High Level Student Autonomy in a Virtual Learning Environment

Barbara Allan, Mike Barker, Kate Fairbairn, Margaret Freeman, Pam Sutherland

University of Sheffield

E-mail: <u>bca@bcallan.demon.co.uk</u> <u>mike.barker@sunderland.ac.uk</u> <u>kate.fairbairn@burycollege.ac.uk</u> <u>m.freeman@sheffield.ac.uk</u> <u>p.j.sutherland@sheffield.ac.uk</u>

Abstract

This case study explores the experiences of a group of students (the authors) working as a tutor-less group (TLG) that developed during a web-based MEd programme. We describe the development and life cycle of the TLG, the experiences of the students and the effects on those who continued to work in a tutored environment. Members of the TLG demonstrated high levels of autonomy and group work. The relationship between the TLG and communities of practice is considered.

Keywords

Networked collaborative learning, tutor-less groups, peer learning, autonomous learning, communities of practice.

INTRODUCTION

The growing literature relating to online collaborative learning typically includes reference to three key strands: e-learning, group work and the development of professional practice. These reflect the strong influence of socially orientated theories of learning within networked environments (McConnell 2000). The influence of theories of constructivism and situated cognition, particularly in relation to communities of practice, and strongly linked to concepts of knowledge construction through discussions between peers, is particularly important in the field of continuing professional education. As Hamilton (1992) predicted, this has led to the development of some powerful examples of collaborative pedagogy in action.

One of the central themes in the literature of distance and e-learning is that 'participating in group work helps group members learn' (Harasim, 1990). Like others, Harasim highlights the importance of socio-emotional variables including motivation and satisfaction, but also observes that working with peers, rather than tutors, can help to reduce anxiety. According to McConnell (2000), the mutual support and encouragement in groups provides 'the conditions for learners to take risks in the learning process, to try out ways of working, thinking or acting which they consider to be different to "the norm", but which might produce novel results or ideas'. McConnell also indicates that group size and gender may be important influences on the group process.

A number of recent researchers have pointed out, however, that there is still a great deal to be learned about the way that networked learning actually works. Hardwick (2000), for example, has pointed out that we have relatively little information about the nature of the interaction among and between students and their tutors, or, indeed, which factors determine '*how effectively they work (or do not work) to encourage collaboration*' in e-learning (p.124). From a review of the literature, Rovai (2000) reports that a variety of influential factors have been identified, including '*student–instructor ratio, transactional distance, social presence and instructor immediacy, lurking, social equality, collaborative learning, group facilitation, and self-directed learning*'.

Some of the factors which facilitate successful computer mediated communication (CMC) have been identified by Salmon (2000). As a result of action research, Salmon has identified a series of steps, which begin with ensuring students' ease with the technology and the process of participation as a prerequisite for the next stages (*'on-line socialisation' and 'information exchange'*). Salmon

identifies the fourth stage as 'knowledge construction', a phase when course-related discussions become more collaborative. In the final stage the participants begin to reflect on the nature of networked learning for themselves and others. Here, Salmon notes that as students become more competent and confident online, relationships and the balance of authority may change. In this final stage, Salmon suggests, participants using a constructivist approach to learning may wish to challenge known variables and even 'ask the designated e-moderators to withdraw' (p.35).

A different approach, which focuses on the group and learning dynamics in computer mediated communication in postgraduate education, has led Davis and Denning (2000) to map student interactions as a "Learning Community Grid" (Table 1). They suggest that groups with the characteristics shown in the top right-hand quadrant of the grid get as close as possible to being a learning community.

