in Chapters 5 and 7-10, and showing how the work reported in these chapters has addressed the research questions stated in Chapter 1. Contributions to knowledge are identified, recommendations are made and future research is suggested.

Finally, in Chapter 12, there is reflection on the entire study reported in this thesis, how it was conducted, challenges encountered, and the influence and implications for me as a researcher, as a teacher employing the tool of online collaborative learning, and on my philosophical position towards teaching and learning.

1. Context and development of research questions

This chapter explains how the need for this study became apparent, places it in the context of learning and teaching at the Open University, and explains the development of the research questions

Introduction

The Open University (OU) is a distance education institution. Although OU students occasionally have the opportunity to meet face to face, almost all their learning is undertaken in physical isolation from their peers and from OU staff. To alleviate this, the OU has for many years provided a conferencing system of online forums where students and their tutors can meet together asynchronously. Increasingly, OU academics have taken advantage of this system to build online collaborative learning activities into their modules. Collaboration between students is viewed in academia as having great value as a learning mode. However, there is some research, and much anecdotal evidence, that OU student participation in these online activities is patchy. There may be many reasons for this lack of engagement with online collaborative learning (OCL) and it is important to capture the student and other voices to help gain an understanding into this phenomenon.

Background to this study

The decision to undertake this research arose from personal experiences when talking and listening to OU students during conversations regarding online collaboration. These discussions took place on the then OU's conferencing system, *First Class*[1],

[1] All students and staff at the Open University have access to an online conferencing system made up forums. The OU Students Association runs its own suite of forums, some of which are specific to particular modules, some are dedicated to different student issues. First Class was a propriety system which has now been replaced by web-based Moodle forums.

within the Open University Student Association (OUSA) support network, and involved students studying a number of different courses in several subject areas. Issues raised by students included other students benefiting from work which was owned by the contributor, plagiarism, being judged by peers, and having other students benefit whilst not contributing anything themselves, not wanting their assessed work to be dependent on other students, and wishing to work alone. Yet many of the participants in these discussions were students who are very active in the OU online environment, in both learning and social contexts, who I had seen taking part in informal collaborative discussions regarding course material, including assessed work. Their reluctance to engage in formal collaboration therefore intrigued me. Some students stated unequivocally that they would not take part in collaborative activities. This raised another issue, because other students said they wanted to collaborate, but were unable to do so because of the lack of participation by their peers.

Concurrent with these conversations between students, the OU's Student Support Review (SSR) was taking place, and here too worry about online collaboration was expressed. Examples of comments from students and staff, taken from a summary within the First Class SSR Evidence forum, respectively, included *"I don't want to do collaboration work with other students, I want to work where and when I can"* and *"[...] My experiences of MK's[2] inability to think from the student's point of view leads me to be fairly pessimistic about activities of this sort"* (Brown, 2006).

Despite the disquiet of some staff, and apparent student reluctance, there is valid justification for including collaboration in OU courses. Firstly, collaborative learning is currently viewed across the world and at all levels of education as good pedagogical practice (Johnson *et al.* 2007). Secondly, the Quality Assurance Agency (QAA) expects undergraduate programmes to include transferable skills such as effective communication and team-working (Quality Assurance Agency, 2001) and OU

[2] Some students and ALs use the term 'MK' to refer to a non-defined 'centralised body' of the University; MK is ostensibly an acronym for Milton Keynes where the campus is based, but is also expanded by some to 'Mission Kontrol'. Here the term is most likely referring to unnamed OU decision-makers, portrayed as both geographically and mentally distant from the students.

undergraduate courses and programmes are mapped to the OU Undergraduate Framework which ensures award learning outcomes meet QAA requirements (COBE, 2005, p. 2). One of the indicators within this framework is "*communicating clearly, effectively and appropriately with others (including interpersonal skills, collaborative and group working)*" (COBE, 2005, p. 6). Collaborative learning therefore has the potential to serve two purposes in the OU, as a pedagogically respected activity that enhances learning, and as a means to both teach and assess communication and interpersonal skills.

The OU Learning and Teaching Strategy 2009-12 (internally published only) states that technologies will be used for students to develop their communicating, collaborating and teamwork skills, and to support learners in building knowledge. In line with this, evidence from OU e-learning audits in 2009 and 2011 (internally published only) showed that online collaborative tools are increasingly used in OU modules. There has been some evaluation of online collaborative learning (OCL) in OU modules. For example between July 2007 and February 2008, 48 case studies of e-learning activities, including twelve related to OCL, were collated as part of a learning design project (Conole, 2008, pp. 209-231). Although lack of participation was mentioned in several of these studies, there does not appear to have been much investigation into the causes of student absence. In the case study for one module, *A215 Creative Writing*[3], it was noted that 8 of 22 students in the cohort being studied were effectively non-participants, and 4 others were only partially present, but the report states that reasons for non-attendance were difficult to discover (A215 Case Study, 2007, Appendix I). The *M883 Software for Business Systems* study mentions student resistance, but does not give figures, although it does conclude that *"Some students still don't seem ready for collaborative work. They still have the perception that a course is what you get in a box, take it out, and work through by yourself"*

[3] Naming convention for OU modules: The letter refers to the faculty or department which presents the module. A = Arts; K = Health & Social Care; D = Social Science; S = Science; E = Education; L = Languages; M = Maths; T = Technology; W = Law; H = Educational Technology. Some modules are jointly produced so contain more than one letter. The first number in the code refers to the level of study. Module codes where the first number is 1,2 or 3 are undergraduate levels 1,2 or 3 which relate to FHEQ levels 4, 5 and 6 respectively. Code 8 is postgraduate, FHEQ level 7.

(M883 Case Study, 2007, Appendix I), an interesting observation which I return to later in this thesis, but for which no evidence was given. The *KE308 Youth Perspectives and Practice* case study did attempt to find further explanation as to why some students absented themselves from the collaborative process, and reports that

> *"Students feel less able to take responsibility for their own mark: those students who put in a lot of effort can feel that others are getting credit for their work, or that the credit they get is dependent on others. Both situations mean keen students could feel they're giving a lot and not getting much back. They are also concerned that if others haven't posted to the conference, do they have all the materials they need for their assignment" (KE308 Case Study, 2007, Appendix I)*

The current situation then is that the OU is moving towards greater inclusion of online collaborative activities, whilst at the same an unknown number of students are not taking part in collaboration. There is no central record of student participation in OCL, and to my knowledge this information is not collated at module level. Yet lack of participation has implications for the students who do not wish to collaborate, for students who want to take part but find the experience diminished by the absence of others, for tutors who need to facilitate the activities, for course writers who need to provide learning opportunities for all students in as equal a manner as possible, and ultimately for the OU itself, if a move towards more OCL results in fewer students registering on courses. The findings of this research should also have implications beyond the OU, for other higher education institutions which are including, or planning to include, online collaboration as part of study strategies for either campus-based or distance learners. It is therefore imperative to gain greater understanding of how and why OU students feel and talk about online collaboration, in order to try to address the apparent disparity between what the OU would like and what students actually do, and to help inform the wider higher education community.

The research questions

When I first became aware of some OU students' reluctance to participate in OCL, I wanted to determine the representativeness of the comments I had seen in *First Class*, and to discover if there were other barriers I had not seen. My preliminary research question was therefore *"what is it about collaborative learning that some learners reject?"* I intended to implement a mixed methods approach, running focus groups which would inform questionnaires consisting of both Likert scale and open ended questions, which could be analysed qualitatively and quantitatively. However, between writing my research proposal and beginning the study, I studied discourse analysis, which considerably altered my approach to textual data. When I began the focus group analysis I became aware the content could yield data far richer than identification of issues to inform a questionnaire. I was already interested in how the representation of knowledge and learning might influence OU students' attitudes towards collaboration, and some of the discourse appeared to be influenced by epistemologies. My experience also changed, in that the modules I began tutoring incorporated collaborative learning in the learning and assessment design, making it possible to undertake a case study of student participation and engagement in OCL, and relate this to student talk. My eventual overarching research question therefore became *"what discourses influence Open University students' participation and engagement in online collaborative learning?"* This encompasses the sub-questions *"what is OU student participation and engagement in collaborative learning?"; "what discourses do OU students make use of when discussing online collaborative learning?"*; *"what are the discourses of online collaborative learning within the University?"* and *"what external discourses influence those of the university"* (figure 1.1).

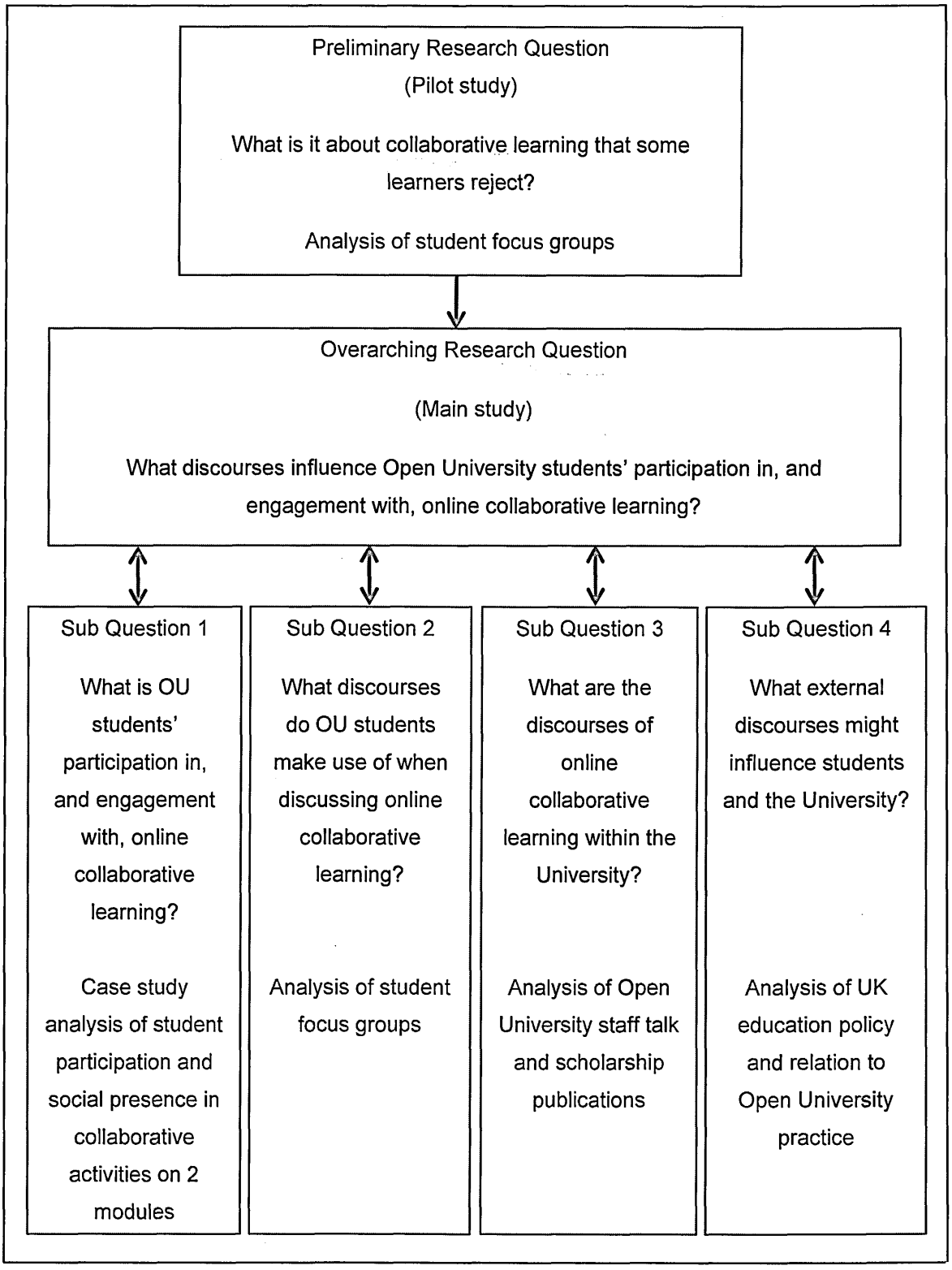


Figure 1.1 A map of the research questions underpinning this study, and how they will be addressed.

2. Theoretical framework

This chapter contains a discussion of my theoretical positions on learning and on discourse, and how this positioning influenced both the research questions and the choice of methodologies.

Introduction

It is important to set out the position of the researcher in any investigation as this inevitably influences both choices and interpretations made during the course of the research and its output. In this study there are two major concepts where I believe it will be helpful, and is in fact is necessary, to clarify and defend my particular perspectives; the first concerns knowledge and learning, the second concerns discourse and its analysis. Beliefs about knowledge and learning are not only important in relation to myself as the researcher, they also need to be elucidated because OCL is associated with learning theory relating to social constructivism, and because all students will have their own view on what knowledge and learning actually are. Definition of discourse and how it might be analysed is important for a very different reason. There is no set definition of discourse, and no set method for its analysis; therefore the approach of the researcher to this discipline must be clearly set out in any study.

Learning theory and epistemology

The constructivist theory of knowledge, whereby individuals build knowledge according to their experiences, is widely accepted by educationalists as a viable theory (Roth, 1999, p. 6). As Doolittle (1997) explains, this theory is rooted in philosophy, and recognizes the importance of social, as well as individual, experience. It is argued that learners need to talk to each other for knowledge construction to take place. Such inter-subjectivity is at the core of both the constructivist and the socio-cultural theories of learning. My position on how we learn is drawn from the constructivist

theories of cognitive constructivism (Piagetian model) and socio-culturalism (Vygotskian model) (Rogoff, 1999 pp. 73-80; Dillenbourg *et al.*, 1996). In the Piagetian model, learners use discourse to examine the ideas of others and thus build on their own interpretation, whilst in the Vygotskian model, learning between peers uses shared cognitive processes and depends on unequal knowledge so that the 'novice' is working in the 'zone of proximal development'. Talk is at the core of both these theories, with the major difference between the two models being the explanation of how shared thinking results in learning. Although both models rely on interaction between participant learners, the first is essentially individualistic, in that the learning occurs within individual minds, whilst the second is wholly intersubjective, in that learning takes place in the communal space between learners (figures 2.1a and 2.1b).

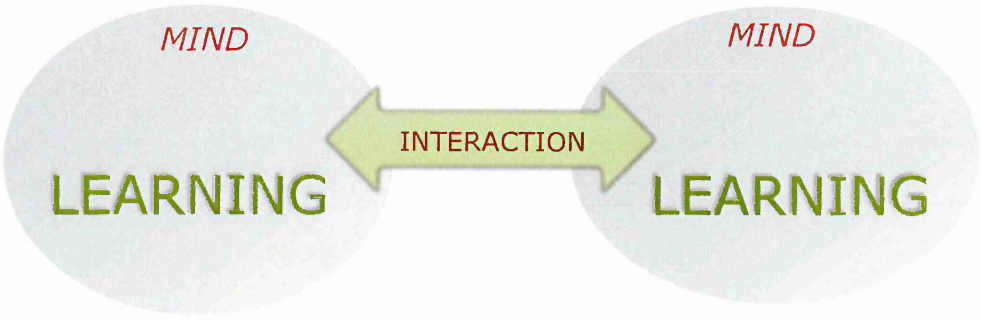


Figure 2.1 (a) The cognitive-constructivist model, where each individual has a mind separate from other minds and from the environment, and where each individual constructs their own meaning through interaction with others.

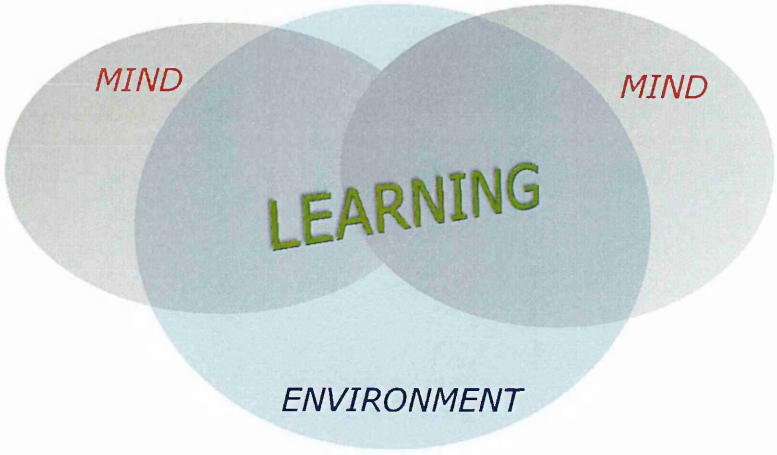


Figure 2.1 (b) The socio-culturalist model, where the mind is not an entity which can be separated from other minds or the environment and where learning takes place in the interactive space.

There are many similarities between these two theories, and whichever cognitive processes might be taking place, as Fung (2004, p.136) summarizes, both are

founded on the belief that "*discourse and articulation are considered to be the basis of learning*". The two models do not need to be viewed as being exclusive or in opposition to each other. It is entirely possible that both operate simultaneously, with dominance of one or the other dependent on the learning situation. Pragmatically, as a teaching and learning practitioner, to make a distinction between the models is unimportant; what matters is that opportunity is created for learners to share a useful space so that learning can take place. It is on this premise that the practice of collaborative learning, where learners work together to accomplish shared goals, is built.

Within this particular research, however, there is a need to further consider the epistemologies that might influence the learning discourses of both myself as a researcher, and OU students' as participants. Suthers (2006) identifies four epistemologies of collaborative learning as viewed by the research community; a knowledge communication epistemology which is based on knowledge transfer and acquisition; an interactionist epistemology based on a 'common ground' metaphor; a participatory epistemology - the participation metaphor; and what Suthers refers to as 'a more radical interactional epistemology', intersubjective learning, which relies on knowledge construction within and between individuals. These epistemologies are also reflected to at least some extent in the three knowledge discourses suggested by van Aalst (2009), knowledge sharing, knowledge construction and knowledge creation.

The knowledge communication epistemology described by Suthers is clearly a non-constructivist position, in which knowledge is perceived as an entity which can be transferred to another party, and where the person acquiring that knowledge does not need to do any work in order to acquire it. In the knowledge sharing discourse described by van Aalst, although the disclosing of knowledge is portrayed as a social practice, knowledge communication is not pictured as leading to any modification of the shared ideas, nor to any reflection on the knowledge by anyone taking part in the sharing (van Aalst, 2009).

In Suthers' common ground epistemology each party contributes knowledge to be shared, leading to greater understanding by all parties, but this metaphor does not account for any joint construction of knowledge. Thus this explanation equates with the cognitive-constructionist model (figure 2.1a), where the building of knowledge takes place within the individual mind, aided by interaction with other learners. The work being done is entirely at the level of the individual, firstly in the sharing of their own knowledge, and secondly in building on that knowledge using information shared by others.

Participatory epistemology is based on the idea that a learner acquires or builds knowledge through peripheral participation in a community of practice (see for example Lave and Wenger, 1999). As Suthers comments, there are several ways in which learning might be viewed as being supported through peripheral participation, it could be passively acquired, it could be built internally by the learner, or it could arise from the interaction of the various participants, that is, be intersubjective, as opposed to individualistic. I find 'participation' the most troublesome of Suthers' metaphors. Although I agree that participation in a community of practice is vital for developing thinking that aligns with that of the community, I do not see it as an explanation for 'how we learn'. What the participation metaphor does highlight, however, is 'community' as the environment in which learning occurs, and this is very relevant in OCL.

In contrast, intersubjective learning epistemology, which Suthers identifies as being wholly interactional, can be equated with the socio-culturalist model (figure 2.1b above), whereby knowledge is created between the participants within the learning space, and is an emergent property of that collaboration. In the words of Suthers (2006, p.317), according to intersubjective epistemology "*learning is not only accomplished through the interaction of the participants, but also consists of these interactions*". Suthers also distinguishes intersubjectivity from the common ground metaphor on the basis that the former allows for varying beliefs to be brought into the

shared space and for these beliefs to remain at variance; that is, disagreement is catered for within the intersubjective epistemology.

The common ground, participatory, and intersubjective learning epistemologies are all reflected in what van Aalst labels the knowledge construction discourse, a discourse in which collaborative learning is portrayed as situated within the group, mediated by social interactions, and acting as an enabler for learners to build on and restructure both their own prior knowledge and that of others in the group. The knowledge creation discourse as described by van Aalst (2009) also reflects intersubjective epistemology, but this third discourse is based around creativity and innovation, the emergence of new products and goals, and although it is collaborative, it seems to move beyond the concepts of knowledge and learning, into the realm of proposition and invention.

The above epistemologies, and discourses in which they are found, or within which they are founded, have been identified because the issue of 'what knowledge is' and how it is acquired/built by individuals is central to this analysis on several counts. Firstly, although these issues might never have been considered by the study participants, both students and educators, they will have been embedded in the education culture which the participants have been subjected to; secondly they will have been, either directly or indirectly, part of the reasoning behind the structure of OCL activities which students are asked to participate in; thirdly the common ground, participatory and intersubjective epistemologies, based on the social constructivist paradigm, are at the root of the theoretical 'Community of Inquiry' model of learning (Garrison, 2007) which is critical to my analysis of student participation and engagement in online collaboration 'in action' (chapter 7); and finally, they will influence the discourse of this thesis simply because I am aware of these epistemologies and discourses, and their sometimes contradictory, sometimes complementary nature.

Discourse and its analysis

The second theoretical framework on which this study is built is that of discourse itself. In particular I base my thinking and my methodologies on the premise that there are discourses of learning. Potter and Wetherell (1987, p.7) suggest that in its widest sense, discourse includes all spoken and written texts, but they do not acknowledge anything outside those texts. Gee however (1990, p. 142) introduces "Discourse with a big 'D'" which he determines is more than stretches of language (described as discourse with a little 'd'); it also includes "saying (writing)–doing-being-valuing-believing combinations"; in other words, discourses are "a way of being in the world" (Gee, 1990, p. 142). Rogers *et al.* (2005) elaborate on this, saying

> *"Big D Discourse refers to both language bits and to the cultural models that are associated with discourses. For instance there is a university Discourse that includes certain language bits that may be particular to academia, and there are also associated ways of thinking, believing and valuing that are connected with membership in the Discourse of the university. [...] The important thing to keep in mind about Discourse (both big and little d) is that they are social and political and have histories of participation that are saturated by power relations" (Rogers et al., 2005, p.370).*

My position is based on this elaboration; I am working from the perspective that a discourse includes both the picture being painted through the language being used and the culture within which the language exists.

In summary, my theoretical framework is that learning depends on interaction between learners, but that there are various epistemologies and discourses associated with OCL that will influence both the construction of collaborative activities and student participation in those activities. My framework also includes the theory that a discourse includes both language and culture, that the existence of a discourse can be determined using various criteria, and that the nature of a discourse can be revealed

through analysis of interpretative repertoires, subject positioning and ideological dilemmas contained within.

3. Collaborative learning, what we know and what we don't know.

This chapter contains a review of the literature concerned with collaborative learning and online collaborative learning

Introduction

Any piece of research needs to be delineated and positioned within currently available knowledge, so that gaps in the knowledge can be identified. In the context of this thesis, the meaning of 'collaborative learning' must also be elucidated, since both 'collaboration' and 'cooperation' have been applied to the concept of students working together to build knowledge. There is a huge amount of research on collaborative learning, including OCL. However, as will be shown in this chapter, very little of this research brings the student voice to the fore.

Definitions

It is helpful to define what is meant by 'collaborative learning' as this in turn defines the parameters of the literature search. There is no universally accepted definition of collaborative learning, and there is no single term used to label learning that might be defined as collaborative. The terms 'collaboration' and 'cooperation' have both been widely used to describe group learning. Much of the literature appears to use these two terms interchangeably, for example in his book *Implementing Computer Supported Cooperative Learning*, McConnell (2000) decides to use the term 'cooperative learning' for both collaborative and cooperative learning (p8) and Johnson *et al.* (2007) attach the keyword 'collaborative learning' to an article on cooperative learning which does not contain the word 'collaborative' anywhere else within its pages. Harasim *et al.* (1995, p.30) offer a description of collaborative learning as "any learning activity that is carried out using peer interaction, evaluation and/or cooperation, with at least some structuring and monitoring by the instructor', whilst

McConnell (2000, p.8) describes cooperative learning as learning which "involves working together on some task or issue in a way that promotes individual learning through processes of collaboration in groups". The distinction here seems to be the presence of the instructor in collaborative learning, and the presence of a task or problem in cooperative learning. Yet McConell's description of cooperative learning includes the word 'collaboration'. Other distinctions between cooperative and collaborative learning have also been made. For example it has been suggested that in computer mediated learning, cooperation requires members of the group to each work on a separate task, a division of the labour, whilst in collaboration there is joint input to a single task (Littleton and Häkkinen, 1999, p.21). Holliman and Scanlon (2006) investigated this particular distinction through Open University students communicating via *First Class*, and concluded they do describe two different means to bring about co-construction of meaning. However, even when treated as separate entities, definitions of the two terms often have a great deal of overlap, and, as Resta and Laferrière (2007) comment, share common elements such as active learning, the teacher as a facilitator, shared experiences of teaching and learning, and small group activities. Dillenbourg (1999, p. 2) suggests the definition of collaborative learning as "a *situation* in which *two or more* people *learn*, or attempt to learn something *together*". Although Dillenbourg believes this broad definition is unsatisfactory because it is open to different interpretations, I would contend that is a strength of the definition. In the introduction to a special edition on collaborative learning (Sweet and Svinicki, 2007), the editors of *Educational Psychology Review* discussed the various labels that have been attached to group work, including collaborative and cooperative learning, peer learning, small group learning and peer tutoring, and concluded there was no need to ask the contributing authors to use any one term over another. In line with such thinking, the position in this thesis is that collaborative learning encompasses all situations where learners are working together in groups to exchange thinking and build shared knowledge. Here, equal attention has been paid to literature regarding cooperative and collaborative learning, and the label 'collaborative learning' is treated as synonymous with 'learning together' or 'shared learning'.

History

The concept of working and learning with peers has a long history in education. In what is perhaps the first recorded instance, philosopher George Jardine employed peer review as a teaching technique in his Glasgow University writing classes during the late 1700s, although this facet of learning collaboratively disappeared when teaching practice was reformed at the end of the 19th century (Gaillet, 1994). These beginnings are often overlooked however, and use of collaboration as a learning method is more widely attributed to problem solving techniques used in medical education in England in the 1950s, in particular the work of Abercrombie, who's research into medical students learning as a group showed that discussion and consensus making led to faster diagnosis than individuals working alone (Bruffee, 1984, pp. 636-7; Bruffee, 1992 pp 30-31).

Compared to face-to-face collaboration, collaboration in distance education is a relatively new enterprise, brought about, according to Resta and Laferrière (2007), by a convergence of new technology tools, interest in constructivist learning theory, and the need for engaging learning environments. Gunawardena and Zittle (1998) attempted to break this relationship down, and conclude it is difficult to determine whether the shift to more learner-centred education has been driven by the technology or by teachers bringing constructive learning theory into their practice. Whatever the drivers, as Motteram and Forrester (2005) assert, computer mediated conferencing (CMC) "offers the potential for active group participation and reconstructs distance learning as a social process and student interaction which has come to be regarded as significant in facilitating and consolidating learning". Gunawardena and Zittle (1998) further explain that, by using constructivist principles, CMC environments can be designed to "provide multiple perspectives and real-world examples, encourage reflection, and support person-to-person and large- and small-group discussion at a distance". However, as Motteram and Forrester (2005) acknowledge, there have been reports of inconvenience, frustration, access difficulties,

information overload, the overly time-consuming nature of asynchronous communication, forced participation and low levels of user involvement.

Researching collaborative learning – the three paradigms of 'effect', 'conditions' and 'interaction'

Early research on collaborative learning focused very much on its usefulness as a tool, leading to a consensus is that it is beneficial to the process of knowledge construction. Johnson and Johnson (1974; 1990), having looked at 323 studies, concluded that "cooperative efforts result in more frequent use of higher-level reasoning strategies, more frequent process gain, and higher performance on subsequent tests" compared to competitive or individualistic learning modes, whilst Panitz (1998) lists 38 benefits of collaborative learning. Specifically within adult education, Johnson *et al.* (2007) report that over 168 studies between 1924 and 1997 collectively demonstrate that cooperation promotes higher individual achievement than both competitive and individualistic learning modes. McConnell (2000) discusses other advantages of collaborative learning in areas such as motivation and attitude to learning, and concludes that such activity helps clarify ideas and concepts, develops critical thinking, provides opportunities to share information and ideas, develops communications skills, provides a context where learners can take control of their own learning, and validates individuals' ideas and ways of thinking (McConnell, 2000 p. 26). Dillenbourg *et al.* (1996) label this focus on effectiveness as a tool, the 'effect' paradigm, and whilst acknowledging that findings have been mainly positive, are slightly critical of the pre and post-test measurement methods which prevail, and maintain there are well documented negative effects which show there must be conditions when collaborative learning is less effective.

Since the value of collaboration is well accepted, but not all studies demonstrate positive outcomes (Dillenbourg *et al.*, 1996), the focus of the research community turned to non-pedagogical factors that might influence shared learning. A second

research approach, labelled by Dillenbourg *et al.* as the 'conditions' paradigm has been to look at the conditions under which collaborative learning is indeed successful. Factors such as group composition and the nature of the collaborative tasks have been examined; see for example Sharan (1980) and Slavin (1996) for comprehensive reviews. Specific to online collaboration, these factors have included design of the online environment (Scardamalia and Bereiter, 1996; Suthers, 2005; Suthers, 2006) and student characteristics such as gender and race (Prinsen *et al.*, 2007a; Prinsen *et al.,* 2007b).

A third approach described by Dillenbourg *et al.* (1996), relating to the 'interaction' paradigm, has been to observe collaboration in action, and includes investigation of social interaction, group dynamics and group familiarity (Jones and Issroff, 2005; Kreijns *et al.*, 2003; Kirschner and Kreijns, 2005; Janssen *et al.*, 2009), the use of scripts (Weinberger *et. al*, 2005; Kollar *et al.*, 2006; Schellens *et al.*, 2007); facilitation of the collaboration (Bober and Dennen, 2001; Bonk *et. al.*, 2004) and content analysis of OCL in action, including production of an array of research methods for this process (De Wever *et. al.*, 2006; Strijbos and Fischer, 2007).

Yet despite this plethora of knowledge, which has surely influenced practice, the reality remains that learners "do not work or learn well in the collaborative learning environments that are designed and developed for them", and that students often need to be coerced into collaboration (Kirschner *et al.,* 2008). The question is therefore, if these paradigms have been investigated and addressed by design of 'best practice' environments, why is online collaboration not as successful as might perhaps be expected.

It has been suggested that low participation in OCL is linked to inconvenience, access difficulties, information overload and the overly time-consuming nature of asynchronous communication (Motteram and Forrester, 2005) and participants have reported several issues including not only use of the technology but also not wanting to alter study habits, preferring to work alone, and not seeing any added value in the collaboration (Tyler *et al.*, 2001, p.71). However, the conversations between OU

students which triggered my interest were taking place in the same online environment in which the collaborative activities were being held, and between students who appeared happy and comfortable to be using the medium for a variety of purposes, including building their relationships and community with other students, discussing course content, and supporting each other's learning in an informal manner. So these issues of inconvenience, access, and lone working do not appear to be pertinent. For at least some students, it appears that opposition to OCL might be directed towards formalised collaborative activities rather than to any of the individual factors that contribute to an OCL environment. What is noticeably absent from the paradigms of Dillenbourg *et al.*, and indeed from any of this early research, is the voice of the student. As the discussion below shows, collaborative learning has been largely studied from the 'what works' perspective rather than by focusing on intrinsic attitudes or feelings that might encourage or discourage participation in collaborative activities.

Student voices

There is not a great deal of literature explicitly focusing on student attitudes towards the concept of collaborative learning. In October 2011, using systematic review methodology, a search on Academic Search Complete (EBSCO), using the terms *(attitude OR perception) AND (collaborat*) AND (learn* OR student)*, with no field selected, retrieved 883 peer review articles. Article content was then determined by title, which ruled out clearly unrelated studies, and by full reading of the whole abstract for all other papers, plus skim reading of all articles which were deemed to possibly contain relevant content. Using this process it was determined that only six of the found papers directly addressed student feelings towards learning collaboratively (discussed below). Branched searching of citations in these papers, and manual searching of various educational journals yielded no additional articles.

Although it is not claimed this is an exhaustive list, it does demonstrate the scarcity of the data.

This experience in having difficulty locating research on student attitudes to collaboration, whether face to face or online, is corroborated in the literature. For example in a 2005 review of the literature on affective issues and OCL, Jones and Issroff (2005) stated that "whilst there has been a concern with understanding more about student motivation in the context of learning technologies for some time, there is still relatively little work in this area". Volet and Mansfield (2006) noted that "motivational and socio-emotional aspects of students' participation in group learning activities have received little attention in the literature" and further commented that "while research into cooperative and collaborative learning has revealed the motivational benefits of learning with others, limited attention has been paid to the antecedent of motivation and actual management of motivational and emotional issues in real-life, socially challenging situations". Machemer and Crawford (2007), writing about active learning including collaborative activities, also commented that research on student perceptions is "limited and contradictory".

The apparent lack of published research in this specific area is interesting. One possibility is that such research has been conducted but not published, or was published too long ago for electronic records to exist. Alternatively, it is possible that, as the content of the available literature suggests, attention has been almost entirely focused on the socio-cultural or social constructivist theory that underpins collaboration, and on observing and measuring the outcomes in terms of student satisfaction and student learning. As a research topic there seems to be more interest in how and to what extent collaboration works than in whether learners want to collaborate. Also, perhaps as educators it is simply more practical to determine which practices the teacher believes will most benefit students, and to use them without much thought of students' own pre-existing beliefs. In 'traditional' face to face settings, where students are captive in the classroom, and in many cases have signed up to courses without prior knowledge of the teaching methods to be employed,

perhaps this does not have much implication. After all, students are expected to experience the benefits during the collaborative exercise, and it is presumed the outcome will be favourable, otherwise the technique would not be employed. Thus, if the teacher wants to determine effectiveness they examine the experience as it is lived, and the educational outcomes, rather than looking at pre-existing attitudes and beliefs. Students might voice dissatisfaction with group work, but in a face-to-face setting, to maximise engagement, the arguments can be countered and participation can be obliged. This is not so easy with distance learning students, especially where participation is not compulsory because of the need to be in inclusive and where online activities might not be accessible to all students. In the distance learning environment of the OU, students undertake curriculum choice using relatively detailed module descriptions, and many have quite strong ideas about their wants and needs prior to module registration. Although marks from collaborative activities might be a part of summative assessment, it is generally not necessary to take part in order to pass the course. Students can therefore make deliberate choice to 'opt out' of collaborative activities at two stages, either by choosing curriculum that does not include collaboration, or by absenting themselves from those activities when they do appear in their chosen curriculum. This itself has a major implication for research, not only because non-participation is relatively high due to the non-compulsory nature, but because students make an active choice, and therefore if they choose not to participate, in most cases at least will have made a conscious and considered decision, based on factors which they will have articulated to themselves. Thus the OU is an ideal setting in which to investigate student attitudes to OCL.

Although there is some, albeit not a lot of literature that specifically looks at student attitudes to formalised collaborative learning, the student voice is actually lacking from much of this research. Of the six papers identified as explained above, only one (Hodgkinson, 2006) really appeared to take individual voices into account, with the other five using various forms of pre-determined questionnaires and quantitative analysis. Fung (2004) used a 15 point Likert scale questionnaire to discover why MEd

students in the OU of Hong Kong did not participate in online collaboration, concluding that technology was not an issue, and that time, and preference for reading rather than online discussion, were the major barriers. However the questionnaire only covered a small number of potential issues, chosen by the author. There is no evidence that these chosen issues were based on factors that had been previously highlighted by students in that setting. Muilenburg and Berge (2005) used a similar technique, although with many more items on the questionnaire, a 5 point Likert scale, and analysis that included demographic factors such as age and gender. Items on the questionnaire were determined through a review of the literature, analysed quantitatively, and again, there is no opportunity for students to talk about barriers not pre-conceived by the authors. Administrative issues were found to be the major barrier, followed by social interaction and academic skills. In contrast to Fung, technical issues were determined to be a barrier. Using a different approach, Ocker and Yaverbaum (2001) measured attitude towards collaboration using a 4 four item questionnaire, with each item graded on a 1-5 interval response scale. This tool measured attitude towards collaboration in a gross manner, and did not probe individual reasoning behind those attitudes. The items simply established whether the respondent felt that collaboration is effective/ ineffective in preparing for the workforce, that peer evaluation is an effective/ineffective way to grade students, that collaboration is an effective/ineffective way to accomplish a task, and whether the student normally feels comfortable/uncomfortable working in groups. In other studies researchers have collated the results so that individual voices disappear altogether from the data. For example Thompson and Ku (2006) conducted a case study that included a survey into student attitudes to OCL, which they interpreted simply as a positive or negative attitude, and because the students had been working in groups, they collated the results and attributed a single attitude to each group. Dewiyanti *et al.* (2007) also used a questionnaire to determine student satisfaction, but reduced the findings even further to a single mean and standard deviation across the whole cohort, which they then used in regression analysis against other measured variables

within an online collaborative learning task. This literature does not illuminate why individual students might reject formalised OCL.

One interesting paper (Hodgkinson, 2006) does enquire into the differing attitudes of students towards formal and informal collaboration, where formal is taken to mean required activities overseen by a lecturer as part of an assessed course component. This study took place in a face-to-face university setting. Learners collaborated formally and informally through instant messaging, online asynchronous discussion forums, e.mail, phone and texting as well as face to face. Overall students believed informal collaboration more useful to their studies than formal activities, and preferred the face-to-face environment. Collaboration was seen as positive, in particular being motivational and leading to friendships and community building. Yet a number of attitude barriers to formal collaboration were revealed, including fear of plagiarism, lack of confidence, lack of trust, and worry that sharing of knowledge would be unequal. Many of the issues identified by Hodgkinson could be found in the OU student discussions that first led to this enquiry; conversations between students who appeared happy to collaborate informally, but not so happy at the prospect of being asked to participate in formal activities run by their tutor and contributing to assessment. It appears there could be at least some common attitudes towards collaboration, whether students are working face-to-face or online.

Hodgkinson (2006) labels the issues raised by students as 'barriers to knowledge sharing'. Discussing student reluctance to participate in computer supported collaborative learning, McConnell (2000, pp. 84-5) suggests that choice of learning method may be related to our values and beliefs. For me this poses the question 'how is knowledge viewed by OU students', and I would like to determine whether collaboration is perceived as the transfer of 'knowledge objects' from one learner to another, or as the building of knowledge between learners. In other words I am interested in how various learning epistemologies might influence attitudes to formal collaboration. I am also interested in how learning is portrayed within the OU system and beyond, in the world of education.

4. Methodologies

In this chapter each method used in the study is described, along with the rationale for, and critique of, each choice.

Introduction

To build knowledge and understanding of student participation and engagement with OCL, and of potentially influential discourses, various methodologies were employed. The fine detail of each method as it was implemented during the study is described in the relevant chapter. Here the focus is on the methodology itself, paying particular attention to describing the methodology alongside why it was chosen, and the benefits and drawbacks of this particular technique. Methodologies used were synchronous and asynchronous online focus groups to gather verbal and written data, iterative open coding to code that data, a critical discursive psychology approach to analysing the discourse from focus groups and other sources, and quantitative analysis of social presence during online collaborative activities to assess student engagement.

Online focus groups

A focus group is a particular form of group interview which centres on a defined topic, where interaction between the participants rather than between the facilitator and individual interviewees is promoted (Bryman, 2004, p. 346). Focus groups have been extensively used in many qualitative social research areas including education (Chioncel *et al*, 2003; Hyden and Bulow, 2001; Parker and Tritter, 2006). The internet is increasingly employed to gather social research data, and online focus groups have become a common feature in research arenas where either the participants are geographically dispersed, or the topic is directly concerned with internet use (Bryman, 2004, p. 476).

Rationale

One aim of this study is to uncover attitudes which might not be previously known. According to Bryman (2004, p. 348), in contrast with interviews, focus groups allow issues to surface because the moderator relinquishes some control to the participants, whilst Hennink (2000, p. 10) indicates that focus group methodology allows the researcher to identify a range of views and experiences, identify new issues, and generate hypotheses. As these outcomes align well with the research aim, there is good justification for the use of focus groups.

Online focus groups can be run synchronously, where all the participants meet at the same time, and messages are read and replied to instantly, or asynchronously, where participants do not necessarily access the space at the same time. Each of these has their own set of advantages and disadvantages. Asynchronous communication overcomes issues of access such as timing and typing speed, and allows the participant to be reflective, whilst a synchronous environment can be more dynamic (Fox *et al.* 2007). Stewart and Williams (2005) noted that one consequence of the more complex interactions found in a synchronous environment is the difficulty researchers have in mediating such conversations and suggested that for a novice researcher asynchronous focus groups would be more appropriate. It was decided that the pilot focus groups should therefore be run asynchronously.

Following on from the pilot, I gained more experience of facilitating synchronous focus groups in a face to face setting, through other research work at another Higher Education institution. At the same time, *Blackboard Collaborate,* a video conferencing system which allows the participants to talk as well as type and has a recording facility, became available[4]. This system was used to run synchronous focus groups when talking to Science students during the main study.

[4] The OU had been using an online conferencing system called Elluminate which was bought by Blackboard, retitled Collaborate, and an OU-specific version was commissioned, OU Live. Elluminate and now OU Live are used to hold online group tutorials. It is possible to set up online 'practice rooms' on the Blackboard website, and this is where the focus groups were held.

Critique

According to Robson (2002, p. 284), focus groups are becoming "the stock automatic response to the question 'what method should we use'". As Parker and Tritter (2006, p.25) comment, focus groups "*have emerged as 'vogue' practice for researchers*" and inclusion of focus group material can add "*worthiness and status*" to project data. Their popularity must in part be due to their success in generating many findings across the social research sphere which have been peer judged to be valid and useful. However there is a caveat in that reliability and validity have perhaps not always been a major consideration in focus group literature (Robson, 2002, p. 288), and it is important to recognise that choice of this data collection method might be influenced by its popularity.

In terms of validity, Hyden and Bulow (2003) question whether focus group participants represent themselves, or act as a group, and if they do represent themselves, whether this is as belonging to a particular demography, for example learners, or as individuals. This is an important consideration when analysing focus group talk, and indeed, in the pilot study (Chapter 5), some participants did talk partly in the abstract, referring to how 'students' might feel, rather than how they themselves felt. However from a discourse analysis angle, it is the way that they portray their message, the imagery and metaphors used, which reveals participants interpretative repertoires, and this would be less likely to change according to how they constitute themselves within the focus group situation. The group effect (Bryman, 2004 p. 360) can also be a problem with regard to dominant voices who might drown out the more reticent participants (Parker and Tritter, 2006; Breen, 2006). Although this can be addressed through skilful facilitation, moderation of online forums used during asynchronous focus groups could be difficult in this respect, because any response or attempt by the facilitator to equalise participation would be by written word rather than body language signals.

Validity also relies on generating enough data to reach theoretical saturation, that is, when no new categories emerge and the pattern begins to look repetitive (Bryman,

2004, p.349). It has been suggested that three groups is the smallest number through which theoretical saturation can be determined, and that saturation usually appears within 4-6 groups (Morgan, 1996). For the purposes of the pilot it was decided that three groups would be adequate, but with awareness that more could be useful. In the main study three groups were also run, although, in this instance, the number of groups was governed by participant numbers rather than by investigator choice.

