ROLES FOR TRAINERS AND TRAINEES IN COMPUTER-MEDIATED COURSES

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Introduction

These days many people subscribe to the view that the teacher or teacher-trainer's role should principally be that of facilitator, rather than "fountainhead of knowledge" Greater equality between trainers and trainees is regarded as beneficial to the learning process; it empowers trainees to select their own learning styles and question received wisdom, whilst it also permits trainers to step back from centre stage to a position where they can observe the learning process.

Computer-mediated conferencing (cmc), apart from its value as a means of distance learning, offers opportunities for trainer-trainee equality that are unimaginable in the face-to-face classroom. Participants need not, and often, because of relative anonymity cannot, defer to those belonging to a more dominant age group, gender or race. Thus ideas and issues that might not be voiced in a conventional learning situation can find a forum.

This article identifies and discusses the relevant design features of computer-mediated courses for pre-service and in-service teacher training, and discusses some of the strengths and weaknesses of a medium that offers participants a more equal voice.

Course Design Issues

In a computer-mediated course contact is usually asynchronous in that participants and tutors log on at different times, according to work patterns and time zones. One of the chief attractions of cmc is that it gives participants the opportunity to choose where and when they will take part.

It is a matter of debate, however, exactly how *linear* a computer-mediated course should be. Is it better for all participants to access the input to the course in a fixed order, and at a fixed pace, or should there be some flexibility so that participants can work at their own pace, and even access materials in whatever order they choose?

Forrester (1995:8) reports on a study of learning styles within a computer-based learning environment, from which four different categories of student were identified:

Exploratory - students who typically begin by jumping around the sessions and then begin to adopt a more gradual approach with fewer exploratory moves;

Repetitious - methodical students who consistently repeat a previous lesson before proceeding to a subsequent one, and who frequently access the introductory material and spend time using it;

Linear/**continuous** - students who access material in the order the course tutor has intended;

Occasional - students whose use of the material is sporadic. Such students come in at an (apparently) random point, work for a fairly long period and then exit.

Forrester's conclusion that the learning environment should be flexible enough to suit a range of learning patterns finds support amongst experts in computer conferencing:

As a social technology conferencing attracts a wide variety of users and must allow different user approaches, from the impatient browser to the slow, structural learner

Vallee 1992:185

On the other hand, any kind of collaborative learning on a cmc course entails participants learning together, and working on the same task during the same period (although not necessarily at the same time).

As a compromise all tutor input, in the form of monologue (equivalent to the face-to-face lecture), sample materials and suggesting reading and activities, can be made

available to all participants from the start of the course. Participants can, however, be required to focus on different imput areas at different stages of the course, and they may be expected to obey strict deadlines in the submission of assignments.

The main patterns of interaction during a computer-mediated course are:

- one-to-one (participant to partipant, tutor to participant);

- pairs, for discussion and completion of tasks;

- groups of four to six participants with similar interests/needs.

- whole-class, so that the maximum number of interested participants can discuss tasks and issues.

The major locations for input and discussion during a computer mediated course are:

- a "cafe", for social interaction;

- a place for information about the course, accessible before the start of the course and throughout the course;

- a place for tutor (but not participant) input on course topics. This area can be available in its entirety from the start of the course, thus giving participants the freedom to skim future topics, preread in areas that particularly interested them and chase up references. It can also provide greater flexibility for participants who cannot work at the same pace. This area should not be open for participants' comments, although it might be developed and amended by tutors and the moderator in the light of discussion in other conference areas;

- mini-conferences of pairs and groups;

- a whole-class area where pair and group-produced tasks can be displayed and commented on;

- a whole-class area where excerpts from drafts of individual assignments can be displayed and commented on (this area to be closed when a final whole-class area is opened);

- a whole-class area opened towards the end of the course and available after the closure of the course, where parts of individual assignments in their final form can be displayed (subject to the authors' permission). Tutors can attach brief (and

generally positive) editorial comments to work displayed here, but the area should not be open for participant comment;

- e-mail, as a one-to-one means of communication with tutors and fellow participants.