Table 1: Davis and Denning's Learning Community Grid

High (9)	I'm OK, you're OK (9.1). If a group is high on learning dynamics but low on group dynamics then members will show little concern for each other personally and will tend to work independently rather than interdependently.	Tough Love (9.9). Groups who manage both group dynamics and learning dynamics get as close as is possible to being a learning community.	
Learning Dynamics		Summer holiday (1.9). If a group is high on group dynamics but low on learning dynamics then it might be where the group have fun but achieve little learning.	
Low (1)	Fragmented by technologies (1.1). A group that is low on both learning and group dynamics may have very little activity and will not be concerned about the group processes nor will it be effective in its learning objectives.		
	Low (1) GROUP DYNAMICS High (9)		

As Table 2 shows, Davis and Denning consider the group and learning dynamics as separate entities. They conclude that the following conditions are necessary for the formation of a learning community:

Table 2: Conditions necessary for the formation of a learning community (from Davis and Denning)

Group dynamics	Learning dynamics	
Risk-taking	Building or scaffolding ideas	
Facing rather than avoiding conflict	Challenging	
Social activity	Experimenting	
Humour	Meta-communication ?	
Expressing interest	Reflecting on the process?	
Reflecting on the process?		
Feedback and disclosure		

We have noted with interest that the majority of the reports on the learning community are described from the perspective of the emoderator (Curry, 2001). We suggest, however, that if the students are considered full members of the community of practice (Wenger, 1998), the view from the student perspective is both useful and highly relevant. We therefore offer our discussion of one experience in a CMC, which we suggest is a legitimate contribution to the conference to which we decided to submit a proposal!

THE CONTEXT OF THE CURRENT STUDY

This paper is based on our experiences as six post-graduate students who negotiated with our course tutors to work as a tutor-less group (TLG) in one phase of a part time, web-based MEd programme. In our case, "tutor-less" means there was no active input by tutors into the TLG. Our group was tutor-less for a period of five weeks and then continued to work collaboratively (and tutor free) on this paper. The paper also reports on the views of some of the nine students who continued to work in "tutored" learning sets (TLS) and of the two tutors for the MEd course.

The MEd in Networked Collaborative Learning by action research is a two year part-time course built around the principles of action learning and research and problem-based learning. The philosophy of the course emphasises 'the implementation of innovatory online practice by creating a supportive and creative online research learning where participants can feel free to experiment and "learn by doing", while constantly holding a critical perspective on their practice and the theory underpinning it.' (McConnell et al., 2000, p.220). The course is now delivered entirely online; in our cohort, all students are practising educators working in a variety of settings, predominantly, but not exclusively, in the UK.

Our proposal to work as a TLG developed from one of the regular reviews of the course activity, early in the final year of the twoyear degree programme. Originally, the TLG was perceived as involving three distinct phases: the formation of the group, the life of the TLG and the stage of rejoining the tutored learning sets. In reality, a fourth phase emerged as the tutor-less group continued to work on this paper.

METHODOLOGY

This project is an example of action research, as we hope that the outcomes will inform our practice as both e-learning students and tutors. A case study approach is used, as we are investigating one aspect of e-learning, in depth, over a limited time period. Our aim was to explore the interactions involved in the tutor-less group process, following Nisbet and Watt's (1980) view that *'it is only by taking a practical instance that we can obtain a full picture of this interaction.'* We used both quantitative and qualitative data and evidence collection techniques including: a questionnaire to all participants in the MEd, messages in all the discussion fora and analysis of our personal diaries/logs. The message analysis was explored following the Davis and Denning framework, while the findings from the questionnaires were analysed through the identification of emerging themes and issues. Quantitative data was taken from the discussion forum statistics during phases two, three and four.

In our research we wanted to explore the following themes:

- Why the tutor-less group was formed, from the perspective of the students.
- An evaluation of working as a tutor-less group, including questions such as: Was the tutor-less group effective? How was it "different" from our past experiences of tutored sets? How did our absence affect our peers in the tutored sets? And to what extent was our learning comparable with those in tutored sets?
- What were the opinions and concerns of our peers and the tutors about the TLG?
- How reintegration into the learning sets occurred and how issues regarding reintegration were resolved.
- The impact of the tutor-less experience on the development of a community of practice and in the production of this paper.

Key findings

Phase 1: Forming the tutor-less group

Members of the TLG identified several reasons for electing to join the TLG, including reservations about the size of the planned tutored learning sets, a response to a new challenge and recognition that this would be a logical extension of the concept of collaborative learning. One TLG member observed: 'In a programme that appears to espouse autonomous learning and learners, working in tutor-less groups appears (to me) to be the next progressive stage.'