Reporting data from focus groups presents a particular challenge. As Hennink (2000, p. 5) states

> *"The context of a group discussion is thought to create greater spontaneity in the contributions of participants as it replicates everyday social interactions more than a traditional one-to-one interview. The function of non-directive interviewing is to shift the attention away from the dominance of an interviewer to focus on* ***generating a discussion*** *between participants on certain issues. The discussion element of the method gives participants greater control of the issues raised in the dialogue, as they are essentially discussing the issues between themselves rather than directly with an interviewer. It is important to recognise that it is the creation of a group dynamic that enables spontaneous issues to arise from the discussion and participants to highlight issues that are of importance to themselves" (Hennink, 2000, p.5, emphasis in original publication).*

The problem with this approach is that whilst the facilitator will be in possession of an outline schedule, and perhaps some artefacts such as pictures or written pieces to generate discussion, much of what is said by the participants is prompted by the contributions of other participants rather than by a question posed by the facilitator. As Parker and Tritter (2006, p. 32) explain; *"at the individual level people are influenced by the discussions that they are party to. Over the course of a focus group session many members may shift their position on certain subjects, change their*

minds and/or express different views at the end of the discussion than they did earlier on". With fixed interview schedules it is possible to report responses as they were given to specific questions. In a discourse analysis of spontaneous conversations, where only short excerpts are analysed, the context of these excerpts can be explained, or full transcripts provided. However this is not the case with focus group data. The data from the pilot in this study consists of very long written conversations between participants, where it is often not possible to determine exactly which previous contribution(s), or part(s) of the previous contribution(s), is being responded to, and certainly not possible to separate out the different influences, whilst the main study focus group data contains transcripts of hour long and more verbal conversations; both contain talk which is a response to multiple influences, which is difficult to report from a practical perspective. In addition, in both cases, the data from three separate groups needed to be amalgamated, so that use of particular discourses across the focus groups could be explored. Making sense of all this data necessitates coding, and coding of focus group conversations inevitably removes at least some of the context, in particular the words of the facilitator or other participant that led to a particular statement. As Chioncel et al. (2003, p. 504) state

> *"Writing a report requires a balance between the direct connotations of participants (descriptive validity) and the scientific interpretations (theoretical validity) of those connotations. [...] This is a complex process of producing valid knowledge through dialogue, by understanding and interpreting data and by searching for meanings in explanation of reality represents a clear argument for communicative validity" (Chioncel et al., 2003, p.504).*

This can be addressed to some extent by giving as much detail as possible regarding the focus group organisation. Breen (2006, p. 473), on reporting focus group investigations, suggests *"The interview process should be detailed. How did you introduce the topic? What was the order of the questions and how did you decide on their order and progression? What was changed or modified as a result of the pilot?"*

(Breen, 2006, p. 473). This is of course easily achievable. At the same time though, there will always be an element of trust required, and although this is no different to any other type of research report, trust in this respect needs to be placed not only in the integrity of the researcher, but also their expertise and deep knowledge of the data to avoid any skewing or misinterpretation arising from potential disconnect between the schedule and the reported participant talk.

Iterative open coding

Open coding involves taking apart the data to identify concepts, which are then compared and grouped into categories, in an iterative fashion (Corbin and Strauss, 1990). Although it is possible to manually code, there are now several computer packages which aid the process. The software used here was *QSR NVivo;* versions 8 and 10 were used at different times as the newer version became available. This software does not remove the coding process from the researcher, it is completely dependent on researcher-defined concepts, categories, and hierarchy mapping, and gives no help towards decisions such as the number of concepts or categories, or how data should be coded within them. It is however a very powerful tool for data interrogation, sorting, display, and retrieval.

Rationale

Open coding was chosen because it provides a 'way in' to the data, and is particularly useful when dealing with relatively large transcripts or sections of text. The initial purpose for the focus groups was to determine factors which might affect participation in OCL, and categorising the data through coding would also provide themes to be transferred to a questionnaire for quantitative data gathering and analysis. Coding can also be used, alongside the literature review, to inform direction of the study.

Critique

With open coding, loss of context, through removal from the social setting and fragmentation of data, can result in distortion (Bryman, p. 411). I would argue it is also possible to lose the richness of the data through over-consideration of concepts and categories which are features of closed coding. Kendall (1999) discusses a similar problem in relation to axial coding, in a powerful description of how she lost sight of both the research question and of what interviewees had been saying, through over-application of the axial coding methodology. In the pilot study, when the data was revisited in its entirety, rather than as coding categories, it became evident that focus group participants were saying more than the initial coding process had revealed, and although coding had not hidden the research question, interrogation of the data through looking at the language revealed a completely different question.

Analysing the discourse

Unlike grounded theory, there is no set procedure to follow when 'doing' discourse analysis. As Potter (2003, pp. 784-5) comments, "*it is not a free-standing set of data-generating and data-analytic procedures. It is an approach embedded in a web of theoretical and meta-theoretical assumptions*". As discussed in Chapter 2, the method I have chosen is based on the CDP approach.

Rationale

There are several approaches to discourse analysis which could inform why OU students do not want to participate in OCL. Conversation Analysis (CA) involves close analysis of the interactions which take place during conversations in natural settings, and is often used to explore institutional talk. CA would therefore be a useful tool to explore, for example, how students might be included or excluded during OCL activities. A strong feature of CA is that it does not include any consideration of events external to the interaction. Critical Discourse Analysis (CDA) uses CA

techniques but places the talk in a wider political context, so that change might be brought about through critical understanding. A CDA approach has been used in a wide range of educational settings (Rogers *et al.*, 2005). However, as with CA, analysis of the actual talk is confined to natural settings, and would not be valid for analysis of focus group responses (except in the analysis of how participants in a focus group interact). Like CA, CDA would only be useful for analysis of OCL in action. CA and CDA were therefore rejected as possible approaches for this particular study. The other two approaches to studying talk-in-action are sociolinguistics (sometimes known as ethnography of speaking) and discursive psychology. In a sociolinguistics approach, the symbols and meanings within the language of a particular group are used to illuminate the culture within which interactions take place. This could be useful to explore OCL either in its natural setting or through students talking about it, if students were taken as an homogeneous group or if specific groups or communities of students could be identified. However this would be overlooking the very diverse social and cultural backgrounds of OU students and could result in either a confused or an incomplete analysis. The remaining technique for analysing what people say during focus groups and interviews is that of discursive psychology, in which talk is examined for interpretative repertoires, subject positioning and ideological dilemmas (Edley, 2001, pp. 197-217). This is an extremely useful technique for my purpose, because, as discussed in Chapter 2, it allows the researcher to tease out attitudes and beliefs of the participants. Discursive psychology can also become a critical analysis, by looking at the talk within the context of the institution.

The critical discursive psychology (CDP) tradition of discourse analysis, as Edley (2001, p. 190) explains, acknowledges that people simultaneously produce, and are the products of, discourse. The discursive psychology element allows examination of the way in which students talk about learning, which can reveal their attitudes and beliefs about building and sharing knowledge, whilst the critical aspect enables this talk to be embedded within the wider context of educational traditions, and to consider how the language which surrounds learner-knowledge relationships might constrain

and control students' beliefs. In this instance the discourse includes language present in OU documents such as course guides and assessment handbooks, institutional talk and practices within the educational setting, and wider sources such as the way in which education and qualifications are portrayed in society. CDP therefore gives the opportunity to examine and suggest changes to various discourses which might reinforce student perceptions of taking part in knowledge building and sharing that act as barriers to participation in collaborative learning activities.

The discourse analysis methodology chosen here is an approach which broadly aligns with the method of Critical Discursive Psychology (CDP) because this both reflects my position on discourse and allows me to suggest ways forward within the OU. The basic premise of CDP is that it takes a discursive psychology approach to analysing talk, and positions it within the dominant discourse of the institution in which the talk takes place. This institutional discourse is revealed through analysis of talk by those in positions of power within the institution, practices of the institution, and written documents. Using this critical approach means that the analysis can be used to suggest and implement change. CDP is a relatively little used methodology, and thus knowledge of the practice is taken from a very narrow set of authors and publications.

In discursive psychology the three interlinked concepts of interpretative repertoires, subject positioning and ideological dilemmas are examined though analysis of rhetorical talk (Edley, 2001, pp. 197-217). Interpretative repertoires are the terms and metaphors which are drawn upon when talking about actions or events (Potter and Wetherell, 1987, p.138). Using a critical approach, interpretative repertoires can not only be identified in conversational data, they can also be located within the discourse of the institution. Recognizing interpretative repertoires requires practice, but they can be revealed through illustrations such as images, metaphors and figures of speech which are repeatedly present in the talk. Analysis of interpretative repertoires can reveal ideological dilemmas (Edley, 2001, p. 203), particularly if an ideology, for example the power relationship between being taught and doing learning has been challenged. However, ideology in the sense of discursive psychology is not

limited to the Marxist use of the term. According to Billig (1991, p.1), an ideology consists of "*maxims, values and opinions which are commonly held*" or could be described as a "*common way of thinking*". Drawing on an earlier definition by Billig, Edley (2001) p. 203) explains that ideologies are "*composed of the beliefs, values and practices of a given society or culture*", and that they are dilemmatic because they can be contrary in nature. Analysis can also reveal subject positioning, both within the conversation (Davies and Harre, 2001, p 263) and within the institutional discourse (Edley, 2001, p. 210). Attitudes and subject positioning are clarified by determining where the participants locate themselves within the conversation, and how they construct themselves as learners (Potter and Wetherell, 2001, p. 199; Edley, 2001, p. 210).

Critique

Both the selection of data and inferences relying on personal interpretation have an impact on internal validity in CDP (Taylor, 2001, p. 318). This is a feature of all forms of discourse analysis. External validity could also be questioned, due to reliance on talk which has occurred in only a few, manipulated, situations. There is no guarantee findings can be extrapolated beyond the analysed talk. Thus what is produced by analysing discourse is simply a snap shot of that particular situation, and cannot be claimed as more than this, without a mixed methods approach including for example a questionnaire responded to by a much larger cohort to back it up.

Reliability of discourse analysis findings is always dependent on researcher skills and experiences, and a consistent approach is paramount. In CA particular tools might be employed, for example the researcher might look for duplicated patterns in turn taking (Wooffitt, 2001, p. 53), and generally accepted concepts exist such as expressive caution (Silverman, 2001, p. 121). Identifying these patterns is relatively straight forward and objective once the technique has been learned. However, although the concepts of interpretative repertoires, ideological dilemmas and subject positioning are described in the literature as central to CDP, and have been chosen as indicators in

this study, there are no guidelines available by which they might be recognised (Edley, 2001, p. 198). The analytical processes used to explore these concepts in the research data will need to be explicit and transparent, and to be carefully scrutinised for internal validity, because ultimately they will form the foundation of this study.

Whilst Gee's interpretation of 'discourse with a big D' is a cornerstone of my theoretical framework, I have not adopted his analysis methodology. Gee proposes five factors which identify a discourse; that they are inherently ideological, are resistant to internal criticism, take a stand in opposition to other discourses, concern themselves with objects, and are related to the distribution of social power and hierarchical structure in society (Gee, 1990, p. 144). Meanwhile, referring in particular to Critical Discursive Psychology (CDP), Parker (2002, pp 145-156) gives 7 criteria and 3 auxiliary criteria regarding discourses, stating that a discourse is a coherent system of meanings, is realized in texts, reflects on its own way of speaking, refers to other discourses, is about objects, contains subjects, and is historically located, and further that discourses support institutions, reproduce power relations and have ideological effects. Most of these criteria reflect or are inherent in Gee's conditions for determining a discourse, although the criteria of being historically located and supporting institutions are unique to Parker. Both authors suggest use of the criteria when performing discourse analysis. It could be argued that the definitions of Gee or Parker would provide a more rigorous backbone to the discourse analysis methodology employed in this thesis. However the purpose of this research is not to place a ring fence around a set of words and actions and attach the label 'discourse', but to recognise that certain discourses exist within the talk and practices of the university, and to then examine how these discourses might influence student behaviours. In addition, the criteria of both Gee and Parker are complex and subjective; their use would not only be time consuming, but could distract from the thesis purpose and add more validity questions to methodology. Therefore, the approach of Edley (2001) in using discursive psychology methodology to analyse the discourse and then to place it in a political context was thought to be more applicable.

Wetherell (2001, p. 385), cites the argument that using a critical approach when analysing discourse is 'bad scholarship and bad politics' because it holds the potential for bias, and discourse analysis should concentrate only on what is present within the conversation. Yet without any political engagement, this study would be of limited use, as it would merely catalogue processes as they occur. The aim is to feed back into the system so that it can be challenged and changed. An awareness of distal context is however paramount, as choice of texts and other external data will be unavoidably subjective, and I must be prepared to defend the selection criteria.

Engagement with online collaboration –analysis for social presence

In order to collaboratively construct knowledge, learners need to actively engage in talking with each other (Suthers, 2006) and in an asynchronous online environment, this knowledge construction depends on social interactions within the group (Kreijns *et al.*, 2004). Whilst running collaborative activities in online forums as the tutor on two different OU science modules, it was noted that learners sometimes did not appear to be interacting with each other, but seemed to be contributing to the required tasks in isolation, without obvious regard for previous discussion or attempt to engage with others in the group (see Chapter 6). The students did not always appear to be 'there' in the forum, that is, they did not seem to be projecting themselves into the online space, or, in other words, creating any social presence necessary for truly collaborative learning (Garrison, 2007).

It was not considered sufficiently rigorous for the purpose of this thesis to simply note a perceived lack of interaction between students; an objective measurement of student engagement with each other was required. It was therefore decided that social interaction, measured through social presence, would be quantified through analysis of forum content using data from the online forums of two OU science modules, *SDK125 Introducing Health Sciences: A case study approach*, and *S294 Cell*

Biology. The method chosen to measure social presence was an adaptation of the method of Rourke *et al.* (1999).

Rationale

Analysis of forum content has been extensively discussed in the literature. In a thorough and critical review of methodologies for analysing asynchronous forum discussion, Weltzer-Ward (2011) identified 56 coding schemes that had been used in research published between 2002 and 2010, including 11 different instruments designed to identify and quantify social interactions. Of these, the social interactions coding scheme most employed during this period was that of Henri (1992), used 28 times, followed by that of Rourke et al. (1999) which was used eight times in the papers reported as reviewed by Weltzer-Ward. All other methods were reported as being used either once or twice.

Weltzer-Ward did not identify the actual papers she reviewed and I therefore looked at the original publications containing these methods, to determine their suitability for this investigation; An *et al.* (2009), Bales (1950), Chen and Caropreso (2004), Chen and Chiu (2008), Dillenbourg (2003), Fauske and Wade (2004), Henri (1982), Lapadat (2007), Ng and Murphy (2005), Rourke *et al.*, (1999) and Schaeffer *et al.* (2002). Three were ruled out immediately, as not available or not applicable. One reported publication, Dillenbourg (2003), does not appear to exist. The method of Bales (1950), written for face to face interactions, is based on synchronous discussion and contains elements which are not applicable to online asynchronous forums. Chen and Chiu (2006) included use of the properties of the messaging system to examine message hierarchies; this method was not applicable to the Moodle forums analysed in this thesis.

The other eight methods identified by Weltzer-Ward could all be used to analyse asynchronous social interactions in Moodle forums, and these were examined for suitability, taking into account the comments of Garrison *et al.* (2007) that straight forward coding schemes with explicit indicators and manageable message units allow

for consistent application and thus reliability. Instrument reliability is generally measured by the degree of coding agreement between multiple coders (inter-rater agreement), which is the primary test of objectivity and replicability in content analysis, and can be determined using various statistical methods including percent agreement, Pearson correlation, Cohen's kappa and Holsti's coefficient, with percent agreement being the most popular (De Wever *et al.*, 2006). Although there is no set standard above which inter-rater agreement can be said to indicate reliability of the instrument, and different authors set different standards, a percentage agreement of between 70 - 80% is usually taken to indicate coding reliability (De Wever *et al.*, 2006, Strijbos and Stahl, 2007).

The investigation by Lapadat (2007) began with the forum transcript rather than with a list of categories; she carried out an iterative process looking for devices which established and maintained the community, alongside devices which aided coherence of the discussions. However, rather than claiming the identified devices as evidence that social interactions take place, Lapadat used the classifications as a method for tracking and evaluating the discursive interactions of the participants, as they negotiated meaning making and formulated beliefs via the discussion element of this particular distance learning course. Thus, this is a set of devices developed for use in a qualitative exploration, and as such they have not been subject to any test of validity as an instrument for content analysis.

The method of Chen and Caropreso (2004) did provide the basis of a quantitative analysis instrument, but was not considered developed enough for the analysis to be performed in this thesis. Their method consists of classifying messages for presence or absence of two coding categories; two way communication and engagement with task. Whilst two-way communication, such as asking a question, or responding to another post, clearly does show engagement with other students, determining whether a post was intended as one or two way could be difficult to establish in a reliable manner. For example if a student says 'hello' to the group, should this be categorised as one or two way communication? The researcher would need to assume

the intent of the message author. A list of indicators used in the classification is not given in the Chen and Caropreso paper and therefore to use this method the researcher would need to develop their own coding parameters based on the content of the data to be analysed. The second classification used in the Chen and Caropreso method, engagement with task, relates to cognitive rather than social presence, and again, parameters would need to be devised based on the actual task. Employing this method would entail developing what would essentially be a new instrument, which would need to be rigorously tested for validity, and which, as Rourke and Anderson (2004) assert, is not only a long and elaborate procedure, but is also not necessarily desirable in a field where existing instruments are available.

The analysis designed by Schaeffer *et al.* (2002) was an amalgamation of several different instruments and implemented using five different units of analysis and non-Boolean coding. Amongst other variables, classification was developed for 'type of exchange', which were categorised as disagree, challenge, unrelated, acceptance, enhancement which were given numerical values. Although the coding system was refined until inter-relater agreement of 80% was established, details that would allow the instrument to be used in exactly the same way by another researcher are not given in the paper, and thus use of this method would also entail substantial development including validity assessment.

The method of Fauske and Wade (2004) could be applied without further development, and the authors established inter-rater agreement of 83%, so use of this instrument could be justified on the grounds of validity. However the choice of categories was designed to interrogate communications for the presence of elements which had previously been labelled as characteristics of either male or female discourse. The authors' chosen categories of 'supporting', 'considering perspective of others', 'inquiring', self-challenging', 'non-supporting', 'isolating' 'community eroding' and 'posturing' could be said to be indicative of engagement with the community but do not encompass the breadth of social presence, described by Garrison et al. (2000, p. 89) as "*the ability of participants in theCcommunity of Inquiry to project their*

personal characteristics into the community, thereby presenting themselves to the other participants as 'real people'".

An *et al.* (2009) employed three indicators labelled as a measure of social presence; referring to the group as 'us' or 'we', use of exclamations or emoticons, and addressing other students by name. Whilst these are clear labels which could be objectively applied to the data, the authors provide no justification for this limited choice of indicators and no validity checks. It would therefore be difficult to justify choice of this instrument against others available.

The method of Henri (1992) has been influential in the design of many content analysis schemes (De Wever *et al.*, 2006) and on 10th February 2015 the paper containing this method is reported by Google Scholar to have been cited in 1517 publications, and thus was carefully considered for this thesis. However, Henri's method is not limited to identifying social interactions; it also includes analysis of cognitive and metacognitive processes taking place in the online discussions, and measures overall participation. Her method is complex as it is not based on Boolean present/not present coding, and according to Schaeffer *et al.* (2002) is difficult to use. Henri divided messages into 'message units'; she commented that to objectively determine the units was difficult (Ng and Murphy, 2005) and did not report any attempt to determine inter-rater reliability to validate the method (De Wever *et al.*, 2006).

Ng and Murphy (2005) based their method on that of Henri (1992) and their coding system is equally complex. It also has a high degree of subjectivity; the authors reported inter-rater percentage agreement of only 50% when six messages were initially analysed by two coders.

The method of Rourke *et al.* (1999) is also based on Henri (1992), but consists of a more straightforward instrument which simply measures indicators of social presence in a Boolean present/not present manner. Social presence indicators are classified into three groups, affective (emotion, humour, self-disclosure), interactive (respond,

quote, refer to other, question, compliment, agree) and cohesive (vocatives, inclusive pronouns, phatics/salutations). The simplicity of the instrument, alongside explicit descriptors and relatively large number of indicators, satisfies the reliability criteria espoused by Garrison et al. (2007). Additionally, inter-rater reliability was determined using Holsti's coefficient, which provides an index based on percent agreement, and when two transcripts were tested by the authors, inter-rater agreement was above 90% in both cases. Therefore for the purposes of this investigation, the decision was made to use this instrument as described in Rourke et al. (1999) with a slight adaptation to the method, as described below and in Chapter 7.

One other decision needed to be made regarding the content analysis. When implementing a coding scheme, the data must be segmented in order to be analysed. Rourke *et al.* (2001) identify five units of analysis which can be used in content analysis of asynchronous text-based communication; message, paragraph, sentence, 'unit of meaning' (theme), and illocution. Thematic and illocution units are difficult to place boundaries around, and involve subjective decision-making which can have an impact on reliability of the analysis (Strijbos *et al.*, 2006). Whilst paragraphs and sentences in written texts are usually identifiable according to spacing and punctuation, contributions to the forums do not always conform to grammatical norms, and as Rourke *et al.* (2001, p. 16) indicate, reliable objectivity is lost due to the idiosyncratic nature of asynchronous text-based messaging, which, they report, combine *"the telegraphic style of e.mail with the informality of oral conversation"*. Students using the messaging system organise their writing in different ways; identifying sentences and paragraphs in such messaging is not straight forward and the researcher might be interpreting message layout in a way that was not intended by the message author. The only unequivocal user-defined unit which does not rely on researcher interpretation is the entire piece of communication (Strijbos and Stahl, 2007) and it therefore follows that the most reliable unit of analysis is the whole message, a consensus reached by, for example Garrison *et al.* (2001), Naidu and Jarvela (2006) and Stijbos *et al.* (2006). Thus, unlike the method of Rourke *et al.*

(1999) who used the thematic units, the whole message was the segmentation unit chosen for this investigation.

Critique

In the paper detailing the social presence instrument chosen for this thesis, Rourke *et al.* (1999) state

> *"The relative presence of these 12 indicators reveals the level of social presence in an online community of inquiry. Low frequencies indicate that the social environment is cold and impersonal. Participants are using the conference in a purely pragmatic manner for terse exchanges of information, perhaps because they are being evaluated for quantitative participation. High scores indicate that the environment is warm and collegial. Participants feel a sense of affiliation with each other and a sense of solidarity with the group. This environment of approachability and closeness encourages the students to regard the conference and their interactions as intrinsically valuable and educationally profitable." (Rourke et al., 1999, p. 9)*

Whilst the authors' categories of affective, interactive and cohesive responses are drawn from a range of literature sources, there is no justification given for the chosen 12 indicators and the above statement is a huge claim to make about these particular indicators, particularly as Rourke *et al.* did not triangulate through asking participants for their views and feelings. Therefore the results of using this instrument must be confined to observation that according to use of this particular method, social presence appeared to be either high or low within the analysed discussions.

Having said this, the discourse devices which Lapadat (2007) arrived at through iterative coding of forum transcripts resulted in the classifications of greetings, social remarks, invitations, asides, help, support, humour, invitation to comment, genres, colloquialisms, inclusive language, alignment and disclosure, reference to another post, acknowledgement of another, quotes, self-reference, posing and answering

questions, contextualisation and marking of digression. These classifications bear a close alignment with the social presence indicators employed in the method of Rourke *et al.* (1999) and this gives me added confidence in their chosen indicators.

Students could have been asked themselves to report on their perception of social presence within the forums, and many instruments have been developed for this purpose (see for example Gunawardena and Zittle, 2007, Ning Shen and Khalifa, 2008, Sung and Mayer, 2012). This could be thought of as more relevant for the purpose of this thesis, which is after all partially driven by a perceived absence of the student voice within OCL research. However decisions needed to be taken on the limits of this investigation and it was decided that an objective quantitative measurement of social presence was a more appropriate means through which to strengthen and validate my own perception that interaction with other participants was missing from many of the student contributions to the collaborative activities.

5. Pilot study

This chapter contains the methods and results of the pilot study and discusses the findings in light of the literature

Introduction

The purpose of the pilot study was to discover what factors might encourage or discourage OU students from participating in online collaborative activities. To facilitate this, asynchronous online focus groups were arranged to run on First Class, and synchronous face to face focus groups were arranged to run in two study centres in the North West region. However student response to invitations to participate in the face to face groups was disappointing, and the face to face groups did not run. Therefore all the data in this exploratory study was gathered by online means only.

Methods

Permission to run focus groups was sought from the OU Institute of Educational Technology Student Research Project Panel and granted by e.mail on 7th August 2008, and subsequently clearance to run the project was obtained from the then Human Participants and Materials Ethics Committee in September 2008.

To ensure all participants had understanding of what OCL might constitute, three scenarios were written, each describing potential activities a student might be asked to undertake during an OU course (Appendix II). The scenarios incorporated elements of online collaborative activities already in use by the OU (scenarios 2 and 3), and elements currently common in face to face classroom situations (scenario 1).

In August 2008, four First Class forums were created by the Learning and Teaching Solutions unit which runs First Class within the OU. Relationships between the participants, and between the participant and the facilitator, can influence what people

say in focus groups (Hollander, 2004). To address this issue, a space for anonymous contribution within the online focus groups was provided. The online resource, *Survey Monkey* (www.surveymonkey.com) allows creation of question and answer pages which are accessed anonymously by invited users, providing a facility similar to having a wall on which to stick anonymous 'post-it notes in a face to face situation. This resource was used alongside First Class during the online focus group meetings.

Four online focus groups took place, one with Associate Lecturer (tutor) participants and three with student participants. The main aim of the tutor focus group was to gather thoughts from colleagues regarding the collaborative learning scenarios and use of *Survey Monkey*, and to look at details of the method in terms of number of participants, timing and other issues which might arise. The aim of the student focus groups was to draw out factors which students might find a barrier to participation in OCL activities.

Tutor focus group

On 30th August 2008 a message was sent to the 'AL Common Room' on First Class, asking for volunteers to take part in a pilot focus group in which we would discuss OCL within the OU. Readership of this forum was approximately 600 across a two-week period during the summer of 2008 (Dyke, 2008). All respondents to the messages were invited to take part in a focus group, thanked for their interest, given a brief explanation of how the group would operate, and asked to complete an electronic consent form. 10 Associate Lecturers responded to the invitation and became participants in the pilot study (table 5.1).

Table 5.1 Demography of tutor focus Group; Faculties: FELS = Education & Language, HSC = Health and Social Care, MCT = Maths, Computing & Technology.

	Science	FELS	MCT	Arts	Arts & HSC	FELS & social science
Male	1		1			
Female		2	2	2	1	1

The pilot focus group was run from 6th September – 2nd October 2008. The session began with participants being asked to read the collaborative learning scenarios (Appendix II) and respond with any comments about the scenarios to the First Class forum. It was explained that these were scenarios designed to help students in the focus groups understand the type of activity they might encounter in OCL with the OU, and that feedback was needed on whether they were thought to be a valid representation. This activity was followed by a message containing a link to *Survey Monkey*, where participants were invited to respond with up to four comments each under the two question labels of "factors which might encourage you to participate in formalised collaborative learning", and "factors which might discourage you from participating in formalised collaborative learning". All data from *Survey Monkey* was then collated and posted into the First Class forum, with a request that it be discussed. These discussions continued until 2nd October 2008.

Student focus groups

On 15th October 2008 a message (Appendix III) was sent to the OUSA student forums *'OUSA U211'*, *'OUSA A215'*, *'OUSA S104'*, *'OUSA Matters'* and *'OUSA Education Matters'*[5]. From reading message histories it was estimated that combined readership of these forums is approximately 400-450 in any given week. 31 students responded to the initial invitation, of which 29 finally participated in the focus groups. Participants were allocated randomly to groups denoted Focus Group 1, 2 and 3 (tables 5.2 – 5.4), except that the male to female ratio was pre-determined so that it was equal as far as possible in each of the groups.

[5] See footnote 1, page 6 and footnote 3, page 8

Table 5.2 Demography of Student Focus Group 1 participants; gender and faculty of study. FELS = Education & Language, MCT = Maths, Computing & Technology.

	Arts	Science	FELS	MCT	Education	FELS & Arts
Male	1	1				
Female	3		1	1	1	2

Table 5.3 Demography of Student Focus Group 2 participants; gender and faculty of study. FELS = Education & Language, MCT = Maths, Computing & Technology.

	Arts	Science	MCT	Social Science	FELS & Arts
Male		2			
Female	2		2	1	2

Table 5.4 Demography of Student Focus Group 3; gender and faculty of study. FELS = Education & Language, MCT = Maths, Computing & Technology.

	Arts	Science	FELS	MCT	FELS & Social Science
Male	1	1			
Female	3	1	1	1	2

All students were asked to electronically sign a consent form before the focus group began and return it to me by e.mail (Appendix IV). All participants did this. None of the participants had ever been my own students, and given the size of the student body it was highly unlikely any of the four Science participants would be future students of mine. Therefore there was no ethical concern regarding any tutor: student relationship. The student focus groups ran from 22nd October – 14th

November 2008. Three focus groups were run simultaneously, and participants of each group did not have access to the other groups. The session began with a welcome and an invitation to the group to discuss what they believed collaborative learning to be, and what the OU might be trying to achieve by introducing collaborative learning (Appendix V). The three collaborative learning scenarios (Appendix II) were then posted to the forum and students asked to access *Survey Monkey* to post up to four comments under the title "factors which might encourage you to participating in formalised collaborative learning". *Survey Monkey* was set up so that each focus group posted to a separate area, and the responses from each group were kept separate at all times. Responses were collected on 26th October and posted to the relevant forum, with an invitation to the students to read the comments and together decide if they fell into any particular 'categories'. The dual purpose of this was to encourage participants to think about the content of the comments and to introduce respondent validation (Bryman, 2004, p. 274) into the study. Further comments were sent to Survey Monkey and these were added to the list on 28th October. Participants were invited to discuss the comments in the First Class forum. On 26th October participants were asked to again access Survey Monkey and post up to four comments under the title "factors which might discourage you from participating in formalised collaborative learning". These were collated and all comments which had already appeared posted to the First Class forums on 31st October, with an invitation to categorise and discuss the comments. A final collation of all comments was made on 9th November, and posted to the relevant forum, alongside a summary. After thanking the participants the forums were closed on 14th November. Appendix V contains all the facilitation messages sent to each forum.

Data analysis

An iterative open coding technique was used to sort the *Survey Monkey* data from both the tutor and the student focus groups. Access to qualitative analysis software was not available at the time and therefore comments were manually grouped by cutting and pasting into a word document, printing, and then cutting the pages into

separate strips, each containing one comment. The process was begun by grouping similar comments into individual categories, each of which was allocated a temporary category title. This sorting continued, with new categories added where necessary, and re-visiting of category titles, until allocation to the most appropriate group had been determined for every comment.

Comparison between student focus groups would not be meaningful as participants were not assigned to groups according to any socio-demographic criteria. Data from the three student groups was therefore combined during the coding process. This is common practice when using focus group methodology (see for example Watson et. al, 2006; Lambert and Loiselle, 2008).

Following this initial coding, all data from the student First Class forums and *Survey Monkey* responses was then uploaded into *QSR NVivo 8* for further analysis. A coding technique was again used. This second round of coding was specifically to look for the metaphors and imagery used to describe the various reasons given by students for being encouraged to or discouraged from participating in collaborative learning. The technique was again iterative in that categories and their content were continually revisited. There is no set end point for this type of interrogation, the coding was continued until satisfaction was reached that the major images of OCL and 'being a collaborative learner' painted by the participants had been identified. These categories were then sorted into areas which it was considered might constitute particular discourses. The final analysis was to determine whether these potential discourses fit the label of 'discourse' according to the criteria of Gee (1990) and Parker (2002) as described in Chapter 2.

Results and Discussion

Critique of the methods

Three student focus groups were initially run, as this is the smallest number which might reliably indicate data saturation (Chapter 4). The data from FG1 was coded first, and no new categories emerged during coding of data from the other two groups. Therefore it can be reasonably assumed that saturation had been reached.

Demography of all focus groups was skewed towards females (tables 5.1-5.4). In 2007-8 the tutor population comprised 52.5% female and 47.5% male (Equality and Diversity Report 2008, 2008), in comparison with the pilot focus group ratio of 80% female to 20% male. The latest available statistics for students, from 2006-7 show a population of 61.1% female and 38.9% male, compared to the student focus group population which comprised 79.4% females and 20.6% males. In this aspect, internal validity of the method was low, but it was not possible to manipulate focus group demography by gender, other than by eliminating many of the female volunteers, or by re-issuing the invitation until more males had been recruited. It would have been useful to ensure a wide age range of participants, as this is a factor which might affect attitude to OCL, but this information was not requested from the students. In the pilot all faculties were represented, and all but Health Science were represented in the student groups.

One aspect of focus groups is that they are best held in familiar, non-threatening situations (Kitzinger, 1994). The online focus group participants were recruited from social learning and purely social areas of First Class, and therefore were in familiar surroundings in which they could be assumed to be relatively comfortable. In addition, the research question focused on collaboration which included asynchronous online discussion, and thus the enquiry took place in the setting on which it was based (Gaiser, 1997). However, only a minority of OU students use First Class socially, and there was no voice from those who might be less comfortable in such an environment. The lack of face to face focus groups means that some barriers to OCL participation

might have been under-represented or not heard at all. It is acknowledged that this was a weakness in the methodology.

Although discussion did take place in the tutor focus group forum, it was fragmented and disjointed in the student groups, and the use of *Survey Monkey*, which the tutor group indicated was isolating, appeared to severely detract from the group discussion setting in the student forums. The anonymity provided by *Survey Monkey* probably did give students more freedom to speak than if they had been making identifiable comments in the First Class forum. During the FG1 discussion on First Class, one student took exception to one of the comments posted in from *Survey Monkey*, and responded by disparaging the author's thoughts, which resulted in the person who had made the comment "admitting" ownership of the contribution. A brief argument ensued, prompting another participant to comment

> *"our original answers were valuable because they were given anonymously with no pressure on us to say the 'right' thing or defend our views" (FG1 forum)*

Therefore using *Survey Monkey* or some other form of 'break out' place in which to make anonymous comments is worthy of further exploration, but how it is incorporated into the focus group session needs more testing and evaluation.

It is possible that the heated discussion in FG1 was the trigger for some students to vacate the forum, because at this time three participants (not those who had expressed a view during this argument) stopped reading the messages. One student in each of the other two forums expressed regret that they needed to leave due to unforeseen circumstances, but all other participants continued reading until the focus group was closed after three weeks. However active participation had dwindled considerably by the end of the second week, with numbers actually posting being 5, 4 and 3 students in FG1, FG2 and FG3 respectively.

It was agreed in the tutor group forum that the scenarios were a good representation of the type of collaborative learning activities currently being implemented by the OU.

Asked about using *Survey Monkey*, it was suggested by one participant that the requirement to go outside First Class to an unknown environment was initially off-putting, but once tried, they found the site easy to use. Responses from other participants were that they did not have a problem with this, but two people said it was awkward reading the scenarios in one programme and making comments elsewhere, because both windows could not be open simultaneously. It was felt that anonymity can help by encouraging comments, but there was a general agreement within the group that going off on one's own was isolating, particularly as there was a time lag between sending comments to Survey Monkey and having them posted back to the First Class forum.

Student Focus Groups: first round of coding

This coding considered the answers sent to *Survey Monkey;* 144 comments, 53 from Focus Group 1 (FG1), 56 from Focus Group 2 (FG2) and 35 from Focus Group 3 (FG3) participants. The identified themes were categorized as '*summative reward', 'building knowledge', 'sharing work or knowledge', 'building a learning community', 'motivation', 'group inequality',' 'time', 'technology', 'facilitation'* and '*course relevance* & *materials*'. Three comments were placed in two categories as they addressed more than one of the identified themes (table 5.5).

Table 5.5 Summary of comments submitted to Survey Monkey in response to the collaborative learning scenarios (Appendix II)

Category	+ve	-ve	Example comments
Learning community	19	6	*"Offers shared learning in a social context" (FG3)* *"The way we can collaborate online makes us feel part of a team" (FG2)* "I do online courses to avoid contact with other people"(FG2)
Building knowledge	15	5	*"Explaining one's ideas and understandings to others can help to consolidate learning" (FG1)* *"Group discussion can enhance understanding of course material" (FG2)* "I prefer to take responsibility for my own learning" (FG1)
Facilitation	9	11	*"How into teaching the tutor is" (FG1)* *A lot of activity in a strong and diverse community – ie a tutor that facilitates with lots of exercises and students that have gelled as a group" (FG2)* *"Absent or otherwise ineffective tutor" (FG2)*
Reward	15	2	*"Taking part means extra marks!!" (FG1)* *Knowing that I would get some sort of mark (FG3)* *"I don't like having to rely on other people, even partially, for my marks" (FG2)*
Time	4	12	*"Ability to respond 'at 'leisure' and allows time for reflection" (FG3)* *"If time were short I would concentrate on my own personal study" (FG2)* *"Having to take part in something at a set time – my schedule doesn't generally allow for this" (FG1)*
Group inequality	1	14	*"That the rules apply to everyone, perhaps a range of marks for those who have contributed and those who have not" (FG2)* *"I would hate to be in a group where there were more takers than givers" (FG1)* *"One person dominating a group" (FG2)*
Sharing work or knowledge	0	10	*"Fear of plagiarism or students getting rewarded for other students work" (FG2)* *"I prefer to keep my work to myself, its mine, why should others benefit from my hard work?" (FG2)* *"I feel very uncomfortable with the thought that other students could make criticisms of a piece of writing I had done" (FG3)*
Motivation	7	3	*"The requirement to join in with discussions might be an extra motivation" (FG1)* *"It provides encouragement to complete work" (FG2* *"I would definitely not register for any course which insisted on this kind of collaborative learning" (FG1)*
Course relevance & materials	4	3	*"An engaging activity which built on what the course had been teaching" (FG1)* *"if collaboration felt shoehorned in for its own sake, might seem worthless exercise" (FG2)* *"Quality of materials and activities based on it" (FG1)*
Technology	1	6	*"A good interface – course materials etc should be easy to find" (FG1)* *"software not being compatible" (FG1)* *"What if my pc breaks down and I can't access the learning space until I can afford repairs" (FG3)*

An indication of the number or strength of responses allocated to the various categories is given in table 5.5, but the study was not intended to result in any numerical analysis of learner attitudes. This is the norm in focus group methodology, which does not purport to result in quantitative data. The data does show that three student focus groups all highlighted similar issues affecting OCL participation, and although the small number of participants means it is not valid to generalise to the whole student population, the facts that the pilot group of ALs anticipated most of the issues, and that many of the comments replicated those seen in other arenas such as the OUSA forums and the SSR, strengthen a tentative conclusion that saturation had been reached, and this is likely to be a representative picture in terms of the major areas of concern.

This data analysis is important in its own right. It is necessary for the OU to be aware of all factors which negatively affect student participation in OCL in order to reduce the barriers. Many of the categories are subsumed into the discourse analysis which followed this initial coding. Those which have been put aside during the rest of this investigation, namely technology issues, content and timing of activities, and facilitation by the tutor, should not be ignored in any assessment of barriers to online collaborative participation. However, there was a need to fine-focus this study and therefore the choice was made to concentrate on attitudes to collaboration and learning when undertaking the following discourse analysis.

Discourse analysis

This analysis covers both the *Survey Monkey* data and the forum data from all the student focus groups.

Belonging to a group

One discourse that appeared to be used by participants was that of belonging to a group, with all the trusts and fears this implies. The term 'social' appeared several times, for example;

> *"I enjoy the social interaction" (FG 1, forum)*

"Offers shared learning in a social context" (FG3 Survey Monkey)

"Social aspect of helping other students" (FG2 Survey Monkey)

Several participants also referred explicitly to a community, saying for example;

"a strong and diverse community" (FG1 Survey Monkey),

"sense of community" (FG3 forum) and

"more of an online community" (FG2 Survey Monkey).

Others referred to the isolation of working alone;

"OU study can be quite isolating" (FG3 Survey Monkey)

"less alone time" (FG2 Survey Monkey)

"I felt very isolated" (FG3 forum)

Being part of a group was not universally seen as appealing however. The spectre of 'other students' appeared to loom large for several participants. Trust in other students seemed to be lacking, with several students expressing fears of being laughed at. Word such as 'silly' and 'stupid' were used;

"Being made to feel stupid" (FG2 Survey Monkey)

"Will I appear silly/will they accept me/will I feel threatened/will I be bullied?" (FG3 Survey Monkey)

Being bullied or dominated as indicated above was a major theme across all three focus groups;

"The group may be dominated by stronger more confident personalities" (FG3 forum)

"One person dominating a group" (FG2 Survey Monkey)

"Concerns that discussions are likely to be dominated by stronger individuals" (FG3 Survey Monkey)

"an overbearing student" (FG1 Survey Monkey)

"simply promote bullying" (FG3 Survey Monkey)

Clearly the question of whether other students would be friend or foe was certainly a worry. One participant summed up this dichotomy, writing in response to the different attitudes expressed in the *Survey Monkey* comments;

"YAY!! New friends!!!!.....

BOO...I'm paired up with doofus!!!!" (FG2 forum)

According to Smith (2008), whilst trust is critical for successful group work, there are no generally accepted theories to explain trust in online collaborative groups. In her study (2008), Smith's findings were that trust was always an issue in online collaborative groups. Whilst valuing collaboration in the same way as focus group participants in this paper, the same barriers were raised in Smith's groups, in particular fear of "*not being as smart as everybody else*" and experiences of being "*treated disrespectfully*" so that voices were not being heard. This is very similar to the fears of dominating or overbearing students expressed here. That this situation can exist is borne out by the comments of some OU tutors when discussing the facilitation of collaborative activities (Chapter 8). Lack of trust was also cited as a significant barrier to collaboration by Hodgkinson (2006), including both trust in how shared knowledge was used and trust in the credibility of the knowledge itself.

When OCL was examined in practice (Chapter 6), lack of social interaction between members of the group was noted as a distinct characteristic of the asynchronous online forums where the collaborative interaction was intended to take place. Therefore this aspect of group cohesion is returned to in Chapter 7 where social presence in the forums during online collaborative activities was measured. The issue of trust is also very interesting when researching barriers to OCL participation, and is

deserving of further study amongst OU students. Trust was raised as an issue by participants in later focus groups (Chapter 8), both trust in student behaviour, and lack of trust in the knowledge being brought to the group, which I would suggest might also be influenced by the discourse of being a collaborative learner.

Being a collaborative learner

Another discourse employed by the focus group participants is labelled here 'being a collaborative learner'. The idea that collaboration could result in new knowledge being built between learners was clearly noted by one participant who wrote

> *"It seems to me that working with other people should bring a new perspective on ideas - and that everyone learns something from each other - the group should be greater than the sum of its parts" (FG3 forum)*

This idea was also alluded to by other students who painted a rich picture of interaction in a shared environment leading to shared learning;

> *"For me collaborative learning is about learning in a shared environment" (FG2 forum)*
>
> *"I believe that it about everyone pulling ideas together to enhance their learning experience and enrich knowledge" (FG2 forum)*
>
> *"Being able to work together benefits all participants - opening minds to possibilities which may not have been considered when working in isolation" (FG1 Survey Monkey)*
>
> *"Offers shared learning in a social context" (FG3 Survey Monkey)*
>
> *"Throwing ideas around in a group helps to trigger other ideas and insights" (FG1 Survey Monkey)*

In contrast, some participants had a very individualistic view of learning, saying for example

"I don't like having to rely on other people, even partially for my marks" (FG1 Survey Monkey)

"I prefer to take responsibility for my own learning" (FG 1 Survey Monkey)

"If time were short I would concentrate on my own personal study – which is the best route to knowledge for me" (FG1 Survey Monkey)

"As far as 'creative writing' is concerned I think collaborative study can be - and definitely is for me - a really bad idea. Sharing [...] I think, cheapens" (FG 1 Survey Monkey)

These quotes are all from FG1. However this is not significant because they were written in Survey Monkey, where participants could not see the contributions of others until they were collated and published anonymously to the forum for discussion.

