

# Complexity, harmony and diversity of learning in collaborative e-learning continuing professional development groups

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## ABSTRACT

In this paper I examine the learning dynamics of three collaborative, e-learning continuing professional development groups specifically the degree of complexity, harmony and diversity in them. Two of the groups worked harmoniously, and successfully produced a collective end product. The other group exhibited extreme anxiety and division, and required extra resources from its members in order to sustain itself. Anxiety became a major focus for this group, which had the effect of diverting it from effective collective production. I use these differences as a point of departure in order to consider the place of identity, control, ontological security and guilt in collaborative e-learning groups.

Keywords: e-learning, collaboration, groups, identity, control, ontological security, guilt, community.

## INTRODUCTION

Collaborative e-learning in continuing professional development (CPD) higher education contexts is relatively uncommon. Distance learning has long been a source of education provision in CPD contexts, but the shift to a new generation of distance learning involving course delivery entirely via the Web and Internet, and which involves collaborative group work as the main pedagogical method, is slow to emerge.

In this paper, I draw on research into a two year, part-time professional development e-learning Masters in Education course which is delivered entirely online and which has a pedagogic design focusing on collaborative and cooperative group work. The focus of the course is on e-learning itself. Further information on the background to the design of the course can be found in McConnell, 2001.

Participants are organised into small groups of between 7-10 members with a tutor. They work together for periods of between 16 and 32 weeks using Web-CT asynchronous forums and synchronous chat rooms for their communications and group work.

The collaborative issues and problems which the groups work on are characterised by the following:

1. **Complex:** The problems and issues researched by these groups are defined by the groups themselves through processes of negotiation. They are usually complex, often ill-defined problems which are fertile ground for the production of mutual understandings and the construction of "shared resolutions" (Schon, 1983).
2. **Have a personal and professional focus:** They are important to the members of the group, arising from concerns and interests they may have about their professional practice. The outcomes associated with the group work will be of benefit to the members in their professional practice.
3. **Require negotiation and communication to understand them:** because the issues researched are invariably complex and ill-defined, the members of each group have to engage in considerable communication in order to understand them and in order to negotiate changes in their perception of the 'problem' and its resolution as their work progresses. Communication is both task oriented and socially centred. The groups function both as learning communities (Pedler, 1981; Snell, 1989) which have an interest in sharing, supporting and learning collaboratively in a social context, and communities of practice (Wenger, 1998) in which members are actively constructing understandings of what it means to be professional e-learning practitioners.
4. **Require an action research approach to progress them:** The groups are encouraged to view their research and learning as "action research" (Carr & Kemmis, 1986; Elden & Chisholm, 1993; Whitehead, 1989; Winter, 1989), and they are introduced to the concept of action research in an earlier e-seminar. This provides them with a model of how to act together, which helps guide them in their work.
5. **Require a journey of learning:** There are no specific pre-defined learning outcomes. Each group embarks on a learning journey which requires collaboration but which does not define in exact detail how they should work together or what the outcomes of their learning should be. In this respect, the groups are following a long tradition of adult-learning which supports openness and exploration ((Boot & Hodgson, 1987; Cunningham,

1987; Harris, 1987), and which has a history in experiential learning groups (Reynolds, 1994; Davis & Denning, 2000).

6. Involve a high degree of reflexivity: Learning in these groups is highly experiential, and the groups are therefore encouraged to be reflective and to use this as a source of learning (Boud and Walker, 1998; Moon, 1999).

There are usually significant differences in the learning dynamics of these groups, and in the way they negotiate and carry out their collaborative work, and in the way they produce their final product. It is some of these differences which I will examine here.

## **METHODOLOGY**

I examined the activities of three e-groups which were working at the same time, but separately. In carrying out their work, members of each group produced approximately one thousand separate entries in their own asynchronous forums, which when printed amounts to at least 200 pages of text per group. Each group also used the Web-CT synchronous chat facility and as an example, members of one group participated in 15 synchronous chat sessions, each lasting at least one hour, which amount to over 100 pages of text.