The questionnaire responses indicate that members of the TLG came together with very similar hopes, exemplified by the

observation: 'in terms of hopes, I wanted all of us to undertake a successful mini project, to collaborate, share and support one another, to gain some different perspectives on our individual projects, to get on as friends and colleagues, and to be open and honest with one another.' Given that people had volunteered to join the TLG, it is not surprising that they appeared to have relatively low level fears, exemplified thus: 'I'm not sure I had any fears primarily because I felt I "knew" my peers in the set and that we were all capable of achieving the required outcomes and because I felt sure we would support each other through this phase.' The main concerns expressed by TLG members were about the way we would fit back into the other learning sets and what the tutors (really) thought about our declaration of independence.

The tutors were, essentially, supportive. One tutor reflected that '*My hope was that it would be a good learning experience. I wasn't unduly concerned because the group … had already demonstrated their staying power in the medium and their dedication to the course'*. This tutor's main concerns were 'the issue of the impact on the course as a whole, given that this was a rather impromptu development (i.e. not planned in advance by the course team) and might have implications for others not in the tutorless set'.

Another tutor said 'I'm not sure I had any particular hopes or fears. I understood to some degree why the group wanted to try working without a tutor and thought that might be interesting, so I supported it. Since they were working in a relatively small part of a larger workshop, I had no "fears" about it working or not. I was sure the experience would be valuable for all involved and might throw some light on their perception of the role of the tutor in learning sets. If it didn't "work, no damage would be done (as far as I could see). But I guess I thought it would "work" as those involved had made the deliberate choice and would therefore make it work.'

Our peer group typically identified specific reasons for remaining in tutored sets, including: to experience working with a particular tutor; the perception that there would be little difference between TLG and TLS due to minimal tutor input; the timing and conditions imposed on the group as a whole and wanting support for the workshop topic (educational research). One colleague noted, for example: 'I was not very much sure how I could make it so that I wished to receive advice from others (both a tutor and colleagues). Naturally, I stayed in the learning set.'

Asked for their concerns about the TLG, our colleagues identified some negative effects of our leaving our assigned tutored sets and the potential disruption as we tried to reintegrate. There was also some discussion about whether or not this was a genuine tutor-less experience, given that the tutors had set a clear boundary around the TLG experience and would eventually assess our work.

Phase 2: The experience of working in a tutor-less group and its effect on others

Quotes from the TLG demonstrate the general response to this experience:

- *Tive felt a greater sense of personal responsibility e.g. to other group members, and put a lot of time and care into reading messages/work and giving feedback.*
- 'There was a good group ethos and I feel an honest exchange of ideas/criticisms happened at all times.'
- 'I think all of my hopes have been achieved with the added bonus that we may have a paper to reflect our efforts and to be disseminated to a wider audience.'
- 'I think we were all honest, direct and stringent in our feedback and that there was a strong sense of cooperation and objectivity.'

• 'However we were operating over a relatively short space of time and I wonder to what extent we actually "lost" our tutor? I know that I for one visited the other groups and gleaned some nuggets of advice. My question would be, how long could a group remain tutor-less, what would need to be the end-point of the experience, and how much "tutored" experience would participants need to support this excursion?'

TLG members also identified the following advantages of this experience:

a sense of increased motivation

excitement about doing something different

enthusiasm for researching the issue.

freedom to pursue own ideas

opportunities for developing new ways of autonomous working

opportunities for working with peers in new ways.

The main disadvantages were identified as:

the impact on the rest of the MEd group as a whole. Reading some of the messages in LS1 and LS2 shows that the setting up of this group has caused some discomfort. One member of the TLS also commented that the TLG had acted as a closed group; although she had visited the TLG she had noticed that reciprocal visits hadn't taken place.

The need for all to work for reintegration. As one of the TLG observed 'I can't help feeling, from reading postings from a LS1 member, that I "let them down" by going tutor-less, therefore I have the feeling that, since I have never worked with this colleague before, it will be even harder to establish a good group rapport from now on.'