Images of knowledge as an object appeared several times, always with negative connotations related to sharing that knowledge;

"I would hate to be in a group where there were more givers than takers" (FG1 Survey Monkey)

"I prefer to keep my work to myself. It's mine. Why should others benefit from my hard work" (FG1 Survey Monkey)

"waiting for me to come up with yet more ideas that they could poach. [...] stealing my ideas and greater understanding" (FG1 Survey Monkey)

Concern over group inequality spans the discourses of 'being in a group' and 'being a collaborative learner'. An image is painted that 'work done' equals 'giving something to another person' and no regard appears to be given to the idea that doing the work might equally benefit the worker.

"Uneven contribution could provoke resentment" (FG2 Survey Monkey)

"Some members of the group will ride on the coat tails of those who do the work" (FG3 Survey Monkey)

"Others not contributing will benefit from participants' work" (FG2 Survey Monkey)

"Fear of plagiarism or students getting rewarded for other students' work" (FG2 Survey Monkey)

"There is huge scope for plagiarism" (FG2 forum)

Collaboration was also sometimes viewed simply as a means to achieve reward

"is it worth the collaboration for the extra score" (FG1 forum)

"Perhaps what is needed is more motivation to do so [collaborate]. Greater reward for doing so" (FG2 forum)

"Perhaps a range of marks for those who have contributed and those who have not" (FG2 Survey Monkey)

Ideas such as 'poaching', 'plagiarism', and 'it's mine', alongside concepts such as 'takers and givers' and being 'rewarded for posting work', indicate knowledge was viewed by some participants as a commodity, with properties of ownership and trading value. The image painted was one of learning as a 'competitive marketplace'. Naidu and Jarvela (2006) assert that "*the completion of the CMC tasks as a part of this designed learning experience* [OCL] *must have explicit rewards for the students or else they would not be inclined to spend time on it*". Whilst this is clearly evidenced here, providing reward in terms of summative marks could reinforce the view that collaboration is transactional, and overtly affording it extrinsic value could give the impression that there is little or no intrinsic value. This aspect of reward and the influence on student thinking and action during collaborative learning tasks was also evident in later focus groups, and is returned to in Chapter 8.

Control was clearly an issue for several participants; many comments showed that students want to be in control of their learning and viewed being asked to collaborate as a constraint. Phrases used included

"could stymie" (FG1 Survey Monkey)

"could tie study down" (FG3 Survey Monkey)

"don't want to be forced" (FG2 Survey Monkey)

"at our own pace in our own way" (FG1 Survey Monkey)

"pushed into having to participate" (FG3 forum)

"I like [...] independence" (FG1 forum)

During the focus group conversations, some students referred to the informal OUSA forums as being of great help in their study, reducing isolation, providing sources of information and support, and giving space for learning together. Coupled with the desire for individual control of learning and the resistance to being compelled to collaborate revealed above, this has great resonance with the findings of Hodgkinson (2006) that students preferred informal to formal teacher-organized collaboration.

Summarizing the discourse

Thus far the analysis has concentrated on the imagery within the discourse, in other words, the interpretative repertoires. I turn now briefly to the other elements of a discourse according to the discursive psychology tradition; ideological dilemmas and subject positioning, which according to Edley (2001, pp. 198-203) are the three components to be assessed when analysing discourse in this way.

Being a collaborative learner appeared to throw up two dilemmas for the participants. Firstly there was the dilemma of learning in a group as opposed to learning on one's own. Whilst appearing to subscribe to the pedagogy of collaboration, several students stated a belief that they learn better on their own, and that if time were an issue then taking part in group activities would be abandoned. Secondly there was the dilemma

of sharing knowledge. The social constructivist theory of collaboration is that knowledge is built and shared between learners. However a dilemma appeared around issues of knowledge ownership. This was particularly highlighted by worry that some students would benefit from the hard work of others or might even 'poach' or 'steal' knowledge, and by the almost universal positioning that collaboration should involve reward in terms of summative assessment marks.

Belonging to a group also produced a dilemma; on the one hand students talked about the positive feeling of social interaction within a community, but there was also fear and distrust expressed about the potential actions of others in the group. Whilst the focus group students did not appear to have any dilemma about control, all wanting the power to determine their own study mode, there was definitely a positioning that the formality of being asked to undertake collaborative activities was different to the informal collaboration that they might choose to do in other spaces.

6: Moving on

This chapter sets the scene to further data gathering and analyses, and introduces how my teaching experience has been brought into this thesis. With reference to online collaboration undertaken by my own groups of students, the relationship between participation, engagement and social presence in online forums is explored.

Introduction

When this study began I was very much an outsider, looking in to what students were saying about collaborative learning, and why they might choose not to participate in collaborative activities. The conversations I was reading on student forums when this thesis was first proposed (see Chapter 1) appeared to revolve around the central question of 'why should I engage with OCL' and to centre on knowledge ownership and competition between students (Chapter 1). Analysis of what was said by both students and tutors during the pilot study focus groups (Chapter 4) showed that some students value the opportunity to work with other students, but confirmed that knowledge ownership and competition are factors in students' decisions on whether to participate, and also highlighted issues around reward, with metaphors related to transaction being prominent.

Participants in the pilot study had been recruited from across the University and had varying experience of OCL, including some who had not experienced it at all. Their contribution has been very valuable to this study. However, after completion of the pilot study I became much more involved with OCL as an Associate Lecturer, when collaborative activities were introduced into the modules I currently tutor[6]. I now support students as they take part in these activities, discuss with other tutors and the module team how we might encourage students into taking part, and share the disappointment when this encouragement fails; I can therefore now legitimately act as

[6] In the Open University, groups of about 15-25 students are allocated to a tutor, formally known as an Associate Lecturer, who supports their study and assesses their work. The students allocated to a particular tutor in a single group are known as the 'tutor group'. The forum to which students in this tutor group hold their discussions is known as the 'tutor group forum'.

an insider researcher, and this gives me further opportunity to investigate the practice of students, and suggest any relationship with learning discourses within the university.

Experiences

My experience of supporting students as they undertake online collaboration is from two OU science modules, *SDK125 Introducing Health Sciences: A case study approach*, and *S294 Cell Biology*. Both modules have an online *Moodle* forum for each tutor group, which students are encouraged to use throughout their studies, and where, at various times, the module study materials direct students to hold particular discussions with the other students in the group. Both modules also ask students at particular times to gather data from various sources and to enter this data into a wiki. Both gathering of data and discussion of information, which might or might not be linked to the wiki data, are herewith labelled online collaborative activities.

In my experience, on these modules, the majority of students only appear to operate on what might be called the edge of the group, or the edge of the activity, during these collaborative activities. On both modules, but particularly *SDK125*, many students only contribute just before the activity deadline, which means that as well as not taking part in any interactions with the rest of the group, other students have no opportunity to interact with them.

An example of this timing issue can be seen in *SDK125,* which includes an activity where students are asked to read an article on stem cell research and discuss their thoughts in the tutor group forum. Contributing to the forum and copying the contribution into their Tutor Marked Assignment (TMA)[7] is worth up to 2% of the TMA

[7] In the Open University, students usually submit pieces of continuous assessment as well as completing an end of module assessment. On *SDK125* and *S294*, this continuous assessment is labelled 'threshold formative' which means students need to meet the threshold of 40% average across the components to pass the module, but anything above 40% makes no difference to their final module grade, which in both cases is determined by their exam mark. On SDK125 this continuous assessment is made up of 7 computer marked assignments (CMAs) and 4 TMAs. On S294 it is solely 3 TMAs.

marks. Students are directed to complete the activity during the final week of study of SDK125 block 6[8]. The TMA is due 6 weeks later, on completion of block 7.

The pattern of submission to the tutor group forum for five SDK125 groups, presented from 2011 to 2013, is shown in table 6.1[9].

Table 6.1 *SDK125* forum submissions to a collaborative learning activity where students were required to access an article on stem cell research and post their thoughts into the forum. Results are from 5 separate October groups in 2011-2013, with two groups in 2012 and 2013, showing the 6 weeks from the setting of the activity to the TMA submission date. Each circle represents a single post.

●: 2011; ●: 2012 (I); ●: 2012 (II); ●: 2013 (I); ●: 2013 (II)

Feature	Week	Posts submitted to the thread
Activity set	1	
	2	
	3	
	4	
	5	
TMA due	6	

As can be seen from table 6.1, in all five groups, some students only posted to the discussion in the final week before the TMA was due, and although this finer detail cannot be seen in the table, several of these posts were in fact made on the final submission date for the assignment. Across the five groups, there were more submissions during the TMA submission week than during the week the activity was due to take place, 6 weeks earlier. In all five groups, for this activity, there was also no instance of a student posting more than one message to the thread, so there was no attempt to maintain engagement with others, even by students who did post in

[8] Open University modules are usually broken down into blocks, with at least one piece of continuous assessment related to each block.

[9] This data is from October presentations. Data from February presentation groups is not shown - this data is not directly comparable, because in the February presentation there are only 5 weeks between setting of the activity and TMA submission deadline.

good time. In the *SDK125* tutor forum[10], other tutors have also noted they had students who contributed at the last minute. This non-interactivity, which occurs across both modules and across all activities within each module, will be examined in depth in Chapter 7.

In the *S294* online collaborative activities, it is my experience that of those students who do participate, they will contribute to the information collection on the wikis, although this also often is contributed in a non-timely manner, but do not always take part in the subsequent discussion of that information. Talk in the tutor forum for *S294* confirms that this experience is mirrored by many other tutors. The most recent example is of a discussion in the tutor forum for *S294*[11], which took place on 20th-24th November 2014 and concerned the first collaborative activity for S204 students (figure 6.1). In this activity, students are asked to contribute an image to a wiki and then, in the words of the instructions from the module team, *"on the tutor group forum nominate the image which in your view most clearly illustrates the relationship between the structure and function of the eukaryotic cell, and briefly state why."*

The tutor discussion is shown here for the purpose of corroborative evidence that lack of student participation in collaborative activities is evident in many *S294* groups, and thus my experience can be extrapolated to that of other tutors. I did not contribute to this tutor forum discussion and therefore had no influence on the subject being raised or the subsequent discussion; in other words, this discussion was not engineered in any way for the purpose of this thesis, it was a spontaneous reaction by tutors to the behaviour of students in their tutor groups.

[10] A *Moodle* discussion forum is usually provided for all the tutors working on a particular module
[11] All tutors quoted here gave explicit permission for their words to be used in this thesis

Tutor 1: "Out of interest... has anybody ever had any students do the final part of this activity? [...] I haven't - and I have tried hard to encourage them - even this presentation when I had a really good lot of students posting images to the wiki. Still nothing ☹ I'm wondering whether to bother with the final part of this activity next year!

Tutor 2: "I had about 12/30 put images up and 8 of those actually bothered to vote [...]. I put a lot of emphasis on the fact that this activity is (1) a vital part of them learning how to recognise and interpret TEM images and (2) vital to their ability to relate structure to function."

Tutor 3: "Three comments after much nagging and me leading the way...all voted for the same image and gave the same reason!"

Tutor 4: "I had 11 out of 22 who posted to the wiki and of those only 4 voted on the image. This was with much nagging and chasing from me as well as extending the initial deadline for both posting to the wiki and the vote - oh and they all voted for the same image :-/"

Tutor 5: "Think I'm very lucky this year, 15/21 added images to the wiki and 8 posted pretty decent justifications for their 'favourite' images. It is so lovely to have such an engaged and interactive group ☺ "

Tutor 1: Oh well...just me and my lot then! 17/22 posted images but as I said no discussion despite my doing the things everyone else has been doing :-/ Mind you they are a quiet bunch.... Onwards and upwards next year.... Thanks for the replies ☺ "

Tutor 6: "No discussion on mine either :-/"

Tutor 7: "I had 9 entries but no discussion ☹"

Tutor 8: "A couple of 'favourites' identified but generally a lack of engagement I'm afraid"

Tutor 9: "I had 13 entries but no discussion"

Tutor 10: "10 images on the wiki, 3 students voted and commented (all for the same image) with a tiny bit of discussion between 2 of them"

Tutor 1: "Phew that's reassuring ☺ There's always such unexplained variation between groups - and I do know that - but I sometimes start to doubt myself and think it's my fault when they don't engage.....:-/

Tutor 11: 7 images and 8 votes (!) Not great, but those who took part did seem to engage. I encouraged heavily too but for me it was getting people to post something in the first place!

Tutor 7: One of mine must be telepathic :-/ Today there is a new contribution....

Figure 6.1 A conversation that took place between S294 tutors on the tutor forum, November 20th -24th 2014.

In summary then, taking experience of both S294 and SDK125 into account, students on both modules tend to follow one of three strategies with respect to their contributions to the collaborative activities:

- Some take part early in the activity and continue to be involved for the duration of the activity, contributing more than once to the forum discussions
- Some contribute only the minimum necessary to gain the allocated assessment marks, and neither respond to other contributions nor invite a response from other students
- Some make no contribution to the activity; occasionally these students make it known to their tutor that they will not be participating, but most simply make no contribution with no explanation given

From the above evidence, it would seem that the issue at stake for students, and for success of the activity, is not merely one of participation/non-participation, but of timely and truly collaborative interaction within the group.

Engagement

The term 'engage' or 'engagement' is used three times in the quoted tutor discussion regarding *S294* (figure 6.1). It appears some tutors are therefore of the view that a move from non- or partial- participation to full participation requires the student to engage with what they are being asked to do. When this investigation was begun, I initially thought of student engagement with OCL. Use of the term 'engagement' was thought questionable, because of the difficulty of defining and measuring engagement, and it was decided to replace this with 'participation'. However, as demonstrated above, it is also questionable whether 'participation' adequately covers the range of strategies used by students when asked to take part in collaborative activities. Therefore, with some trepidation, and feelings of stepping into a minefield, I turn here to this troubling concept of student engagement.

According to Munns and Woodward (2006), with substantive engagement, the learner is reflectively involved, actively participating, and genuinely valuing what they are doing. In relation to engagement with the institution (in their case, schools), and discussing the multifaceted nature of 'engagement', Fredericks *et al* (2004) summarise the research literature as addressing engagement in terms of behavioural, emotional and cognitive factors. They also suggest that engagement can be variable in both duration and intensity. Trowler (2010) explores this further, suggesting that each of these dimensions of engagement - behavioural, emotional and cognitive – consist of two opposite poles, positive and negative engagement, with non-engagement (which she describes as withdrawal or apathy) lying between them. With respect to behavioural, emotional and cognitive engagement respectively, positive engagement is described by Trowler as enthusiastic participation, showing interest, and meeting or exceeding assignment requirements; non-engagement as skipping lectures without excuse, exhibiting boredom, and late, rushed or absent assignments; and negative engagement as boycotting lectures, rejection and redefinition of assignment parameters.

A link is clearly being made between participation and engagement, both by authors such as Munns and Woodward, and Trowler, and by associate lecturers talking on forums. However this link is not straightforward and needs elucidating. I would say that using the definitions put forward by Trowler, positive engagement should promote full participation. However, full participation cannot be taken as evidence of positive engagement, students might be employing strategies which are not related to engagement but to, for example, a sense of duty because the tutor emphasises that full participation is necessary for the task to succeed for the whole group. The links between partial and non-participation, and negative and non- engagement are also not clear-cut. For example it appears that partial participation students who contribute at the last minute, making no reference to contributions from other students, and/or address their messages to me rather than to the group, are not displaying evidence of engagement as defined by Trowler. However it could be that

this is a negative engagement strategy deliberately employed by students. Likewise some students who do not participate at all could be either non-engaged or negatively engaged.

With regard to participation, there is a question as to whether some participants are reflectively involved in active participation, based on the instances where students do not access the forum until the cut off day for the assignment, whereupon they simply post the required message, and do not take part in the conversation by responding to postings by any other student. However, it is not only the late responders whose contributions do not appear to have the aim of engendering discussion. I have noted that contributions sent at the beginning of the exercise are often addressed to me as the tutor rather than to the group, and that students sometimes make a series of statements rather than using a discursive tone that invites response (figure 6.2). This is inconsistent with the claim made by Salmon (2003, p. 114) that "*online learning offers more opportunities for students to write for themselves to benefit their own learning and also for each other (rather than writing for the tutor)*". Some messages also have the appearance of being worked on and edited away from the online environment before being posted to the forums, judging by the complex sentence structure and refined use of grammar (figure 6.3).

Figure 6.2 A series of messages illustrating posting of 'serial monologues' addressed to the tutor in an SDK125 forum where participants had been asked to discuss an article they had just read (names redacted).

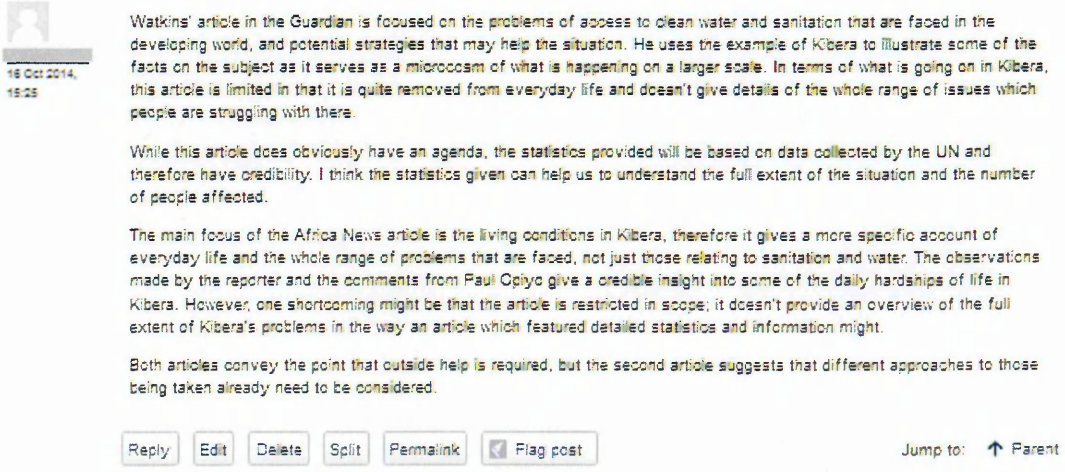


Figure 6.3 (a) Forum post from an SDK125 student (name redacted) where participants have been asked to discuss the difference between two news articles.

[redacted]
3 May 2013, 11:57

All three neurodegenerative disease show similarities in the three areas researched.

Main symptoms:

Parkinson's and Huntington's both have an effect on motor skills, where a person with Parkinson's has a resting tremor and develops progressively limited movement, especially in facial expression, Huntington's tends to produce abnormal involuntary movement and twitching accompanied by a slowness in the execution of movement. The common feature to all three diseases is the feeling of depression and associated behavioural traits that an individual experiences with the onset and progression of their disease, such as mood swings, loss of appetite leading to weight loss and social exclusion.

Causal Factors:

All three diseases are a direct cause or can tend to have a link to gene mutations. Huntington's disease is a mutation on chromosome 4 and can be directly inherited as it is an autosomal dominant disease, whereas Alzheimer's can have a specific genetic cause linked to abnormalities on chromosomes 1,14,21 and 19, but also can be caused by non-specific environmental factors. Less is known about the causes of Parkinson's disease but it could be caused by genetic factors or the environment, although there are rare cases of it being inherited. Exposure to toxic substances such as pesticides is thought to be a possible cause for genetic mutations and the subsequent onset of both Parkinson's and Huntington's disease.

Observable effects on cells:

The common theme that runs through all three diseases is the misfolding of proteins and the aggregation of them in neurons. Mitochondrial dysfunction is also common to all three diseases, leading to the resultant lack of energy experienced by individuals afflicted with these terrible diseases. All three diseases result in the degeneration of various parts of the brain ultimately affecting the cortex and cognitive function.

Reply | Edit | Delete | Split | Permalink | Jump to: ↑ Parent

Figure 6.3 (b) Forum post from an S294 student (name redacted) where participants had been asked to discuss similarities between three neurodegenerative diseases.

The impression created by the nature of posts such as those in figures 6.2 and 6.3 is that students are not really 'there' in the discussion, and one could question whether such participation really constitutes 'engagement'. This type of participation in asynchronous discussion forums where "*minimal effort is made to connect to the contributions of others*" has been described as "*serial monologues*" (Pawan *et al.*, 2003, p. 119). Anecdotally, this is a common trend amongst OU students, with some tutors having labelled this behaviour 'post and run'. Such lack of discursive engagement with other group members is not only a feature of online collaborative activities, it is mirrored in face to face group work, where students often work together to divide up the tasks, but then complete them independently before assembling this individual work into the finished product, a phenomenon which was documented, for example, by Volet and Mansfield (2006). Again, this has the appearance of students not being fully 'there' where the collaboration is supposed to

be taking place, but of producing independent 'monologues' that are then slotted into place. In this case too, students can be said to have engaged with the activity by doing as instructed, but not to have engaged with each other during the process.

According to Krause (2005, p. 3) "*part of the challenge of deconstructing the 21st century undergraduate is being aware of and fostering new engagement opportunities such as those offered by online technologies*". Participation in online activity is measurable using constructed criteria to determine whether it is full, part or not present. However this does not really help in understanding what is actually occurring at the level of engagement, and whether this offer of new engagement opportunities is actually being taken up by students. Krause (2005, p. 4) likens non-engagement to the physics concept of inertia, where inert students are those who "*do not actively pursue opportunities to engage in their learning communities*". I believe there is an important distinction to be made between 'engaging with the online learning activity' and 'engaging in the learning community'. A student might appear to be engaged with the activity simply by having completed the required tasks, as shown by the examples in figures 6.2 and 6.3 above. However, in both these sets of forum contributions, the students do not appear to be engaging in their learning community, which is a concern, since it is intersubjective engagement in the community which is thought to foster knowledge construction between the learners, and is the basis on which OCL as a pedagogical tool is built. As Kreijns *et al.* (2003, pp. 335-6) point out, "*there is ample empirical evidence that cognitive processes necessary for deep learning and information retention occur in dialogues*", and yet "*research on group learning shows that asynchronous distributed learning groups utilizing computer supported collaborative learning environments often lack the social interactions necessary for these dialogues*". Accordingly, analysis of social interactions, that is, engagement with each other, within an OCL activity can give a measure of engagement with the activity as a dialogic learning opportunity.

Social presence

When students are engaging with each other in a dialogic manner in an online environment, they will be projecting themselves into the online space, a phenomenon termed 'social presence' (Rourke *et al.*, 1999). This description of participants 'projecting themselves', aligns with my observation that students contributing to online collaborative activities do not always give the impression of 'being there'. It appears therefore that what was noted in the SDK125 and S294 forums is what others have described as a lack of social presence. Discussing social presence in OU online forums, Kear *et al.* (2014, p.1), say

> *"One common difficulty is that learners can find text-based online environments impersonal, because of the lack of communication cues such as facial expression and tone of voice. In asynchronous online environments (for example, discussion forums), the possible delays between a contribution and any responses can exacerbate the problem. These issues are important because they affect levels of participation and interaction, and therefore have an influence on learning. Unless students feel comfortable when communicating online, they may not participate openly, and so may not gain the benefits that an online learning community can provide." (Kear et al., 2014, p. 1)*

There are many instruments available for quantifying social presence in asynchronous forums (see Chapter 4). Social presence during online collaborative tasks has therefore been chosen as a measurable indicator of student engagement in their learning community.

In order to include analysis of both student participation patterns and social presence in asynchronous online forums, it was decided to use a case study approach, with the focus being on the above two science modules, *SDK125* and *S294*. Patterns of student behaviours and social presence in the forum-based online collaborative activities were measured quantitatively, and evidence of learning taking place within

these activities was qualitatively assessed. The results of these analyses are presented and discussed in Chapter 7. It is not possible, through analysis of the content of the collaborative activities, to determine whether non-participation equates to non-engagement or negative engagement, and this is returned to in Chapter 8, where student talk in focus groups is assessed.

The learning community, of course, does not only consist of the relatively small tutor groups which make up these case studies. There is a larger cohort studying the same module at the same time, and a very much larger group, OU students. Trowler (2010, p. 3) summarises student engagement as "*concerned with the interaction between the time, effort and other relevant resources invested by both students and their institutions intended to optimise the student experience and enhance the learning outcomes and development of students and the performance, and reputation of the institution*", but goes on to quote Krause (2005, p. 4) who suggested that "*For some students, the interlocking of individual and institutional interests, goals and aspirations never occurs. They do not choose or see the need to waver from their familiar path to engage with people, activities or opportunities in the learning community.*" Is this what is happening when OU students do not fully participate in collaborative activities? Are students simply choosing a strategy of lone study which they already believe suits them best as learners? They have, after all, chosen distance education. Does the way that learning is presented to OU students (both as a concept and in the nature of the study materials) reinforce the idea that good learning does not necessitate interaction with other students? And is either non-engagement or negative engagement with collaborative activities linked with either non-engagement or negative engagement with the university itself? Discussion of these questions is central to this investigation as to why some students do not participate, or undertake only partial participation in collaborative activities that are built into their modules, and is returned to in Chapters 8 and 9.

To step back for a moment, it must also be asked 'what *is* the message that the OU (or the module team or the tutors) wish to convey when they promote collaborative

learning?' What are we – the university, the module team, the tutors - attempting to achieve by the use of online collaborative activities? Is it to promote an engaged learning community within the university? Is it to engender engagement within the student? Is it because group work is so widely accepted as good pedagogy? Is it to enhance employability by introducing team working and ICT skills? For a student to wisely choose a route through collaborative activities, they need good understanding of why they are being asked to do something (Hillyard *et al.*, 2010). So for this exploration it is also necessary to discover university and module team thinking behind the incorporation of collaborative activities, and how this thinking is conveyed to students. It will also be helpful to look at how both learning and belonging to a learning community are presented in the University discourse. These questions are addressed in Chapters 9 and 10.

7: Case study part A: student engagement and participation

This chapter looks at how students engaged with the online collaborative activities that are part of two science modules. It contains analysis of online collaborative activities in action, through patterns of student participation and through social presence analysis of forums where the activities took place.

Introduction

As explained in Chapter 6, analysis of student participation behaviours where online collaborative activities form part of the formal study can help in the examination of student engagement with their learning community and this in turn could be linked to discourses of learning within the university. The two OU module, *SDK125 Introducing Health Sciences: A Case Study Approach* and *S294 Cell Biology* are both modules which I tutor and in which the study and assessment strategies include online collaborative activities (table 7.1). These can therefore be approached from the insider researcher perspective. As also explained in Chapter 6, impressions of forum content, as a tutor on both these modules, indicated that some students might not be engaging with the learning community during online collaborative activities, as demonstrated by the pattern of participation and the manner in which some of the posts were written. However these are only impressions from selected examples. To determine consistent patterns of engagement with the collaborative activities which could be more confidently linked to learning discourses, a quantitative analysis of student behaviour during the collaborative activities on the above two modules was performed. Specifically, analysis of social presence within the forum posts, which, as suggested in Chapter 6, could give an indication of student engagement with their learning community, and thus potential to use the forum space for knowledge construction, was undertaken.

Table 7.1 Collaborative activities in the modules *SDK125 Introducing Health Sciences: A case study approach* and *S294 Cell Biology*. The week number(s) shown relate to the week in the academic year when students are asked to undertake the activity.

Module	Activity instructions	Assessment
SDK125 Week 0	Post a message to the welcome thread	None
Week 1	"use the notes you made [...] to contribute to a discussion thread on any of the issues it raised for you [...]. 12% of the marks for TMA01 are for participating in this discussion"	Paste one of your own contribution and one other contribution into TMA1 6% Explain choices 6%
Week 2	Contribute to a second discussion thread	Could be used in place of above
Week 4	Students asked to collect numerical data from a website and add it to a group wiki	Add correct numerical data to the TMA1 wiki 5%
SDK125 Week 13	"Log onto your tutor group forum and discuss the remarks on this research made by Professor Karol Sikora with other students in your group"	paste one of your own contributions into TMA 2%
SDK125 Week 20	Students asked to generate numerical data from a home experiment and add the data to a group wiki	Add full and correct data to the wiki 10%
SDK125 Week 25	"after reading the article [...] write a brief paragraph summarising your thoughts [...] and post it to your tutor group forum"	Paste your forum contribution into TMA 2%
S294 Week 4	Upload an image and a description to a group wiki. "Your tutor [...] will open a discussion thread [...] nominate the image [...] and briefly state why	No assessment related to this activity
S294 Week 26	Extract information from various resources and post this to a wiki. "your tutor will then lead a discussion [...]. This discussion and your contributions to it will be assessed in TMA03.	Contribute to the group wiki 5% Contribute to the forum 5%

Method

Quantitative content analysis of tutor group forums in which *SDK125* and *S294* students hold their discussions was performed. The analysed forums were those

belonging to myself as a tutor: *SDK125* 2012J R08[12], 2012J R07, 2013B R08, 2013J R08, 2013J R07 and 2014B R08, and *S294* 2012J, and 2013J(I) and 2013J(II). These groups will hereafter be referred to as *SDK125* groups A-F and *S294* groups A-C respectively (table 7.2). These groups were chosen because they constitute all the groups on *SDK125* and *S294* for which the full data of student contributions to the forums was available.

Table 7.2 Number of students in each group who were actively studying at the point in the module where the collaborative activities began.

	Label	Tutor group	Male	Female	Total
SDK125	Group A	SDK125 2012J R08	6	19	25
	Group B	SDK125 2012J R07	3	17	20
	Group C	SDK125 2013B R08	2	16	18
	Group D	SDK125 2013J R08	5	20	25
	Group E	SDK125 2013J R07	2	9	11
	Group F	SDK125 2014B R08	5	8	13
S294	2012	S294 2012J	4	15	19
	2013(I)	S294 2013J (I)	4	11	15
	2013(II)	S2942013J (II)	3	10	13

Online collaborative activities in these modules are detailed in table 7.1. Analysis was performed on every forum thread that was associated with these activities.

In both modules, each forum was opened with a welcome message from the tutor, inviting students to say hello to the group and say a little about themselves. *SDK125* students are directed to this activity as part of the induction week materials and were reminded of it in an e.mail from the tutor. *S294* study materials do not ask students

[12] Open University tutor group codes also include the year and month in which the module begins. Months are labelled A-L for January –December respectively. Therefore 2012J refers to a group for which the presentation began in October 2012; Level 1 groups are also labelled according to the Open University region which manages that group and in which at least most of the students reside. R07 refers to the Yorkshire region and R08 is the North West region. S294 2013J (I) and (II) indicates two separate groups which began presentation in 2013J.

to introduce themselves on the forum but the tutor sent all students an e.mail with an invitation to take part in the forum.

The chosen method for quantitative measurement of social presence was an adaptation of Rourke *et al.* (1999) in which forum posts are interrogated for presence of one or more of 12 indicators of social presence, which fall into the three categories of doing affective, interactive or cohesive work within the group (table 7.3).

Transcripts of each thread of messages were saved as *Microsoft Word 2010* documents and loaded into QSR *NVivo 10* for coding. Each message was then coded for presence of each of the 12 indicators. Each indicator was classed as either present or absent across a whole message, regardless of whether single or multiple instances of that indicator were present in that message. Here the method differs from that of Rourke *et al.* (1999) who used themes within messages as their unit of analysis. Results from the coding were then transferred into *Microsoft Excel 2010* (see Appendix VIII) for data analysis and visualisation.

The other adaptation made to the Rourke *et al.* (1999) method involved the coding itself. The coding scheme of Rourke *et al.* includes the interactive social presence indicator 'continuing the thread', to be determined by use of the reply feature of the software (see Chapter 7, table 7.2). Due to the nature of the messaging system alongside the instructions given to students, in the analysed discussions the only way students could contribute was by use of the reply feature. Removing the 'reply' indicator was thought to be a gross alteration of the original set of indicators. Therefore the parameter of the indicator was altered, so that the content was assessed to determine whether the reply button had simply been used as a method to contribute, or whether the reply was intended as a response to the previous message. Those messages that, in the message hierarchy, appeared as a reply to an earlier message, were not counted as containing the 'reply' indicator unless the content specifically responded in some way to the earlier post.

Whilst in other respects the method of Rourke *et al.* (1999) was closely followed, some decisions on whether a particular indicator was present related to the exact nature of the Moodle forums and to the specific content of the collaborative activities, and these could not be determined by referral to the work of other researchers. The following two decisions were taken:

- Collaborative activities in *SDK125* were designed around discussion of socially or politically controversial subject matter to which students might have an emotional response; lack of clean water and sanitation in the shanty town Kibera, binge drinking, and stem cell research. When discussing these subjects, students often used rhetorical questioning as a device, for example, in a discussion on lack of clean water in Kibera; "*we have technology to fix this so why can't we?*" Although this is a question it was decided it does not constitute interactive social presence; the only questions considered indicators were those which either the tutor or another student could reasonably be expected to answer.
- Likewise, in the *SDK125* discussions, the content matter led students to use phrases relating to an emotion such as "*it was shocking*" or "*it is sad*" which were not counted as affective social presence because it was decided they place the emotion outside the message author. Emotion expressed as "*what saddened me*" or "*I feel helpless*" was counted as affective social presence because the student was determined to be projecting their own feeling into the forum.

Table 7.3 Evidence indicating social presence used in the content analysis of the forums where online collaborative activities took place during study of SDK125 and S294 (adapted from Rourke *et al.*, 1999)

Category	Indicator	Definition	Example
Affective	Expression of emotion	Conventional or unconventional expression of emotion, includes repetitious punctuation, emoticons	*"(if that's allowed?!?!)"; "it surprises me that dirty water poses a greater risk to human life than terrorism or war yet the thing to hit the national newspaper this year was the hosepipe ban"*
	Use of humour	Teasing, cajoling, irony, understatements, sarcasm	*"so glad someone else has slugs lol.....know my eyesight can be bad but I've got new glasses!!!"; "I had to go away and think about this one for a bit ☺"*
	Self-disclosure	Presents details of life outside of class, or expresses vulnerability	*"sorry for not joining the discussion sooner but I had an accident on my bicycle"; "I didn't quite grasp some of the concepts"*
Interactive	Continuing a thread	Using reply feature of software	*"I think that was the thing that got to me too"; "Actually many diagnoses are done preliminarily by symptoms alone"*
	Quoting from others' messages	Using software features to quote from other messages	No examples
	Referring explicitly to others' messages	Direct references to contents of others' posts	*"Huntington's and Parkinson's are more similar, like Sxxxx says"; "OMG I think you took it a little bit overboard by saying that Mr Sikora could be responsible for future deaths and diseases"*
	Asking questions	Students ask questions of other students or the moderator	*"Does anyone have any ideas of how to put together the summary?"; "What do you think?"*
	Complimenting, expressing appreciation	Complimenting others or contents of others' messages	*"Everything you wrote looks great"; "That's a really interesting angle"*
	Expressing agreement	Expressing agreement with others or content of others' messages	*"I was also surprised at the similarities"; "I agree that comparisons at a cellular level are quite difficult"*
Cohesive	Vocatives	Addressing or referring to other participants by name	*"what shocked me Douglas on the photos"; "That sounds like a fair statement to me Sxx"*
	Addresses or refers to the group using inclusive pronouns	Addresses the group as we, us, our group	*"so should we decide during Wednesday, leaving Thursday to fill it in?"; "with stem cell research I think we could all agree to disagree"*
	Phatics, salutations	Communication that serves a purely social function; greetings, closures	*"Hi everyone"; "Hope study stuff is going well ☺" "Kind regards"*

Results and Discussion

Critique of the method

Analysis for social presence was employed as a measure of student engagement with their learning community, which is argued to be necessary for collaborative interaction leading to deep learning. Care must be taken to avoid assumptions here. Cognitive presence and knowledge construction were not measured and these results are not intended to give any indication of actual learning. The purpose was not to determine whether deep learning was occurring, or even whether there was an environment where collaborative learning could take place, but to provide a measure of the interaction between students during formalised online collaborative activities, giving a quantitative triangulation of my insider observations.

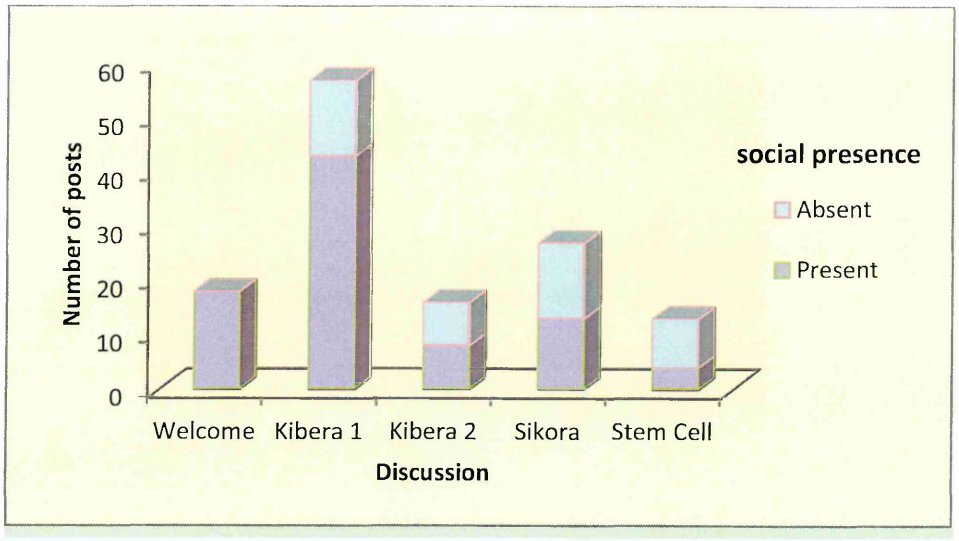
The forums were not used solely for collaborative activities, they also provided a medium where the tutor could communicate with the students, and where the students could talk to the tutor and each other, and use of the forum as a social space was encouraged by the tutor in all the tutor groups. There were many posts in the forum that were not analysed for social presence and it could be argued that if there is social presence anywhere within the environment then it is not so crucial during the formalised activities. Measurement of social presence across the whole forum could have been performed. However presenting this data in a meaningful way would have been beyond the scope of this thesis, and in all the groups there was in fact little social interaction between students other than in the initial welcome thread, and in every forum analysed in this investigation, attempts by the tutor and by individual students to generate further conversations were not successful.

With regard to the coding, subjectivity and inter-rater reliability must be considered. The method was chosen because inter-rater reliability had been established by Rourke *et al*. It would have been more rigorous to undertake a percent agreement analysis with another coder. However at this time, such an analysis has not yet been possible.

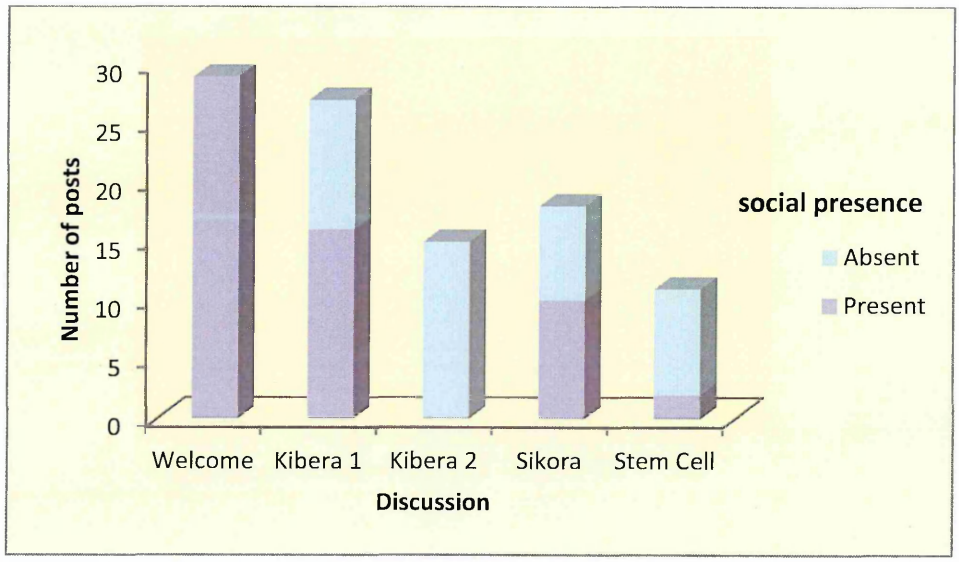
The number of students registered on the modules decreased over time, as students withdrew from the study. Data for student numbers at the various time points in *SDK125* other than the first activity was not available as the analyses were performed retrospectively, when these figures were no longer obtainable. Thus, whilst patterns of social presence/absence were identified, no conclusions can be drawn about the actual number of participants in the *SDK125* activities. For *S294*, student numbers at the time of the online collaborative activity are known, as the forums include a record of students placed into each subgroup by the tutor, and thus participation rates for the *S294* activity could be determined.

Participation and social presence in the SDK125 forums

The results from the content analysis for social presence are presented in Figure 7.1 which shows the number of posts which do or do not contain any social presence indicators, in each of the message threads '*Welcome*', '*Kibera 1*', '*Kibera 2*', '*Sikora*' and '*Stem Cell*', in *SDK125* groups *A* to *F* (see tables 7.1 and 7.2). As can be seen in figure 7.1, all of the posts to the *Welcome* thread in every group contained social presence indicators. Most but not all students in each group chose to write to the welcome thread, with participation in this conversation being 80, 72, 67, 100, 100, and 77% of those who then took part in the *Kibera* discussions, in groups *A-F* respectively. Students had been directed to say 'hello' this thread in the module materials, and were further encouraged to do so by the tutor. Thus it can be seen that a proportion of students (18.7% across the 6 groups) who were actively studying the module, as determined by their subsequent activity, chose to not take part in the initial attempt to create a cohesive, socially interacting community.



