A Methodology for Designing Post Graduate Professional Development Distant Learning CSCL Programmes

David McConnell

University of Sheffield

Abstract
Designing post graduate professional development distant learning programmes via CSCL requires us to ensure that the technology does not become the major determinant of the programme. We have to maintain the educational values which underpin our work as adult educators, whilst exploiting the potential of the CSCL technology. This paper describes a methodology for designing such programmes which has been tried and tested on an MA course for part-time trainers and developers in the UK, using computer conferencing as the CSCL medium.

Keywords — self managed learning; learning community; professional development; computer conferencing; learning design; adult education; collaborative assessment; evaluation.

1. Introduction
In post graduate professional development programmes, the question of cooperation is central to the educational process. Adult education theory and practice has always emphasised a qualitatively different approach to learning. With CSCL, the question is how to be true to those educational values while working in an environment which is often perceived to be "technocratic" and unable to support this form of learning.

For the past six years, I have been involved in running a distant learning post graduate professional development masters degree CSCL programme, using computer conferencing systems such as Caucus and LotusNotes. The students are part-time, and are employed as trainers and developers in organisations throughout the UK. The programme is based on a philosophy which acknowledges that people learn in different ways, and has an action learning and research focus which allows participants to make choices about the management, focus and direction of their learning. Participants work within a learning community which emphasises:

- a wide choice over content and direction of learning

- the management by participants of their own learning, and cooperation with others in theirs, through processes of negotiation and discussion

- a critical perspective on learning and academic issues with strong relationships to participants professional practice

- a focus on participants own learning and development from a critical, reflective perspective combined with an understanding of relevant academic ideas and concepts

- the learning community perspective is based on participants and tutors taking collective responsibility for the design and evaluation of the programme viz constant review, modification of the design, procedures and ways of working.

The programme is based on an open syllabus. This largely non-directive approach demands constant and critical involvement by all, participants and tutors alike.

2. A Methodology for CSCL
What constitutes a useful learning design for establishing and maintaining a virtual CSCL community ? And what issues need to be addressed in designing CSCL environments ? From my own experience and research, and the experience of working closely with colleagues on the post graduate professional development MA CSCL programmes, I have found the following to be useful and important aspects of CSCL design:

- Openness in the educational process - the learning community

- Self managed learning

- A real purpose in the cooperative process

- A supportive learning environment

- Collaborative assessment of learning

- Assessment and evaluation of the ongoing learning process.

3. Openness In The Educational Process - The Learning Community

Openness in the educational process is an overarching design feature which permeates CSCL generally. Openness does not only relate to aspects of the administration of any learning event or course, where barriers to openness such as when and at what pace a person can study are relevant. Openness relates to freedom around the relationship of the learners to such things as course content and method, choice and negotiation within the course, self and peer assessment, and tutor-learner relationships. It is also to do with the learners' willingness to share ideas and be open with their intellects; to be open to new ideas and to the possibility of change.

Learners should be in a position to make decisions about their learning, and feel they have a large degree of freedom in doing so. *They also need the power to exercise their choices.*

There has to be a mechanism for achieving openness and freedom, and for the exercise of the learners' power. One which works particularly well in CSCL is the concept of the learning community, which is made up of both staff and learners who have equal rights to managing the resources of the community and the learning that takes place in it. The learning community attends to issues of climate, needs, resources, planning, action and evaluation as a whole community (Pedler 1981). This makes it quite different from traditional, staff-led courses and also from independent studies courses and flexible learning courses (Snell 1989).

The role of the tutor in all of this is crucial. The tutor has to address issues of authority and power, and has to be aware of how best to use their special experience in a community where everyone is equal, or at least where everyone has equal rights to equality. The power imbalance between learners and the tutor has to be worked on. The tutor has to become more of a "tutor-participant" and has to acknowledge that traditional forms of thinking and acting around their role have to be changed to suit the circumstances of a learning community. Notions of "there always being a right answer" or a "right way of doing something" have to be put aside. In a learning community there will always be a variety of ways of doing and thinking.

4. Self Managed Learning

Self managed learning means that each person takes primary responsibility for identifying their own learning needs. At the same time, each person is responsible for helping others identify and meet their needs and for offering themselves as a flexible resource to the community. Sources and materials for learning include each other; one's own learning practice; books and journals etc; reflection on, and "unpicking" of, learning experiences in the hear and now, and so on.

In CSCL, one aspect of self management is learning how to learn. Learning to learn is embedded in CSCL processes. It is not of the study skills variety where an expert tells learners how to learn. By playing a major role in determining their own learning and by working cooperatively with other learners and tutors, learners will have to face issues of learning how to learn within the processes of the cooperative learning group itself.

In being self-managing, learners are more likely to adopt deep approaches to learning. The responsibility of managing your own learning within the learning community quickly makes it clear to you that how you learn and why are largely up to you. Other learners and tutors in the community work with you around your concerns and interests, but you have to make the choices about how and why you are learning. This requires, and leads to, deep approaches to learning where you engage with the material, situation, issue etc in a meaningful way, and attempt to bring your own understandings to bear on it in doing so. If the community is working as a learning community (sharing, supporting, challenging, critiquing, questioning etc.), learners will constantly be faced with working at deep levels.