Phase 3: Re-integration into the tutor-ed groups

Following the usual pattern for this MEd course, the period of workshop activity in small learning sets was completed through presentation of individual work, followed by peer and tutor assessment, and group discussion. After the five weeks as a TLG, group members returned to their originally assigned learning sets, to comply with the course regulations. There was little discussion of the TLG 'issue' until we requested feedback through a questionnaire. This elicited a number of comments, some of which were supportive of the TLG concept, while others were less positive about the experience. It is of note that one of our peers considered that the TLG members became too self-contained. This raises an interesting issue, because we had been aware of wishing to test our ability to work without a tutor, but at the start of the TLG had not fully considered the implications of our separation from our student peers. With hindsight, we recognise that this created unnecessary tensions and feel we must record our thanks to our peers who tolerated our actions, were supportive during the reintegration phase and willingly completed the questionnaires for this research. The comments below reflect the views of both groups:

TLG members expressed a number of concerns about their experience of re-integrating with the tutor-ed groups:

- 'I was aware that there would already exist some group norms in Learning Set 2 and I did not want to upset these, out of respect for my colleagues in there and the fact that I was the one who was rejoining, not them.'
- 'I was also fortunate in that I'd worked with most of my colleagues in Learning Set 2 in previous workshops and had developed, I believe, good professional and personal relationships with these.'
- *'I have found this the hardest part...It seems strange to be waiting for feedback from the tutor and am also not quite sure how to re-engage with people when they have been chatting without us!'*

Among the TLS members, there were quite varied responses. Positive comments included:

- 'Different experiences and knowledge are always welcomed. There will be some findings for those both in the tutor-less and original learning set groups after the reintegration.'
- It was nice to see you back and to see what you had achieved.'

The following reservations about the impact of the TLG were also noted:

- *The group I am in seems to be struggling to find any identity this semester and I certainly feel that there is a distinct lack of any "bonding".*
- 'I felt that it was not a good experience for our learning group to suddenly have people re-join it, particularly part way through an actual working phase.'

Phase 4 The continuing tutor-less group

The TLG continues to exist as it researches, analyses, discusses its experiences and works collaboratively on this paper. Members are currently discussing ideas on a daily basis when, officially, the MEd has a break between semesters.

DISCUSSION OF THE EXPERIENCE OF THE TUTOR-LESS SET

One of the main reasons for choosing the TLG was that it offered the opportunity to test for ourselves the concepts of autonomy and

peer learning. As we have reflected on this, we have recognized that we each had a fairly strong sense of personal autonomy which had been strengthened by the previous collaborative activity. We concluded that the TLG experience provided a "different kind" of autonomy. As examples, all TLG members showed strong active communication, demonstrated by the number of messages posted during and after the TLG (see Table 3, below) and felt able to contribute to and interact with all other group members. As one of us observed: '*I hardly noticed we lacked a tutor because everyone was my tutor, and I hope I reciprocated.'*

The quantitative data confirms that members of the TLG were very active communicators, within the group and with their peers, in the post TLG phase. It would be interesting to explore this point in more detail. For example: did the members of the TLG set up the group *because* they were already very active or did this initiative encourage them to *become* more active?

Table 3: Analysis of messages in each learning set during the four phases of the experience

Phase 1: Postulation & formation of TLG – all students & tutors were in one group.				
Phase 2:	TLS1	TLS2	TLG	
The life of the TLG	4 members	5 members	6 members	
	162 messages	235 messages	343 messages	
	(plus 32 visitor messages)	(plus 45 visitor messages)	(plus 6 visitor messages and plus 85 messages re the conference)	
Phase 3:	TLS1	TLS2		
Rejoining the 2 TLS	8 members	7 members	Not	
	70 messages	49 messages	Applicable	
	(plus 37 visitor messages)	(plus 22 visitor messages)		
Phase 4:			TLG	
Tlg Working on this conference paper	Not Applicable	Not Applicable	5 members	
(concurrent with phase 3)			55 messages	

The analysis of messages and chat logs demonstrates that the TLG group dynamics followed the pattern identified by Davis and Denning. A small indicative selection of messages are presented here:

Table 4: Examples of group messages in relation to the Davis and Denning criteria for a learning community

Criteria	Illustrative examples	
Risk-taking/experimenting (pushing the boundaries)	I'd quite like the challenge of being in the TLG, I think we can now all be constructively critical as well as supportive.	
Challenging/ facing rather than avoiding conflict	I'm impressed and at the same time a bit worried that you've asked such open questions. Are your participants sophisticated enough to answer such broad questions? (re: design of mini-project)	
Building or scaffolding ideas	I'm so glad you raised this issue. It seems very important and needs to be captured in some way. I've been thinking along these lines too and have been	

	trying to get my head around this approach.	
Social activity	I love the idea of looking forward to the end (of the course). Maybe we should organise a hilltop walk for all, with a few pints of lager so we can test how much it takes till we can't see the hills?	
Humour	I can't quite envisage a born again accountant, but I think my sister in law may find the idea useful	
Meta-communication/ reflecting on the process	Your suggestions in your last paragraph have made me ask "What exactly am I trying to achieve with this mini project? I need to re-clarify this in my own mind over the next couple of days.	
Expressing interest	I can't say I have a preferred area to tackle just now, will "willingly" have a go at anything If it helps, I'd be willing to do some thematic analysis of our transcripts.	
Feedback/disclosure	Throughout the life of the TLG there was continuous feedback, comment, questioning and discussion between set members relating to the various stages of their individual projects, which was the "task" for this phase of the workshop.	

Our reflections on the TLG have raised a number of questions. First, we are aware that many of the characteristics of successful group and learning dynamics, identified by Davis and Denning (op cit), have been present throughout the collaborative working for the MEd. programme. This leads us to ask why some, but not all, of our cohort elected to work as a TLG. We suggest that one influential factor was the topic for the specific workshop; while some of us felt able to complete the task without direct tutor input, others considered they needed tutorial support. We also recognized that TLG members felt ready to take risks (Davis and Denning), or to seek new challenges in their learning , which seems to correspond to stage 5 of Salmon's (2000) model of CMC. In other words, we felt ready and able to test our ability to establish our own *'supportive learning environment'* (McConnell, 2000).

A second question relates to the role and function of the tutor in the later stages of a collaborative course. It is significant that the members of the group had all experienced the same early training from the tutors and were all at the same stage in their course, namely Workshop 4 of a 5 Workshop programme. Our feeling is that such a proposition would not have been made by students at an earlier point. Because this MEd has been conducted entirely online from the outset, we suggest that the early effort put in to establishing community was in itself influential in the formation of the TLG. We were able to consider this step as a result of our previous engagement within the learning community, and with the support of the tutors who: a) established sound community-building techniques as a central component of the course and b) were prepared to allow the tutorless group to function. Again, a quote seems to exemplify this view: 'We aren't tutorless are we? I mean this in the sense that as a result of our previous time on the MEd, (the tutors) have left some imprints of themselves on us haven't they? It seems to me that some of their many skills, attributes, expertise and knowledge have enabled us to have the courage and confidence to work in a "tutorless" set.'

It is also likely that our perceptions of teaching and learning have changed as a result of the constructivist emphasis in the course. While the tutors still have the 'authority' to pass or fail students and have demonstrated greater expertise as tutors and educational researchers, their core philosophy has enabled and empowered the students who form part of the learning community. Our proposal to work without the tutor, therefore, seemed to us a logical extension of our autonomy.

As one of our tutors has noted, the tutorless group certainly seems to have worked. However, like this tutor, we are also concerned that such a group can only function under certain conditions. In the tutor's words: '*For example, the individuals need to be confident and at home in the medium, committed to the activity in which they are engaged, and have a good idea of the nature of the task they are trying to undertake and how to proceed.*' It is also worth noting that the tutors reported that they '*popped in once or twice, just to check there were no obvious problems, and out of interest.*' This highlights another aspect of our group. Because it was time-limited and part of a larger workshop, we were able to test our sense of independence and autonomy, but with clear safeguards including, as we found out later, the tutors as observers in place. Were we really, therefore, 'tutorless'?