(a)



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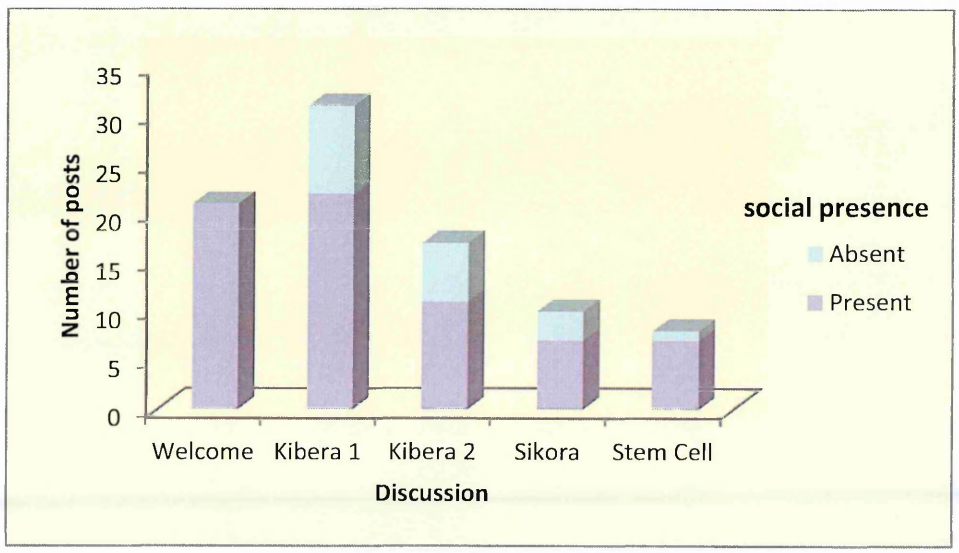
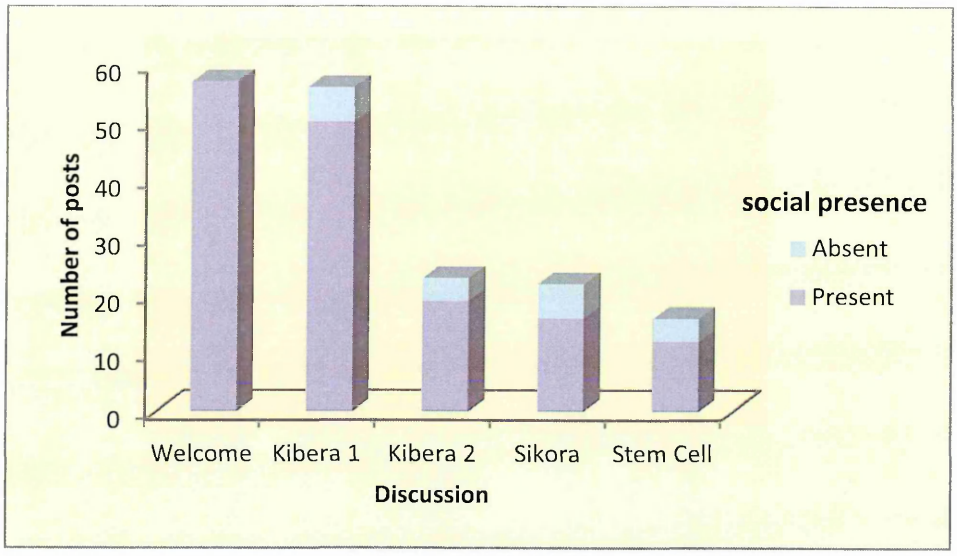
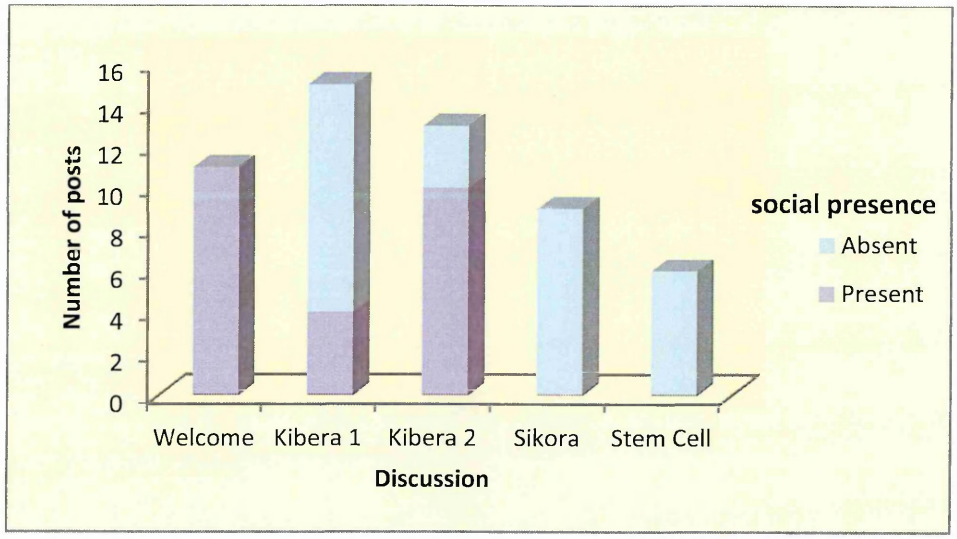


(c)

Figure 7.1 (a)–(c) Number of posts in which indicators for social presence were either present or absent, during the 'welcome' conversation and four discussions which took place between students as OCL activities in SDK125 Groups A-C respectively.



(d)



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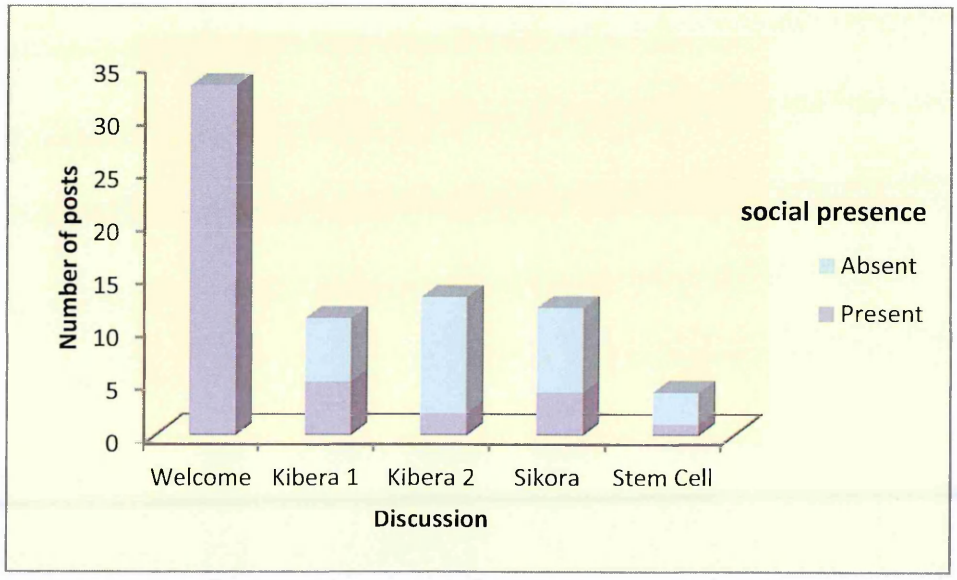


(f)

Figure 7.1 (d)–(f) Number of posts in which indicators for social presence were either present or absent, during the 'welcome' conversation and four discussions which took place between students as OCL activities in SDK125 Groups D-F respectively.

In all groups, the proportion of messages containing social presence indicators reduced as soon as the activities required specific content that was related to the module material (figure 7.1). in the *Kibera 1* discussion of *Groups A-F*, social presence indicators were identified in 75, 59, 71, 89, 27 and 45% of posts respectively. In the *Kibera 2* discussion, the results were 50, 0, 65, 83, 77 and 15% respectively, in the *Sikora* discussion results were 48, 56, 54, 73, 0 and 33% respectively, and in the Stem Cell discussion, 31, 18, 88, 75, 0 and 25% of posts respectively had at least one indicator for social presence (figure 7.1). The only conclusion that can be drawn from these figures is that social presence appears to be relatively high in a few discussions, but is less prominent, and sometimes completely absent in others. Apart from a general reduction in numbers of posts over time, it is difficult to identify any particular trends either within or between the groups, using this method of analysis. Thus to determine if there was any factor which had been missed using this instrument in a quantitative manner, the analysis was supplemented by a closer look at message content with regard to the social presence indicators.

In the *Group A Kibera 1* discussion, where 75% of the messages contained a social presence indicator, 22 students took part, 12 of whom made multiple posts, most only posted twice, but one student contributed 9 times. This student appeared to act as a 'social glue' with most of her messages containing multiple interactive indicators, in particular self disclosure, and complimenting and agreeing with other students. Affective social presence indicators were present at a relatively very high level compared to other discusions both within and outside this group, with 10 messages containing expressed emotion, and 5 containing self-disclosure. 6 students, however, did not include any social presence indicators in their messages, and these students only posted one message each. It is clear from this analysis that there is a correlation between greater interaction with the activity, and projecting oneself into the group.

In the *Kibera 2* discussion, 16 students took part, each contributing a single message. 8 contained a social presence indicator, but in 7 of these, there was a sole indicator,

that of including a salutation such as 'Hi all', and only 1 contained both a salutation and the comment that the student agreed with an earlier post. This message was also the only one which was posted in reply to another student, as opposed to replying to my opening message inviting the discussion. So interaction between students, evidenced by the multiple posts and the interactive social presence indicators in the *Kibera 1* thread, was not maintained in this second discussion, despite it being started just one week later. Students complied with the requirements of the activity, thus participating, but did not carry out an actual discussion, and this correlated with low social presence in the messages.

The third discussion, *Sikora*, was interesting from a social presence perspective. This activity asked students to discuss the impact of potentially controversial remarks in a radio 4 programme on alcohol use, made by Professor Karol Sikora. The forum discussion began with a series of messages which contained no social presence indicators. Each of the contributions was posted in response to the initial message, in the manner of 'serial monologues' as described in Chapter 6. This altered when one student wrote "she refers to the amount of consumption in 'glugs' [...]". This resulted in another student asking whether there were different sources because the term she had was 'slugs', and there then followed a short humorous chat about failing eyesight and slugs. Another humourous conversation subsequently occured, with participants querying whether Professor Sikora is male or female, since some students were using masculine and some female pronouns. There were many social presence indicators in these two exchanges, which took place only between those students who had already contributed to the academic discussion. When later students contributed to the forum, there was a reversion back to the 'serial monologues' format, with no social presence indicators in the rest of the messages. In total, 18 students contributed, 8 of whom included no social presence indicators in their message. These 8 all contributed only one post to the discussion. Here it can be seen that greater engagement with the discussion occurred when there was more social presence within the messages.

The final discussion on stem cells consisted mostly of serial monologues. 13 students each contributed one message. 4 of these did contain a social presence indicator, 3 of which were an agreement with what others had said, and one of which was self-disclosure.

The pattern for *Group B* was very similar to *Group A* except overall there were relatively more posts with no social presence, and no social presence indicators at all in the *Kibera 2* discussion. Affective social presence indicators, both expressing emotion and self-disclosure, were again prominent in the first discussion where 8 of the students made multiple postings. Self disclosure was particularly high, being present in 9 of the 27 messages. However this presence was not replicated in the further discussions; there were no affective social presence indicators at all in the remaining threads.

The pattern for *Group C* was also very similar to *Group A*, and although higher social presence was indicated in the *Stem Cell* discussion, this presence was all in the cohesive category, with the only indicators being the inclusion of a salutation at the start of the message. In all other respects these posts had the appearance of a series of monologues; there was no interaction between the contributors, and no affective indicators.

From the summative quantitative data, *Group D* looks to be rather different, with a higher proportion of social presence indicators across all four collaborative activity threads. In this case, as with the social presence in *Group A*, in the *Kibera 1* discussion one student seemed to be providing the social glue, she made ten separate contributions, responding to and building on what others had said. However this did not continue, and in the other three discussions the only major indicator was cohesive, and as found for other groups, consisted almost entirely of a one or two word salutation, either 'hi' or 'hi everyone', with the contributions otherwise having the appearance of serial monologues. So although students in this group did appear to be talking directly to each other, they were not interacting with each other.

In the messages posted by members of *Group E* there was initially very little social presence on the forum, the first discussion was overwhelmingly a set of serial monologues. However at the start of the second discussion, one student had difficulty finding the discussion article, and others helped her, which seemed to break the ice, so that for the rest of the discussion, most students were talking to each other, at least by including a salutation, but also by agreeing with each other. The pattern here then is reversed, with a higher proportion of messages having social presence indicators in the *Kibera 2* than the *Kibera 1* discussion. However the final two discussions held no indicators for social presence, both reverting back to consisting solely of serial monologues.

Group F was the only group which contributed more messages to the *Kibera 2* discussion than *Kibera 1*. In *Kibera 2,* however, the only social presence was one student asking where to find the relevant article, followed by a further message saying she had found it; there was no response from anyone else in the group to this query. Likewise in the Sikora thread, a student also asked where to find the relevant data, and this did result in a short exchange between two contributors which contained social presence indicators, but did not result in any other contributors including any affective, interactive or cohesive indicators in their subsequent contributions.

Participation and social presence in the S294 collaborative activity

Encouraging S294 students to come together as a community at the start of the module was less successful than SDK125. Participation in the 'welcome' thread was low, at 10 of 22 students, 8 of 20 students and 13 of 20 students in the 2012, 2013(I) and 2013(II) groups respectively. At the time of the analysed collaborative learning activity, the numbers of students who were still actively studying were 21, 15 and 13 respectively. With larger numbers it would be interesting to determine whether there is any correlation between early engagement with the group and retention on the module.

The analysed *S294* collaborative activity differed from the *SDK125* activities in that students first had to work together in smaller groups to divide the tasks, complete a wiki and then come together as a whole cohort group to discuss their findings. Participation in the first forum activity was relatively high in all three groups, with 67-77% participation by students who were still actively studying the module (table 7.4), that is 15, 10 and 10 students respectively took part in the activity. Social presence in this first activity was also high, with 86-100% of messages containing at least one social presence indicator (table 7.4). This is not surprising as students had to work together as a group to organise themselves.

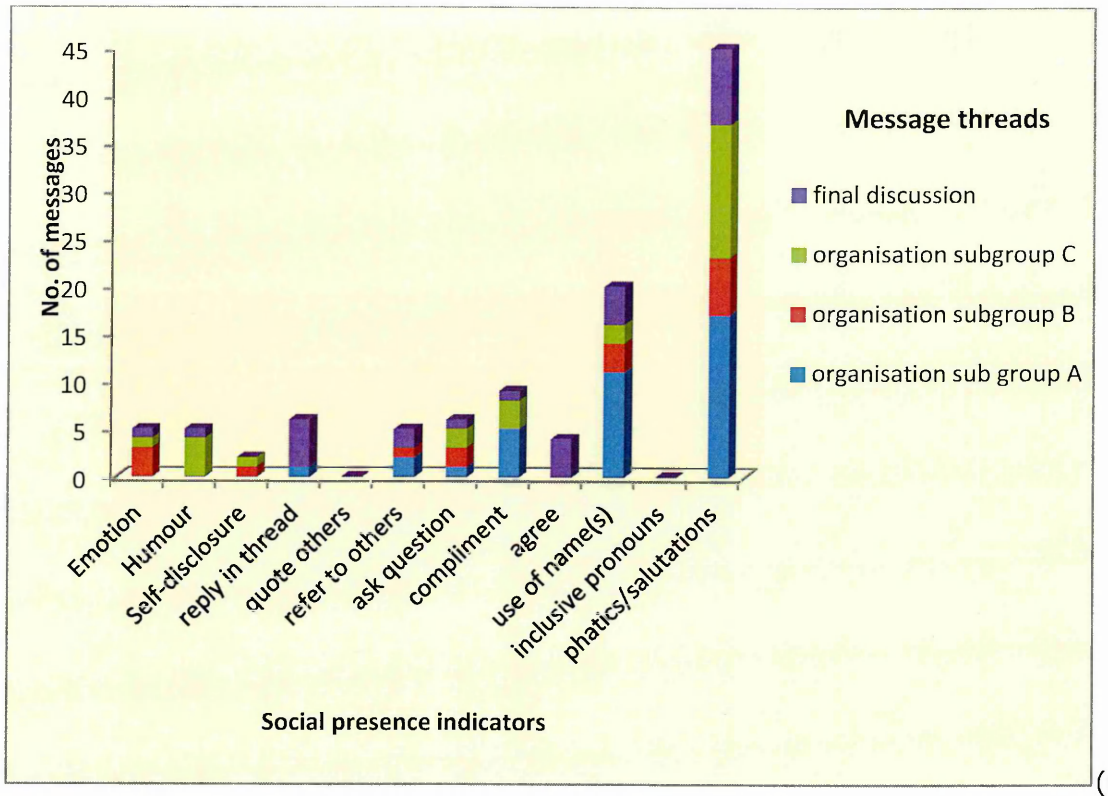
There was, however, no trend across all three groups in the discussion thread, where students were asked to discuss information compiled in the wiki. In the 2012 group, all 15 students who had contributed to the organisation and building of the wiki took part in the subsequent discussion. However, the percentage of messages containing any social presence indicator was only 33%. Eight students contributed a single message, of which six consisted solely of factual content. Two contained a salutation to the tutor, which actually appears to exclude other members of the group and thus were discounted as containing any social presence. Therefore only seven of the 15 students contributing to this thread posted any message that, using the chosen indicators, could be said to demonstrate that this student was socially present in the discussion. In contrast, in the 2013(I) group, only half the students who had contributed to the wiki building took part in the ensuing discussion, but all five did contribute at least one message that exhibited social presence, although this was still only present in 56% of messages. Of the 2013(II) group, again only half of those who had built the wiki took part in the ensuing discussion. However in this case, social presence was visible throughout the discussion (table 7.4).

Table 7.4 Participation and social presence in the organisation and discussion threads

	Organisation threads		**Discussion thread**	
Group	Participation %	Social presence %	Participation %	Social presence %
2012	76	92	76	33
2013(I)	67	86	34	44
2013(II)	77	100	39	100

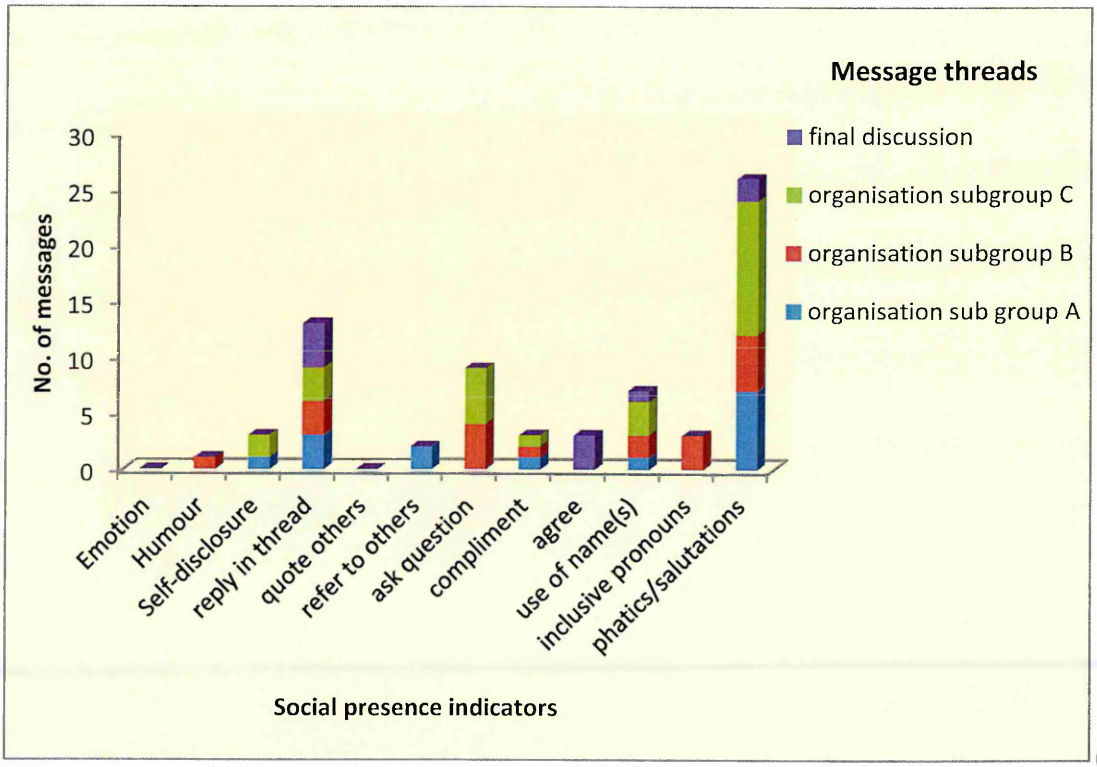
The most interesting features of this analysis are firstly that participation in two of the three groups dropped to a half when students were asked to take part in an academic discussion, and secondly that during that academic discussion, there was a move away from students being socially present in two of the three groups. However, the two do not appear to be linked, since the group that maintained full participation at the discussion stage had the lowest social presence during that discussion (table 7.4).

Participation potentially offered two extrinsic rewards to students; TMA marks available simply for taking part, and the knowledge being built in the wiki for use in writing the TMA. This could explain the relatively high number of participants who originally engaged with the activity. However, at this point in their study most *S294* students have already passed the coursework threshold, and any work they do in the collaborative activity, and indeed any work they do in the final TMA, will not have any effect on their passing the module. In two of the analysed group discussions, the contribution by students was minimal, just enough to be given the marks. Only in the 2013(II) group did discussion continue beyond that required by the assessment regime, and it is interesting to note that this was also the academic discussion that contained the most social presence (figures 7.2 -7.5).



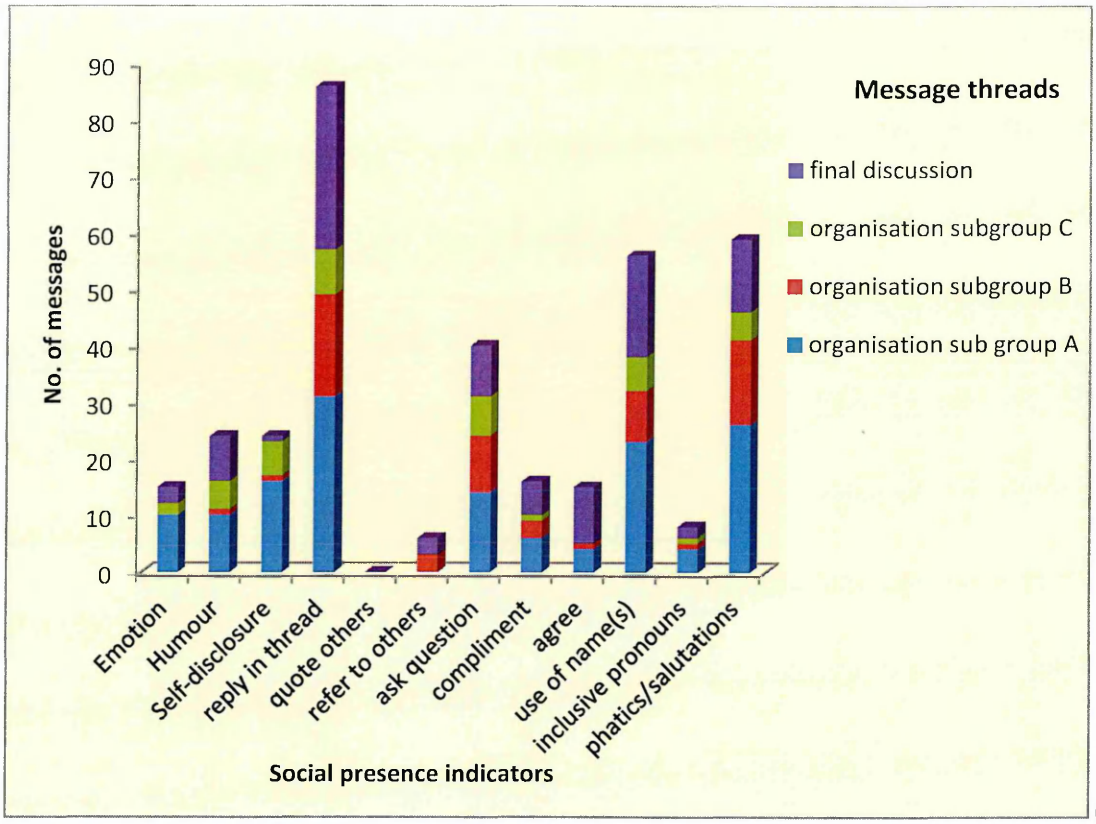
(a)

Figure 7.2 (a) Social presence in messages posted to the S294 collaborative activity threads by students in the 2012 group.



(b)

Figure 7.2 (b) Social presence in messages posted to the S294 collaborative activity threads by students in the 2013(I) group.



(c)

Figure 7.2 (c) Social presence in messages posted to the S294 collaborative activity threads by students in the 2013(II) group.

Figure 7.2 shows the number of messages which contained the various social presence indicators according to the adapted method of Rourke *et al.* (1999). Any message might contain multiple indicators, so this is a measure of the social presence rather than of total message numbers containing any social presence. The data here shows that in all three groups there was more social presence during the organisation than during the academic discussion. However the pattern of social presence is different in the 2013(II) data, with proportionally more affective presence than the other two groups, and almost as much use of names as inclusion of phatic/salutation indicators. In this group, social presence is proportionally higher in the academic discussion than in the other two groups. Further data manipulation (figures 7.3-5) allows comparison of between the groups, and normalising for different student and message numbers within the three groups. In this data however, any differences between the organisation and the discussion threads has been lost.

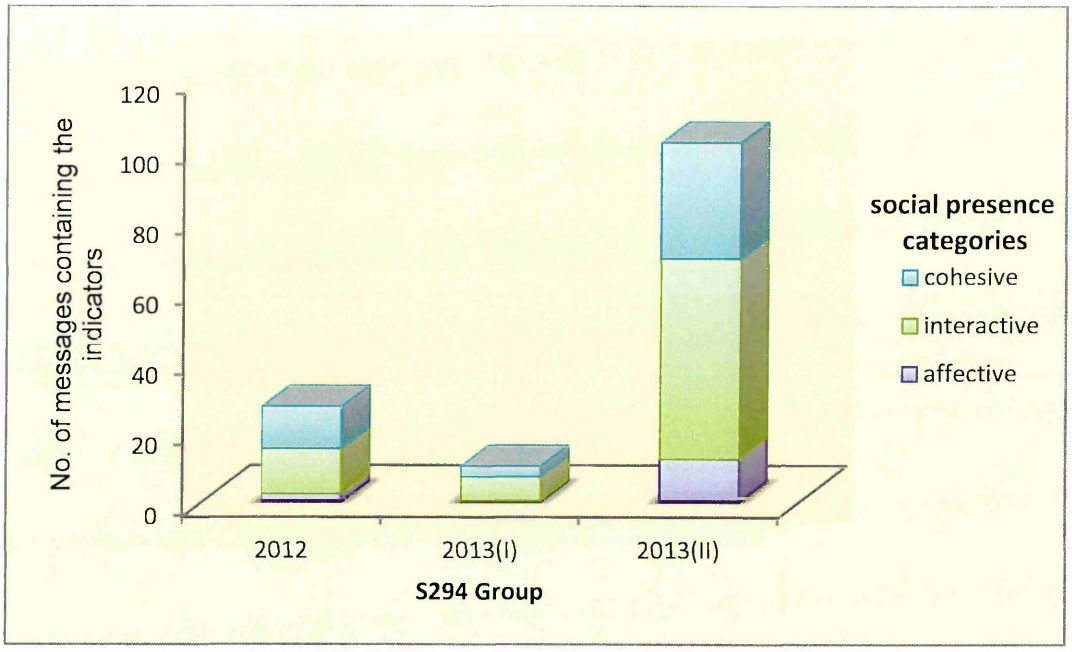


Figure 7.3 Number of messages containing social presence posted during the *S294* collaborative activity by groups2012, 2013(I) and 2013(II). These messages account for 72.5, 80 and 100% of all messages posted by groups 2012, 2013(I) and 2013(II) respectively.

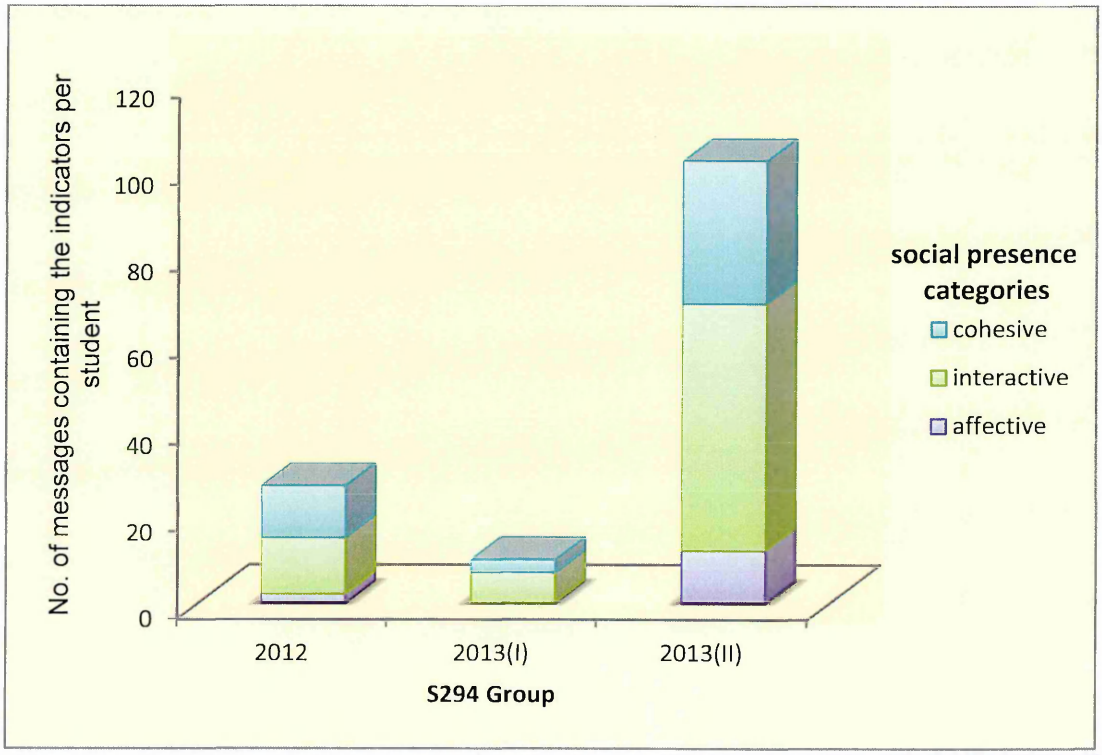


Figure 7.4 Number of messages containing social presence posted during the *S294* collaborative activity by groups 2012, 2013(I) and 2013(II), normalised per student.

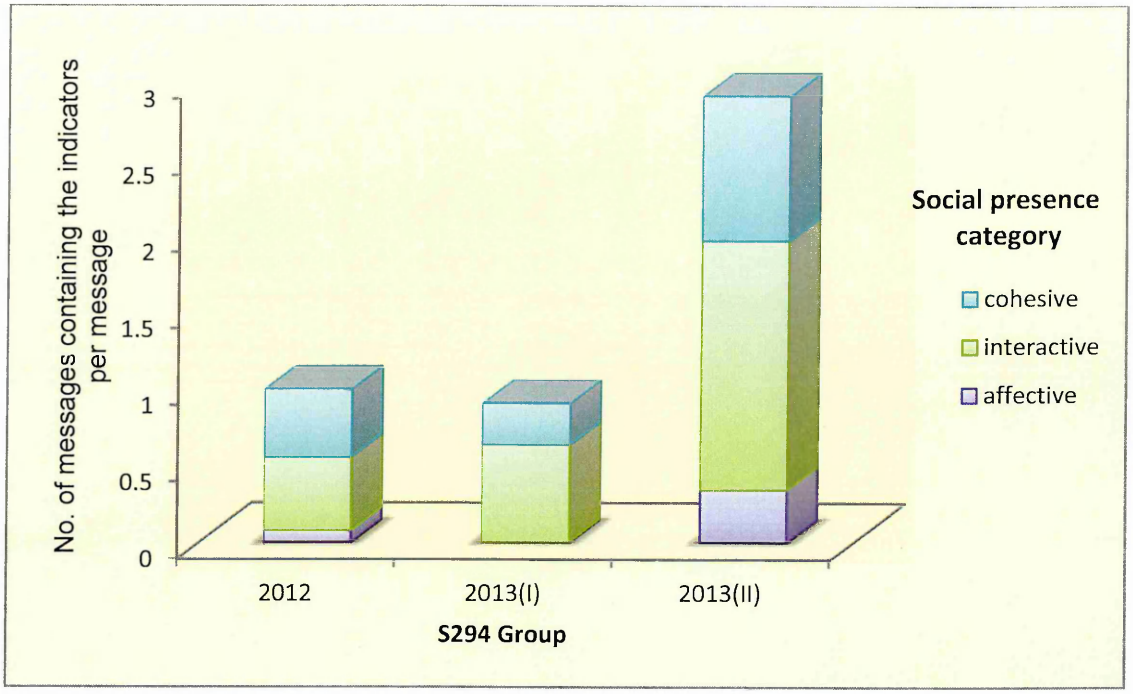


Figure 7.5 Number of messages containing social presence posted during the *S294* collaborative activity by groups 2012, 2013(I) and 2013(II), normalised per message.

Figure 7.4 shows that the pattern across the groups is still present when the data is normalised for the number of students participating in the conversation. Looking at the number of students taking part, the data for the 2012 group shows an even greater disparity with 2013(II), and the trend with 2013(I) is reversed; on a 'per student' basis, social presence in the 2012 group is lower than that in the 2013 (I) group. This is explained by the fact that in 2012 so many students did not include any of the chosen social presence indicators in their messages.

Although there were many more messages posted by the 2013(II) group into their group discussion, figure 7.5 shows that was more social presence per message than in the other two groups. Therefore the disparity in the number of messages does not account for the much higher number of social indicators that were seen in messages contributed by this group. On average, there was just over 1 social presence indicator per message in the 2012 and 2013(I) groups, whilst there were just over 3 indicators per message in the 2013(II) group. Of the five contributors to this latter discussion, two members posted just one message each, with the other three continuing the

discussion over many posts and days. Interestingly, two of the participants were from the same subgroup, and participation of the third student gradually increased as the discussion between the other two continued. There is a good argument to be made here that the higher level of social presence in this conversation was the driver for the sustained discussion, all of which was on topic for the activity, and that in this case it was two students, who had built a relationship during the first activity, who provided the 'social glue'.

In conclusion, these analyses demonstrate that even when engagement with the group, as determined by both participation and social presence, is achieved, it is not generally sustained. This finding somewhat mirrors that of Swan (2002) who determined that cohesive social presence diminished as an online course progressed, although in Swan's investigation, interactive social presence increased. For the *SDK125* groups it could be argued that the relatively long time between activities allows group cohesion to be lost, and that in any case, the nature of the final activity in particular does not encourage collaboration. This would concur with the thoughts of Akyol *et al.* (2011) who found that group cohesion was significantly lower in an online course delivered over 6 weeks compared to the exact same course delivered over 13 weeks, and who suggested that the shorter intervals between activities did not give students opportunity to lose a sense of community. SDK125 does not follow this trend at the start of the module, where the first three activities are in three consecutive weeks, yet there is a downward trend in social presence across the three activities. The difference between the three activities could be a factor here. The first asks students to merely introduce themselves to each other on the forum, initiated with a light-hearted introduction by the tutor. The second asks students to discuss their reactions to a news item they have read, so although this is academic in nature, there is no sense of revealing anything about their understanding of the article to other participants, it is merely their reaction which is asked for. The third activity asks for a comparison of two articles, and it could be argued that this is a more academically demanding task in which students reveal understanding. In *S294*, the loss of both

participation and social presence over a short timescale is even more pronounced, as it occurs within a single activity. One way to summarise this *S294* trend is that students tended to engage with the activity of organising *working* in a group, but a significant number then disengaged when it came to collaborative *learning* in a group, when measured by both participation and social presence. The exception to this was the 2013(II) group, where social presence was maintained, and an academic conversation between three of the group members continued beyond the requirements of the assessment. Overall however, it appears that social presence is more evident when contributions would not potentially expose knowledge and understanding.

A further conclusion is that if there is the presence of a person or persons acting as 'social glue', weaving messages together, this encourages participation and social presence from other members of the group.

Active engagement with other students in distance learning has been found essential to learning and collaborative knowledge building (Wegerif, 1998). From this analysis, however, we cannot be confident that promoting and supporting students to actively engage with each other is enough to create a community that sustains discussion, particularly where that discussion is academic in nature.

As Oztok and Brett, 2011, succinctly state

> *When social constructivism is employed as a theoretical framework, social presence becomes critical as it connects individuals in an online learning environment and motivates them to take an active role in the knowledge construction and meaning-making processes (Oztok and Brett, 2011, p. 2)*

The evidence in this chapter shows that where there is little social presence there is also less sustained discussion. According to Garrison et al. (2000), cognitive presence is defined as "the extent to which the participants in any particular configuration of a community of inquiry are able to construct meaning through sustained communication". Where there is no sustained communication it is difficult to see how

meaning construction can occur. From this I would argue that using social presence as an indicator of engagement is justified within this thesis, and furthermore, that the lack of social presence evident during many of the assessed collaborative activities analysed here shows that there is little student engagement with learning collaboratively on these two modules.

8. Case study part B: analysing discourses of students and staff

This chapter contains a discourse analysis of online focus groups run with OU students who had recently completed either SDK125 or S294. The analysis is discussed in the context of online talk between S294 staff and in the light of recent literature on collaborative learning

Introduction

In the pilot study (Chapter 5) the talk of a sample of students from across the university was analysed. The pilot study showed that the student discourses were concerned with belonging to a group and being a collaborative learner. However, these students may or may not have had experience of collaborative learning within the OU or elsewhere. They were given a set of collaborative learning scenarios and asked to discuss their feelings about these scenarios. There is nothing to suggest that this would be representative of the discourses drawn on by *S294* and *SDK125* students who had taken part, or been asked to take part, in the activities analysed in Chapter 7. To determine whether student discourses might be related to the lack of social presence and thus engagement identified in Chapter 7, it was therefore necessary to carry out analysis of the talk of students who had studied these two modules. Unlike the pilot study, there was opportunity to hold synchronous online focus group discussions using the *Blackboard Collaborate* interface as discussed in Chapter 4. Synchronous focus groups with three mixed groups of S294 and SDK125 students were therefore held, and the talk was subjected to a CDP analysis. Staff discourses intersect with those of students and therefore use was also made of the available talk between S294 tutors, and between those tutors and *S294* module team members during an online *S294* module debrief, an online *S294* staff development session, and two *S294* tutor forum conversations.

Method

Student focus groups

Enquiry to the OU Institute of Educational Technology Student Research Project Panel (SRPP) in January 2011 determined that the initial permission for focus groups granted on 7th August 2008 extended to their use in the main study. New clearance for the study was then sought from the new OU Human Research Ethics Committee through submission of a Project Registration and Check List, as I was unsure of the status of the original clearance. The decision of this Committee was that the 2008 permission from the Human Participants and Materials Ethics Committee was still in effect.

SRPP determine which students are available to be approached and stipulate that students may only be approached by members of staff. I had student rather than staff status for this research. SRPP therefore provided the approved student contact list to my Supervisor, Dr Hughes, who subsequently sent the invitation to students. On 11th July 2013 a sample of 300 OU students who had recently (June 2013) completed study of SDK125 and 250 OU students who had recently (June 2013) completed study of S294 were asked by e.mail (Appendix VI) to take part in synchronous online focus groups using the *Blackboard Collaborate* web conferencing system. The timing was chosen for ethical reasons; my decision was that all students should only be invited once they had completed their study and sat their exams. There were 18 respondents, of whom 12 eventually took part in the focus groups. A Doodle poll was used to establish acceptable dates for the participants and in order to group the students (Appendix VI). Three focus groups, FG1, FG2, and FG3, each consisting of four participants plus the facilitator took place on 5th, 6th and 8th August 2013 respectively (table 8.1).

Table 8.1 Demography of student participants in the three online focus groups

Group	Participant	Sex	SDK125/S294
FG1	A	Female	S294
	B	Female	S294
	C	Female	S294
	D	Female	S294
FG2	E	Female	SDK125
	F	Female	S294
	G	Female	S294
	H	Male	SDK125
FG3	J	Female	S294
	K	Female	S294
	L	Female	SDK125
	M	Female	S294

The conferencing system includes a whiteboard facility which has the capability to display *Powerpoint* slides. The devised schedule for the focus group was presented on these slides (Appendix VII). The first slide contained the consent form, which students were asked to agree to via another facility of the system, the capability to display a cross or a tick. Subsequent slides were used in order, but the discussions were not confined to the questions appearing on these slides, which were used merely to ensure all the desired questions were asked in each of the meetings. The focus group meetings, which were 64, 69 and 93 minutes respectively, were recorded using the *Blackboard Collaborate* facility and from this, audio and text files were made of the oral and written participant contributions. The audio files were first transcribed longhand and then into electronic format in *Microsoft Word*, the transcripts were checked against the audio files for accuracy and finally the transcribed data was loaded into QSR *NVivo 10* for analysis.

Discourse analysis was performed as for the pilot focus groups. The transcripts were read through a number of times in order to become familiar with the raw data. Iterative coding was then employed, picking out recurring themes and imagery using the facility of QSR *NVivo 10* to segregate and re-segregate the data. Selected

excerpts of the segregated data were then transferred to a *Microsoft Word* document where final sorting was carried out. In writing the final analysis, the original transcribed data was continually revisited to ensure context and accuracy. The CDP analysis technique was employed as described in Chapter 4.

Staff talk

An *S294* module briefing session[13] was held online on 2nd October 2013 and an *S294* staff development session[14] was held on 15th October 2014; both sessions were recorded. The collaborative learning activities were discussed during both sessions. Discussions related to the activities also took place on the *S294* tutor forum in April 2013, March 2014 and May 2015. Permission was gained to use information and anonymised tutor quotes from all these sources. Only quotes from tutors who gave explicit consent were included in the analysis. Sections of the audio recordings where collaborative learning was discussed were transcribed longhand and remained in that format. This talk was also analysed according to the CDP technique, and used in discussion of the student talk.

Results and Discussion

Critique of the methods

Student response to the focus group invitation was low with 3.6% initially responding and the eventual participation rate being even lower at 2.2%. This needs to be kept in mind throughout this discussion. One particular problem was that the students who participated in this study all reported they had taken part in the collaborative activities and there is no representation from students who absented themselves from collaborative learning.

[13] In the OU each module is headed by a module team who manage the module presentations and support the ALs tutoring on that module. At the start of the second presentation a briefing is often held, where the module team inform tutors of various aspects relating to the previous presentation and discuss the way forward.

[14] This staff development session was run by an S294 tutor and related to online tuition

The format of *Blackboard Collaborate*, which allows for simultaneous audio talk and written talk using a text box, generally worked well. The text option gave participants the opportunity to comment whilst a person was speaking, without disrupting the speaker. This option helps replace opportunities present in a face-to-face group, where other participants might nod agreement. However this did have a disadvantage in that two or more conversations could occur simultaneously, leading to the possibility that the focus group facilitator could miss what might be important lines of discussion that would benefit from further exploration. In the second focus group one participant could only contribute by text but the other participants continued to use the microphone and this was a successful format. However in the third focus group, the participants, who did all contribute orally, began separate conversations in the text box, and it was difficult for the facilitator to maintain participants' focus on the subject matter as they talked with each other about, for example, pass marks, the exam, module materials being online, and use of tablets versus books as learning media. If this type of medium is to be used for future focus groups it would be beneficial to lay down ground rules for use of the text box.

Transcribing longhand, then transferring to a *Microsoft Word* document and finally checking against the original audio file was time consuming but forced deep immersion in the data which would not have occurred if the QSR *NVivo 10* facility to directly upload audio mp3 files had been used. The subjectivity of selecting and interpreting talk and text using the discourse analysis technique is discussed in Chapters 4 and 12.

It is unfortunate that analysis of staff talk is confined to *S294*. It would have been useful to also use talk of staff working on *S2DK125*. However there were no past records of online discussions between SDK125 staff and the current tutor forum has no talk regarding the collaborative activities. Focus groups or interviews with SDK125 staff would have been ideal but due to lack of time, this was not done. It should be noted however that there is crossover of staff, both module team members and tutors, many of whom teach on both modules.