I analysed the transcripts of the textual communications of the groups using a grounded theory approach (Glaser & Strauss, 1968; Strauss & Corbin, 1990). I started by reading the transcripts and making annotations in the margins indicating different features of the group's work such as shared ideas, disclosure, planning for chat sessions, summaries of chat sessions, the production of documents, discussions of the documents, joking, sharing professional practice, sharing resources, the production of timetables of planned work, reference to stakeholders and so on. As part of the procedure I also made analytical notes to myself highlighting possible interesting issues for investigation and analysis.

As the entries of each member of the group is numbered in the transcripts (along with dates and times and other contextual information), I was able to follow the various threads of the discussions with relative ease.

This first reading of the transcripts allowed me to 'get a feel' for the group's work and to immerse myself in the data. By a process of progressive focusing (Parlett, 1981) and constant comparison (Strauss & Corbin, 1990) issues of relevance and potential importance concerning the nature of the groups' work became apparent. I then looked in depth at these emerging issues, re-read the margin annotations and notes to myself, moving back and forward from the text of the transcripts to my notes. I then made a new set of notes on the particular issue and proceeded to engage in a new round of analysis in order to illuminate the issue in some detail (Parlett, 1981).

This qualitative research approach allows the emergence of sensitizing concepts, which are:

"...less specific suggestive ideas about what might be potentially fruitful to examine and consider, an emergent meaningful vocabulary that alerts the researcher to promising avenues of investigation" (Clarke, 1997).

rather than the generation of definitive concepts from data abstracted from their social milieus. The purpose is to remain close to the natural world being researched.

## **FINDINGS**

In this section I present the findings relating to one group (group two), and in the following discussion section, I examine the degree of complexity, harmony and diversity in the three e-learning groups.

Two of the groups (groups one and three) worked harmoniously, and successfully produced a collective end product, which they were happy with. The other group (group two) exhibited extreme anxiety and division, and required extra resources from its members in order to sustain itself. Anxiety became a major inward looking focus for this group, which had the effect of diverting it from effective collective production. It did produce a collaborative product, but one which the group was not entirely happy with. The patterns of work and communication of the three groups can be summarised as:

### ***Group One: characterised by***

Negotiation

Discussion

Agreement

Work and research

Collaboration

Production

***Group Two: characterised by***

Struggle –over leadership; over project focus and group processes

Argument

Changing minds and direction

Personality and identity

Anxiety

Learning conflict

Closed-ness: use faxes, chats, telephone, email as well as open forums. But this has not been agreed by members, but brought about by division and struggle to be productive

High introspection which “becomes” a major component of their project

***Group Three: characterised by***

Negotiation

Support for each other

Openness

Discussion

Agreement

Work and research

Collaboration

Production

**Patterns of group two**

In analysing the work of group two, several patterns of communication and group dynamics can be discerned which illustrate some of the problems they faced:

***1. Members not replying to requests or questions from other members.***

This was evident throughout the life of the group and involved:

Members posting summaries of decisions made by sub-groups in the asynchronous forums, and inviting (by name) those not present to comment on them, with no response from them.

A member posting her thoughts on why there were no replies, and receiving no response.

A member trying to get the group to discuss how they are working together, with no response.

Members posting sets of possible guidelines which had been devised by sub-groups for improving communications within the group as a whole – with no response from others

A member trying to summarise where they are in their group work, with no response (she was not asked to provide the summary, but in other groups when this happened members were always grateful and acknowledged the entry).

A member inviting others to brainstorm ideas about group effectiveness, with no-one participating

A member posting the final plan for the group’s collaborative work after discussion in a group chat session: no one responds, and one person disagrees with its contents.

***2. Anxiety***

Members refer to themselves as being anxious, or to the group itself being in a state of anxiety over its work, including:

Perception that some members are deliberately contriving to produce division in order to examine its effects on the group.

Constant questioning and reflection about their own group processes

Their “struggle” (a term often used by some participants) to effectively collaborate.

Exclusion experienced by some – others making every effort to be inclusive

***3. Strong personalities***

Some individuals taking very strong views on issues and not being willing to negotiate around them.

Disagreement amongst individual members, sometimes extreme

Differences in perceived level of previous experience and expertise, leading to perceptions that some members were better equipped than others to fulfil certain tasks, or had greater experience and knowledge.