When asked the questions 'could tutor-less groups function on other programmes? and if so what conditions would need to exist?' a second tutor replied 'Two issues here I think: 1) tutors are needed as "regulators" or as holders of the University values and procedures. 2) I also think tutors help to bring an understanding of "standards" and what it means to study at a University for a formal degree. I certainly think it is possible for there to be tutor –less groups, yes, but two questions arise 1) why do participants

want to work in tutor-less groups? and 2) why would tutors want there to be tutor-less groups? Lots of reasons could be put forward in answer to both questions!!!But I could see tutor-les groups working on "other" courses as part of a mixed mode approach to learning and teaching.'

Despite our apparent enthusiasm for the TLG, we are aware that the risks taken during this experiment went beyond those already mentioned in this paper. One of the risks yet to be measured has been the long-term effect of our TLG on the whole group. Although the TLG enabled us to work in groups of 5-6, rather than 8-9, we do not know if the benefits of smaller group size will outweigh the possible detrimental effect of splitting and re-forming existing learning sets. Our hope is that the recent discussion about the TLG and subsequent interaction with our peers have helped to overcome any discomfort felt in the group as a whole.

A final point is that the stimulus for the formation of the TLG was the concern over group size. The maintenance of small learning sets has been a strong element throughout the MEd, reflecting the view that *'small groups are needed to foster interaction; frequent interaction also helps to promote stable cooperation'* (Axelrod, 1990, quoted in McConnell, 2000). But how do we define a "small" group? The statistics show that LS1 was the smallest and yet generated the least number of messages. This suggests that it is not only the size of the group that is important, but also the roles individuals take on within that group (see Tables 2 and 3, above).

ACKNOWLEDGEMENTS

We wish to record our thanks to 1) Cathy Morgan who was a supportive and enthusiastic member of the TLG and who encouraged us in the production of this paper 2) The tutors and our peers on the MEd who completed questionnaires for us and granted us permission to quote from their messages and 3) Tim Roberts (Central Queensland University) for his comments and feedback on our draft paper.

REFERENCES

Axelrod, R. (1990) The Evolution of Cooperation, London, Penguin Books.

Curry, DB (2001). *Collaborative, Connected and Experiential Learning: Reflections of an online learner*. http://www.mtsu.edu/~itconf/proceed01/2.html

Davis, M and Denning, K. (2000) On-Line Learning: Frontiers in the creation of learning communities. Asensio.M ,Foster. J,Hodgson.V ,McConnell.D (Eds.)*Networked Learning 2000, Innovative approaches to lifelong learning and higher education through the internet (2000* (Lancaster University 17th – 19th April 2000)

Hamilton, S.J. (1992) Collaborative learning in the arts and science, in: Hamilton, S.J. and Hansen, S (Eds) *Sourcebook for Collaborative Learning in the Arts and Sciences at Indiana University*, pp. 209–227 (Bloomington, In, Center for Media and Teaching Resources).

Harasim, L (ed.) (1990) On-line Education: Perspectives on a new environment. New York: Praeger.

Hardwick, B (2000) Humanising the technology landscape through a collaborative pedagogy. J. Geography in Higher Education. 24(1) 123-129

McConnell, D (2000) Implementing Computer-Supported Cooperative Learning. London: Kogan Page.2nd edition.

McConnell, D., Noakes, N., Rowe, P. & Stewart, W. (2000) The Practice of Networked Learning: Experiences of design and participation. Asensio.M ,Foster. J,Hodgson.V ,McConnell.D (Eds.)*Networked Learning 2000, Innovative approaches to lifelong learning and higher education through the internet (2000* (Lancaster University 17th – 19th April 2000)

Nisbet, J.D. and Watt, J. (1980) Case Study, Ediguide 26, University of Nottingham School of Education

Rovai AP (2000) Building and sustaining community in asynchronous learning networks. *Internet and Higher Education* **3** 285-297.

Salmon, G (2000) E-Moderating: The Key to Teaching and Learning Online. London: Kogan Page.

Wenger, E (1998) Communities of Practice. Cambridge: Cambridge University Press.