Amount and provision of input

On-screen information differs from both a lecture and the written component in a conventional distance learning package. On a computer-mediated course there would probably be less purely factual information, because of the constraints of screen size and the problems associated with reading on screen as opposed to paper. With certain forms of distribution (for example, the World Wide Web) it might be possible to create interactive screens. HTML could be used to create hot keys within hypertext so that participants could pull down further pages defining key terms, giving further references and so on. Additional hypertext pages could address questions related to the topic which might be relevant only to certain types of teaching situation. Although input screens would be created before the start of the course, and would be made available from the start of the course, further pull-down screens could be added if new issues arose in the course of cmc discussion.

The trainers' roles

Trainers have two distinct and alternative roles to play in a computer-mediated course. As moderators they can concentrate on the social and organizational aspects of the course. As tutors they can provide teaching input and commentary.

The moderator's role

According to Feenberg (1989) the moderator has to work very hard at both the "social host" and the "meeting chairperson" roles. The social role involves issuing warm invitations, sending encouraging private messages to people, and suggesting to participants what they might be uniquely qualified to contribute. The chairperson role involves preparing an initial agenda, summarizing and clarifying the discussion, expressing the emerging consensus and even (sometimes) calling for a formal vote. Both of these roles would be required of the moderator.

Feenberg also suggests that the chairperson/moderator might need to sense and announce when it is time to move on to a new topic. This, however, is often the job of the course designer, who decides the length and order of topics before the start of the course, rather than the moderator who supervises the course in progress.

An important role of the moderator is to provide metacommunication - explicit verbal commentary about the communication process. The moderator's "weaving" comments should summarise the state of the discussion and identify its unifying themes and points of disagreement. In order to "weave" successfully a moderator might have to review transcripts of the conference so far. Careful reading of transcripts would enable the moderator to provide an overview of the conference, linking earlier discussions with more recent ones, clarifying confusing expressions, identifying the themes and generally making connections.

Feenberg identifies three main categories of moderating function:

Contextualising functions
Opening discussion
Setting norms
Setting agenda

Monitoring functions
Recognition
Prompting

Meta-functions
Meta-commenting
Weaving

Davie (1989) describes in sequential order the five duties she believes the cmc moderator should fulfil:

Climate setting

This involves welcoming and introducing participants (perhaps by means of photographs). It also involves introducing participants to the course requirements, the types of activities that will take place, and the course schedule. (Davie notes that two different types of course introduction are necessary, to the cmc medium *and* to the course itself; she recommends that these two different types of need are handled separately).

Managing group discussion

This involves providing leading questions, refocussing the discussion, and providing ongoing commentary. The number of moderator contributions must be limited, however, so as not to overshadow participants.

Managing joint writing projects

This involves dividing up participants for pair and group work, and helping participants download, edit, upload and pass drafts on.

Managing individual papers

This may involve uploading individual papers one at a time, so that a seminar can be conducted on each paper. Alternatively, it may involve placing papers in a branch conference.

Editing the transcript of the course

The moderator may need to move, delete and edit comments made during the course, and also add editorial comments.

The tutor's role

Tutors provide teaching input and deal with queries and issues specifically relating to the topics they have prepared. As teaching input can be prepared in advance of the course, tutors do not have to be available throughout the course, as the moderator does.

The discourse of the course and the question of language appropriacy

Davie (1989) proposes that the moderator/tutor might deliberately misspell words, and ignore the grammar, spelling and formatting of participants' messages. This is not always appropriate behaviour, especially when participants are non-native speakers, and one of the aims of the course is to raise the standard and accuracy of language use.

A consideration of course methodology should address the way tutor/participant and participant/participant interchange might vary across different areas of the course. A course might feature four essentially different types of discourse:

a) social interaction amongst participants (cafe and e-mail)

b) discussion of course input

c) assignments submitted for assessment

d) teaching materials submitted for assessment.