Student focus group analysis

Belonging to a group

As in the pilot focus groups, there was a great deal of talk around aspects of belonging to a group. During the focus groups the facilitator made no mention of social interaction in the forums and in fact these focus groups were run before the decision to analyse forums for social presence had been made. However, when talking about how students felt about being asked to take part in OCL, it became clear that using the forum space for social interactions was viewed as a limiting factor by at least some of the focus group participants. One aspect of this was the idea of the forum being a space into which the student ventures with a feeling of the unknown;

> *"I think perhaps because we were talking into the abyss I would say I don't know how many other students there were in my group [...] I certainly got the impression there were some warm and open people there but [...] I was extremely nervous and said ooh hello its me first time and then backed out and no one actually picked up on it but having said that I didn't go back and say could someone talk to me please" (participant E)*

> *"I have a couple of people in the office that I can work really well with and that's brilliant but then there's like the other fifty and it just doesn't work I think it's just as much the luck of the draw if you just find that person you can click with you can benefit from but how do you do that especially in a system like O U when you're not even you know ever together in a room it's really difficult" (participant L)*

There is some striking imagery in these two responses. *Talking into the abyss*, with no idea even how many people might be listening, conjures up the image of the person doing the speaking being on the edge of a black hole, blindly throwing in a contribution, listening for an echo to come back, but hearing none. It seems this

student felt like an outsider, not able to make contact with the "*warm and open people in there*" and feeling that, to be included, they ought to have overtly asked to join the group - "*could someone talk to me please*". This certainly paints the picture of a lonely student rather than a member of an inclusive group. In the second excerpt, the student talks of the group members as if they are bumping into but not really connecting with each other, "*luck of the draw if you can just find that person you can click with*" and not expecting the group to come together as a whole. For this student "*you're not even you know ever together in a room*" so the actual space of the online forum is not thought of as a 'room'. Thus there are two different images of the 'group' here; one where there is a space to enter, but the group within the space has boundary around it which is difficult to permeate, and one where there is no communal space and nothing to bind the individuals together as a group. In both cases, it is having no knowledge of who is in the group that appears to be at least partly responsible for these very different impressions. In both these scenarios there is no sense of belonging, both students position themselves as not within a group, and it is difficult to see how this could possibly result in meaningful engagement and thus shared learning.

Some students spoke as though they were inside the group, but communicating made them uncomfortable;

> *"when it comes to writing and presenting myself entirely by writing to people [...] I feel really shy about it and you know will I say something wrong will someone take offence or something like that you know" (participant A)*
>
> *"I just find it really hard doing it over my computer screen" (participant L)*
>
> *"I felt quite uncomfortable trying to converse by the written word [...] I'm not a social media person so I'm not that relaxed at writing my thoughts on a keyboard" (participant E)*

I was nervous with it as well I've never been erm in chat rooms and things like that twitter online media is all new to me" (participant H)

"When it comes to writing and presenting myself" gives the impression that this student feels they are 'on show' presenting themselves to an audience, because the communication is in writing. A picture is built of *"a keyboard"*, *"the computer screen"*, *"the written word"*, as obstructive intermediates in the communication; this is a new way of conversing, and one which makes participants in the conversation uncomfortable. *"I'm not a social media person"* presents a strong impression of "social media" people who have a different way of being.

Not all students had these worries. One student said

"I I think that erm it's nice being with other people it's nice to know they're around you know I think you're a bit isolated so it is nice to be with them" (participant M)

The images of *"know they're around"* and *"it is nice to be with them"* do give the impression of being included in a cohesive and supportive group. Use of the word *"nice"* three times in quick succession emphasises the good feeling it gives this student and they clearly feel that being in an online space with other students is a positive experience. This accords with the description given by participant E (above) that they believed there were *"warm and friendly people"* in the group.

Being in a group that was expected to collaborate however was a concern for students;

"I felt the pressure to be a good citizen though I think not everyone on the module did" (participant F)

"I do feel it puts quite a lot of pressure on me as well cos I'm quite conscientious and I don't want to let those guys down (participant J)

"I was trying not to let the other people down on the collaborative thing" (participant K)

"if you feel responsibility for others you are more likely to get stuff done" (participant A)

The idea that others in the group might be 'let down' paints a picture of students having responsibilities towards each other. Although "*responsibility for others*" was only explicitly stated once, all these students clearly felt the weight of this responsibility, with the word "*pressure*" appearing in two of the quotes. "*To be a good citizen*" is particularly evocative of the group being a society of inter-dependent members, and one in which every person ought to play their part. At the same time, there was frustration that other students perhaps were not so prepared to play their societal role, as participant F went on to say "*though I think not everyone on the module did*" a feeling that was echoed by students in the other groups too;

"there definitely were some people who didn't contribute [...] it kind of felt like I had to do extra work to erm just because of these particular people" (participant B)

"I was hoping it would get the students to interact with each other but I didn't feel that happened at all I felt some were doing it at the last minute (participant G)

"I tried to encourage other people to do it but it didn't work that way but I obviously felt a lot of pressure because other people weren't taking control that I had to do it for everyone" (participant J)

It is clear that these students had an expectation that other members of the group would put in equal effort. In this regard, reference to other students does appear to fracture the group and there is the appearance of 'others', as in "*some people who didn't...*", "*some were doing it at the last minute*" and "*encourage other people...*".

When working in a group there is an implicit need for trust, the development of which is not helped by this fractured nature of the group. As Tseng and Yeh (2013) comment,

> *"the lack of social context and limitations on personal interaction and communication among team members in virtual teams decrease the potential for trust. Trust on a collaborative level is more complicated and more pivotal than dyadic trust because the collaborative relationships involve multiple trustees, each with different attributes (Tseng and Yeh, 2013).*

This relates back to the lack of social presence documented in Chapter 7. Without social interaction, it is not surprising that the talk of some students exhibits a lack of trust in the motives of others.

The fractured nature of some groups was not restricted to the feelings or impressions of students; it also manifested itself in behaviour and was overtly visible to at least two *S294* tutors;

> *"I found I had a core group of people who wanted to do it I had a core group of people who didn't and I had a core group of quite bossy individuals who started taking over and I ended up having to blow my referee whistle on more than one occasion" (S294 tutor in the 2013 module briefing)*

> *"A few of the students were actually quite aggressive and I think what happened in mine was I had a few people who just put so much [on the collaborative forum] that it intimidated other people and they then were sort of reticent to contribute" (S294 tutor in the 2013 module briefing)*

There are distinct echoes here of the worries OU students expressed during the pilot study reported in Chapter 5.

Absence of trust not only in motives, but also in each other's knowledge and understanding appeared in some of the talk;

> *"you have to trust what everybody else has done and I found that a little bit tricky as well and I ended up going through other peoples links just to make sure some of the information that was put up in the wiki I didn't believe and I then found to be wrong so if you then don't trust it you end up doing even more research" (participant D)*

> *"it does make me a little erm I don't know I think maybe I'm a bit of a control freak and you know I'll go and check stuff for myself" (participant M)*

In both these extracts the students appear to mistrust the academic understanding of other students and have developed strategies for coping with this. Both were *S294* students, and this was the first time that students were being asked to work together academically so they had little information about other students to help build that trust. I would argue that creation of trust needs to be enabled before students are asked to work together to collaboratively build knowledge which will then be independently assessed. However, this might not be enough to satisfy students, as one student quite strongly stated, of students attempting to help each other out during an online tutorial;

> *"it really annoyed me I just thought you're on here to learn like everybody else and the tutors know more than everybody else combined so let the tutor answer it and then it will be right" (participant A)*

This statement appears to dismiss the idea that understanding by any other learner can be trusted, and only the tutor has knowledge which will be accepted as "*right*". This feeling was echoed by another student whose confidence in the knowledge being built was also based on presumed tutor expertise;

"I did find it reassuring that the tutors did actually check the erm scientific content of the stuff that we'd all put together" (participant M)

To some extent this is in fact a misconception, the tutors were not expected to check all the scientific information, the tutor role was to facilitate, and it is interesting that any student had this impression that their collaboration was being overseen to this degree. It would be interesting to know whether some tutors did feel the need to reassure students about this aspect of their working together.

Group dynamics, social interaction and trust has been the subject of much OCL research in recent years. Clouder *et al.* (2006, p.467) looked at changes in dynamics as groups moved from face-to-face to online settings, determining that "*group learning is linked to group cohesion, which appears to be mediated by social and cognitive factors that students bring with them*". They also found that group dynamics formed during face-to-face interaction are transferred intact when the group moves to online interactions. Some OU modules use a blended approach, either alternating between face-to-face and online tutorials, or holding a single face-to-face event at the beginning of the course. Indeed, this occurs in some *SDK125* groups, although there are no face to face meetings on *S294*. It would be interesting to see whether this blended approach helps group cohesion during online collaborative activities. Cho *et al.* (2007) also found that a pre-existing network, along with communicative style and willingness to communicate online are factors in the setting up of online social networks, and affect individual learners' performance in OCL, whilst Janssen et al. (2009) found that group familiarity impacts on overall group performance. However not all groups establish any kind of cohesion, as witnessed by Clouder et al. (2006) and the wish to form a supportive group will depend in part on whether the participants see any benefit from belonging to such a group, in other words, reciprocal altruism. As Kreijns *et al.* (2003, p. 338) comment, "*just placing students in groups does not guarantee collaboration*".

By saying "*you're on here to learn like everybody else*", participant A seems to be describing knowledge building as a one way process where students cannot contribute anything of academic value to the learning process of other students. The converse of this was also expressed during the focus groups;

> *"I also know that I can learn from others that kind of thing" (participant F)*

> *"I felt it was trying to open our minds to other points of view" (participant E)*

Use of "*learn from others* " and "*other points of view*" gives the impression that both the knowledge and varied understandings of other students have value, although "*trying to open our minds*" does convey some sense that students' minds might be initially closed to this idea. This is reinforced by one particularly strong statement;

> *"we've chosen to do something that requires an awful lot of independent learning I mean you know we've opted for the OU which is all about learning on your own" (participant A)*

The juxtaposition of "*independent learning*" and "*learning on your own*" is quite telling here. Participant E echoed this in another focus group, saying "*I love independent study because SDK125 showed me how much I can learn on my own*". This also appeared in the pilot focus groups, for example "*I too see myself as an independent student although [...] I do like having contact with other students*"(pilot FG1). Interestingly, this interpretation of being an independent learner is also used by an OU MA in Open and Distance Education student, quoted in Macdonald (2003);

> *"just by agreeing to do tasks by a certain time suddenly removes you from the cocooned environment of the independent learner and forces you to engage more closely with the resources and other people" (student quoted in MacDonald, 2003).*

Becoming an independent learner features in the The OU undergraduate levels framework, a framework to which all OU modules should conform, which includes indicators for students to develop as independent learners, specifically using that term, at all three stages of undergraduate study (COBE, 2005, p.6). Some modules state this explicitly as a learning outcome, for example *SDK125* students are told that one of the eleven *SDK125* learning outcomes is "*manage your own learning, organise your time, and begin working independently in a way appropriate for continuing personal and professional development*" (*SDK125 Course and Induction Week Guide*, 2013, p. 8). Additionally, the OU information to tutors states that there are eleven aspects of the AL role, one of which is 'develop students' study skills', which has the tag line "*Support students to become independent successful learners within the discipline/module*" (Aspects of the AL Role, 2015). It appears that the term 'independent learner' means different things to different members of the University, and that some students do equate *'independent learner'* with *'learning on your own'*.

For students to value the knowledge and understanding of other students, and particularly to appreciate "*other points of view*" also necessitates a view of the curriculum as being open, but this did not come across during the focus groups. On the contrary, much of the talk portrayed the study as bounded by both the module materials and the assessments;

> *"I was learning from the units [...] I feel that going to the units and if there was anything I didn't understand in the units I would raise that with the tutor" (participant H)*
>
> *"I feel I'd have been better just concentrating on the course materials" (participant K)*
>
> *"I think the courses are written as though they are fact after fact page after page so I think that's how that's how I've sort of learnt it almost by rote sort of thing without actually doing" (participant B)*

The image presented here is that there is a set of knowledge presented in the materials, *"going to the units"*, *"fact after fact, page after page"* which is to be understood or even simply learned *"by rote"*; there is no sense of the materials being merely a starting point for building understanding. This is corroborated by *S294* student feedback *SEaM* data [15], presented to tutors in the 2013 module briefing; the module team informed tutors that students had viewed the collaborative learning activities as *"a distraction"*. Although not explicitly stated, presumably students believed they were being distracted from study of the module materials, the materials formed the study boundary and they were being asked to go outside this.

Assessment, regarding which participants in all three focus groups returned to several times during their discussions, was also talked about as forming a study boundary

> *"I didn't understand why it wasn't assessed [...] I was somewhat confused on the cell biology course why I was doing it why I was contributing when the only thing that mattered was the exam result so there was some sort of discrepancy there that's what bothered me I think (participant C)*

> *"I didn't think that the detail that was in it was necessarily going to be asked for in the exam" (participant A)*

Participant C appears to distinguish legitimate learning expectations by the boundary of assessment; inclusion of activities that do not fit within this boundary causes consternation, *"I was confused"*, and is seen as *"some sort of discrepancy"* which gives the impression that this should not happen. For participant A the collaborative learning caused some assessment boundary fuzziness, which is not explicitly stated but which is alluded to by *"I didn't think"* and *"necessarily"* so again here, the assessment appears to be thought of as an outer limit for what should be learned.

[15] All OU students are requested to provide end of module feedback in the form of a questionnaire entitled 'Student Experience on A Module (*SEaM*)

There is also an underlying pragmatism in the above comments that was made more explicit by another participant;

> *"I think it's a way forward collaborative learning but for me it's getting the TMAs done [...] and the collaborative learning side can go on the back burner a bit the main thing is getting the TMAs done on time" (participant H)*

There is a ranking of importance here, with the assessment taking priority; there is no sense that the learning being done during the collaboration is relevant to the assessment. This has accord with a suggestion by Analoui et al. (2014);

> *"if students hold firmly to the notion that any relevant information can be derived from other sources, then they may be unlikely to engage with other students in discussion. If true, this appears prima facie to be an argument that group work is non-essential" (Analoui et al., 2014)*

This practical approach is attributed to students who did not participate in the collaborative activities;

> *"I think some people made a practical decision not to bother" (participant A)*

The word "*bother*" was used by other participants too

> *"I have heard students in the past say you now I've actually got 40% so I'm not going to bother" (participant M)*

> *"For S104 the wiki did count towards the TMA and hence the final grade but yet still some people did not bother with it (participant B)*

This appears to be dismissive, there is no importance attached to the activity of collaboration, which is doubly interesting because these statements are all from students who did actually take part and are talking of non-participation by other students. The phrase '*did count*' is also telling here, it appears there is more value

placed on the work if there is a reward in terms of summative marks. Other students also used this phrase albeit in the negative '*didn't count*';

> *"The TMAs and all the other things you contributed to erm within the course didn't count and I don't know whether all courses are like that but it seems a little bit erm strange somehow really" (participant H)*

> *"some people seemed to think it wasn't worth their time especially as it didn't count" (participant F)*

> *"it was in the TMA but the TMAs didn't count" (participant D)*

What students are referring to is that once the coursework threshold of 40% had been achieved, the actual mark did not make any difference to their overall grade, which was then determined solely by the exam. It appears student focus is on achievement of the module grade rather than any intrinsic value of learning.

Some intrinsic worth of taking part in the collaborative learning, by being both enjoyable and an aid to learning was recognised by some students. However this was tempered by a feeling that having given something, there is an expectation of payment in return;

> *"I did really enjoy it and I did it knowing I think I actually knew that before I started it that I didn't have to do it and I was choosing to do it because I wanted the experience of collaborating in that way [...] so I was quite excited about it in a way [...] but it would have been nice to get some credit" (participant A)*

> *"it definitely helped me learn and I thoroughly enjoyed it the assignment was well setup and it was enjoyable to do [...] but I wish it would have been nice to be rewarded for the effort" (participant C)*

Use of the word '*rewarded*' is note-worthy; it highlights the transactional view of learning. That it would be nice to "*get some credit*" or "*be rewarded for the effort*"

creates an image that the learners are in a transaction with the university, whereby their effort in learning collaboratively with other students ought to result in some kind of tangible return.

Some students also painted a picture of uneven contribution combined with reward as being unfair

> *"but everyone as long as they contributed a tiny bit was considered to have contributed enough to pass and all get the same grade which felt quite unfair really (participant J)*

This was also commented on during the during the *S294* 2013 module briefing, where, in relation to the *SEaM* data, a module team member noted that

> *"some of the students basically felt that some of their colleagues were sort of freeloading on their efforts" (module team member in the 2013 S294 module briefing).*

This is a well-known feature in talk about collaborative work (see Chapter 5), and was perhaps to be expected. As one student observed;

> *"obviously as you know we're humans so if someone else will do it you're gonna sit there and let them" (participant L)*

Non-contributors to the group thus appear to be seen as deliberately inert, watching the proceedings and making a conscious decision to not contribute because others are prepared to take on the load. Distrust of others' characters appears to be the basis of this statement, "*we're humans*" does not appear to be said in positive sense. As one tutor articulated regarding non-participants in the *S294* 2014 staff development session, "*they twigged early on how to play the game*".

There appears to have been little investigation into knowledge sharing in collaborative learning, either face-to-face or online. Using questionnaires, Yuen and Majid (2007) investigated campus university attitudes to knowledge sharing. Asked to indicate

which factors might limit knowledge sharing, 87.2% of respondents believed lack of depth in the relationship between students was a factor. The second highest reason chosen was fear that others would perform better (76.7%). Other major factors included only sharing when it was reciprocated, not wanting to be perceived as a 'show off', and being afraid to provide the wrong information. Lack of a knowledge sharing culture, shyness, lack of time and not appreciating knowledge sharing were also indicated by over 40% of respondents. Over 30% also said that they were afraid of causing offence and that they did not know what to share. In a campus-based study by Hodgkinson (2006) two of the three focus groups argued that "academia is essentially about individual goals and attainment" and saw potential lack of originality as a negative side effect, although the third group felt that collaboration would reduce individual competition. In another campus-based study, Analoui *et al.* (2014) found that group relationships and trust, both in the individuals and in the validity of their knowledge, had a bearing on willingness to share knowledge. Clearly both the group and the knowledge sharing issues identified here and in the pilot study are reciprocated in face to face collaborative learning scenarios.

Kimmerle and Cress (2008; Cress and Kimmerle, 2009) discuss the 'information exchange' dilemma presented to students when asked to share knowledge through contribution to a shared database in an OCL environment. The picture the authors present equates knowledge with power, and the assumption is that individuals undertake a form of cost-benefit analysis, where time and power-loss are costs, and access to others' knowledge is a benefit. The dilemma arises because withholding of knowledge by all participants results in no benefit to the individual. The focus of Kimmerle and Cress's study is how individuals might be encouraged to share knowledge through awareness of their group, and they do not consider, for example, why withholding knowledge might constitute power in the mind of the student, or what other influences might act on a participant's willingness to share. One of the questions arising from Cress and Kimmerle (2009) is whether the 'costs' envisaged by

students include being in (perceived) competition with others. This would tie in with the competitive marketplace analogy put forward in Chapter 5.

Barriers to knowledge sharing are also documented in the knowledge management literature. For example Ridge (2005) identifies barriers to knowledge sharing including "taking ownership of intellectual property due to fear of not receiving just recognition and accreditation from managers and colleagues", "lack of trust in people because they misuse knowledge or take unjust credit for it", and "lack of trust in the accuracy and credibility of knowledge due to the source", all of which can also be directly related to issues within knowledge sharing in learning, and which appeared in the talk of students during this study. However, as Scardamalia and Bereiter (2006) comment, in knowledge creating organizations, knowledge sharing makes obvious sense. People are not honoured for what is in their minds but for the contributions they make to the organization's or the community's knowledge. This dichotomy of knowledge as power versus knowledge sharing as being honourable, "*the good citizen*", must affect learner attitudes towards collaboration, and clearly there is need for further research into how learners view both knowledge ownership and knowledge building, and how this might impact on participation in OCL.

If there is no value attributed to other students as a knowledge source, and there is reticence to share knowledge, then in order to be encouraged to participate in collaborative learning, students need to value the process of collaboration as a useful learning mechanism. In the 2013 *S294* staff briefing, tutors learned the *SEaM* data showed that of 127 respondents from 294 students asked to complete the questionnaire, only 52% of students reported that the collaborative activities helped them learn[16]; 27% responded that they did not help them learn, with the rest of the responses being neutral. This compares with 90% of students reporting they were satisfied with the teaching materials. This was presented as a concern, but similar to

[16] SEaM is in the form of a Likert scale survey in which students are asked to state whether they definitely agree, mostly agree, neither agree nor disagree, mostly disagree or definitely disagree with each of 40 statements. The statement relating to collaborative learning is 'taking part in collaborative activities with other students helped me to learn'.

SEaM results for other modules. On the 2012 *S294* tutor forum it was suggested by a member of the module team that to encourage participation, tutors could stress that the material might be in the exam, that the skill of using scientific literature allows practice before level 3, and that the activity helps develop the graduate skill of team working. This conversation took place before the *SEaM* result related to collaborative activities was known, but the fact of the statement being on the *SEaM* survey, and particularly being the only statement about collaborative learning, is evidence that university discourse around collaborative learning, at least in the unit responsible for designing the survey, is centred on collaboration as a learning activity. Thus it is notable that tutors were not encouraged to mention that collaboration can be a worthwhile activity in its own right, or to explain to students that one purpose of the activity might be to foster joint knowledge building because this is a valid way to learn.

In the 2013 *S294* staff development session, inclusion of collaborative activities was framed by the module team as a duty because the OU is pressured to include employability skills. This framing, which was also present in the advice to tutors stated above, aligns with the talk of some students in the focus groups who described collaborative learning in terms of skills building;

> *"you collaborate you publish things together that's what science is about these days so it's about teamwork doing things together and collaborative learning is everyone learning together everyone contributes you produce a document together or do your wiki and so on" (participant C)*

> *"I've been working in industry for quite a long time and I obviously recognize the importance of collaborative work and why people need to learn skills to work with others as a scientist because it's not a role you do in isolation" (participant L)*

Here there is a distinct picture of working in teams being an authentic scientific

activity; *"that's what science is about"* and *"it's not a role you do in isolation"*. The students are acting like scientists when collaborating. Where learning is mentioned it is related to skills rather than academic knowledge;

> *"I guess it depends on what the OU wants us to learn if it's about delegation team working etcetera which are important skills then yes they do help me learn (participant J)*

> *"I don't go to the OU to learn about team working etc. I just want to further my knowledge have an academic challenge [...] it just felt like we have to tick the collaborative learning box what can we throw in" (participant K)*

The talk of students mirrors that of the S294 module team;

> *"I think that reflects some of the learning outcomes on the module we are duty bound to do some activities relating to collaborative work" (module team member in the 2014 S294 staff development session)*

The issue here is not just that asking students to work together can be seen as ticking an employability box, but that the image of *"what can we throw in"* might have some basis in reality. There is no impression given that study of a particular topic might be best approached collaboratively; on the contrary, the need to include collaborative work appears to be the driver. The *"activities"* are *"relating to collaborative work"* rather than to learning. The design of the activities and the device of using summative reward to drive participation was discussed in two of the student focus groups;

> *the discussions can be a bit forced I found [...] there's something about being told you must make X number of contributions to earn the marks that makes the whole thing a bit artificial" (participant F)*

> *"to me it felt rather contrived erm somehow erm I didn't quite know what to make of it [...] it needs to be a bit more meaningful I think at*

least with S294 the collaborative stuff seemed to be contrived just for the sake of collaboration" (participant K)

On *S294* a certain number of postings (two) must be made to '*earn*' the marks in the hope that students, if being driven by marks, will sustain a discussion rather than 'post and run'. It is interesting to see this described as '*forced*' and '*artificial*'. I would argue that posting of serial monologues is more forced and certainly more artificial in terms of a collaborative learning scenario. The image this brings to mind is of the actions of the student outside the forum 'doing the posting' or 'writing the contributions' rather than the process of a knowledge building discussion within the forum. The feeling of it being "*contrived*", collaboration for the sake of collaboration and needing to be more "*meaningful*" however does chime with point made above that the inclusion of a collaborative activity might be included because of the need to deliver this learning outcome rather than because learning collaboratively would be a natural activity for this topic. On the subject of forced collaboration through, for example, monitoring and rewarding student contributions, Gulati (2008, p. 118) argues that this might not result in constructivist learning;

"online learning practices that aim for constructivist education need to recognise the impact of formal requirements [...]. Compulsory participation in discussions may be a useful tool for engagement for some learning situations, but using it as a pedagogical strategy requires greater awareness of power differences due to monitoring and judging learners against a tutor-defined process" (Gulati, 2008, p. 118)

The forced nature of the collaborative activities, and the need for measurable outputs which can be afforded marks, also tends to create the impression that the purpose is product rather than process. In both SDK125 and S294, each activity asks students to produce a tangible product, a completed wiki, or to write down their thoughts, where those thoughts are contained in a tangible document, a forum post, which in the case of SDK125 students are then asked to reproduce in their assignment.

Getting to the end of the activity, finished and out of the way, featured in some student talk

> *I wanted us to move the project thing along and actually get it done [...] I was doing what you need to do" (participant A)*

> *I just wanted to get things done really and out the way and get the TMA finished (participant B)*

> *"the way I did it I did what I needed to do on that score I didn't sort of embrace it erm as much as probably I should have done I suppose" (participant H)*

The activities are talked about as if they are tasks to complete, "*get it done*", "*get it out of the way*" and doing "*what needed to be done*" which perhaps the label 'collaborative activity' might foster. It could be argued that all learning is a set of tasks, but I would question whether it is thought of in the same way, as a bounded entity that can be got "*out of the way*".

The formality of these tasks certainly appeared to obstruct the community building which has been suggested is a necessary prerequisite for learning collaboratively;

> *"What I find strange is all the modules I've done (3) have had very lively groups on Facebook and I've found the interaction there much more useful than the formal interaction required by the OU [...] perhaps it is also precisely because it is unofficial that people feel more able to talk about what they don't understand I find informality really helps" (participant F in the text box)*

> *"there is a feeling that people need to be more formal which is a pity because if people had been more informal on the forum I think that would have encouraged me to write more informally and then actually get in more too" (participant E)*

"but maybe via Facebook or something where you can just talk about the course" (participant M)

There was recognition by some students that for a meaningful discussion to take place there had to be a joined up conversation and that it did require some informality

"A few people did contribute on our forum but it was a bit disjointed I suppose" (participant B)

"there was discussion and we did relate to other people's input but it was a bit formal" (participant A)

"what some people did and I really liked in our discussion forum was that they talked added extra to it they said oh I wish there was a cure for this and sort of cures might be found sort of read more and that was interesting but it wouldn't really go in the TMA but it was additional stuff that was interesting" (participant C)

This student talk relates back to the social dimension of engagement with the learning community as discussed in Chapter 7. Students have identified that in some cases the contributions were "*disjointed*" which could be said to describe the serial monologues present in the analysed forum threads, and commented adversely on the formal nature of the postings. In contrast, participant M replicated the social presence that appeared in their own forum discussion, saying that students said "*oh I wish*", an expression of emotion which is an affective social presence indicator according to Rourke *et al.* (1999). The student described this discussion as containing "*additional stuff that was interesting*" which I would suggest is the whole purpose of asking the students to learn together collaboratively. Qualification of this with "*but it wouldn't really go in the TMA*" is indicative that there is indeed a conflict between asking students to build knowledge through collaborative learning and endeavouring to drive that collaboration by linking it to assessment.

Analysis of AL talk

There were definite parallels between the talk of students and that of ALs on S294. It is interesting to note that two words used multiple times by students, 'bother' and 'count' also appear in the staff discourse. In the *S294* 2013 module briefing, a member of the module team remarked that it was known that students "*disliked the idea that TMA scores did not count*", and in the *S294* 2014 staff development session a tutor commented "*I've had some of my brightest best students [...] not bother with TMA3*", whilst in the 2014 tutor forum, regarding an earlier collaborative activity, which did not attract marks, one AL wrote "*I had about 12/30 put images up and 8 of those bothered to vote*" The OU tenet is that the TMAs both consolidate the learning and give the opportunity for self-evaluation and tutor feedback. It could be argued therefore that a discourse of the TMAs not 'counting' and students not 'bothering' would be alien to OU staff, and there is a question here as to whether staff buy into the discourse of collaboration being a 'bother', are being influenced by student discourse, or are merely describing that discourse. Whichever is the case, there has been a great deal of discussion amongst *S294* staff on how to encourage participation, and this discussion almost always centres on linking the collaborative learning to assessment, so that it does 'count';

> *"Can we make the [collaborative] activity more inviting by erm having always having a question that's based on it in the exam [...] maybe if the students knew that they might be more inclined to engage with it" (tutor comment in the S294 2013 module briefing)*

> *"I thought about the possibility of making all the TMAs obligatory [...] indeed making it [the threshold] 40% per TMA [...] because that might encourage a bit more participation" (tutor comment in the S294 2014 staff development session)*

> *"the only way to force engagement is to link it to assessment in the exam" (module team comment in the 2013 module briefing)*

In talk by ALs and module team staff, there appears to be no question as to whether assessment should be a driver to student participation; no uncertainty whether linking to assessment might still result in students making pragmatic decisions based solely on this factor, so that they tailor their participation according to the assessment requirements and not according to any intrinsic benefit they might gain from learning together. This notion that in order to encourage students to participate in collaborative learning it must be linked to assessment, which I argue is a pervading but not necessarily helpful idea across the University, is further explored in Chapter 9.

In the *S294* 2013 module briefing, a member of the module team remarked that students found the collaborative activities "*not worthwhile*" so again here, staff members appear to be using this same transactional discourse as students. "*Not worthwhile*" brings up the image of a cost benefit analysis, which is also apparent in the *S294* tutor forum discussions;

> *"there really is a mismatch between the amount of time and effort some have put into this research and the marks they get" (tutor in the tutor forum, 2013)*

> *"15 marks out of 50 isn't much of an incentive to carry out the donkey work – and 35 marks thank you very much for using it handed on a plate " (tutor in the S294 tutor forum, 2015)*

As in the student talk, collaborative learning appears to be painted as a transaction whereby the learner makes an input, and receives assessment marks in return. "*Donkey work*" and "*effort*" make it appear that this is somehow more extraordinary work compared to other study techniques. The second comment also gives the impression of a tension between those who do this 'donkey work' and those who simply use the work of others to then complete the assessment task and collect the other 35 marks available for this piece of work. Adding to this idea of transaction, and including transaction between students as well as between the student and the

University, a member of the module team, in the 2012 presentation tutor forum, wrote;

> *"...in a formative strategy[17] the marks for this activity aren't adding much benefit for the individual student and we will certainly look at this for next year. I would really like to put a OCAS[18] distinction threshold in and make students (especially the able strivers) complete all the TMAs to assure a Pass 1 on the module. In terms of fairness to the students who do the research work compare to the others- I will see what could be done to make it fairer. I really wanted a lock out wiki - but we don't have a tool like this. In this a student can't see anyone's contribution until they add their own and have it checked by their tutor" (S294 Module team member, S294 tutor forum, 2013)*

In effect, the suggestion here is that students should 'buy' access to the wiki, where the other students are building up knowledge, by providing their own contribution.

Again, it is not clear where this learning as transactional discourse originates, if it is with students, central staff, or ALs, or whether it has arisen independently in two or more of the groups. It can be noted, however, that the idea of the 'lock out wiki' appears to predate the beginning of the module. It certainly chimes with the idea that collaboration is a task to be completed rather than a way of doing learning.

The presentation of collaboration as a 'task to be completed' could affect how ALs both approach and talk about student participation and engagement with the activities. It is of course very difficult to move away from the representation as 'tasks' because this is precisely what is asked of students, that they undertake a series of tasks, including being given a timetable for moving from one task to the next. Little wonder then that in the tutor forums, AL emphasis is on how to organise the timing of the different activity strands, when to start the activity in relation to the rest of the curriculum, and

[17] S294 is 'threshold formative, students need to achieve at least 40% as an average across the three TMAs to pass the module

[18] OCAS: Overall Coursework Assessment Score – This is the additive score from all module assignments

the process of shepherding students into completing these tasks; undertaking a logistical exercise, rather than how they might encourage learning happening between students. Evidence of this can be seen in figure 6.1, Chapter 6, where the overriding concern is numbers of students completing different elements of the activity. The same concern has been highlighted every year (2012-2015) in the S294 tutor forum whilst the collaborative activities have been taking place, with similar, equally long conversations between many tutors on how well or otherwise they have managed to bring students into the fold. Terms such as 'chivvying', 'coaxing', and 'nagging' are used. This is repeated in the student talk, with one student from a focus group saying;

> *The tutor really really pushed for everyone to collaborate and do it and kept sending e.mails geeing people along to do it by the deadline (participant D).*

Tutors who report good participation in terms of numbers are congratulated, and those who are doing less well in the numbers stakes receive commiseration - because they are working hard and not achieving their aim. This is exemplified in one extract from the 2015 tutor forum;

> *Tutor 1: Mine are just starting the group summaries and I only had two non-responders. Teamwork, output and attitude has been brilliant this year...rather proud of them actually* ☺
>
> *Tutor 2 Well done [name redacted]* ☺ *I've got a third entry now, and it's only Tuesday*
>
> *Tutor 1 Sorry, I realise my post sounded rather smug but I am just so pleased I haven't had to blow my referee's whistle once this year I had to share* ☺

This was later followed by a final post from Tutor 1:

Am ecstatic...my TG are having the most fantastic discussion about the three summary wikis...really good insightful comments and a proper scientific debate....YAY  *Feel like a proud parent...is that wrong?* 

This last post touches on students building knowledge, of which there is very little hint in the tutor forums, and this is by far the most explicit in terms of giving recognition to the activity actually being a learning exercise. Yet even this post shows that the tutor, who earlier was acting as a referee, now describes herself as a 'parent' watching over students fulfilling the purpose of the activity, rather than the part of a teacher scaffolding knowledge creation.

Summarizing the discourse

When examining talk using discursive psychology, the imagery, or interpretative repertoires should be considered alongside any ideological dilemmas[19] and how the subjects position themselves within the discourse (Edley, 2001, pp. 198-203). As in the pilot study, regarding students, two discourses were drawn on here, that of belonging to a group and that of being a collaborative learner. Repertoires of belonging to a group included 'talking into the abyss', accidentally bumping into like-minded peers, and the nice feeling of having other students around. Some students positioned themselves as outside looking in, others saw themselves as inside the group. There was also the repertoire of doing the talking, where the physical entities of the computer and the screen, and fact of the talk being in writing, presented barriers. In this respect, one student positioned himself as 'not a social media person'. One clear ideological dilemma was the expectation to be a 'good citizen', countered by 'we're only human' and 'playing the game'. Trust of peer knowledge was also problematic, whilst students saw the benefits of building knowledge together, some felt the need to then verify that knowledge from an outside source. Regarding being a collaborative learner, this was positioned against the expectation to be independent, which was used as the synonym of 'alone'; there is a distinct ideological

[19] See Chapter 4, p.39 for an explanation of how the terms 'ideology' and 'ideological dilemmas' are being used here

dilemma here which is reinforced by the discourse of staff and university talk and text, albeit one which arises from misuse of the term 'independence'. Other repertoires drawn on by students were the concept of a closed curriculum presented in the module materials, task-oriented formality and inequality of knowledge-sharing, all of which make social knowledge-building and sharing dilemmatic. Cost benefit analysis of effort versus extrinsic reward, pragmatism, and a transferable skills purpose of OCL also featured in the student talk, another dilemma when positioned against the recognised ideology that learning with, and from, others is a worthwhile activity in itself.

The imagery employed by S294 ALs mirrors some that used by students in the focus groups, particularly the reward-based transactional nature of collaborative activities, whereby students are awarded marks for participation, which is positioned as beneficial and necessary. Collaboration is presented as a task to be completed, and from the AL perspective this appears as a logistical exercise, with success measured by numbers of students who have been pressed into taking part.

9. Influences within the University – strategy and scholarship

This chapter considers online collaborative learning discourses within the Open University by looking at institution-wide strategy and policy, and by analysing OU-produced scholarship texts

Introduction

The OU describes itself as "*a world leader in modern distance learning, the pioneer of teaching and learning methods which enable people to achieve their career and life goals studying at times and in places to suit them*". ('The OU explained', www.open.ac.uk). When the OU opened in 1971, teaching was achieved through the static media of textbooks and non-interactive television programmes. There was some opportunity for students to meet and learn together through face to face tutorials, and students were encouraged to form study groups, although anecdotally, few of these study groups were formed. In 1986 the possibility for mass electronic communication had been tested and evaluated by the OU, an online conferencing system was introduced on a single pilot module with 1400 registered students (Mason, 2000), and by 2000 160 modules, studied by about 100 000 students were using conferencing as part of their tuition model (Salmon, 2003, p. 25). The University was thus a pioneer in using computer conferencing as a mass communication tool, yet Mason (2000) describes an atmosphere of suspicion amongst his colleagues, citing a particular incident where, in 1988, a conference on computer communications held by the OU brought in over 200 researchers from Europe and North America, yet fewer than 10 OU staff, working on campus and invited free of charge, attended. So here is an incongruity – a pioneering university working at the forefront of technology to provide opportunity for students to learn together online, but with apparently little buy-in from the teaching staff.

According to Mason (2000, p. 69), the turning point for the University regarding use of electronic media was the 1990 appointment of Sir John Daniel as vice chancellor,

whose *"leadership of the transition of the OU from a print-based to an electronic university [was] unflagging and wholehearted"*. The OU first experimented with online collaborative learning in 1993, running a Department of Education sponsored experimental course XT001 Renewable Energy Technology, which was fully online and collaborative, where student-student and student-tutor interaction was facilitated using the conferencing system, First Class (Alexander, 1998). Over the following few years, various modules in the Technology and other faculties followed suit in giving students and tutors access to First Class, although there was no formal collaborative element built into these modules. The first large scale module to incorporate online collaborative learning was another Technology faculty module, T171 You, Your Computer and the Net, first presented in 1999 as a pilot with 900 students, and fully rolled out in 2000, attracting, in the first year, over 12 000 students (Weller, 2000).

It is difficult to determine the exact number of current modules that ask students to collaborate online, since there is no data set to be interrogated, nor any straightforward means to acquire the information from the teaching staff[20]. An e-learning audit[21] carried out in 2009 observed a 'strong indication' there had been a substantial increase in the take up of interactive and collaborative Moodle tools, but these tools include forums, and there was no information as to what the forums were used for. A 2011 Online Learning Provision Audit[22] stated that a quarter of modules have specifically designed learning activities to use asynchronous communication methods, but again there is no indication as what these activities are. No further such audits have been found. In November 2013, it was asked in the AL Common Room and AL Assembly tutor forums[23] whether modules tutored by readers included assessed or non-assessed collaborative activities set by the module team. Responses were received for 109 modules (over one fifth of the total number of modules) of

[20] For a different project in 2012, where, as a member of staff undertaking OU research, similar data regarding incorporation of peer review into OU modules was desired, it proved not possible to gain the data for more than half the then current modules due to lack of response from Deans and Curriculum Managers

[21] Report to the Learning, Teaching and Student Support Committee, November 2009

[22] Report to the Learning, Teaching and Student Support Committee, February 2011

[23] The AL Common Room and AL Assembly forums are online meeting places for ALs and have a large readership, the Common Room in particular reaches 500-1000 ALs at different times (unpublished data)

which just over half, 56, incorporated collaborative activities linked to assessment, 10 set collaborative learning activities not linked to assessment, and 43 had no collaborative learning associated with study of that module (table 9.1). Data was spread across all faculties, and within the data set, only in the faculties of Health and Social Care, and Maths, Computing and Technology, were students on less than half the reported modules asked to undertake collaborative activities. It can therefore be concluded with some confidence that use of collaborative learning activities is firmly embedded as a teaching practice within the University, and has increased over time.

Table 9.1 Results from a survey of OU Associate Lecturers asked to provide information regarding online collaborative activities within modules, November 2013

Central Academic Unit	Assessed collaboration	Non-assessed collaboration	No collaboration
Maths, Computing and Technology	11	0	15
Faculty of Business and Law	6	3	1
Institute of Technology	9	1	0
Faculty of Education and Languages	11	3	7
Arts Faculty	4	2	6
Health and Social Science Faculty	1	0	4
Faculty of Science	11	0	6
Faculty of Social Science	3	1	4
Total	56	10	43

There must be a cause for this rise in the implementation of collaborative learning within modules. Two potential influences are academic governance and internal

scholarship; these will operate in an iterative manner, as each have the power to influence the other.

Papers to the Learning, Teaching and Student Support Committee (LTSSC) and to Senate[24] from 2009 to present are currently available (internal only) and I also have access to some earlier discussion and policy papers considered and approved by these two committees. It must be stressed that these papers focus on e-learning as a whole, but in each of these documents there is specific mention of collaborative or group learning. Each of these sources was therefore examined for how they represent OCL.

OCL has been and remains a research focus within the OU, resulting in a great deal of output; see for example the publically available *Open Research Online* (*ORO*) and *OU Knowledge Network* repositories (http://oro.open.ac.uk/; http://kn.open.ac.uk/index.cfm). Despite, or perhaps because of this continued research, there does not appear to be any central or unified thinking, advice or approach to collaborative learning which could be said to be representative of the OU. It is therefore not possible to pinpoint a defined set of scholarship publications which can be claimed to be influential on staff thinking and practice. After much deliberation, a two-pronged approach to examining university-produced scholarship was taken. A quantitative text analysis of the titles and abstracts deposited in the ORO repository was performed and a small number of papers which were felt to be particularly important were subjected to a qualitative analysis.

[24] The Learning, Teaching and Student Support Committee is an academic governance committee, responsible to the Senate for strategy, policy and standards related to the student experience, including learning and teaching. Senate is the academic authority of the University, responsible for promoting teaching and research.

Methods

Quantitative textual analysis of OCL scholarship within the OU

A search of *ORO* using the search term "collaborative learning" in the title or abstract resulted in 315 hits. Unfortunately, despite the quotation marks, the search returned all articles with both collaborative and learning in the title or abstract. Results were therefore manually sorted and only those related to online collaborative learning were retained. Discarded papers were those where collaborative learning appeared only in a list of e-learning possibilities where online collaboration was not otherwise mentioned (for example papers related to Open Education Resources), papers where collaboration referred to the action of the researchers or collaborative teaching, research on classroom based or one to one collaboration, and duplications. Where the deposit constituted a book chapter and the abstract was for the book rather than for the paper and written by a different author, the title was kept but the abstract was discarded. The final number of papers included in the analysis was 111. The remaining titles and abstracts were subject to a *QSR NVivo10* word frequency query, using the query properties of the 300 most frequent words (including stemmed words) with a minimum length of six characters (Appendix IX). From this list all words which might be expected to appear in any context, for example students (which could be related to number of students, gathering participants to a study for example), course, developments, education, research, computing, reports, analysis, plus terms which it was not believed would help an analysis of the discourse such as provide, relatively, issues, settings, framework and so on, were removed. This left 26 words and their stems which could be significant in the meaning making of the research, and which appeared between 9 and 114 times in the corpus of titles and abstracts queried here (figure 9.1). An *NVivo* Text Search query for each of these words plus their stems was then performed to highlight the surrounding 10 words, which puts the terms in context. These queries resulted in discarding a further eight words and their stems, because the constructions of their use was deemed not relevant to this analysis. For

example instances of the word 'community' was in fact in almost all cases the stemmed word 'communication' where the term referred to the process of online communication, whilst the stem word 'knowledge' in almost all instances referred to knowledge of the researcher. The term 'activities' on the other hand, contained many instances of the stemmed word 'active', and the text query showed that in many instances this was related to learners being active during collaborative learning, so it remained in the list (Appendix IX).