#### ***4. Decisions only being made by some members***

In the early stages of the group's work, it proved impossible to find appropriate times when everyone could meet in the synchronous chat sessions to discuss their work and make decisions. Sub-groups met in the chat rooms and later posted in the forum the outcomes of their discussions and any decisions made so that those not present could have their say. This proved unworkable as those not present began to question the focus and outcomes of the chat sessions, which often led to feelings of frustration by those who had attended. Decisions made had to be re-negotiated, which took time and also caused members to feel that little progress was being made.

#### ***5. Changing ground rules and focus of project***

In addition, the interpretation of decisions made in chat sessions were often questioned afterwards in the forums by some of those who had taken part in them. It seemed that the ground rules were being changed. This sometimes led to ill feeling and a degree of mistrust. Agreement on the focus of the group project was a major example of this. Considerable time and effort was put into negotiating the focus in several chat sessions, and on several occasions it seemed that the group had successfully negotiated what they should work on, only for the interpretation of that decision to be challenged afterwards in the asynchronous forum. The group never satisfactorily resolved this, and it emerged frequently throughout their period together as a point of argument and disagreement. They finally agreed that each member of the group should work on their own professional interests (according to how they individually interpreted that), and report back to the group on progress and findings in two/three weeks time. This is when the sub-groups were formed. At the end of this period the group opened a new thread to discuss their findings, and at this point they did begin to work collaboratively as a whole group.

#### ***6. The role of the Tutor***

The tutor's role in the group was for some a source of anxiety. Reference was made to how tutors in other groups were participating by way of pointing out how their tutor "should" be working with them. However, there was division over the group's view of the role of the tutor. Some members were critical and looked for "stronger" tutor guidance. Others took the opportunity to publicly thank the tutor for his support, signalling that they thought he was doing a good job.

The lack of effective group functioning in the early stages of the group's work caused some members to seek "outside" (ie tutor) intervention to tell them what to do. This had the effect of forcing the tutor to make some important decisions on behalf of the group which were not therefore owned by the group. For example, at one point the tutor suggested that the group should have a manager, chosen from its members to help steer the group through its work. At another point he suggested that, because they had spent an inordinate amount of time negotiating their differences, they should "just get on with it" and work towards producing their product. Both these decisions were perhaps understandable given the circumstances, yet they had the effect of unwittingly dividing the group even further. Someone did take on the role of group manager, but was largely ignored by most members. The group members did "get on with it", but did so in their sub-groups, perhaps using the tutor's directive as a way of avoiding facing up to the divisions in the group.

#### ***7. The role of "closed" chat sessions***

Compared to the other two groups, this group used the synchronous chat facility extensively. Chat sessions were very important in the life of this group, and a great deal of the work of the group was conducted in them compared with the asynchronous forums. As we have already seen, not everyone could attend the chat sessions. So on some days one sub-group would meet in the morning and make certain decisions. Those who could not attend would often meet later in the day and try to 'catch up' on the work of the first group. This often had the effect of making those who attended the second chat session feel that they were working "at the tail end", having to address and essentially agree to an agenda devised by the other group. These sub-groups also used other "closed" forms of communication such as faxes, telephone calls and emails.

By contrast, the other two groups carried out the vast majority of their communications in the open forums where everyone could participate or follow what was happening.

## **DISCUSSION**

In this section I use the differences between what might be termed the traditionally "successful" groups and the "anxious" group as a point of departure in order to consider issues of identity, control, ontological security and guilt in collaborative e-learning groups.

## **Harmony, communication and conflict**

Groups one and three have a high need to collaborate harmoniously. Their starting point is to make each group a really “good” collaborative group which works harmoniously, and they put considerable time and effort into ensuring this happens. They deliberately address the need to support differences and mutual recognition. They actively involve everyone in decision-making, group processes and production. They work in ways that are open and accessible to all members and make reference to this being an important requirement for success. They talk of “really wanting the collaborative project to work”. They could perhaps be described as being “dutiful”.