Rules should be established regarding the acceptability of linguistic and formatting errrors in each of these four discourse areas. Although communicative effectiveness should be the participants' goal in all four areas, the areas can be placed on a cline according to the degree of attention that participants would need to pay to linguistic accuracy. At the two ends of the scale are areas a) and d); spontaneity would be of overriding importance in the social area, which would be essentially private and ephemeral, whereas the creation of public documents for students and fellow-teachers would require careful thought and drafting for accuracy and precision. Discussion of materials might sometimes require initial drafts, while assignments (area c) would almost certainly have to be drafted and redrafted before submission.

Participants have to be made aware of the different standards required of language produced within the four areas, and they also have to be told that provision will be made for the discussion of drafts in areas c) and d). Feenberg (1989) points out that specifying the appropriate "communication model" (ie genre) for a cmc group might involve using performatives rarely needed in face-to-face interaction. For example,

the moderator may have to say "this is a class" or "this is a support group", because otherwise participants would not know what kind of contribution was relevant.

The appropriate attitudinal tone for each area should also be established. This is a matter of some delicacy. Cmc interaction is characterised by the use of participants' first names, overt and positive signalling of acceptance of others' contributions, and very explicit indicators of (positive) attitudes. Compared to the subtleties of face-to-face interaction, this can seem heavy-handed, and even vapid and insincere. I myself very rarely use first names in conversation, and wince at their repeated use in cmc. I distrust elaborate signalling of non-agression and humour, which in face-to-face exchanges is often used to mask manipulation. Clearly, most cmc course participants and tutors are sincere in their expressions of friendship and enthusiasm, but an attitudinal tone which jars might nevertheless have a negative effect on others.

Cultural background probably plays some part in determining how participants react to the "sweetness and light" which characterises cmc discourse. Participants on a computer-mediated course often come from a wide variety of backgrounds, and individual differences of temperament, age and experience are compounded by differences in cultural expectations regarding the saving and loss of "face", the tutor's role, and the expression of compliments and good will. Language teachers, however, should be sufficiently interested in genre and the linguistic features of text to tolerate some guidelines on attitudinal tone within each of the four discourse areas.

Perhaps backs must be constantly patted and ruffled feathers smoothed on *any* kind of distance learning course, because the "service recovery potential" is so much less than in face-to-face training, where the tutor and participants are continually assessing each other's reactions and modifying their input accordingly.
However, although "sweetness and light" are perhaps essential in some areas of cmc, there are other modes of computer-mediated interaction which do not, and indeed perhaps should not, attempt to develop personal rapport. It seems important to make the distinction between areas of the course which are primarily interactional, or where affective issues are discussed, and areas where the transactional information content is paramount.

Course evaluation

There are a number of ways in which a computer-mediated course can be evaluated. Simon (1992) describes how a team of evaluators carried out quantitative and qualitative analyses on an in-service teachers' course. In the qualitative analysis all messages from learners and tutors were classified according to the following categories:

Learners' messages:

greetings

responses to a proposed activity

descriptions of a personal experience with computer conferencing

reactions to a peer's comment or interaction

proposals for debate

questions and requests for further information on a topic.

Tutors' messages:

presentation of modules

proposals for activities

proposals for debate

posing of examples

"weaving" activities

references to other comments

explanation of questions

public correction of exercises

expression of personal opinions on a topic.

(Simon 1992:33-34)

This approach is similar to the "content analysis" described by Mason (1992) and Henri (1992). Although interesting as a descriptive exercise, it is difficult to see how the success of the course can be measured by this means, except in cases where learners' messages can be seen to decrease dramatically in number and quality, or where severe and unrectified misunderstandings can be seen to have taken place.

Davie (1989), however, suggests that an edited version of the course transcript can help participants gain an overview of course, which they can comment on in a separate branch conference. Participant comments on the transcript are of much more obvious value as a course evaluation tool. They would, however, necessitate participant involvement *after* the course had officially ended, something that cannot usually be relied upon.