Qualitative analysis of selected texts

Discussion, strategy and policy papers to LTSSC and Senate were analysed to determine how online collaborative learning was represented in these texts. A selection of papers was made from internal staff who it is argued have been particularly influential in the direction the OU has taken with respect to online collaborative learning; Mary Lea, Robin Mason, Mary Thorpe, Diane Laurillard, Robin Goodfellow and Janet MacDonald. Gilly Salmon has also been influential in how student learning in online forums is organised and thus her contribution to the discourse is also discussed. An early contribution by Gary Alexander is also included. This analysis enabled historical location of OU staff talk about online collaborative learning, and at the same time throws some light on what are argued here to be dominant discourses within the University.

Results and Discussion

Critique of the methods

Papers to academic governance committees were analysed to determine OU positioning towards online collaborative learning on the premise that such positioning dictates the policy, and policy influences module design. There are groups within the Open University that discuss e-learning and produce output, for example the eLearning Community and the AL e-learning development group, but these groups

have limited local reach within the University, and could not be argued to have such a wide influence as the chosen documents.

The textual analysis of a repository of texts written by OU academics was performed in order to add quantitative triangulation to the discourse analysis of selected papers. Two large repositories, *ORO* and the *OU Knowledge Network*, are both publically available open access sites. The *OU Knowledge Network* aim is to share expertise in teaching and learning, both internally and externally. *ORO* is a repository of published peer reviewed papers where OU academics and research staff are encouraged to store their work, particularly for the purposes of the Research Excellence Framework. Although the *Knowledge Network* is a much wider database, not only concerned with research, there is no consistency in the deposits, and carrying out a search for "collaborative learning" resulted in an apparently random selection of descriptions of OU groups, seminars, workshops, awards and conference calls for papers, alongside some research, presented in various formats including Powerpoint slides. 365 hits were returned for "collaborative learning", compared to the 316 hits from *ORO*. *ORO* deposits in contrast are consistent in style, containing a title and abstract for each paper. Further investigation of deposits in the OU Knowledge Network repository would be interesting but this database does not provide such a focused and comprehensive repository as ORO, and the purpose here was to attempt to remove randomness from this analysis. Therefore ORO was considered the more reliable data set.

The word frequency query in *QSR NVivo 10* requires two parameters, the minimum number of characters in the retrieved words, and the number of words retrieved. Initially, queries were run for a minimum of four, five or six characters, showing the first 1000 words, ordered by number of times that particular word appeared in the database document. Perusal of the results showed that very few words in the first 1000 were of less than six characters, and those that were less than six characters did not appear to be helpful in terms of highlighting a particular discourse. Thus, running the query for a minimum of six characters was justifiable. Using this parameter, all

words that appeared at least nine times were in the top 300 retrievals. Nine appearances was chosen based on the assumption that if the word appeared once in the title and twice in the abstract it might be significant, but would be unlikely to appear more than three times overall in the title and abstract of a single document. Therefore it could be assumed likely to appear in at least three documents. Therefore the final query, on which the rest of this analysis is based, was run with the parameters of words with a minimum of 6 characters, and a retrieval of the top (most appearing) 300 words (figure 9.1). It is accepted that the justification for each of these decisions is open to criticism. However parameters had to be set, and, for reasons set out above, I believe that the chance of significant results occurring outside these parameters is small.

Select texts were also analysed to highlight discourses of learning and/or online collaborative learning in the published work of OU academics and to discuss how these discourses might be influential within the University. When starting this particular analysis I was already familiar with many such works. My own thoughts and beliefs about online collaborative learning have been shaped by some of these very texts. Some are powerful to me because I subscribe to what is written, others because I very much question what they say. There is a concern that choice of authors and particular papers is not objective; there could be other papers which are equally or more influential, there could be completely different discourses elsewhere. However the textual analysis mitigates this by providing a triangulation using resources which are more distant to me. And if these are the papers that have influenced me as an OU tutor, then it is possible they have a much wider influence on whole practices within the University. I therefore maintain that, though subjective, these are valid choices for further analysis. Gary Alexander's 1998 paper, *'Communication and collaboration on-line: New course models at the OU'*, was made for a slightly different reason. This appears to be the first paper to discuss the OU's approach to embedding online collaborative learning into any of its curriculum. In particular, Alexander describes the thinking behind the collaborative learning aspect of *T171*, the module referred to

above as the first large scale module to be built around this type of online interactivity. It is therefore contended that this paper reflects some of the discourse of collaborative learning prominent in the Open University when practices were being developed, and that this discourse has continued to influence at least some practitioners.

Discussion, policy and strategy papers

Opportunity knocks

The Senate paper '*Towards a policy on ICT Access and Provision*' (June 2002) exhorts that online methods of learning and teaching including collaborative learning should "*allow students to benefit from effective learning opportunities*", whilst the Senate paper e-Learning Policy 2005 (June 2005) included in its vision of OU aspirations that "*staff and students participate in learning communities in which they both expand their learning potential through use of eLearning*". In both of these papers then, the image is of online learning communities providing learning potential. In contrast, a discussion paper to the February 2007 LTSSC, '*eLearning in the 21st century: the evolution of the OU learning and teaching strategy 2000-2007'*, stated

> *"Effective independent study, when appropriate, alongside the ability to work collaboratively online with colleagues, are both increasingly important skills for employment in the knowledge economy. At present this is particularly relevant to the OU's response to the Leitch report on skills in the UK economy."*

Use of the word 'working' is interesting here; in the context of this statement, and with the absence of any reference to pedagogical advantage of OCL in the paper, it could be interpreted as setting collaboration apart from learning, which occurs elsewhere.

Both the learning potential and the transferable skills affordances of OCL are articulated in the Learning and Teaching Strategy, approved by Senate in June 2009 and refreshed in June 2012, which says that technologies will be used to

> *Provide opportunities for students to develop their skills in communicating, collaborating and teamwork;*
>
> *Support learners in building knowledge collaboratively and engaging in social learning;*
>
> *Meet our responsibility to provide high level skills for the information economy and to equip learners with the skills they need as workers and citizens in an information society." (Learning and Teaching Strategy, 2009, OU internal document)*

Here, the university is portrayed as a tool of society, a training ground, preparing those who enter to then go out and serve that society. These papers create the climate in which OCL is devised and implemented in the OU, and thus their directives also form part of the 'discourse with a big D' and provide background for the critical component of this analysis.

The independent learner

Another discourse is also used in the quote from '*eLearning in the 21st century*' (2007, internal paper), in the words "*effective independent study, when appropriate, alongside the ability to work collaboratively online with colleagues are both increasingly important skills...*" Here, studying independently is presented as a different learning mode to working collaboratively. As discussed in Chapter 8, this interpretation is also present in the talk of some staff and students, where 'independent' appears to be correlated with 'alone' rather than as the antonym to 'dependent'. It is of course possible to work in an inter-dependent collaborative manner and still exhibit independence. However, if independence is portrayed as

'alone' then there is a clear conflict between collaborative learning and being an independent learner which could influence student attitudes towards OCL.

Word frequency analysis

Results of the word frequency analysis are shown in figure 9.1, and those terms which were subsequently determined to be used in constructions relevant to this analysis were grouped into categories (figure 9.2).

community knowledge social understanding assessment shared productive reflection cultural collective integration skills enabling creative building construction generation socialisation motivation assignments affective active environments innovative negotiation participatory

Figure 9.1 Words (and their stems) that appear at least 9 times in the titles and abstracts of OCL-relevant papers in ORO, after removal of common words and those which might be expected to appear in any paper related to OCL. The non-highlighted words were used in constructions which were not considered relevant to this analysis, or appeared in relevant constructions in fewer than three papers (Appendix IV)

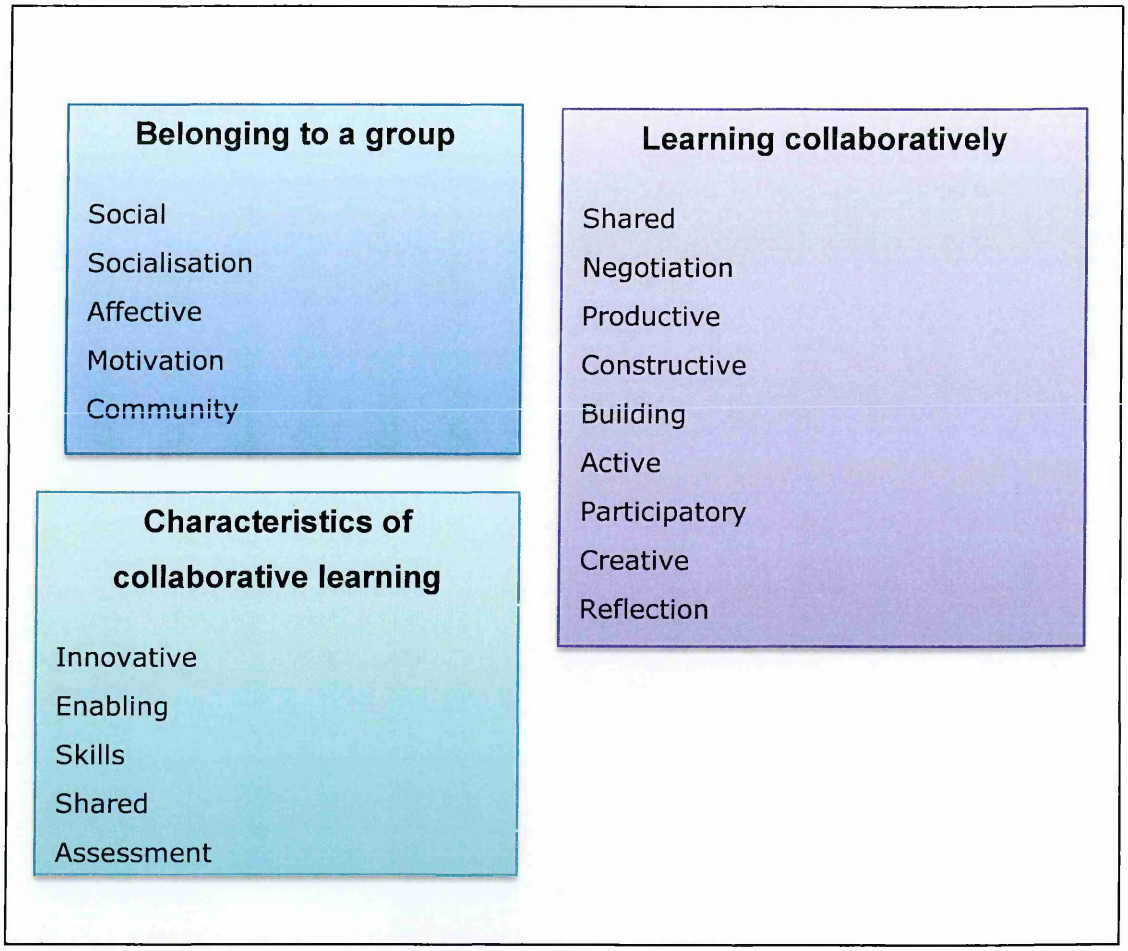


Figure 9.2 Categorisation of the 17 relevant words over 6 characters in length which appear at least 9 times in the ORO database. The term 'shared' falls into two categories, as it was used in multiple papers both to refer to shared spaces and to shared learning.

Analysis of selected texts

You have to do it, it's good for you

Alexander (1998, p. 1.56), in a conference paper describing collaborative learning newly introduced into OU courses, asked the question "*why collaborative learning?*" His answer paints a picture of two types of learning, with instructional method being portrayed as somehow lazier or offering an easier route for both teachers and the

learners, as well as being less effective for deep learning compared to a collaborative approach.

> *"Learning is not a matter of passively accreting knowledge [...] The job of the educator or instructional designer then is not simply to create materials in which concepts are clearly explained, but to create learning situations in which students find themselves actively engaging with the concepts they are learning" (Alexander, 1998, p. 1.56)*

Here the image again is that students using the materials are passive, whilst when working with others they are active. The ORO textual analysis confirms that the image of students being active in collaborative learning is present in several pieces of OU scholarship (figure 9.1). Further to this, MacDonald (2003, p. 377) states unequivocally that *"the pedagogical advantages of online collaborative learning are well known"* without further elaboration. That collaboration is good for learning seems to be so embedded in the OU scholarship psyche that it is unquestionable.

Mason (1998, p. 1.74) however, implies that students do not subscribe to this idea of collaborative learning being advantageous;

> *"Because it tends to require more initiative, more time and more dependence on others, group work is rather more popular with teachers than with students! When integrated with assessment and examination, however, the evidence is that most students do overcome their inhibitions and play their part in joint activities" (Mason, 1998, p. 1.74)*

This reinforces the discourse that collaborative learning is a chore for the student, requiring more intellectual effort, and will only be done if some force is applied.

MacDonald (2003, p. 382) continues this discourse that collaboration must be forced, saying *"even the more reluctant students can be encouraged to engage in online tasks or structured debate if their participation is part of an impending assignment"*. This paints a picture of students not playing their part, not being 'good citizens' unless

there is something extrinsic to gain from taking part, or to lose by not doing so. Use of the word 'impending' is interesting here too; it has connotations of looming over the student, perhaps even a slightly threatening entity in light of the fact that it requires action the student is reluctant to undertake. I would argue that it does not sit well with the idea of encouragement. Impending also gives the impression of urgency, the assignment is due, and the collaboration needs to be done. This certainly fits with the last minute posting behaviour of SDK125 students described in Chapter 6.

With regard to OCL in an OU postgraduate qualification, Lea (2001, p. 163), says assessed group work *"can allow students the opportunity"* to work together. For Lea, the link with assessment is not to draw in students, but that talking online helps students prepare for assessment through discussion with other students. Forum discussion is not a chore but an opportunity; it gives something to the students rather than demands something of them. However, in practice, on the module Lea was investigating, assessment was in fact being used as a stick to make students do the work; there was a forced requirement to take part in the collaboration, because contribution to the online debate formed 30% of the assessment marks (Lea, 2001).

Thorpe (1998) turns around the whole concept of assessment being a tool with which to force students into online conferencing.

> *"Assessment offers course designers an excellent arena in which to introduce new technology, because students pay high quality attention to assessed elements in course work." (Thorpe, 1998, p. 284)*

In this extract, assessment is the big wide space, the 'arena' which is already there, and into which OCL is introduced. Also according to Thorpe (undated), the link to assessment is an indicator to students that collaborative learning is an important feature of the learning, *"...marks are there to underscore that this **matters** in the overall scheme of your study"* (Thorpe, undated) (emphasis in original)[25]. This is an interesting use of assessment marks to delineate 'what matters', since 'what counts' is

[25] This statement appears in a document in a current OU staff development module for social science staff, named ELATE-D e-learning and teaching enhancements (for Social Sciences) which first ran in 2012.

a concept students referred to several times during the focus groups as discussed in Chapter 8.

If we build it, they will come

The *ORO* analysis showed that words associated with the social aspect of belonging to a group appear frequently in OU scholarship texts (figure 9.2) and discourse around the social element of OCL is evident in some of the chosen texts. On cursory inspection (see for example Laurillard, 2009, Laurillard, 2012), Laurillard appears to employ the discourse that learning is a social activity in her 'conversational framework' model of teaching. Her model is built on the pedagogy of social constructivism and the term 'social' appears 73 times in *Teaching as a Design Science* (Laurillard, 2012). However there are no images of students 'being social' in her writing and no sense that students might not see themselves as within a community and thus not take part in the conversations.

In her five steps model of teaching and learning online, Salmon (2003, p. 29), builds a picture of students individually becoming socialised into the online medium, "*establishing their online identities, and then finding others with whom to interact*". Salmon's portrayal, is one of students gradually establishing a learning community where information is exchanged and knowledge is built, with success depending only on the expertise and perseverance of the moderator; "*e-moderators should seek a climate of strong enhancement of the well-being of the online group*" and "*really do have to use their skills to ensure that participants develop a sense of community in the medium*" (Salmon, 2003, pp. 33 and 34). Salmon's five step model has been referred to for many years in OU staff development, and is still used extensively. Therefore this representation of students by default forming a learning community so long as the technical support and tutor moderation is sufficiently skilful, must surely be reflected in the design of collaborative activities in OU modules, and thus students' experiences of OCL.

In contrast, Goodfellow (2004, p. 380), argues that "*online distance learning is often seen as a process of socialisation into a virtual world but [...] it is the responsibility of critical practitioners to respect and explore the origin of student resistance to such socialisation*" and further references how "*individual participants in online learning groups experience and contest the attempt to socialise them into dominant literary practices*". Here students are represented as making deliberate effort to remain outside the virtual learning community.

When implementing OCL it is not possible to determine whether the intended participants are deliberately remaining outside the community or whether they are simply not socialized into belonging to online discussion groups. Analysis of the focus group talk showed that some students are not socialized into communicating online, they were not comfortable with the written medium; one student encapsulated this, saying "*I am not a social media person*" (participant E).

According to Jefferies (2003), for successful collaboration there is a need for frequent and meaningful interaction among the learners, with the instructional materials, and between the learner and the instructor. Johnson *et al* (2007) suggest that for cooperation to occur, conditions of positive interdependence and social skills must exist. However, when a learner undertakes collaboration, the social skills element, which involves interpersonal skills, is often something which is expected to be built *through* that collaboration, rather than exist in order for collaboration to occur. A strong example can be found in the OU module *H804 Implementing Online, Open and Distance Learning*. The introduction (H804, 2007) stated that the module was "*designed to encourage learning that is student-centred, resource-based, 'constructivist' and collaborative*" and it was acknowledged that "*for some of you this approach will be unfamiliar*". The introduction also stated that "*learning to share and compare your experiences online, analyse them and learn from them [...] is a major part of H804*". Yet the introduction then went on to say "*the success of this depends on collaboration between students*" and remind students that they were expected to "*share responsibility for the social and learning climate*". According to Johnson *et al*

(2007, p. 24) *"asking unskilled individuals to cooperate is somewhat futile"*, and they assert that skills including trust-building and communication must be taught. If collaboration requires these skills to begin with, it is contestable that they can be delivered through collaborative activities, unless the activities are carefully designed for such skills building.

Summarizing the discourse

The competing discourses of OCL as a useful pedagogical tool and as a means to comply with societal requirements to deliver transferable skills are evident in the policy papers. They are in competition because how OCL is presented and how students respond both depend at least in part on the perceived objective (see Chapter 8 pp. 125-6). Also evident is the image of an independent learner as someone who studies alone, as opposed to learning collaboratively. This appears to be an ideological dilemma because both independence and ability to collaborate are valued as attributes of effective study and as transferable skills, but the dilemma is misplaced because being an independent learner does not correlate to studying in the absence of others.

Interpretative repertoires identified in the scholarship texts include OCL as a pedagogically advantageous activity which is active and engaging but demanding of students, who need to be encouraged to participate through extrinsic reward. There is a hierarchy at play here; educators know what is best for the students, but there is recognition that this might be rejected, unless students are forced or at least coerced into complying through use of assessment requirements. Alongside this lies the repertoire of belonging to a group; in some papers, socialization into an OCL group is painted as a given, but there is also the picture of students choosing not to participate. Analysed papers were a small selection but the quantitative analysis showed that these repertoires are replicated across a greater number of sources.

10. External discourses of learning: policy and practice

This chapter discusses government interventions in England and their potential influence on discourses of learning and collaborative learning in the Open University

Introduction

Higher education does not operate in a vacuum, and the OU is no exception. Societal influences affect the discourses of all University members; management, educators, support staff and students. The actions of governments can have an effect both directly in terms of higher education interventions, and indirectly through interventions in other education sectors. There are historical and current influences on how education and its purpose, as well as learning itself, are perceived by all members of society, including University staff. This can translate into how knowledge and learning is represented to students, which in turn can have an impact on students' beliefs about, and engagement with collaborative activities.

History

The history of government departments responsible for managing higher education institutions illustrates changing government discourse in relation to universities. Prior to 1964, education at all levels in England was covered by the Ministry of Education, which was then merged with the Ministry of Science, forming the Department of Education and Science. A series of changes begun in the early 1990s saw education increasingly linked to employment, leading to the explicitly named Department for Education and Employment, before a major change in 2007 when Higher Education was split from Compulsory and Further Education, and responsibility for universities moved to the Department for Innovation, Universities and Skills, later renamed the

Department for Business, Innovation and Skills (BIS). Whilst there could be pragmatic reasons for the positioning of the Minister or Secretary of State for Education, it is reasonable to assume that such a decision is based at least partly on how the purpose of education is viewed within UK society. The political and societal discourse around universities appears to have gradually transformed from one of education to one of business and skills; the term 'education' is now noticeably absent from the name of the government department responsible for university governance.

Within this increasing positioning of higher education as a societal economic tool, two of the arguably most influential government interventions affecting teaching in UK universities occurred; the setting up of the Quality Assurance Agency for Higher Education (QAA) in 1997 and the 1996 National Committee of Inquiry into Higher Education, whose final report, titled *Higher Education in the Learning Society*, more commonly known as the Dearing report, was published in July 1997 (NCIHE, http://www.leeds.ac.uk/educol/ncihe/)[26]. The remit of the Dearing committee was to recommend how universities should develop to meet the needs of the United Kingdom over the next 20 years, and although the QAA was founded under a separate initiative, to standardise UK university curricula and outcomes, it is clear from the similarities that the QAA regulations were highly influenced by the soon to be presented Dearing report.

Employability

Whilst it is framed in the language of a learning society, the Dearing report is very much concerned with employment skills. However the recommendations are not for building employability into the curriculum, but for providing careers advice and for including work experience with employers within qualification programmes. There does not seem to be a sense in the report for example that the skills of interaction and

[26] The Dearing report can be found at many websites but this citation is to the original site where the report was deposited and which remains the host site.

communication, referred to when learning is discussed, might be transferable to the workplace.

The 2009 White Paper *'Higher Ambitions: the future of universities in a knowledge economy'*, (BIS 2009), however, begins to tie the two together;

> *"All universities should be expected to demonstrate how their institution prepares its students for employment, including through training in modern workplace skills such as team working, business awareness, and communication skills" (Department for Business, Innovation and Skills, 2009, p.13)*

The language here paints a picture of the university 'doing something' to its students, they are to be trained and *'prepared for work'*. Also in 2009, a joint venture between the Confederation of British Industry (CBI) and Universities UK published their second report, *Future Fit: Preparing graduates for the world of work*; a publication dedicated to showing universities how they could build employability skills into their teaching (Universities UK/Confederation of British Industry, 2009). The picture here is one of employability skills gained through subject learning activities; acquiring transferable skills had become part of not only the stated purpose of university education, but of the pedagogy. The OU focus on employability draws on this document, in particular using the definitions for employability skills as set out in *Future Fit*. Embedding transferable skills into study modes has become a major aim of the OU, an Employability Policy was approved in 2011, and the employability policy statement in the Student Charter states that

> *"the purpose of the student employability policy is to ensure that The OU explicitly addresses and supports student employability through curriculum design, teaching and learning, corporate and student support services" (The OU Student Employability Policy Statement, 2011)*

Employability is presented here as something which describes the attributes of the student. *It is clear that the political discourse of universities being responsible for*

preparing students to be fit for work has been highly influential in OU policy making and learning design. This is not unique to the OU of course; as the Higher Education Academy state

> *"A common theme across HE policy and funding throughout the UK is the need to ensure that graduates are prepared for, and able to contribute to, the economy and society. The development of graduates with relevant attributes, skills and knowledge has placed graduate employability at the centre of the HE agenda" (Employability, www.heacademy.ac.uk)*

The same repertoire of *'preparing'* and *'development of'* students is used here, and it is made clear that this is a concern for all UK universities.

Bounded learning

The Department for Education is responsible for curriculum and assessment practice within compulsory and further education in England, and it can be argued that policy at these levels has a direct effect on how teaching and learning is perceived by society. The education culture in these two sectors, particularly in respect to study for GCSE and GCE qualifications and their equivalents, revolves around the existence of highly constrained syllabuses that are examined in certain pre-determined ways. The precise content of each syllabus is published, teaching materials and textbooks are marketed which are highly directed towards a specific syllabus, and students are always aware of exactly what information they need to know and understand in order to be successful. Whilst this discourse of a tightly specified set of information making up a subject area perhaps has most influence on learners, I would argue that it also influences higher education educators, if only because this is simply a strongly accepted way to approach a programme of study.

This discourse of learning represented as tightly bounded is also apparent in QAA regulations, which determine a set of subject benchmark statements for each area of study. In higher education generally, and in the OU in particular, emphasis on explicit graduate skills and knowledge for each qualification has translated into providing very detailed learning outcomes for each module and qualification. In the OU, in many modules, each chapter of each book has a number of learning outcomes that the student is expected to be able to meet following study of that chapter, and these outcomes consist of a detailed and prescriptive list. For example in *SDK125* there are a total of 244 learning outcomes spread across the 7 books. The first outcome for each chapter is to be able to 'define and use, or recognise definitions and applications of, each of the terms printed in bold in the text', of which, in *SDK125*, there are a total of 477. This practice subscribes to the discourse of tightly bounded discrete learning, and sends this same message to the students.

Learning outcomes are not the only devices that delineate the study; the whole format of OU modules has for a long time been predicated on the model that a programme of study comprises a discrete set of information, initially presented in books and through television and audio, and more recently through videos, DVDs, and online materials. Most of these are physical entities, and 'the box' became almost synonymous with 'the module' in many segments of the OU. For example during a presentation on *Learning Now for the Future* (stadium.open.ac.uk, 2014) the Pro-Vice Chancellor Learning and Teaching commented

> *"usually we've got people who were here in 1970 71 and they can say well what did we give students then what was it and someone said to me this morning well there's the box, so we had the box that was kind of the first thing..."(Tynan, 2014)*

'The box' is also used in the M883[27] Learning Activity Case Study, from the interview with the module author;

[27] M883 is a postgraduate module

"Some students still don't seem ready for collaborative work. They still have the perception that a course is what you get in a box, take it out, and work through by yourself" (M883 Case Study, 2007, Appendix I)

Double use of the word 'still' here is interesting. It cannot be that this is believed to be a perception students have when they first enter the OU, since most learning outside the OU is not literally presented 'in a box'. It could be that the module author is referring to a perception built by students through their undergraduate study. If that is so, then the author must believe this is a notion OU students should have been disabused of during their time as an undergraduate, despite having indeed been presented with a box of learning and instructions for working through it. However many postgraduate students are in fact new to the OU. Therefore the most compelling interpretation is that this is a perception that was once acceptable within the OU, but that students are now expected to perceive something different.

'The box' is also used metaphorically;

"I have always rather felt that the O U's "Empty Box" model for course presentation was a legitimised form of "fraud". The O U actually made its original reputation by producing excellent printed course material" (Learning now for the future' student consultation, 2014) 8th July (student contributor)

Although *'empty box'* is a metaphor representing module design, it contributes to the repertoire of learning being bounded, and the reference to printed material turns this into a powerful image of a student opening a physical box, only to find it empty, and feeling defrauded at the lack OU-produced content.

One striking example of the 'course in a box' being transmitted to students by the team responsible for producing a module, is a video made to introduce *Openings* students to OU study[28] (figure 10.1).

Figure 10.1 A still from the *Openings* video '*What happens next*?' (www2.open.ac.uk).

Whilst holding the pack up to show the viewer, the presenter explains

> *"So, here is the pack. [...] Everything you need is in the pack; there's no need to get any other books, and you won't get any other mailing from the OU, this is it for this module. [...] just do one thing at a time, don't let it overwhelm you and tick things off as you go" ('What happens next', www2.open.ac.uk).*

'The pack' has replaced 'the box' here, but it is the same concept and this statement gives the impression that the learning has an absolute boundary, the knowledge content is physically contained within the pack.

[28] Openings was a set of introductory modules, recently replaced by Access modules, designed to orient students into OU study.

The learning the student needs to do is presented as contained in another way in this extract; there are a specific number of tasks to complete, trackable through a management system of 'ticking things off'. All OU module websites include such a planner, which students can tick off as tasks are completed (figure 10.2).

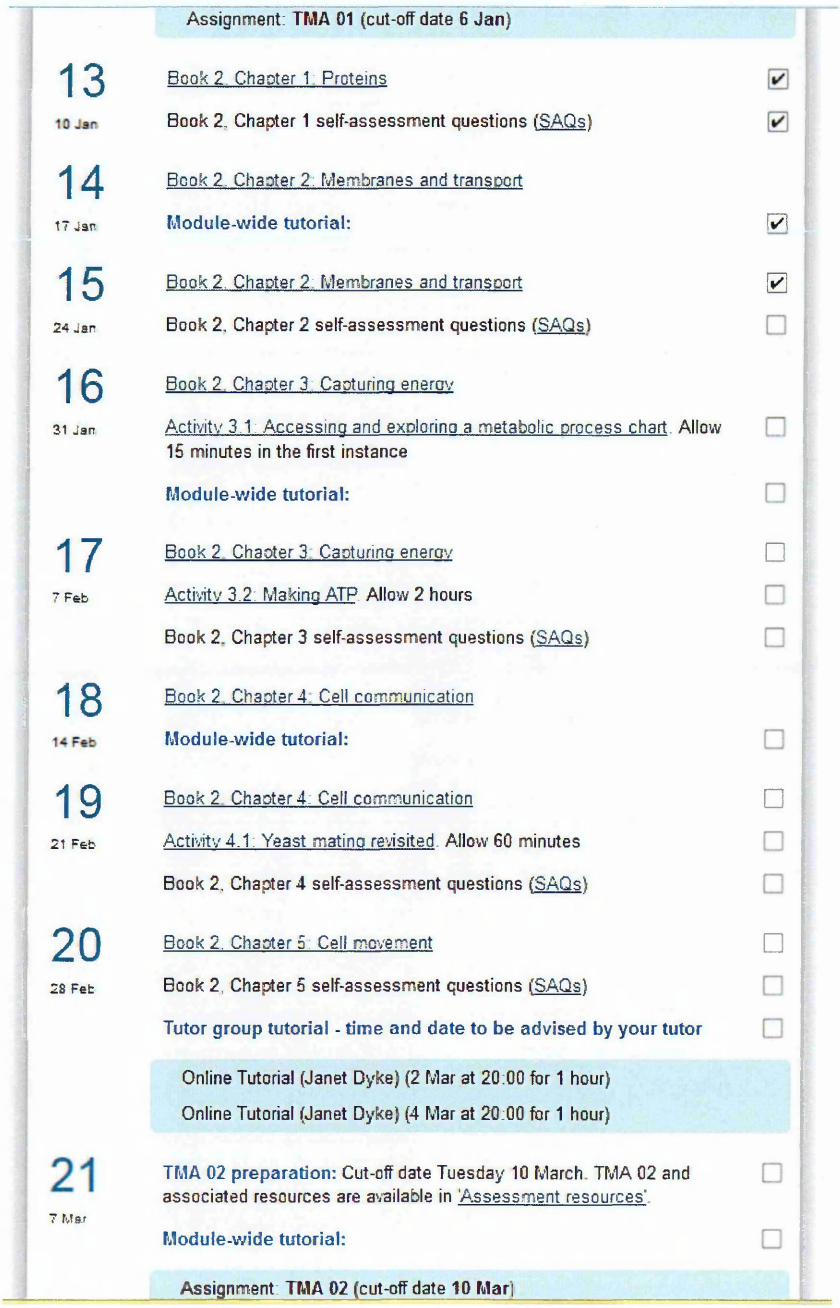


Figure 10.2 An example of the study planner from an OU module webpage, showing the interactive tick list.

Figure 10.2 also demonstrates another element of this tuition model; it shows that the learning is bounded in another way, through the placement of assessment points. Although this concept, that a module contains a precise and limited set of information

to be learned by the students, followed by assessment of that learning, does not preclude collaborative learning, it does lend itself very well to transmission pedagogy. OU students are aware of the assessment content as they embark on a period of study; the assessment relates to the content of the presented materials and this does not give the impression that learning outside of these boundaries, including knowledge built through discussion with others, has any value.

This impression of bounded learning could be said to apply to students at any UK higher education institution, given that learning outcomes are ubiquitous, programmes of study are laid down, and learning is punctuated by assessment points, although the physical nature of the materials presented in a single place can accentuate this perception for OU students. Learning is generally presented as more amorphous at 'face-to-face' institutions; students are expected to find their own resources and class content to some extent is led by student needs rather than a rigid script. However, this is a new departure from the more prescriptive curricula experienced by most UK students during prior education, and in focus groups with first year Pharmacy students at the University of Central Lancashire, some participants articulated dismay at the lack of a detailed syllabus in their study programme, and confusion as to what they actually needed to know.[29]

Summarizing the discourse

The name of the government department controlling universities in England explicitly links higher education with business and skills, and this discourse of higher education being a societal economic tool is used in wide-reaching policy documents, with the interpretative repertoire creating a picture of students being '*trained*' and '*prepared*' to enter the workforce.

A second discourse concerns the nature of a programme of study which is represented as a discrete package, with boundaries. The interpretative repertoires that study is bounded by learning outcomes and carried out in a precise, controlled manner, and

[29] data unpublished but gathered during focus groups detailed in Dyke et al., 2009

that it can be packaged in a physical or metaphorical box, are dilemmatic to the pedagogy of exploratory collaborative building of knowledge.

In conclusion, there is a strong argument that education policies and practices in England encourage a discourse that learning is bounded rather than exploratory and that higher education is an economic tool. Both have implications for how students view collaborative learning, and thus their engagement with, and participation in, OCL.

11. Consolidation

This chapter draws together the research question analyses, sets out the contribution to knowledge, makes recommendations, and suggests further research.

Introduction

This study has addressed the research questions set out in Chapter 1, figure 1.1, and reproduced here for expediency (figure 11.1).

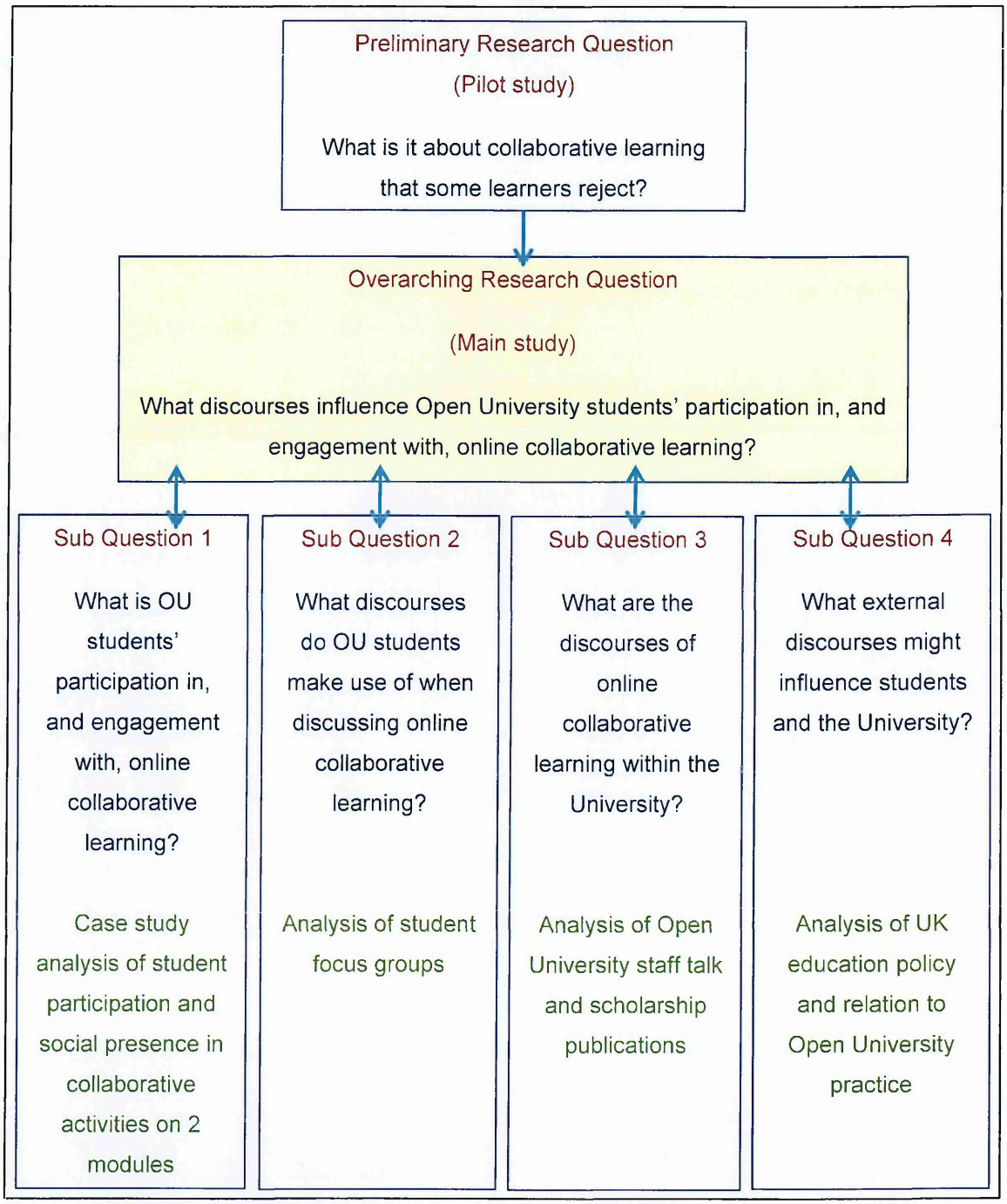


Figure 11.1 The research questions and how they are addressed in this study.

The main findings from the pilot study and from the research addressing each of sub-questions 1-4, reported in Chapters 5 and 7-10, are drawn together here, culminating in figure 11.2 below, which provides a concept map answering the overarching research question *"what discourses influence Open University students' participation in, and engagement with, online collaborative learning"*. The findings contribute to current knowledge in several spheres related to OCL, pertinent within and outside the OU. These contributions lead to recommendations for OU practice that could increase student engagement with online learning activities and thus help build effective learning communities. Finally, there is still work to be done in this area, and suggestions are made for future research.

Answering the research questions

The preliminary research question, addressed through the pilot study (Chapter 5) showed that factors which might most be expected to encourage participation were being part of a learning community, building knowledge, reward and motivation for study. Students had mixed concerns about facilitation by tutors and relevance of the activity to the module, whilst factors which might be expected to have a negative effect on participation were time, group inequality, sharing work or knowledge, and the technological aspects of collaborating online.

Sub Question 1, concerning student participation in, and engagement with OCL, was examined in Chapters 6 and 7, where it was determined that some students fully participated and engaged with both the activity and other learners, some contributed the minimum required for the marks through serial monologues, often posted at the last minute, and thus did not fully engage with either the activity or the community, whilst some students do not participate at all. Furthermore it was established that even when engagement with the community had been established, it was quickly lost.

The pilot study also contributed to Sub Question 2, *"what discourses do OU students make use of when discussing OCL"*, where it was determined that two major discourses were drawn on, that of *'belonging to a group'* and that of *'being a*

collaborative learner'. This question was addressed in more depth in the case study (Chapter 8), which also found students drawing on these two discourses, both of which involved a range of repertoires and attitudes towards OCL. Talk around belonging to a group included the image of 'talking into the abyss, other students as 'friend or foe', and acting as a 'good citizen'. Being a collaborative learner threw up dilemmas around trust of others' knowledge and knowledge sharing, expectation of extrinsic reward through assessment, formality of OCL and what it means to be an independent learner. Collaborative activities were viewed as discrete tasks to be completed, designed to demonstrate transferable skills rather than as learning processes.

Attention then turned to the influences of the university itself, and that of external society through the governance and practice of education in England (Sub Questions 3 and 4; Chapters 9 and 10) and how they might influence student discourse, participation and engagement. Use of a major discourse of *'bounded learning'* was identified both within and external to the University, alongside the strongly influencing external representation of learning as a societal tool and internal representation of OCL as a means to deliver employability skills within the curriculum. Also detected was a pervading belief, within both internal scholarship (Chapter 9) and the academic staff body including ALs (Chapter 8), that to coerce students into participating in online collaborative activities, it must be linked to assessment, with their contributions rewarded by the award of summative marks. There was also a widespread internal belief that provision of the right online environment and tutor support would result in students equipping themselves to use the space for social learning. Meanwhile AL discourse centred on collaborative learning as a series of tasks, to be timed, organized and completed. Both the practice of including extrinsic reward, and the discourse around unequal work by students, contributed to staff representation of OCL as a transactional enterprise. It is suggested that all of these factors combine to influence student discourse and behaviour with regards to OCL (figure 11.2).

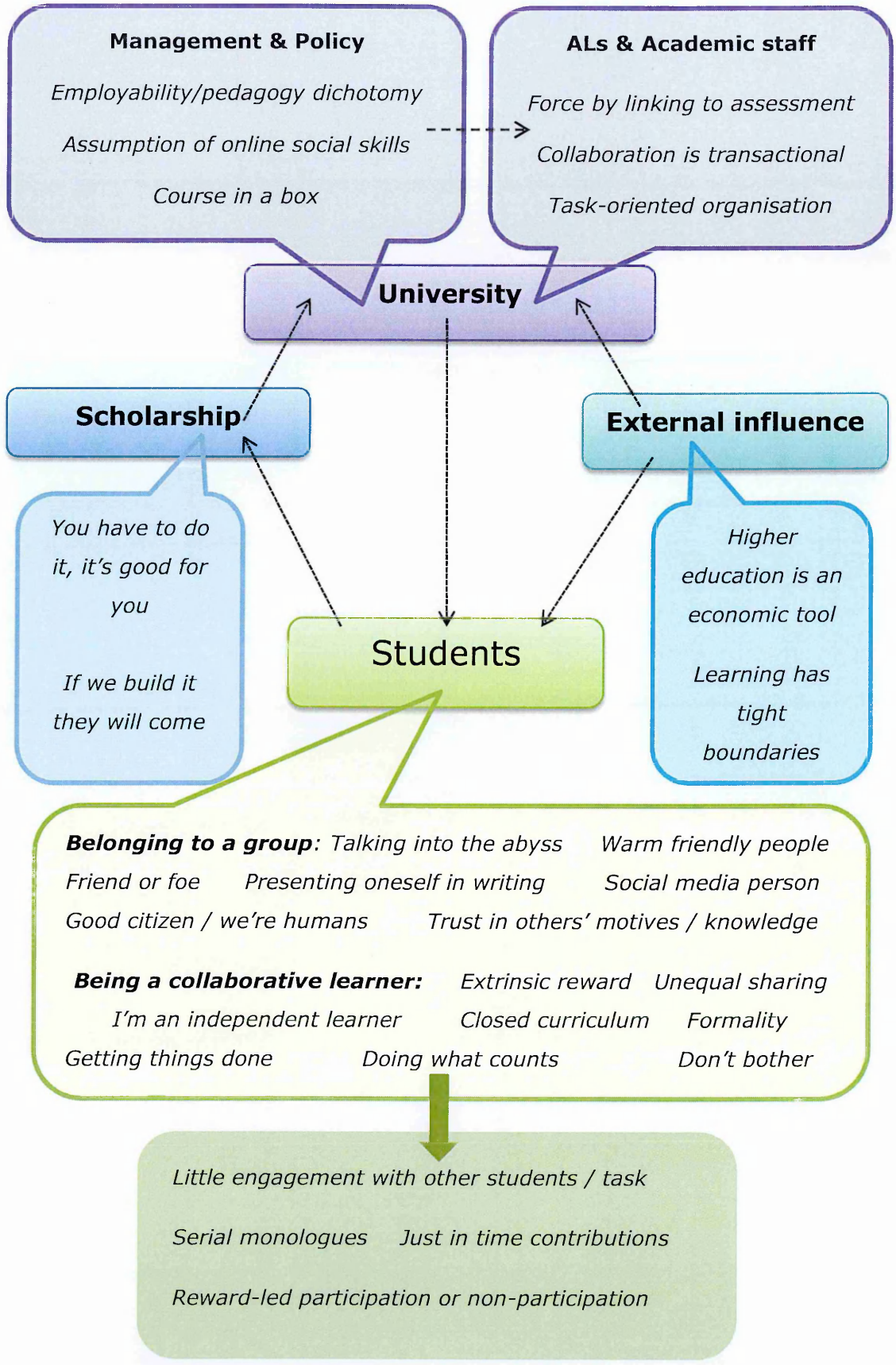


Figure 11.2 A concept map showing how Open University and other discourses interact to influence student participation and engagement in OCL.