5. A Real Purpose In The Cooperative Process

Cooperative learning requires a real purpose in the cooperative process. This is often best achieved through a problem centred, or issue centred, approach to learning. This can take many forms. For example, each learner may define their own problem and the other group members help that person think through the problem, design ways of examining it and carry out the work around the problem. The process of working together has much in common with the cyclical nature of action learning and research. A problem or issue is posed and is diagnosed; this leads to a series of action steps being imagined which need to be taken in order to investigate the problem or issue; the action steps are carried out in whatever form has been imagined; the outcomes of this action are evaluated, and this in turn leads to a re-examination of the problem or issue in the light of the expe-

rience and knowledge gained, and a new cycle is engaged. Action learning and research are ways of dealing with real-life problems and issues. They are ways of both generating new knowledge about something while at the same time trying to change it.

At a meta-level, action learning and research inform the learners about how they are learning. The constant process of reflecting while learning, which is inherent in the action cycle if carried out thoughtfully, raises issues to do with how the learning is taking place and why, and how it could be made different : " contemporary forms of action research also aim at making change and learning a self-generating and self-maintaining process in the systems in which the action researchers work" (Elden and Chisholm 1993).

6. A Supportive Learning Environment

One important aspect of the supportive learning environment is the need to have considerable interaction between members of the groups. Learners must encourage and facilitate each others efforts. This might involve them helping each other, providing feedback, challenging each other, suggesting ways forward, acting in trusting ways and so on. Each member has to feel that they will be supported by the others. This can then produce the conditions for learners to take risks in the learning process, to try out ways of working or thinking or acting which they consider to be different to "the norm", but which might produce novel results or ideas.

A major constraint in interactions is group size. If a group of cooperative learners is too large then the possibility for frequent interaction between all members will be low. What constitutes a large group in CSCL ? A difficult question to answer. In my experience, anything greater than six or seven is large.

A supportive learning environment does not, however, suggest a lack of challenges. But a challenge in a supportive environment can be received and accepted and dealt with in a different way to a challenge in a non-supportive environment. If learners have a large degree of trust in each other, then challenges will become part of the culture of the group and will be seen as productive, if not always comfortable.

Linked to this is the need to work without fear. Where learners do not know each other and where there is little concern for being supportive and cooperative, they will be fearful of taking risks, of sharing and being open. Where there is a cloud of uncertainty in learning relationships, learners will act with caution for fear of "making fools" of themselves or "showing themselves up". Making CSCL environments safe places to work in can create stimulating, challenging and exciting learning opportunities. Learners and tutors engage in dialogue more freely and openly (McConnell 1994).

7. Collaborative Assessment

In CSCL, learners have a major role in choosing what they work on for their course assignments. They also have an important part to play in assessing their own and other learners' work. Collaborative assessment is a natural corollary of cooperative learning; it supports the cooperative learning process.

Self and peer assessment are seen as an important, integral part of the preparation for life and work generally (for example, see (Stephenson and Weil 1992),(Boyd and Cowan 1985). Although by no means widespread, there is now a wider belief in the educational and social benefits of such a process. And a recent survey looking at quantitative self-assessment studies showed that there was considerable consistency between marks assigned by teachers and students in peer and self-assessment situations (Falchikov and Boud 1989), so dispelling some of the criticism that students are not able to effectively assess themselves and each other.

Research into the relationship between assessment and learning has shown that learners will often choose how to learn, and what to learn, on the basis of their understanding of what is to be assessed, and how it will be assessed. Learners seek cues from staff about what to learn and what is likely to be examined in the course, and work instrumentally to achieve this (Miller and Parlett 1974). What students focus on in their studies, and indeed their whole view of university life, is largely governed by what they think they will be assessed on (Becker, Geer et al. 1968).

The importance of this to cooperative learning and collaborative assessment seems clear. If learners are actively involved in decisions about how to learn and what to learn and why they are learning, and are also actively involved in decisions about criteria for assessment and the process of judging their own and others work, then their relationship to their studies will be qualitatively different to those learners who are treated as recipients of teaching and who are the object of others', unilateral, assessment. Because learners in cooperative learning situations make decisions about their learning and assessment, there will be no need for them to seek cues from staff about assessment or seek to find ways of "playing" the system. They determine the system themselves, in negotiation with other learners and staff.

8. Assessment and Evaluation of the Ongoing Learning Processes

Any ongoing evaluation of the cooperative learning process must be carried out with the learners' knowledge that there is a real opportunity to change the design of the learning process.

Group processing occurs within the learning community and within each cooperative learning group. By reflecting on the way in which the group is

working, the group will be in a position to change its patterns and relationships in order to better achieve what it is aiming for.

Group processing and review are mechanisms for surfacing issues in the effective running of the learning community or cooperative group. They are also ways of promoting learning about working in groups from an experiential viewpoint. Successful group strategies have to be able to survive, and new varieties have to be able to emerge (Axelrod, 1990).The tutor has to be aware of some of the techniques, models and ways of thinking about working with small groups in order to help the groups review their own processes.

But it is not sufficient just to have management skills, important as they are. What is vital is a real understanding of the purposes of evaluation in the learning community, and a real willingness, especially on the part of the tutor, to be open to change on the basis of reflection on the experiences of everyone involved. This has to be a cooperative effort. If it is seen to be addressing only the tutor's concerns and experiences then it is unlikely to succeed. And if there appears to be significant blockage on making changes then learners will feel dis-empowered.

9. Conclusion

Professional development programmes offered at a distance via CSCL have to make tremendous efforts to be true to the values associated with adult education. The technology should not be the major determinant of the programme. A methodology for designing the programme which supports adult education values is needed, and this paper is a modest contribution to that design process.

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Author's Address

David McConnell: University of Sheffield, Division of Adult Continuing Education, 196-198 West Street, Sheffield S1 4ET, England, UK, Tel : 0114 282 5376, Fax: 0114 276 8653, email: d.mcconnell@sheffield.ac.uk.