Other possible methods of cmc course evaluation include participant journals and interviews (Mason 1992). These methods take up rather a lot of learner time, however, and would seem impracticable on any intensive courses.

On Davie's course (1989) learners also filled in a monitoring questionnaire six weeks after the beginning of the course. A conferencing system that runs in a Windows environment (as does First Class for Windows, for example) can support computer-based questionnaires created with the software *Qval*, as recommended by Brown, Moss and Redfern (1995:6).

The advantages and disadvantages of CMC

Computer conferencing promotes a high level of interaction between participants. This means that individuals gain feedback on their materials from far more people, and they have more opportunities to discuss materials too.

Computer conferencing gives all participants the opportunity to contribute. It offers the opportunity to "talk" with other students which we may assume is a benefit of full-time face to face teaching but often isn't realised if the students are part of a large class or taking different options.

Moreover, computer conferencing gives all participants an *equal* opportunity to participate. This is particularly important on a multicultural course, where participants may have widely differing norms for turn-taking. It is also important on mixed sex courses, because in most cultures women are given less opportunity than men to contribute in face-to-face interaction.

Computer conferencing, then, is a great leveller. All participants may contribute equally regardless of their status. This also means that potentially high status participants can join the discussion without the deference to their views that may be given in the face-to-face classroom. When tutors take part in a cmc discussion it does not interrupt the flow of interaction, and their views do not necessarily affect the final consensus of opinion. This on the whole may be taken as a good thing, although all cmc moderators must beware of the spread of misinformation that can occur when tutors do not intervene sufficiently frequently, or fail to speak with authority when the necessity arises.

Of course, some turn-taking rules must still apply within a cmc group; participants should not be permitted to contribute too frequently or at too great a length. At precisely what level a contribution ceases to be appropriate will vary from conference to conference, but it is clear that all participants must be informed, as there is no time for knowledge of the genre to evolve naturally, as it does within other discourse communities. Guidance should be given to participants regarding expectations about range of acceptable levels of contributions to the course.

If participants participate more, this provides additional insights into the quality of tutor's input, and the amount of learning that actually takes place on this and possibly *all* our taught courses. Messages put in by students can reveal depths of misunderstanding that may not be apparent to the course tutors and central academics from a perusal of homework assignments and exam scripts.

Many writers have claimed that computer conferencing is popular with participants. Alexander, for example, maintains that:

> working with a group is highly motivating to people. The group provides a pace for its members. People want to be seen to be doing their best. The support and sense of identity provided by the group allays fears and builds confidence.

1992:202

This may not be the case on every cmc course, however. Simon (1992) reports on an in-service teacher training programme where participants were reluctant to take part in computer conferencing, although they took an active part in non-computer-mediated components of their course.

> Most of them considered the medium as "very cold", and pointed out the fact that they did not know each other very well, despite the face-to-face sessions arranged at the beginning of the course. They also found it difficult to express their ideas in writing, because it was hard to imagine "...who you are addressing".

1992:35

These participants also gave cmc a low priority in terms of importance, and some reported little learning benefit.

The process of consensus building, which is typical of face-to-face interaction and enables participants to gain an overview of agreement and disagreement within the group, is hard to achieve in cmc for the following reasons:

- comments on different issues are juxtaposed
- the discussion is repetitive; participants repeat what other participants have previously said
- "fun" messages, with a social purpose, co-occur in the same conference with serious messages
- interaction is asynchronous.

It may be possible to minimise these problems through modifying course design, by increasing course monitoring, reducing group size, and training participants in the function of different conferences. Such problems may also be reduced if the course uses a conferencing system which permits contributors to place their comments next to the original message, and and also permits searching by key word.

Some potential problems with cmc remain, however. One significant problem is the technical difficulty of communicating with overseas sites, and of presentating materials containing illustrations, graphics, audio and video. Although writers have discussed the possibility of conferencing with these features, I do not know of any course which permits audio and video presentations within an on-line conferencing system.