Knowledge contributions

I have provided an evidenced argument that the dominant discourses of bounded learning and of learning as a societal economic tool are in conflict with the socio-constructivist epistemology that lies behind OCL, which, when employed in universities, result in 'institutional hegemony over pedagogy', a phenomenon aptly labelled by Goodfellow and Lamy (2009, p. 174). A third discourse, being a collaborative learner, influences the position taken by OU students when approaching OCL.

Arguably my most important contribution is elucidation of a powerful discourse that presents learning as bounded; a discourse that can be seen as pervasive in the educational practices of society, particularly its governance, in the talk of University staff, and in the execution of teaching and assessment; a 'course in a box' in action, that competes with the socio-constructive epistemology discourse that learning consists of exploratory building of knowledge between individuals. This knowledge is pertinent to understanding student approaches to learning, including collaboration, both within and external to the OU.

A second influential discourse portrays learning as a societal economic tool which involves students being trained to acquire and exhibit transferable skills. This discourse is used to frame the purpose and thus the implementation of OCL in the OU, which in turn shapes students' beliefs, thus effectively competing with the discourse of OCL as a pedagogical tool. It is the effect of this opposing influence on how the OU represents OCL to students, and how OU students approach online collaborative activities which is claimed as a contribution to knowledge here.

The third instrumental discourse, being a collaborative learner, crucially includes how learners position themselves in relation to other learners. Students know they are expected to demonstrate independence. However, as shown by this research, this term is interpreted as 'learning alone' not only by students but also in the scholarship

literature and elsewhere in the University. The confusion created here is hugely important as this interpretation of independence conflicts not only with OCL epistemology and with OCL in practice, but also with widely accepted theory of how we learn, and thus has the potential to be detrimental to students' learning success. New knowledge of how students interpret independence and position themselves within this discourse is therefore a useful tool in supporting students to become part of, and value, their learning community.

I have also provided new insight into the link between assessment and OCL, which throws doubt on the efficacy of forcing participation through assessment. The scholarship literature presents OCL as promoting active and thus deep learning, but assumes that students must be coerced or forced into participation through assessment, and this is a tacit, sometimes explicit assumption also made by module teams and ALs within the OU. The AL voice is particularly strong here and could be influential in further promotion of this direction. The research presented here shows that affording extrinsic value to participation creates tensions for students, who are wary of sharing knowledge and trusting the knowledge of other students when OCL is linked to assessment, and who also then make cost-benefit analyses of whether to participate, based on the size of, and personal need for, the assessment marks.

There is a common assumption in the OU that if students are brought into the OCL environment they will by default become socialised into communicating through the online medium, as evidenced by continual OU referral to Salmon's (2003) 5 step model (see Chapter 9, pp. 140-141 of this thesis). New knowledge from this research shows that this can be a false belief; evidence here is that despite the efforts of the moderator, there is often a continuing lack of social presence, and thus learner engagement with the community, when OU students are asked to take part in online collaborative activities. Of particular interest is that even where social presence has been established, it is not maintained beyond the immediate requirements of the activity.

Recommendations

From university induction onwards, in the OU and elsewhere, all students should be exposed to the concept that learning does not necessarily have discrete boundaries, through teaching design that encourages both exploration and the valuing of knowledge brought into the learning community.

Learning should be presented as constituting joint effort rather than competition, so that knowledge is viewed as to be freely shared rather than as a trading commodity.

Collaborative learning should be presented as offering intrinsic rather than extrinsic reward. To this end, it is recommended that the Open University, and other institutions, move away from the practice of linking collaborative learning with assessment.

The Open University needs to decide the purposes of collaborative learning and communicate this to all staff involved in student learning, particularly module teams and ALs, and of course to students. If OCL is to have a pedagogical value, it should not be used as a tick box exercise for delivering employability skills.

Student discourse showed a clear distinction is made between informal and formal collaboration. In addition, both student and AL voices highlighted that formal collaboration is seen as a transactional enterprise rather than a social knowledge building exercise. To encourage social presence and engagement with other learners, OCL activities should be designed as informal discussions with the emphasis on the collaboration ethos rather than on formal, assessed, product-focused tasks.

Currently, ALs focus on the mechanics of running an activity, focusing on the timing of tasks, encouraging or coercing students into taking part, acting as referees and feeling encouraged if participation numbers are high. There is little evidence in AL talk that building of knowledge between students has any focus. This could be because of the design of OCL activities, or because of perceived expectations. It is recommended

that the Open University undertakes staff development which helps ALs focus on OCL as an arena for knowledge building.

With regard to interacting online, it cannot be expected that all students will be immediately comfortable presenting themselves and their ideas and knowledge through the medium of written talk, particularly to an unknown group. Facilitators should give students information about the group, and students should be given opportunity to explore writing online in a non-threatening, informal environment which does not involve exposure of their subject knowledge.

Future research

The knowledge sharing dilemma does not appear to have been as important to the science students as to those who took part in the pilot study. This position of not sharing however was noted by tutors from other faculties in a separate focus group (data not shown) so this is an area for further investigation.

All participants in the case study had participated to some extent in the required OCL and thus there is a lack of knowledge regarding those students who have not participated or engaged at all with online collaborative activities. Although there is evidence from students who had not participated in OCL in the pilot study, this study was based on hypothetical scenarios rather than 'real world' situations. Further attempt should be made to listen to the voices of those who choose not to participate when completion of collaborative learning online constitutes a formal part of their study curriculum.

The case study was conducted in the faculty of Science; it would be interesting to compare participation in and engagement with online collaborative learning activities across the disciplines, particularly as at the Open University of Israel, researchers found a difference in dialogic behaviour in module teaching forums between humanities and science tutors and students (Gorsky et al., 2010).

12. Reflection

Here I briefly reflect on discourse and the nature of qualitative research, discuss the influence of the research on my own thinking and practice, and acknowledge the individuals who have made this research possible

Introduction

From the very beginning, this research was influenced by discussions taking part in online forums on the University's systems, and consequent research methodology has relied in part on contributions to online forums by my own past students. This raises particular ethical considerations which are discussed below, alongside the ethical issues that arise from using data gathered from my own past students and from my colleagues. In a study whose methodology is reliant on data gathered online, and from student participants, the representativeness of the focus group participants also requires some consideration. In the words of McArthur (2012, p. 428), "*much of what we do as educational researchers and much of what we research is pretty messy, or at least complicated*". Perhaps the most messy and complicated feature of this study was the difficulty surrounding recruitment of focus group participants and concern about how representative they might be. Discourse analysis, which formed a major part of the methodology, is itself subjective and this brings further 'messiness' to the study. Generating and using data from colleagues and students is one consequence of being an 'insider researcher', but this also introduces other issues, both advantageous and disadvantageous, which are acknowledged and explored in this chapter. Despite, or perhaps because of all this, the research has had positive impact on me as an educator, but has also led me to reconsider some of my earlier assumptions about exactly what is 'good pedagogy'.

Reflecting on the methodologies

Ethical considerations

Two committees oversee ethical considerations for human research, and grant ethical approval for research involving staff and students, in the OU, the Human Research Ethics Committee HREC (was the Human Participants and Materials Ethics Committee HPMEC) which grants overall approval for research projects, and the Student Research Project Panel SRPP which controls use of OU students as participants. Permission to run this project was obtained from both the HPMEC and HREC, and permission to use the methods of gathering student data was obtained from the SRPP. At the time of planning, gaining permissions for, and undertaking this research, the OU had no internal research ethics policy for researchers, instead guiding researchers to external sources, in particular the British Educational Research Association (BERA) publication '*Ethical Guidelines for Educational Research* (2011). Whilst useful for issues on informed consent, openness, right to withdraw, privacy, and storage of personal data, all of which were lodged with the HPMEC, HREC and SRPP, this publication contains little guidance regarding use of online-sourced material from public, semi-public or private spaces, other than for participants within a piece of research. The 2011 edition has been updated to include

> *"'Researchers must take the steps necessary to ensure that all participants in the research understand the process in which they are to be engaged, including why their participation is necessary, how it will be used and how and to whom it will be reported. Social networking and other online activities, including their video-based environments, present challenges for consideration of consent issues and the participants must be clearly informed that their participation and interactions are being monitored and analysed for research" (BERA, 2011, p. 5).*

However there is no guidance on the use of historical sources, created before the researcher conducted the study. I therefore had to create my own ethical boundaries for using data from student and staff forums, and from electronically recorded online staff development sessions, when undertaking this study.

One issue is whether the published content is in a public or a private space. To my knowledge there has been a long running debate in various parts of the OU regarding the status of OU forums as public or private in relation to data protection and use. As the manager of an OU staff-wide forum, potentially accessed by many hundred colleagues, I have in the past been informed by the OU Learning and Teaching Solutions Unit which oversees forum provision that the size of this forum means that it should be considered a public space, and that anything published there cannot be considered part of a private conversation. However this appears to be personal opinion rather than written down policy. There also does not appear to be any policy regarding access to, or use of forums designed for smaller groups of staff or students. The forum data is stored on OU servers, and is accessible for many years beyond the active period of the forum. Different categories of staff can access these forums, the users are not informed who has access, and the moderators cannot determine access, which is controlled by the Information Technology unit of the OU.

Taking the above into account, I decided that, nonetheless, ethically, I should not use data from the AL Common Room as I have a power position there as manager. I also decided I should not use data from the OUSA student forums, even though these are open to all members of the University and a potential readership of about 200 000, because again I have a power position as a tutor. Although use of data from these forums could have been useful sources for this study I am comfortable with this decision and in retrospect would not revise it. I also decided that I would only use data from the S294 and SDK125 tutor forums and the S294 online staff development and module briefing recordings where the relevant member of staff gave informed consent to do so.

Use of data from the student forums for S294 and SDK125 was more problematic. When writing to these forums, including for collaborative learning activities, students do not know who is reading, neither the size of the group nor the names of individuals. They do know they are talking within a confined student group, which can range from about 20 to about 150, but they do not know who else might have access, and they do not know for how long or where these discussions might be stored electronically. The big problem I faced with regard to using quotes from these forums, was that whilst the forums were still available to me, the contact details (and in some cases even the 'real' names of the students) for all my past groups of students, were not. I therefore was faced with the choice of either not using direct information from these forums to support my assertions, or use the data but as sparingly as possible, in anonymised fashion with all names redacted. I decided on the latter course of action, mostly because it was suggested as necessary supporting evidence in supervisory feedback. I decided to not use any quote which revealed any personal opinion or data. Two students messages posted on an S294 forum and four posted on an SDK125 forum appear in full in Chapter 6, pp. 79 - 80, figures 6.2 and 6.3. These messages do not contain any personal or sensitive information and author names have been redacted. In addition, Chapter 7, p. 90, table 7.3 contains quotes from various S294 and SDK125 forums are used to illustrate definitions of the different social presence indicators used in the analysis, and in these cases there is nothing to identify the original authors.

I have been aware of this gap in ethical guidelines regarding social media for some time, not just within the OU but within the research community as a whole, see for example Moreno *et al.* (2013). In retrospect, I am still not completely happy that the above quotes and messages appear in this thesis; it does still feel to me like unauthorised use of student work. I have fewer qualms regarding the analysis of social presence, which is the main use to which forum contributions were put during this analysis. However I would still have liked to be able to record that this use was within OU ethical guidelines, and I do think students should know that such analysis

might be performed. It would be beneficial to both users of forums and potential research studies if a position of the OU was to be determined and made clear to all users.

I also want to reflect here on the ethics of attracting students to take part in the focus groups. In an insightful observation, Breen (2006, pp. 468-9) says;

> *Participants are usually aware that they are involved in a process that intends to stimulate some kind of change in their attitudes or their behaviour. Therefore, participants tend to come to the situation believing that they will learn something, particularly if the focus group is used as part of a consultation process. It is always worthwhile and even necessary, perhaps, to consider the quality of the learning experience you are providing for participants. For some people, sharing experiences with others is a rewarding therapeutic experience in itself. Others may expect to go away with a greater understanding of a new initiative or policy (Breen, 2006, pp. 468-9).*

In the invitation to the focus groups, for both the pilot and the main study, I included a 'what's in it for you' section (Appendices III and VI). I do need to remind here that none of the approached participants were, or had been, my own students, and for those studying modules that I personally tutor, their study on those modules had been completed. Therefore there could be no confusion that 'what was in it for them' might be any kind of benefit or detriment to their study or its successful outcome. My explanation of 'what's in it for you' section concentrated on helping the OU make good decisions for future online collaborative activities, and for the main study, on using the new *Blackboard* conferencing system. I can only hope that the experience of using the online space, in particular using the microphone functionality which many students are very reluctant to employ during tutorials, will have been helpful to many of the participants. It was certainly encouraging that one student, towards the end of one of the main study focus group meetings, said, without prompting by any question about the usefulness of the focus group;

"the good thing about having this chat here is on my current module we've got a very different character as a tutor but also having this conversation here tonight it has given me more confidence to now go on be more informal more chatty on the forum so hopefully that might draw others out yeah it's just given me a bit more confidence so I do think I've gained something tonight" (participant E).

Student focus group participants

As mentioned in the introduction to this chapter, recruitment of participants to student focus groups was a messy and complicated business. At the start of the study I was determined to run the focus groups in a face to face setting, in order to talk to students who did not want to, or for whatever reason were unable to participate online. At the same time I did not want my own students to feel compromised by asking them to contribute to my research, even though at the time we did not have any online collaborative learning activities as part of the modules I was tutoring. I decided to try to take the focus groups to the students, in familiar venues where they were already attending face to face tutorials, and where they would be present at the allotted time. I determined which tutor groups would be present at venues in Preston and Manchester, asked SRPP to contact eligible students by post, and arranged room hire. The invitation was to attend an hour long focus group subsequent to their OU tutorial, with the incentive that I would provide lunch. I received two positive responses from students, attended the venues in the hope that others would come along, posted notices, and yet at both venues no students joined me. I therefore had no choice but to recruit students online, to online focus group meetings. This is not a situation that I desired, and as I acknowledge in Chapter 5, p. 60, this is an inherent weakness in my methodology, but I can see no remedy, unless students were paid to attend, which has ethical implications, and could result in skewed data. However, in mitigation, often students who attend face to face tutorials are the same ones who attend online, and the majority of students in the OU do neither. Therefore if the focus group methodology was going to be used, it would only ever reach a small

proportion of students, and those who were happy and available to meet up with other students and the researcher, whether that be online or face to face.

As well as only reaching students who are prepared and/or able to communicate in the online environment, the case study focus groups additionally did not include any students who had exhibited total non-participation in the online learning collaborative activities. This was established at the start of each focus group, although of course I was reliant on the students' word for how active they were in the activities. Again, this is a weakness in the methodology, in so far as these students' voices were only heard through a third party, as focus group participants reiterated what had been said and done by other students. However, as McArthur (2012, p. 422) said "*educational research should always be about moments in an ongoing reality that is in flux and changing*" and I would extend that to say qualitative educational research is also about snapshots of that reality, and a snapshot can never be said to show the whole picture, only a partial picture, but which, so long as it is acknowledged as such, is still worthwhile viewing.

One other factor which gave me pause for thought, and which has implications for the analysis of focus group talk, is encapsulated in this comment in one of the pilot student focus groups

> *"my impression on reading the comments were that 'negative' factors were expressed quite powerfully and vehemently by students, almost to the point of eclipsing the 'positive' comments" (FG1 forum).*

This could be an artefact of the pilot data collection methodology. Although every effort was made to remain neutral during the focus groups, it is possible that the participants believed negative comments were more desirable. Asking students to work together collaboratively can be a challenge to both their beliefs about how they will study, and to their beliefs about the whole concept of being a learner. Reaction to change consists of both cognitive and emotional factors, which together determine subsequent behaviour (Smollen, 2006). These '*powerful and vehement negative*

responses' do constitute an emotional response, and it is also possible that this emotional response could have influenced students' decisions to take part in the pilot research, resulting in the negative responses being more powerful. Negativity was much more restrained in the main study focus groups, perhaps because of the environment; there is not the same distance between focus group members in a synchronous online meeting room compared to adding anonymous comments to a space on *Survey Monkey*. However it is still possible that students who were attracted to taking part in the main study focus groups might have been so because they had negative emotions that they wished to express.

Analysing discourse

When I began this research I was relatively new to the concept of 'a discourse' and was still building my own interpretation of this wide-ranging term. I began with Gee's (1990, p. 142) description of 'discourse with a big D' which includes not only written and spoken words but also practice; this remains the best fit for my personal understanding and I am satisfied that I have located this both in my own mind and in this thesis. A more problematic conception concerns where discourse lies within our construction of the world; is a discourse 'enacted', is it 'there', to be 'found', or 'illuminated', or is it 'used'. This was a major challenge to me, a slippery concept but one I pinned down towards the end of my research. I have determined 'a discourse' to be an artefact, which lies in both an individual and a collective consciousness, and which is realised when people say and do things. This proved a threshold concept that finally allowed me to represent my analyses in writing, using the notion that discourses are 'drawn on' or 'used'.

Analysis of discourse is also challenging because, regardless of methodology, it is inherently subjective in nature. The technique of critical discursive psychology, whilst justified, posed particular difficulties because despite having a structure of examining 'interpretative repertoires', 'ideological dilemmas' and 'subject positioning', there is no set guidance on how to go about this, and published research does not include such detailed methodology (Chapter 4). Thus I was developing my own method as I was

implementing it, and the research is subjective not only in the declared results of the implementation, but in the actual implementation. This also applies to some extent to the measurement of social presence (Chapter 7). I am first and foremost a scientist, trained in evaluating the validity and reliability of data collection and analysis, and this leads me to reflect on the transparency and trustworthiness of this type of research. There is no inter-researcher validation in this study. Respondent validation was incorporated into the pilot study focus groups (Chapter 5) but was not used during the remainder of this study. However, I would argue that ostensibly rigorous quantitative scientific analysis is equally subjective and personal to the researcher in choice of what to measure, how to measure it, how to analyse, and how to interpret the results of those analyses. Perhaps it suits my purpose to call on the recent questioning of the 'politics of evidence' as discussed by Denzin (2009) and to repeat his assertion that "*we are each blinded by our own perspective. Truth is always partial*", but I strongly stand by this.

Being an insider researcher

In Chapter 6, pp. 71-72, I stated that although working as an AL, I was not an insider researcher to OCL when I began the study; however as collaborative learning activities were introduced to the modules I tutor, I was now acting from that position, giving me opportunity to investigate the actual practice of students. On reflection, this was a rather bold position to take. At what point was I allegedly not an insider, and at what point did I supposedly become one? I was always an insider from the position that my research was located within the institution that employed me; my research would involve colleagues as participants, and my findings would include a critique of fellow staff practices, with all the challenges and tensions such a position brings. I was also an insider of sorts within the academic governance of the University, being a member of various governance committees, including a two year position on Senate. I could never therefore have been described as a complete outsider. However, I did consider myself an outsider to OCL, and as Trowler (2014, p. 5) says "*what counts as 'inside'*

also depends on one's own identity positioning; how one sees oneself in relation to the university". In the beginning I was 'one step removed' from both colleagues and students involved with OCL, and this position felt at the same time more 'safe', yet less 'authentic'. I had almost felt like an imposter in doing research on OCL, and was relieved to be able to call myself an insider!

There is a huge challenge for an insider researcher when critiquing the work and practices of the institution in which they work. After all, they will continue to work with, and for, the very same people whose work and practice they are analysing. Assessment of published work, which has been put into the public arena so that it may indeed be critiqued, is a far cry from subjecting work such as the authoring and presentation of online collaborative learning activities to critical scrutiny. This becomes even more of a challenge when analysing and commenting on the actual words used by colleagues who have given informed consent for their use. The thesis will be freely available, some of this work might be published, and in any case, any person who has given consent has the right to see how it has been used. There is an undeniable tension between a perceived personal moral obligation to present colleagues in the best possible light, and the necessity for research validity to provide an objective account. Particularly given the nature of my discourse analysis method, I have at times felt quite uncomfortable at the thought that my peers might believe I analyse how they are talking in everyday situations, including online, even though they had freely given me consent to use their online contributions in specific places for this purpose. I feel quite strongly that it would have been easier to be a complete outsider in this respect.

With regards to investigating student practice and discourse, in particular the case study investigation, being an insider had distinct advantages. Having easy access to recorded historical data from the modules in the case study was enormously beneficial from an organisational perspective. Having access to, and familiarity with, other ALs alongside the experience of being a tutor on these modules was also a bonus, and although validity of insider research in this respect has been questioned (Unluer,

2012). When it came to facilitating the student focus groups, I was already encultured as a long-standing member of the OU community; I had good understanding of both university practices and module-specific detail. Being an AL also meant that the student participants could easily place me and had an understanding of to whom they were talking.

At the same time, being an AL, and in particular an AL on the two modules assessed in the case study, had its drawbacks, and there were ethical considerations regarding the power relationship between students and myself as an AL and focus group facilitator, which had practical implications as well as the potential to influence outcome.

As discussed in Chapters 5 and 8, pp. 55 and 109 respectively, for ethical reasons, to ensure there was no possibility of any power influence over module results, students in my own groups were not invited to contribute to this research, and for the case study focus groups, the meetings were held after exams had taken place. This in itself demonstrates my awareness of the potential ethical issues when research involves a hierarchical power structure, regardless of how well I and the institution work to present the tutor student relationship as one of supporting learning. I am sensitive to the fact that students in the focus groups would still have viewed me as an AL, which they could place above themselves in a hierarchical view of the University, and this could have either consciously or subconsciously, affected both what they said and how articulated it during focus groups. That said, there was nothing practical that I could do to alleviate this situation, other than put the students at ease during the focus group itself. I would just reiterate here the words of participant E quoted in this chapter above (p.179), that *"having this conversation here tonight it has given me more confidence to now go on be more informal more chatty on the forum"* which gives me some encouragement that I was able to talk to student participants within what I, and hopefully they, viewed as a collegiate rather than a hierarchical relationship.

My practice

Undertaking this research has inevitably led to examination of my own practice in relation to not only encouraging and facilitating OCL, but also representation of learning to students. Practically, I have become more aware of social presence in forums and have worked to increase group cohesion. I have also become much more aware of how students approach their learning, which allows me to tailor my support. Philosophically, at the start of this thesis I identified with social constructivist epistemology, whereby learning is portrayed as participatory, transactional and inter-subjective. Listening to student voices caused me to consider whether this is an indulgent version of reality; if the purpose of my science teaching is primarily to support students as they build a body of scientific knowledge, should I not respect a bounded learning discourse that lends itself to a didactic knowledge transfer model of learning? These competing discourses both have validity for those who draw on them, and I have come to the conclusion that although they have no common ground, they can persist side by side.

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Appendices

Appendix I

Case studies of e-learning activities collated as part of an Open University learning design project and quoted in this thesis.

Learning Activity Case Study

Learning Activity Title: Asynchronous discussion based collaborative learning

Summary: Case study interviews of young people are presented on DVD and used as a focus for individual reflection and online discussion.

Context

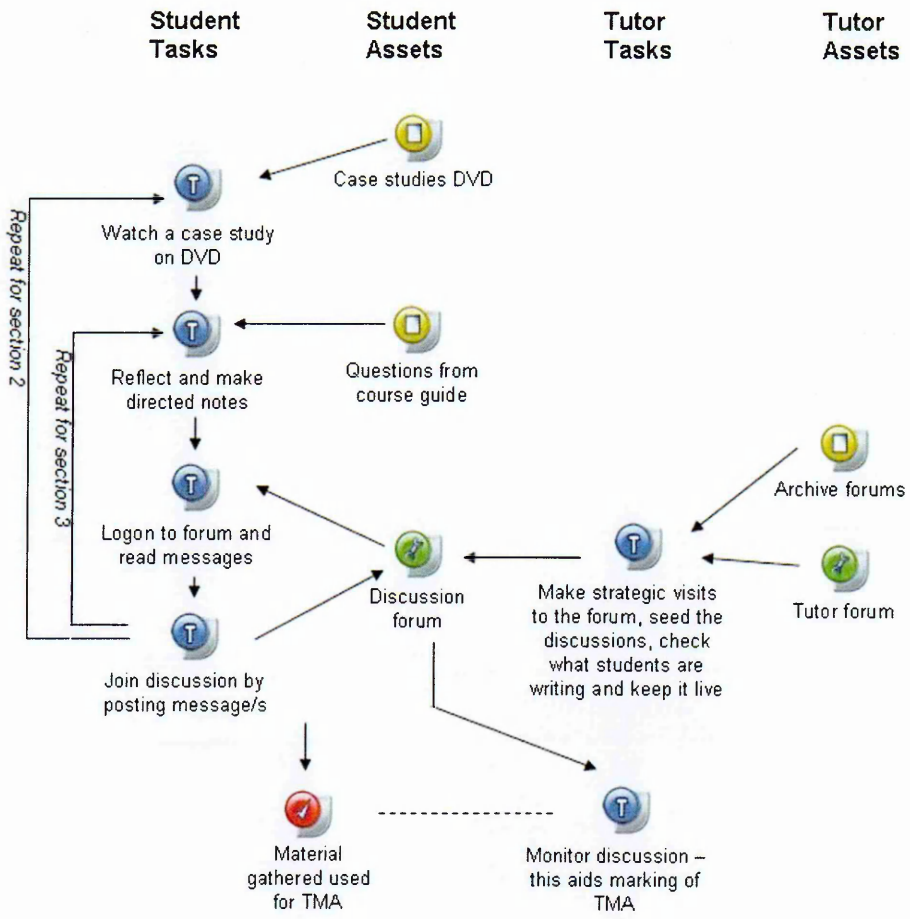
Course context	Title:	Youth: Perspectives and Practice
	Course Code:	KE308
	Course chair or activity lead academic:	Martin Robb
	Discipline:	Health and Social Care and Education
	Faculty:	The host faculty is Health and Social Care, but the module is a collaboration with FELS
	Date of first presentation:	February 2007
	Time to complete learning activity	12 hours: 8 hours of which is for working on the DVD and 4 hours for participation in the online forum

Learning activity description

Why are we doing this?	Students need to meet the knowledge and understanding objectives of the course and learn to both articulate their thoughts and reflect on how to apply these to their own practice and experience. To a lesser extent, it will also contribute to developing more IT related skills.
What are the learning outcomes?	Develop skills in the oral communication of ideas including the use of more formal academic report based language. To use and discuss a range of materials provided. To reflect on how to apply course ideas to their own practice and experience.
How are the learning outcomes achieved?	We have developed two DVD multimedia resources specifically for the course. These incorporate case study material and form the basis of online discussions that happen near the end of each of the six blocks of learning. The first DVD has a number of case studies featuring young people reflecting on change in their own experience. The second DVD has a number of practitioners in their practice contexts talking about how their work has changed and how they deal with contemporary challenges. The learning activities in the online tutor groups are based around the DVDs. In the penultimate week of each block (week 4 of 5), learning is focused around the online discussion forums. In the first half of the activity, the students are given an activity during that week that involves watching a particular case study on the DVD. They are then asked to apply the ideas they have been studying in the block to the case study. The second half of the activity is to go online to the tutor group forum for that block. This activity is designated to a particular week in the calendar, but we have agreed to a window either side of that to allow students who are behind with their work to catch up. This activity requires the students to share their findings from the earlier DVD based activity with their peers. The activities are divided into three stages. The first stage involves asking a fairly basic question, that requires a descriptive answer. The second part invites people to compare two case studies around a particular issue and the third part pushes the conceptual challenge a bit further. Each stage follows a similar sequence: watch the DVD, make notes, reflect on a question, log on to the forum, read any messages, add

	your own messages. The activity is facilitated by the tutor who feeds in at key points: such as an introductory message during the second and third parts of the activity.. The tutor's role is to contribute to the activity in accessible terms and to be welcoming and encouraging to those who are not taking part. The tutor will also give some feedback and help to move the discussion on. An information skills activity usually follows.
Relationship to course assessment	During each of the six week-long discussions, students are encouraged to post at least two messages, one response and one response to other people's answer. Both responses can then feed into their assignments. The assignment and marking guidance is written in such a way that there is an incentive to integrate learning from their experience in the online discussion forum with their learning from the DVD and from the written course materials (see note in further information). To help achieve this integrated approach, we've structured the course so everything funnels into an end of block assignment. Level 3 students should have the skills of integrating different kinds of learning, including learning from experience. How they integrate or draw on the range of resources into the core material is up to them.
Pedagogic Models Used	Discussion based collaborative learning. Formative assessment. Assignment. Scenario based learning.
Technology tools used	FirstClass (Asynchronous) online forums. Multimedia DVDs.

Diagram



Reflection

Student evaluation	None yet.
Enablers	In technical terms, we used K205 as a model so there were no technical barriers. For example, we learnt about archiving which means people can come back to an activity on a read-only basis for revision or if a tutor wants to refer to it. Tutor support: we've made our test forums into an archive for tutors to show how we facilitated those practice forums as a course team. This gives tutors a structure or framework from which to work. For example, we learnt to have a separate forum for each block, and also to have a separate chat area for students to socialise. We have also created a tutor forum in which tutors can communicate with each other. Staff from IET with experience of online forums advised us and that's been really useful. LTS have also contributed in terms of developing our online strategy. Students who lack confidence may feel more confident about expressing their ideas in writing and the online activities should also develop their thinking as exposure to others' ideas will increase. It'll be hard to determine how that works however. Students have a clear incentive for they are told that they're expected to integrate their learning from the written materials, DVD and online forum into their assignment. Tutor experience of technology is improving: tutors did not seem nervous about their own contributions and what was striking was the degree to which our body of ALs are now quite experienced, especially those who work in other institutions as well. They

	know this is the norm, they expect to be online and emailing their students, so it wasn't a huge learning task for them.
Barriers and issues	Organisational barriers are diminishing and there is awareness about questions of administration and access. For example, "Who has access to the forum", "Who's looking in", "How confidential it is", "What do you do if a tutor is going on holiday", "Who's minding the forum". Credit: how you give credit for online activities has always been a struggle for teachers. In a previous course (K205 – see further information) we have found students give quite mechanistic answers which are based on what the marking scheme gives credit for. We've given students guidance although we are still trying to decide what best practice would be. In KE308, tutors have to make a judgement about how well the student has integrated the materials and we have tried to be more flexible. Quality of online discussion: a challenge in the online forums that we've been testing is how to get the students to move beyond very basic and descriptive answers to a more sophisticated form of discussion appropriate to Level 3. We experienced problems with delays in getting the VLE up and running and in integrating resources which weren't available when we required them. Also it was difficult getting resources allocated to the course. AL workload: we have allocated 2 hours for each week. This sounds tight, but it worked on K205. We are confident at the moment but may need to review it. When we spoke to tutors, there wasn't much concern about how it worked, more about what how you award credit if the forum breaks down or how you allocate marks to people who've not taken part. Uncertainty about the scalability of group sizes and non-participants: when we've done our test forums we've only had five or six students. It may be very different with 20 although from past experience we know there will be a keen core and there may be others who need a lot of encouraging. Students feel less able to take responsibility for their own mark: those students who put in a lot of effort can feel that others are getting credit for their work, or that the credit they get is dependent on others. Both situations mean keen students could feel they're giving a lot and not getting much back. They are also concerned that if others haven't posted to the conference, do they have all the materials they need for their assignment. The tutors will have to be flexible and bring to their marking their knowledge of what's happened in the forum. Switch from production to presentation: when we're writing assignment questions for the coming years we need to think of how the funnel process works - we will need to work backwards from the assignment and think "What will students need to be doing in the forum to have the material for it". Therefore, you need to keep people around who know the course. We know we need to monitor online activities and to keep them current and relevant. If they're linked to an assignment then the assignments will have to change every year. Uncertain about how long rewrites will take: we need to learn from each year's presentation and change the online activities if they are not working. I am not sure how much additional work this would involve compared to the more traditional model. Retaining more of the course team longer into the presentation: we need to make sure that more people have an ongoing commitment to the course. This should include scheduling in meetings or workshops to discuss aspects of the course. Our experience with another course suggests it is difficult to keep that alive once people move on. Existing courses in presentation require your time and additional involvement in course delivery needs to be built into people's work schedules. We've begun to make this shift and there may be implications in terms of production load
Who else might this apply to?	Generally applicable, but there's particular relevance for vocational or practice based courses where you're trying to make some link between academic ideas and professional practice. People who are either not in practice or who are in very different areas of practice can learn from other students' experience and their perspectives. It is therefore relevant for inter disciplinary and inter professional courses.

Further information	KE308 Course Study Guide. Main page: http://learn.open.ac.uk/course/view.php?id=1415 We are building on the K205 experience where we divided up the assignment into Part A and Part B. Part A was an essay, part B was specifically about the online activity and was allocated a lower proportion of the mark, something like 10% or 15% of the mark. There was a video activity and the online section part of that. However, this became quite mechanistic – students thought "I can get my five marks if I mention my contribution and one other person's contribution". We're trying to be slightly more flexible on KE308 in saying to students, "If you want more than a basic mark you'll need to show that you've drawn on a range of resources". We want this reflected in tutor comments too and we don't want them saying "You've got to give 80% for using the text and 5% for using this resource and 5% for sharing some sense of the online forums". We really hope it's a much more blended approach, that there'll be evidence that students have learnt from the discussion. On K205/K309 we are trying to use the forums in a slightly different way in that we're trying to use them to encourage students to talk about changing professional practice. This is a much more practically focused discussion. John Pettit is helping with research on this course.

Learning Activity Case Study

Learning Activity Title: Collaborative Wiki project

Summary: Students work collaboratively using a wiki to produce and agree a software specification

Context

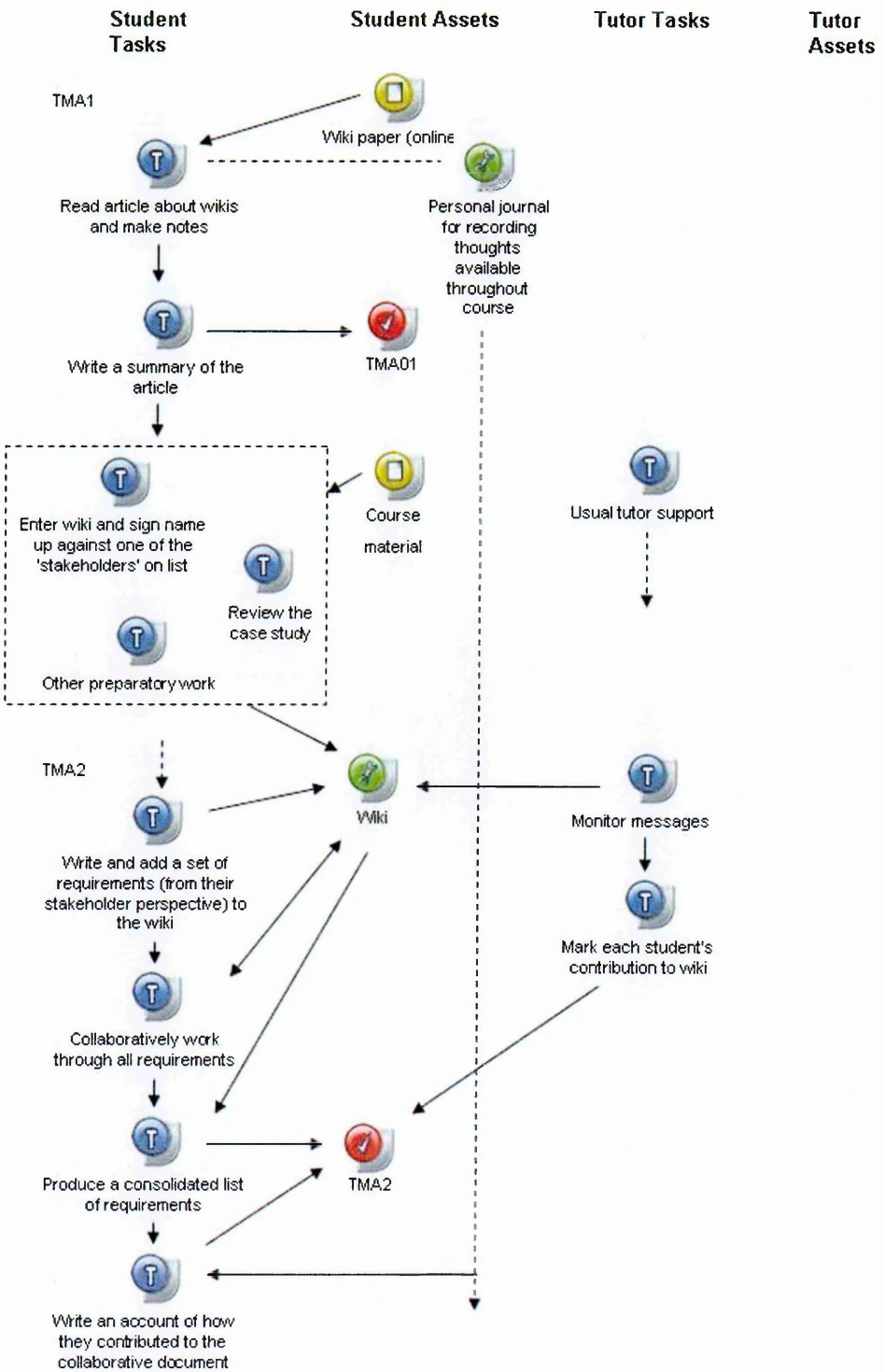
Course context	Title:	Software requirements for business systems
	Course Code:	M883
	Course chair or activity lead academic:	Shailey Minocha
	Discipline:	Computing
	Faculty:	Maths and Computing
	Date of first presentation:	November 2006 (first to use a wiki)
	Time to complete learning activity	Not specified

Learning activity description

Why are we doing this?	The interview was conducted in January 2007 and describes the 2006 presentation of the course. The course team is monitoring feedback from the students, analysing it, and working on it to change the activities and the assessment. Students need to understand about how requirements engineers work together to generate requirements in the 'requirements development' process. Working in teams is a transferable skill and people usually need to collaborate to develop specifications. Students need to appreciate different stakeholder perspectives.
What are the learning outcomes?	To gain skills in reading academic papers To become familiar with wikis
How are the learning outcomes achieved?	The learning activity is distributed over two TMAs. Students work in groups of six. The wiki tool includes a discussion forum which the students can use in conjunction with working on the wiki itself. In the first TMA students are given a paper about wikis to read. This talks about how wikis are being used in software enterprises and convinces students of the need for wiki tools. It is delivered online so that it can be changed and kept up-to-date for each new presentation. Students must then write a summary of the paper so we are certain they have read it thoroughly. This forms part of their TMA. Students then look at a case study (one that runs through many of their activities) and are introduced to the wiki tool. They are asked to enter the wiki and sign their name against a list of potential stakeholders in a software development project. They also do some other preparatory work. The deadline for this is a week before the actual TMA deadline because students depend on the wiki entries of others. In TMA02 there are again three steps. The first is that each student individually contributes a set of requirements from the stakeholder perspective they have been assigned. Then they collaboratively work through the requirements to find out if there are any conflicts, inequalities or duplicates. The course material can help support this process and help them recognise concepts behind the activity. Finally they develop a consolidated list of requirements and this is copied in to their TMA02.

Relationship to course assessment	Students receive 8 or 9 marks for reading and summarising the wiki paper in TMA01. In TMA02, students get 15 marks for collaboration, 3 for individual contribution and 5 for giving an account of how they have contributed to the collaborative document. Technically, students could lose 15 marks if they don't participate but if they copy and paste the wiki into the TMA it can be difficult for tutors to know. There is no alternate provision for those who are unable to participate in this activity
Pedagogic Models Used	Discussion based collaborative learning Group project work Elements of scenario and problem based learning
Technology tools used	Wiki Personal journal (diary)

Diagram


Student Tasks
Student Assets
Tutor Tasks
Tutor Assets
TMA1
Wiki paper (online
Read article about wikis and make notes
Personal journal for recording thoughts available throughout course
Write a summary of the article
TMA01
Enter wiki and sign name up against one of the 'stakeholders' on list
Course material
Usual tutor support
Review the case study
Other preparatory work
TMA2
Wiki
Monitor messages
Write and add a set of requirements (from their stakeholder perspective) to the wiki
Mark each student's contribution to wiki
Collaboratively work through all requirements
Produce a consolidated list of requirements
TMA2
Write an account of how they contributed to the collaborative document

Reflection	
Student evaluation	Feedback has been mixed but we have not been able to analyse it yet because the presentation of the course has not ended (February 2007). Should feedback suggest we remove an unusable or inappropriate tool then we would. Originally, the third TMA also included a wiki – it was employed to develop 'fit criteria' for the list produced in TMA02. As a response to feedback from students and tutors the wiki has now been excluded from this.
Enablers	Ideas: conversations with professionals have given ideas about new skills could be taught. Experience: the fact that members of the course team are associated with the VLE has meant we haven't experienced any barriers in respect to using the tool. Good communication: the wiki was introduced after the first presentation. As a team, we kept everyone informed all the time and even before we wrote about the wiki we told our tutors and sought their support. A good awareness of the stakeholders involved is very important.
Barriers and issues	Quality assurance: technically students will lose 15 of 23 marks for TMA02 if they don't participate. However, in practice, it is very difficult for tutors to identify inaccuracies in what students claim to have done (the only solution is to spend time retracing every message made by the group) or give low marks when the use of the tool was not part of the course description. Tutor contract: the wiki was introduced after the course was first launched. It is not in the tutor's contract to go and look through individual wiki messages. This can present problems when marking student participation. Technology: there is much functionality still to add to the Moodle wiki but the VLE team are working on this. For example, it would be useful to be able to link more directly between discussion and changes made on the wiki. Common framework: it would be useful if we had a general social, technical and pedagogic framework that we can all hold discussions within rather than just at an activity level. Balance between production and presentation: the introduction of a wiki was made after the first presentation, thereby subtly changing the structure of the course. The presentation team, however, would expect to have to keep online material up-to-date throughout the course presentation. Monitoring conferences: we found we are spending some time on monitoring messages coming through either the conference or to tutors. Student resistance to collaborative work: some students still don't seem ready for collaborative work. They still have the perception that a course is what you get in a box, take it out, and work through by yourself. It is also difficult to organise a group, both students and tutors, coming together at the same time.
Who else might this apply to?	None given.
Further information	This is an example of a course that has been adapted with the addition of a wiki after the first presentation.

Learning Activity Case Study

Learning Activity Title: Asynchronous discussion based collaborative learning

Summary: An asynchronous conference where students engage in an iterative process of posting and discussing one another's' creative writing

Context

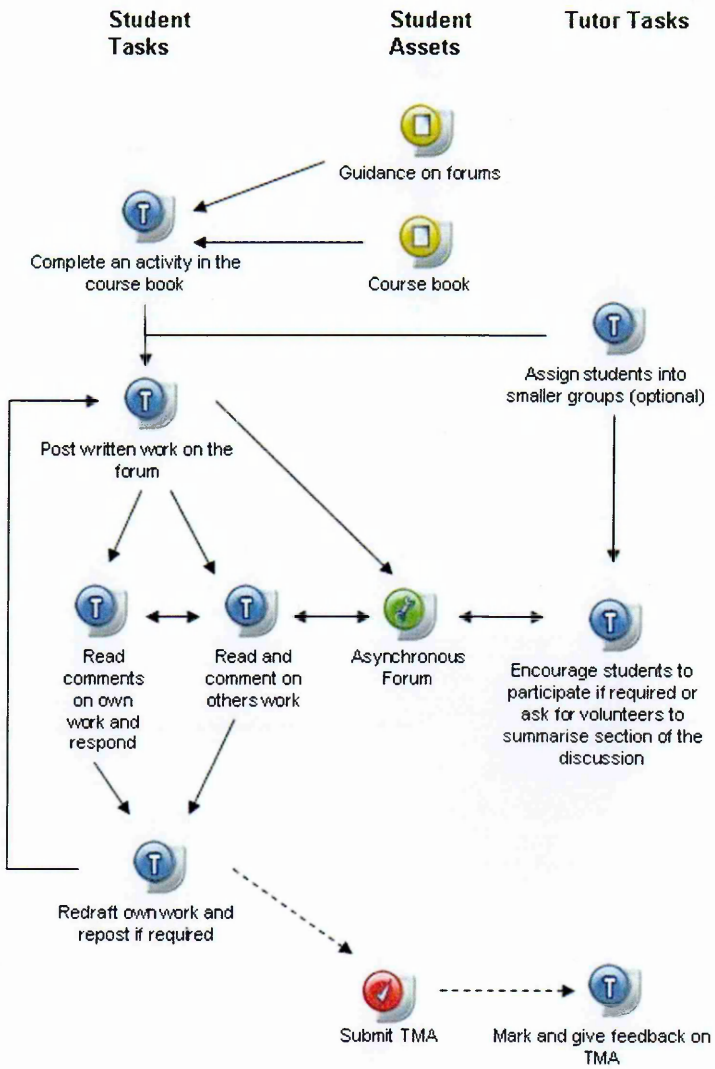
Course context	Title:	Creative Writing
	Course Code:	A215
	Course chair or activity lead academic:	Derek Neale
	Discipline:	Literature
	Faculty:	Arts
	Date of first presentation:	February 2006
	Time to complete learning activity	Up to the length of the course.

Learning activity description

Why are we doing this?	The ability to engage and be critical in a discussion about a written text is a skill that might transfer into a vocational setting or into other study.
What are the learning outcomes?	To develop in the students a sophisticated vocabulary and an appropriate level of discernment about what is working within a text, and what is not, and why it worked better. To encourage students to develop a more sophisticated editorial awareness about their own work and any other writing they might read, thereby starting to read as a writer. They will learn as much from the successes and failures of other people's work as they will from their own. Being exposed to more students' work will allow them to see a wider range and should speed up their learning of editorial processes.
How are the learning outcomes achieved?	This activity takes place in an asynchronous conference/discussion forum where students post their work in relation to a writing activity and then discuss this. Students first post their original writing which has been created following the course book's prescribed activities. The original writings may be from 50 to 1000 words in length. The student is then invited to post their responses to others' writing activities and also take away comments about their work so they can redraft and continue the discussion accordingly. The tutor fosters the students to be independent in the way they critique any work posted. Students may comment on each others' TMA work in its various drafts but the tutor will not comment directly on TMA work-in-progress. The tutor also conducts 5 online tutorials per course, which contribute indirectly towards assignments and the general quality of the student's work. Work produced in tutorial may also be used directly in the ECA. It is suggested that these tutorials last one week at a time and that tutors build towards assignment activities. Tutors may divide their groups of 20 into smaller groups and ask for volunteers to summarise sections of the discussion for fellow writers. The conference can be very busy and during one course there were 3325 messages posted by a cohort of twenty-two students, many of the messages with attachments containing substantial amounts of work.
Relationship to course assessment	The assignments have a reflective component and 20% of the mark for each TMA and 20% of the mark for the ECA is allocated for this reflection. This should cover their writing, working and editorial processes. This is where the conference activity comes into its own because it can actually inform and advance the students' awareness of their writing although in the TMAs there is no direct mark for contributing to the conference activity. There is a natural time structuring within the course. Each chapter contains a set

	number of writing and reading activities and is designed to last a week. The tutor marked assignments also lend the course a time structure, with writing weeks set before each TMA submission date.
Pedagogic Models Used	Collaborative learning Discussion based (peer learning).
Technology tools used	Asynchronous communication.

Diagram


Student Tasks
Student Assets
Tutor Tasks
Tutor Assets
Guidance on forums
Complete an activity in the course book
Course book
Assign students into smaller groups (optional)
Post written work on the forum
Read comments on own work and respond
Read and comment on others work
Asynchronous Forum
Encourage students to participate if required or ask for volunteers to summarise section of the discussion
Redraft own work and repost if required
Submit TMA
Mark and give feedback on TMA

Reflection	
Student evaluation	Of a sample cohort, these were the contributions: 3325 messages in total 22 students in tutor group 10 forum regulars 4 infrequent visitors, but posting more than 20 messages 8 students posting less than 5 messages Reasons for non-attendance were hard to discover. It was suspected most non-attenders did so through choice. One student suffering technical problems contacted the AL and said, "I can read the conference but I can't write to it" but asked the AL to thank the tutor group because he had learned so much from seeing other students' work. The 10 forum regulars were incredibly dedicated to giving feedback and doing it well. They all contributed work and commented on each others' work right until the end of the course. This caused a lot of work – but they all saw the benefits and formed an on-line writers' workshop of their own after the course was finished. The retention rate for the course was incredibly good at 81%. There may be two main reasons for this: the first is the conferencing and the sense of spirit and community that is built and the second is having a heavily weighted TMA quite early on in the course. This makes the students feel that they have something substantial under their belt already, so the rest is less daunting.
Enablers	Experience of colleagues on the *Start Writing* courses and some materials from those courses could be used.
Barriers and issues	Policy on assignment: at the OU has presented a challenge because of an apparent prohibition about tutors commenting on assignments. We were prevented from following the usual teaching model used on face to face creative writing courses where you would have a workshop in which the tutor would give oral feedback to the student, and possibly written feedback, on a piece of work that was being developed for a TMA. For the ECA students were allowed to submit work done in tutorials and already seen in draft form by tutors. This was not permitted for TMAs. Students were given substantial feedback on TMAs though, and this was supposed to feed into their next assignment. OU Policy on plagiarism: does not allow copying however this is often, in effect, how writers learn; they learn by reading other texts and trying to imitate certain elements of style so that way of writing then becomes their own. This form of imitation can include imitation of the way fellow students write, and working in a group can certainly hold an influence. Such imitation is usually of established works though. The reflective commentaries attached to each TMA and the ECA are strong safeguard against blatant copying (from fellow students or established works) because these commentaries reveal the student's writing process. IT literacy: at the start of the course we had to ask ourselves 'what do you have to include in terms of guidance for students who haven't used ICT before?' So we have the normal introductory booklets about how to send your work in by the ETMA system etc. We also compiled our own guidance on using conferences and combined it with material that was already in existence (some guidance on netiquette from the *Start Writing* courses). Electronic communication: we found that we still had to resort to snail (post) mail for important notifications so we knew that all students would get it. Workloads in presentation: from the course team's perspective there is a real need for a staffing allocation to oversee the tutor conference and to occasionally contribute to it. This is especially true at the start of a presentation. There were problems occasionally where students posted things and they didn't get responses. This was usually resolved by AL intervention – for instance the tutor might post messages saying, "Don't forget to look at this".

Who else might this apply to?	This activity is about encouraging students to reflect upon themselves and enter into dialogue with other students (in this case via the conference). It encourages them to resist some comments and take on board others. The chance to actually argue their case for a piece of work could be applicable to many different disciplines.
Further information	A215 Course Resources: http://learn.open.ac.uk/mod/resourcepage/view.php?id=10317 The thinking will be slightly different in the new Level 3 Creative Writing course, where students will submit a synopsis of their ECA idea as the third TMA. That is then marked and given back to the students for them to develop their ideas. Also, in the level 3 course there will be a TMA based on work done on the forum so students will be compelled to read what is going on there, even if they do not contribute that much. Getting all students to contribute to the forum may in turn create workload problems for tutors and course design needs to remain aware of this.

Appendix II

OCL scenarios posted to Focus Group forums during the Exploratory Study

Scenario 1

You are studying a science course. TMA03 requires you to work in groups to produce an experimental write-up based on an investigation carried out at home using an experiment kit provided by the University. Your tutor divides you into groups of 4 students. You are given the title of your investigation, and instructions on how to perform it.

1. Each of you carries out the investigation using the equipment provided.
2. You pool you results, using the First Class forum set up for your group, and individually carry out a statistical analysis of the group results.
3. You use your group forum to talk about issues arising from the experiment. This discussion will require knowledge of the course materials as well as personal experiences and ideas.
4. You individually write up the experiment, acknowledging the forum discussion where appropriate, and hand it in as your TMA.

A total of 15% of the TMA marks are allocated to your participation in the collaborative element, 5% for providing results to be pooled, 5% for contributing to the subsequent discussion and 5% for using the discussion as a source in your write-up.

Scenario 2

You are studying a creative writing course. As a collaborative online activity you are asked to send your first draft of a short story to the course First Class forum. Other members of the tutor group are invited to critically appraise your work, sending their appraisal to the forum. You can respond to any feedback you receive and hold discussions with fellow students regarding each others work. You then write a final draft of the short story and submit both as TMA01. There are no marks allocated to taking part in the activity, but 10% is allocated to an explanation of any changes you made between the two drafts.

Scenario 3

You are studying an IT course. For TMA06 you are asked to write a web page for a particular company, and send the URL to the course First Class forum. You then choose three web pages submitted by other students and critically review them, using criteria explained in the course materials. Your web page is worth 60% of the TMA, your review of 3 other pages are worth 10% each and you are given 10% for having submitted a completed web page for others to review.

Appendix III

Message sent to OUSA forums requesting participants for the pilot focus group

Hello

I'm writing with an open invitation to students to take part in research being conducted into online learning with the Open University.

I am an Associate Lecturer, and am also a student, currently studying for a Doctorate in Education. My thesis title is *Computer Supported Collaborative Learning in the Open University – what we want to deliver versus what students want*. As you can see, from the title, I need to find out what you, as a student, would like to see regarding collaborative online learning in your Open University courses.

How can you contribute?

I'm inviting you to participate in a focus group discussion to be held in a closed First Class Forum, over a period of approximately two weeks. There will be no set times for contributions, and the amount of time you spend reading and contributing to the forum is entirely up to you. It should not take up more than 2 or 3 hours of your time. You can cease to participate at any time. You will have the opportunity to make comments which are anonymous to both myself and other participants, through a link to Survey Monkey. I will collate the comments and bring them to the First Class forum. You can also discuss the issues directly in the First Class forum.

What's in it for you?

You will be able to find out what computer supported collaborated learning (CSCL) is, and some of the ways the Open University uses or might use CSCL, which is already a component in new courses. Your contributions will have the potential to influence decision-making on CSCL by the Open University.

What will happen to the data?

The discussions will take place in a closed First Class forum to which only the participants have access. I will anonymise the data, so that your personal details and views will not be revealed to anyone within or outside the Open University. I will then analyse the data to determine the views which have been expressed during this and other focus group discussions. The findings will be used to inform further research, and disseminated within and outside the Open University. You will be asked to electronically sign a consent form at the start of the focus group meeting, which verifies this assurance.

What do you need to do now?

Simply respond to my mailbox by clicking on 'reply sender', telling me you would like to take part, and I will add you to a First Class forum which is set up specifically for this purpose. If you have any questions please don't hesitate to ask.

Thank you for reading this, and please consider contributing, I will be very grateful, and you will be helping to shape the future of Open University online learning by taking part.

Janet Dyke

Appendix IV

Consent form for student participants taking part in the pilot focus groups

My name is Janet Dyke and I am researching student views on Computer Supported Collaborative Learning within the Open University. This research forms part of my EdD project *Mind the Gap: Computer supported Collaborative Learning in the Open University – what we want to deliver versus what students want*. The data collected during this focus group, will be used for research purposes only, and will not be passed to any third party. All data will be anonymised before publication. Please sign the consent form below if you are willing to take part in this research. Please also be assured that you may withdraw from this research at any stage.

I have read the above and agree to take part in this research

Name.....

Date.....

Appendix V

Facilitator messages I sent to the First Class forums during the pilot focus groups

19 October 2008 21:26:41

CSCL Focus Group 1

From: **Janet E. Dyke**

Subject: Welcome and task 1

To: CSCL Focus Group 1

Hello everyone

Firstly can I thank you all again for offering to contribute to this focus group discussion.

As a starter, I'd like you to think about what collaborative learning actually is and what the OU might be trying to achieve by introducing it. This activity is just to get you thinking about the subject, I'm not judging any of the answers, and in a short while I'll be giving you an idea of what I think collaborative learning is, and what purpose it might serve as part of your study.

Please post a message to the forum with your thoughts on these two questions. You can also answer messages from others to continue the discussion.

hope to hear from you soon

cheers

janet

22 October 2008 20:17:39

CSCL Focus Group 1

From: **Janet E. Dyke**

Subject: task 2

To: CSCL Focus Group 1

For this part of the focus group I'm asking you to read the three collaborative learning scenarios which I've posted to the forum. These show the type of activity which you might come across as part of an OU course, either now or in the future.

In the light of these types of activity, and your own feelings about collaboration, I then want you to think of four (or up to four) things about this type of learning which would attract you personally into taking part.

I'm making these responses anonymous, neither I nor anyone else will be able to identify individual responses. This is so you can feel free to say what you really think, and might be particularly helpful when we later look at negative feelings! I'll collate the responses and bring them back to the forum as part of task 3.

In order to make anonymous responses, just click on the link to Survey Monkey below. This is a very simple site to use and doesn't require anything except writing your task 2 responses in the boxes provided.

http://www.surveymonkey.com/s.aspx?sm=hbDoOEYeotJ024Ff0sDpKg_3d_3d

I'm looking forward to reading your replies :-)

cheers

janet

24 October 2008 08:35:14

CSCL Focus Group 1

From: **Janet E. Dyke**

Subject: task 2 nearing completion

To: CSCL Focus Group 1

Hi all

Thankyou very much for your comments so far. If anyone else has any comments to make on their 'positive' feelings about online collaborative learning, can you post them today please. I will then collate all the responses and post them in here. I'll be posting a list of categories which I think they fall into, and will ask for volunteers to categorize the responses. I will then summarise your thoughts, which we can discuss, before moving on to task 3.

cheers

janet

25 October 2008 11:59:33

CSCL Focus Group 1

From: **Janet E. Dyke**

Subject: sorting comments from task 2 -volunteers please

To: CSCL Focus Group 1

Hi all

In a separate message at the top of this forum is a list of comments which you posted on Survey Monkey. They aren't in any particular order. I'd like one person to decide on a number of categories which they can be sorted into, and then for you to each choose one or two of these categories and list the comments which you think belong in that category. This will help you think about the comments, and you can discuss them in this or in new threads as you wish. Hopefully we'll have the comments categorised by Sunday evening.

cheers

janet

26 October 2008 21:26:59

CSCL Focus Group 1

From:	Janet E. Dyke,oufcnt1.open.ac.uk
Subject:	Task 3 - concerns regarding collaboaritve learning
To:	CSCL Focus Group 1

Hi all

I've decided to run the promised task 3 whilst task 2 is winding up.

This is where we get down to the nitty gritty of negative feelings you might have regarding collaborative learning. Some of these have already been highlighted during the discussion so far, but I think there might be other concerns too. It might be helpful to re-read the scenarios whilst you think about this, but do remember these are simply examples which hopefully encompass the various things you might be asked to do, how you might share your work, and how your collaborative activity might be monitored and assessed.

You can ask questions and discuss this here, and below is a link to the second Survey Monkey site, where you can post 4 factors/reasons/thoughts which might discourage you from contributing to collaborative tasks.

http://www.surveymonkey.com/s.aspx?sm=d1pJuWfgDrccozu8D4U66A_3d_3d

cheers

janet

31 October 2008 14:19:41

CSCL Focus Group 1

From: **Janet E. Dyke**

Subject: Task 3 nearing completion

To: CSCL Focus Group 1

Hi all

I've posted the comments from Task 3 to the forum. If anyone wants to collate these into groups then please do. Otherwise I will group them myself, and start discussions on them this evening

thanks

janet

10 November 2008 11:35:32

CSCL Focus Group 1

From: **Janet E. Dyke**

Subject: summary of Survey Monkey comments

To: CSCL Focus Group 1

Attachments: Focus group 1 categorized comments.doc 29K

Hi everyone

I've now categorised and summarised all the Survey Monkey contributions (from both tasks). I've used the categories suggested by XXXXX, and added in a few more. Some comments have been placed in more than one category. Don't worry about the actual title of the categories, these are just there to help with the sorting, and the sorting itself is just so we can draw out the various emerging themes. I've put these in the attached document.

I've tried to summarise the themes, do you agree with the summary, and do you have any comments on it, eg do you agree with the feelings expressed and/or my interpretation of what's been said? I'm particularly interested in the motivation category, because as you'll see, I've doubled up some comments with facilitation. I hope I've interpreted this correctly but would be grateful for more thoughts on this aspect.

thanks

janet

Appendix VI

Invitation sent to 300 SDK125 students and 250 S29 students.

Dear Open University Student

I am the supervisor of a student undertaking a Doctorate in Education with the Open University. This is an invitation to take part in the research. The student is Janet Dyke who is also a tutor on your module, and she is researching how you feel about online collaborative activities with the OU.

How can you contribute?

I am inviting you to participate in a focus group discussion to be held online in the new version of Elluminate called Collaborate. If you agree to take part, Janet will give you more information about this.

The focus groups will run for approximately 45 minutes. There will be a choice of dates and times during July or August 2013.

What's in it for you?

Your contributions will have the potential to influence decision-making on collaborative learning activities so this is an opportunity to have a voice. Note your name will not be attached to any of the findings.

What will happen during the focus group?

Janet will introduce the topic and then ask you to discuss your feelings about being asked to take part in collaborative activities as part of your OU study. She is particularly interested in activities that form part of assessment.

What do you need to do now?

If you are interested please reply to J.E.Dyke@open.ac.uk giving your name and the module you are studying. She will then contact you with further details. Note there

will be no obligation at any point and you can withdraw your interest or participation at any time.

Thank you for reading this, and please consider taking part, I will be very grateful, and you will be helping to shape the future of Open University online learning.

Yours faithfully

Dr. Jonathan Hughes

Follow-up e.mail to those who responded to the initial invitation

Hello

Thank you so much for agreeing to help me with my research. I'm really looking forward to talking to you about the online activities on your module, and how you feel in general about this method of learning.

I've created a Doodle poll to work out convenient times to hold the online discussion, please click on this link and fill in the times when you would be available. When everyone has filled it in I'll organise participants into groups and let you know which group you're in.

http://www.doodle.com/z2d3ems9bqi25s4q

We'll be holding the meeting in Blackboard Collaborate, which will replace Elluminate from August, so if your next module has online tutorials, this is where they will be held. The OU is calling Collaborate 'OU Live' which is a bit confusing but they are the same thing! I've created a test room which we can use for our meeting. You can go in any time to have a look around – it's almost identical to Elluminate to look at and use, but the great thing is we don't need headphones. Just follow this link to my test room

http://try.bbcollaborate.com/trial/p.go?pk=AZ38hqNsSgEdy6FP

Once again, thank you for your interest and your help, it's really appreciated.

Speak soon

Janet

Appendix VII

Powerpoint slides used in the online focus groups in Blackboard Collaborate

Welcome ☺

We will begin at 8pm

Informed consent

- I will be making a recording of this session. No-one else will have access to the recording and I will delete it in one month
- Any quotes I use from this session will be anonymized and will only be used to support my research
- My research results may be published in educational journals and may be used by the OU to inform future use of collaborative learning
- Please tick to give your consent. You may remove your consent at any time

We will discuss...

- Your overall impression of the collaborative activities on your module(s)
- How you think the activities helped you in your study
- What interaction you would like to have with other students during your study
- What type of collaborative learning activities you would be happy to participate in

What is your overall impression of the collaborative activities?

- Did you expect to be asked to work with other students?
- What was your first reaction when you learned you would be asked to take part?
- What did you think was the purpose?
- What do you think we mean by 'collaborative learning'

How much interaction do you like to have with other students?

- As you study
- As you prepare assignments
- Do you think you learn best on your own or with others?

Did the activities help you learn?

Or did they get in the way of learning?

What do you like and dislike about collaborative learning?

Thank you for coming ☺

Appendix VIII

Raw social presence data from S294 & SDK125 collaborative activities

2013 1				
	organisation sub group A	organisation subgroup B	organisation subgroup C	final discussion
Emotion	0	0	0	0
Humour	0	1	0	0
Self-disclosure	1	0	2	0
reply in thread	3	3	3	4
quote others	0	0	0	0
refer to others	2	0	0	0
ask question	0	4	5	0
compliment	1	1	1	0
agree	0	0	0	3
use of name(s)	1	2	3	1
inclusive pronouns	0	3	0	0
phatics/salutations	7	5	12	2
total	15	19	26	9
no messages	15	12	10	11
no students	5	5	5	15
no participating	3	4	3	5

2013 2				
	organisation sub group A	organisation subgroup B	organisation subgroup C	final discussion
Emotion	10	0	2	3
Humour	10	1	5	8
Self-disclosure	16	1	6	1
reply in thread	31	18	8	29
quote others	0	0	0	0
refer to others	0	3	0	3
ask question	14	10	7	9
compliment	6	3	1	6
agree	4	1	0	10
use of name(s)	23	9	6	18
inclusive pronouns	4	1	1	2
phatics/salutations	26	15	5	13
total	144	62	41	99
no messages	39	22	15	35
no students	4	4	5	13
no participating	2	4	4	5

2012				
	organisation sub group A	organisation subgroup B	organisation subgroup C	final discussion
Emotion	0	3	1	1
Humour	0	0	4	1
Self-disclosure	0	1	1	0
reply in thread	1	0	0	5
quote others	0	0	0	0
refer to others	2	1	0	2
ask question	1	2	2	1
compliment	5	0	3	1
agree	0	0	0	4
use of name(s)	11	3	2	4
inclusive pronouns	0	0	0	0
phatics/salutations	17	6	14	8
no students	7	7	6	20
no participating	6	5	5	15
message no.	20	17	16	27

SDK135																	
Task	Group	Emotion	humour	self-disclose	respond	quote other	refer other	ask Q	compliment	agree	use name	group	salute	total messages	total no. posting	no. of multiples	multiple no.
Kibera 1	2012J 08	10	0	5	30	0	4	3	5	18	7	0	18	57	22	12	two - nine
Kibera 2	2012J 08	3	0	0	0	0	0	0	0	0	0	0	7	17	16	1	two
Sikora	2012J 08	6	9	2	7	0	2	0	0	1	4	0	4	27	17	5	two - five
Stem cells	2012J 08	2	0	1	3		1	1	0	3	2	1	0	13	13	0	none
Kibera 1	2012J 07	7	0	9	5	0	0	0	2	5	4	0	0	27	16	8	two-three
Kibera 2	2012J 07	1	0	1	1	0	0	0	0	1	0	0	0	16	16	0	none
Sikora	2012J 07	1	0	3	6	0	1	0	0	0	6	0	3	18	14	3	two-three
Stem cells	2012J 07	0	0	1	2	0	1	0	1	0	2	0	0	11	10	1	two
Kibera 1	2013B	8	0	1	5	0	3	1	1	6	9	0	12	31	18	7	two-five
Kibera 2	2013B	0	1	0	0	0	1	0	0	0	2	0	9	16	13	2	two-three
Sikora	2013B	0	0	1	1	0	1	0	0	0	0	0	2	10	10	0	none
Stem cells	2013B	1	0	0	0	0	0	0	0	0	0	0	7	8	8	0	none
Kibera 1	2013J R08	6	0	2	17	0	6	0	3	15	17	0	29	56	26	12	two-ten
Kibera 2	2013J R08	0	0	2	4	0	1	0	0	7	3	0	14	23	18	4	two-three
Sikora	2013J R08	0	0	1	0	0	0	0	0	0	2	0	13	22	18	3	two-three
Stem cells	2013J R08	0	0	0	0	0	0	0	0	0	2	0	11	16	16	0	none
Kibera 1	2013J R07	5	0	0	2	0	0	0	0	1	2	0	1	15	11	4	two
Kibera 2	2013J R07	0	0	0	1	0	1	0	0	0	2	0	7	13	10	2	two-three
Sikora	2013J R07	0	0	1	2	0	0	0	0	0	0	0	0	9	9	0	none
Stem cells	2013J R07	0	0	0	0	0	0	0	0	0	0	0	0	6	6	0	none
Kibera 1	2014B	3	0	1	1	0	0	1	0	3	0	0	1	11	11	0	none
Kibera 2	2014B	0	0	1	0	0	0	0	0	0	0	0	1	14	12	2	two
Sikora	2014B	0	0	1	2	0	0	0	0	0	2	0	2	12	8	2	two-four
Stem cells	2014B	0	0	1	0	0	0	0	0	0	0	0	0	4	3	1	two

Appendix IX

QSR NVivo 10 Text queries

been toward supporting visitors to actively learn rather than passively receive

the cultural domain should: support active interpretation; help reveal the context

scaffolding fades the responsibility and activity of learner increases. Here we

of productive talk and joint activity and researchers have attempted to

experience and to support an active and collaborative approach to learning

of productive talk and joint activity and researchers have attempted to

if students cannot have an active participatory role in the community

stakeholders. This need demands the active participation of all these stakeholders

Collaborative learning practitioners also become active players in the process of

and for distance-learning purposes, actively engaging students in productive learning

The results suggest that students actively engaged in both cooperative and

regulated learning (SRL) is an active and constructive process whereby learners

Transana and the application of Activity Theory and other socio-cultural

networked technologies, combined with an active engagement in these new technologies

and in the social and affective aspects of their learning. The

experience to be emotionally and affectively very negative. The results suggest

Learning technologies: Affective and social issues in computer

This paper is concerned with affective issues in learning technologies in

a division between cognition and affect: where cognition is concerned with

thinking and problem-solving and affect with emotional areas such as

such as motivation, attitudes, feelings. Affective issues have been viewed as

It discusses the role of affective factors in three main areas

learners, this article also explores affective issues and difficulties arising from

Computer conferencing and assessment: new ways of writing in

of computer conferencing and their assessed written work, the article draws

collaborative learning as essential to assessment and study, this separation breaks

clear directions to future studies. Assessing online collaborative learning: process and

The assessment of online collaborative study presents

to explore the role of assessment with respect to the processes

of models of online collaborative assessment. The findings underline the importance

findings underline the importance of assessment in ensuring online participation, and

number of recommendations for the assessment of online collaborative learning.

online discussion and writing for assessment on two Masters courses

for online discussion, and the assessment of their written work. The

that the tension between conventional assessment practice and online collaborative learning
increasing rhetorical complexity, and that assessment processes will need to adapt

formally imposed study timetables and assessment deadlines. This paper reports on

Supporting writing for assessment in online learning

involved in online learning and assessment. It draws on data from

online discussion and their written assessed work, arguing that we need

relationship between pedagogy, technology and assessment. It concludes with a discussion

work of the team is assessed through these reports. The performance

performance of the individual is assessed through their reflective account of

The paper also discusses how assessment strategies might be re-considered

the materials they find for assessment tasks in one place and

advice at a distance. Incorporating assessment in a pattern-based design

studies performed to explore how assessment design can be included in

additional support is necessary for assessment design within this process for

this limitation, the use of assessment patterns is analyzed. Evidence gathered

feasibility of a more systematic assessment-aware design process for CSCL

collaboratively the documents required for assessment, they did not always perceive

materials effectively, as well as assessing their level of comprehension of

central to collaboration and the building of community identity. Heritage collections

providing opportunities for students to build trusting relationships (4). There was

on enabling access, e.g. building the organizational/political will to

intercultural remote collaboration.

The Collective Building of Knowledge in Collaborative Learning

used to elicit the collective building of knowledge. This work discusses

and meaningful for the collective building of knowledge. A brief theoretical

future trends about the collective building of knowledge are suggested.

tracking argumentative discourse was developed building on earlier work by the

to the appropriateness of community building tools or mediating artefacts that

research is under development that builds on the successful workshop format

resources

The availability of community building tools and open educational resources

Collaborative knowledge building with shared video representations

shared representation in collaborative knowledge building activities. The article describes how

of these representations in knowledge building environments.

The frequency of 'joint knowledge building category' in this analysis indicates

draw upon this in the construction of their own individual disciplinary

Narratives can be used to construct explanations and make sense of

learners. This paper describes the construction of two web courses: a

analysis methods to explore the construction of knowledge in face to

and creating new ways of constructing knowledge (Saljo, 1999). This paper

the joint processes of knowledge construction.

The negotiation and co-construction of meaning and understanding within

the ways in which they constructed meaning, negotiated shared understanding and

the form of collaborative co-construction of an argument through exchanging

exchange of opinions and co-construction of knowledge, and on the

groundwork for socialisation and knowledge construction within 3D virtual worlds

the use of a knowledge construction model as a framework for

of online learning and knowledge construction. Socialisation needs to be integrated

teaching strategy is one of construction of knowledge through discussion. The

is an active and constructive process whereby learners set goals

in discovering, creating and supporting creative teaching.

this chapter, I argue that creative practices have not only been

perspectives, to appreciate each other's creativity. I suggest that there are

cultural artifacts; support learning and creativity; and address the challenge to

Computer-aided creativity and learning in distributed cooperative

discuss designing abilities, such as creativity and learning, as abilities that
that can exhibit and support creative behaviour using knowledge learnt through
a main indicator for the creative and adaptive ability of the
collaborative problem solving and collaborative creative writing. The complementary

and engagement for learning and creativity in OER communities

aggregating in the study and creative adaptation of particular OER units

critical thinking, content thinking and creative thinking.

Using new tools to support creative community engagement with open educational

up space for the autonomous, creative, productive work of the collaborating
relation to power; to socio-emotional involvement; to the degree of

the learning experience to be emotionally and affectively very negative. The

problem-solving and affect with emotional areas such as motivation, attitudes

that learner attitude, motivation, and emotional state are very important, they

The interrelationship of emotion and cognition when students undertake

In order to determine how emotions and cognition are experienced during

is unique about the socio-emotional experience of collaborating online and

perspectives of the role of emotion in learning: the socio-cognitive

The provision of these facilities enabled distance learning students to avail

for collaborative learning. The technology enables a reflexivity in student learning

has not been possible before, enabling students to benefit from the

Content movement is concerned with enabling students and educators to access

to date has focused on enabling access, e.g. building the

different contexts and characterised as enabling reflection (new meta-cognitive
processes

in conceptual design. The software enables users to talk to each

increasing use of computers to enable or replace face-to-face

Information and Communication Technologies (ICTs) enable educational and cultural institutions to

learning environments (CLEs) have to enable students to learn different mapping

of the activities. The wikis enabled all student groups to author

suggest that a wiki's simplicity enabled students to engage easily with the

of web-based technologies for enabling them to deliver interactive, student

the way in which technology enables collaborative learning. A range of

associated Open Educational Resources (OER) enables the creation of new social

trip, identified different working patterns enabled by the toolkit and identified

based learning are commented upon. Enabling live dialogic and collaborative learning

of designing for transitions that enable groups to appropriately utilise an

employing a framework of collaboration enabling design approach proposed by Kirschner

Scaffolding in Innovation, Implementation and Evaluation of ICT

to their engagement in action. Innovations are considered in light of

in Online Collaborative Learning

The innovations in computer and communications technologies locations, have lead to the innovation of distance education programs

the project was to introduce innovations in practice through action research

Open educational resources and freeware innovative tools provide new strategies for

Open educational resources and freeware innovative tools provide new strategies for

structured content provided for an innovative, practice-based design for an

the creation of new and innovative learning spaces. However in much

into practice is crucial. The motivation, awareness and empowerment, necessary for

paid on scaffolders competence to motivate, recognize and understand group processes

foremost as a source of motivation. However, those group-members

with emotional areas such as motivation, attitudes, feelings. Affective issues have

well known that learner attitude, motivation, and emotional state are very

and control their cognition and motivation behaviours as well as the

finally they may not be motivated about their learning tasks (Azevedo

novel forms of reflection and motivation, and could inspire a new

noticed that both acknowledgment and motivational categories were much smaller. In

may indicate the importance of motivation/individual commitment of students during

to see the effect of motivation on the quality of collaborative

and how it can influence motivation and learning. The findings were

is the foundation for stimulating, motivating and maintaining collaboration among learners

means by which such students negotiate shared understanding and support each
piece of psychology project work negotiate shared understanding and support each
conflict, others that of planning, negotiation, exploratory talk, transactive dialogue and
by becoming more open to negotiation between learners and institutions.
conflict, others that of planning, negotiation, exploratory talk, transactive dialogue

The negotiation and co-construction of meaning

in which they constructed meaning, negotiated shared understanding and supported eac

attention to the production and negotiation of the specific and contextualised

transferable skills of team working, negotiation, communication and managing digital identities

Participatory online environmental education at the
themes of the course include participatory processes in decision-making, the
focus progressively shifted towards more participatory processes of learning.
students cannot have an active participatory role in the community, they

development cycle of CSCL solutions. Participatory Design (PD) approaches (Muller & Kuhn

the notion of creating 'open participatory learning ecosystems' (cf. Smith and

courses under study promote a participatory infrastructure, that not only can

composition could influence both group productivity and individual learning. This paper

Learning with computers: analysing productive intervention

The potential of new

experimental studies of process and product; naturalistic studies of computer-based

and used the record more productively than children working with the

quality of collaborative activity, how productive collaborative activity can be supported

online collaborative learning: process and product
of separating the process and product of collaboration, and in the
respect to the processes and products of online collaborative study. It
considering just the outcomes and products of collaborative work, towards analyzing
more process-oriented account of productive group-work has brought with
in understanding the nature of productive talk and joint activity and
to understand and promote educationally productive collaborative work, whilst investigating this
learn: understanding and promoting educationally productive collaborative work
considering just the outcomes and products of collaborative work, towards analyzing

more process-oriented account of productive group-work has brought within understanding the nature of productive talk and joint activity and

purposes, actively engaging students in productive learning situations. Here we document

to knowledge might be more productive in technology education. The final

free access to information, cooperative production, collaborative learning, and broad sharing

free access to information, cooperative production, collaborative learning, and broad sharing

very little attention to the production and negotiation of the specific

does the configuration of social production of content in learning environments

deploying Engeström's framework on social production as a new landscape for

content (Wilson, 2007), and peer-production of content, including expertise, locus

this paper looks beyond content production issues to contribute to the

Analyzing productive interactions in CSCL: collaborations, computers

episodes of interaction required for productive supervision. The findings suggest that

space for the autonomous, creative, productive work of the collaborating learners

teachers support one another in reflecting back, reflecting on and developing

one another in reflecting back, reflecting on and developing their classroom

staff, for example, sharing their reflected accounts of practice in journals

in February 2004. The team reflects on their own process of

new meta-cognitive spaces for reflection. Role differentiation is explored

contexts and characterised as enabling reflection (new meta-cognitive processes). It

of the task and to reflect on the joint processes of

other, the opportunity for consolidation, reflection and re-positioning.

which allows greater time for reflection, but also creates a permanent

The project output, a shared reflection in French and English on

development. In the light of reflection on our own experience of

a developmental dimension, based on reflection at the end of successive

individual is assessed through their reflective account of the project. The

informed by the literature and reflection on our own practice. It

colleagues to experience, study and reflect on e-learning. Development work

it offered. We want to reflect on what people have said

opportunity to present ideas and reflect upon process at a distance

and inquiry-based learning; and reflective learning. Students gain transferable skills

because it prompted discussion and personal reflection; both of which many students

a cooperative model (Burge, 1994), reflected in the aggregation and filtering

spatial coherence, deictic communication and reflection.

Students, the Net Generation and

empathy between locations provoking deeper reflection and abstract understanding in the

laboratory increases students inquiry based reflections

The role of distributed co-reflection and collaboration within inquiry based

through 3 types of collaborative reflection; remote sharing, dialogic and comparative

sharing, dialogic and comparative information reflection. Implications for inquiry based learning

This provokes novel forms of reflection and motivation, and could inspire

themes, 'Constraints on autonomy' and 'Reflections about collaboration', encapsulate the experience

culture, and the nature of shared documents, organisational knowledge and work

of COL namely: collaboration, knowledge sharing and interactivity. The study used

e. university staff, for example, sharing their reflected accounts of practice

by which such students negotiate shared understanding and support each other

of psychology project work negotiate shared understanding and support each other

as: how can groups with shared goals work collaboratively using the

is united through the contributors' shared desire to understand and promote

which they constructed meaning, negotiated shared understanding and supported each other

the virtual space created by shared simulations and video communication tools

production, collaborative learning, and broad sharing. Open educational resources and freeware

communities to learn, reconstruct and share knowledge around the world. Openlearn

information, interpret content, reconstruct and share meanings.

Learning about online collaboration

of wikis in facilitating information sharing, knowledge management, and in fostering

make use of Lyceum, a shared virtual synchronous environment when engaged

talk to each other and share sketches when they are remotely

work in design using a shared virtual environment.

environment. The project output, a shared reflection in French and English

production, collaborative learning, and broad sharing. Open educational resources and freeware

communities to learn, reconstruct and share knowledge around the world. Openlearn

information, interpret content, reconstruct and share meanings.

as pattern-based best practice sharing. Furthermore, a prototypic implementation for

of wikis in facilitating information sharing and fostering collaboration within teams

sufficient to develop and maintain shared understanding, mutual trust and social

development of the Flickr photo-sharing interface. The advantage of the

allow users to interact and share data with other users, primarily

variety of ways of learning: sharing of resources; collaborative learning; problem

of community, the need to share and collaborate brings in additional

of wikis in facilitating information sharing and fostering collaboration within teams

a forum for collaborating on shared documents. However, at that stage

techniques and to help them share ways in which they can

technologies for learning can be shared. All the activities in COLEARN

well as all the resources shared the by participants.

available content to create a shared space that could improve the

to support collaboration such as Shared Ark and Kansas), and young

distributed information resource system (IRS) shared between field and laboratory settings

types of collaborative reflection; remote sharing, dialogic and comparative information reflection

Collaborative knowledge building with shared video representations

used by people for information sharing, learning and entertainment. We report

how people interact to create shared multi-path video representations in

video for use as a shared representation in collaborative knowledge building

using the video medium as shared representation. Finally we demonstrate how

of collaborative dimensions of the shared multi-path video representation can

known to have poor communication skills and experience difficulty in collaborative

a child with good communication skills. Popular girls modified their behaviour

and in the support of skills development. The purpose of this

task, the children both acquire skills to jointly engage in the

where cognition is concerned with skills and processes such as thinking

to support and develop socioemotional skills. It considers relevant developments in

usually do not have technological skills.

the development of students' collaborative skills. In this paper we discuss

courses to develop online teamworking skills: a helical model

acquire transferrable and professional experimental skills. Developing suitable experiments appropriate in

and hone communication and presentation skills. The online studio allows for

reflective learning. Students gain transferable skills of team working, negotiation, communication

Eliciting thinking skills with inquiry maps in CLE

academic research for eliciting thinking skills. The second objective of this

may contribute to developing thinking skills such as, critical thinking, content

fail to use self-regulatory skills for many reasons; for example

are not teachers' techno-pedagogical skills. An appreciation of the local

be beneficial in developing essential skills, by supporting dialogue and collaboration

collaboratively is a core graduate skill. The importance of online learning

generated knowledge and development of skills.

Analysing collaborative processes and interaction

and facilitating the transition of socially situated knowledge through enriched documents

on the relationship between the social and cognitive dimensions of learning

elements of COL from a social and cultural perspective in terms

the importance of accounting for social and cultural issues relating to

based-learning and to collaborative social theory of learning. Non-authorised

and the qualities of linguistic socialization in virtual environments. Virtual technology

account of wider institutional and social contexts if it is to

can have positive effects of social interaction for learning. More recently

can have positive effects of social interaction for learning. More recently

learning objectives and in the social and affective aspects of their

Learning technologies: Affective and social issues in computer-supported collaborative

which conceptualizes writing as contextualized social practice. The paper illustrates the

stakeholders in the design of social systems. That is, PD methodologies

Tackling social exclusion through online learning? A

participating in education by the socially disadvantaged; (ii) to identify perceived

each of these individual and social views of mind, and each

example explores the implications of social views of learning that give

ways in which theories of social constructivism, collaborative learning and learning

and learning which foregrounds the social practices of the university, its

developments in the use of social media for learning.

activities which ensure to reduce social distance amongst online learners. Virtual

shared understanding, mutual trust and social presence. Inadequate early socialisation is

also of framing the valuable social and collaborative experience that students

investigation of students' experiences with social software tools

web. Blogs, wikis, podcasts and social networking websites are some of

are being used in educational, social and business contexts. We have

have examined the use of social software in the UK further

of the effective use of social software in student learning and

experience: educational goals of using social software; benefits to the students

Our investigations have shown that social software supports a variety of

and the public nature of social software tools for academic activities

conduct of learning using digital social media and networking tools. Meanwhile

and from 'alternative' or informal social constellations of interest and practice

so does the configuration of social production of content in learning

Secondly, deploying Engeström's framework on social production as a new landscape

nature of the interplay of social, technical and environmental factors is

of the technology's pedagogical, organisational, social and technical aspects. We propose

particularly those derived from a social informatics tradition, which to date

also resides in individual learners, social structures, the design of learning

technologies and the increasingly complex social and technological contexts of many

which the infrastructural and the social dimensions of peer learning are

from the textual interface and social organization of the three courses

insight into how academics view social tools and techniques and whether

learning. It examines the wider social and technological context and in

of networked individualism and networked sociality. Finally the chapter concludes by

enables the creation of new social and collaborative learning spaces. This

significance of collaborative learning through social interaction and interdependence is widely

is widely recognised in the social constructivist perspective on learning and

path video representations in a social video environment. The participants created

into account recent research in social cognitive neuroscience. Some practical recommendations

appropriately designed and implemented educational, social and technological affordances is the

issues of student resistance to socialisation into virtual learning communities. Some

range from simple conversations and socialisation to complex virtual teamworking projects

Laying the groundwork for socialisation and knowledge construction within 3D

adopting 3D virtual worlds for socialisation and knowledge creation in distance

knowledge creation in distance education. Socialisation or 'knowing one another' in

for pedagogical design that engenders socialisation, synchronous communication and collaboration. We

Socialisation and collaborative learning of distance

learners in 3D virtual worlds Socialisation or 'knowing one another' is

online learning and knowledge construction. Socialisation needs to be integrated and

and social presence. Inadequate early socialisation is a key obstacle in

wikis and forums, and elsewhere. Socialisation in distributed environments can be

student-collaboration due to inadequate socialisation with tools such as blogs

such as Second Life for socialisation and knowledge creation in distance

Second Life activities which aid socialisation.