Another serious problem concerns copyright law. Face-to-face courses involving materials evaluation allow participants access to sets of published textbooks, and audio and video tapes. Presumably it is illegal to reproduce exercises from published sources on screen. Specially-written materials are limiting, and do not permit in-depth discussion of well-known text book series.

There remains the serious problem of the amount of time a computer-mediated course might take to prepare, tutor and moderate. Teacher time on a full-time three month computer conferencing course for 50 students might be calculated at about 500 hours. Colleagues of mine who have advertised their e-mail addresses to participants on courses they have taught report that their work-load has increased enormously as a result. All in all computer conferencing appears to be very labour intensive, something which suggests that it might not be very cost-effective, unless tutors and moderators can also use it as a source of research data which will enable them to complete their yearly quota of publications!

Glossary

Cafe   A metaphor for a place/site on the internet where you can chat, receive news and information and be entertained in a friendly relaxed atmosphere - a virtual cafe without the coffee.

Computer mediated conferencing   Conferencing via computer. This can be done through e-mail but usually through a dedicated program which allows you to share files, write on a shared whiteboard and recently computer based video conferencing has become affordable. Meetings may be synchronous - where the participants can see

what everyone else is writing as they write it, or asynchronous - using a mailing list or a newsgroup facility.

Download   To take a file down off the network on to your computer.

Hotkeys   Highlighted words or pictures that contain a hidden link to other text or pictures. You can click a mouse on a hotkey and it will take you to the place designated in the link. The best example of hotkeys is on the World Wide Web.

HTML   (Hypertext markup language) Computer language needed to write documents for the World Wide Web.

Hypertext   Text documents which contain hotkeys are hypertext documents. The links may take you to any page within the document or to some other electronic document in any way the author allows or the reader chooses.

On-line conferencing   More or less the same as computer mediated conferencing (see above).

Upload   To put a file up onto a network server so that people can access it through the local network or the internet.

References

Boyle, R. (1994) ESP and distance learning. *English for Specific Purposes* 13 (2) 115-128

Brown, K., Moss, S. and Redfern, P. (1995) Courseware Evaluation in the Pharmacy Consortium. *TLTP Newsletter* no 4. 6.

Davie, L. (1989) Facilitation techniques for the online tutor. in : Mason, R. and Kaye, A. (eds) **Mindweave : communication, computers and distance education**. Oxford:Pergamon. 74-85

Feenberg, A. (1989) The written word : on the theory and practice of computer conferencing. in : Mason, R. and Kaye, A. (eds) **Mindweave : communication, computers and distance education**. Oxford : Pergamon.

Forrester, M. (1995). Interpreting "hyper-entrails" in a computer-based learning environment. *TLTP Newsletter* no 4. 8-9.

Henri, F. (1992) Computer conferencing and content analysis. in : Kaye, A.(ed) **Collaborative learning through computer conferencing**. Berlin : Springer-Verlag.117-136

Kaye, A.(ed) (1992) **Collaborative learning through computer conferencing**. Berlin : Springer-Verlag.

Mason, R. and Kaye, A. (eds) (1989) **Mindweave: communication, computers and distance education**. Oxford : Pergamon.

Mason, R. (1992) Evaluation methodologies for computer conferencing applications. in : Kaye, A.(ed) **Collaborative learning through computer conferencing**. Berlin : Springer-Verlag. 105-116

Mason, R. (ed) (1992) **Computer conferencing: the last word**. Victoria, British Columbia : Beach Holme.

Simon, C. (1992) Telematic Support for in-service teacher training. in : Kaye, A.(ed) **Collaborative learning through computer conferencing**. Berlin : Springer-Verlag. 29-38
Sinclair, G. and Kearns, L., (1992) From text to Multimedia : computer-mediated communication in the 80s and 90s. in : Mason, R. (ed) 1992**. Computer conferencing : the last word**. Victoria, British Columbia: Beach Holme. 251-262

Vallee, O. (1992) The challenge of conferencing system development. in : Kaye, A.(ed) **Collaborative learning through computer conferencing**. Berlin : Springer-Verlag. 181-188

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