Group two supports difference but also uses it as a source of conflict. They bring “differences” to the forefront and use them constantly in negotiations and discussions. However, as a group they cannot seem to reconcile some important differences in a way that helps them work together and be productive. They therefore sub-divide to achieve their tasks. They also bring a high degree of closure to their group processes by the sub-groups using faxes, telephone, email and so on within the sub-group rather than conducting their work in the open forums, therefore making it impossible for others to participate and know what is going on. They never talk of “really wanting their collaborative project to work” as the other two groups do. They are perhaps less concerned with “duty” and less likely therefore to collaborate as a group and more likely to diverge, confront and question. Their high introspection causes them to constantly refer inwardly to themselves in a struggle to understand why they are working in the way they do. Therefore, experiential learning is high and the opportunity to investigate group dynamics is high. In a sense, this becomes the focus of this group’s project. To some degree this group “contrives” (as some members put it) to produce its final product.

All three groups at some point divide their work so that sub-groups can focus on accomplishing particular parts of the overall product. Groups one and three formally and openly divide and come to an agreement about how the sub-tasks relate to the final product. They support each other in their sub-group work, which is open and accessible to all members of the group. Group two works in sub-groups by default – perhaps as a mechanism for avoiding conflict in the large group. They cannot easily find a way of working as a community. It seems people therefore form liaisons in order to deal with the lack of agreement over the focus of their project. Collaboration in the sub-groups is carried out in closed circles, with little communication between sub-groups or, at times, within the large group. There is some evidence of the sub-groups deliberately keeping their work closed from others.

However, group two does see itself *as a group* – there is evidence of them comparing themselves to the other two groups and using them and their work as a reference point for themselves.

## **Reflexivity within groups**

Each group is highly reflective about its work and learning processes, but in group two reflection becomes something of an obsession, and actually becomes a major focus for the group without them collectively agreeing to it being so. It could be argued that in the absence of an agreed focus, this group “naturally” (because of its particular circumstances and dynamics) chooses its focus to be itself.

Considerable time, thought and energy is devoted to this by:

- a) the group struggling to understand itself. It has resource to communicating about its own dynamics as a way of explaining what is happening to itself, justifying its actions, controlling members actions, comparing itself to the other groups, accusing members about various aspects of their project work.
- b) Sub-groups devoting time in their chat sessions to trying to understand the group as a whole
- c) Individuals choosing to focus their research on finding out about group processes and dynamics

The group could have chosen not to spend time doing all of this and just getting on with the “task” of producing a final product. But by focusing on themselves and their struggle to collaborate I think they show a real and genuine concern for each other. To ignore the issues they are facing would be tantamount to saying that they did not care. But there is evidence throughout their discussions that, at the individual level, they do care. They are trying to look after themselves. This is evidenced in part by them continuing to communicate and not give up. They even remark on this themselves, showing that they have a high degree of self-awareness. They do share and discuss, they produce work, and they never talk of splitting up or giving up.

## **Group identity and self-identity**

In his analysis of the self and society, Giddens (1991) suggests that:

“Self-identity (...) is not something that is just given, as a result of the continuities of the individual’s action-system, but something that has to be routinely created and sustained in the reflexive activities of the individual” (Giddens, 1991, p52).

Drawing on the work of the psychoanalyst R.D.Laing, Giddens suggests that one way of analysing self-identity is to consider those whose identity is fractured or disabled. From such a viewpoint, the ontologically insecure individual may display one or more of the following characteristics. They

- lack a consistent feeling of biographical continuity; they cannot sustain a continuous narrative about themselves.
- are in a constant state of anxiety, which prevents them from carrying out practical actions
- fail to develop trust in themselves and their identity, and often subject themselves to constant self-scrutiny

Can the concept of self-identity and the analytical framework provided above be applied at the group level? For example, can a group be described as being “anxious”? The analysis of the work of the three groups shows that they are all highly reflexive: they are aware of themselves as groups and address their histories, development and their future. The anxiety amongst the members of group two may work towards producing a sense of the group that is fractured or disabled. Participants subject their behaviour and thoughts to constant scrutiny, which at times becomes obsessive. This group is obsessed about questioning itself in a way that none of the other groups are. The other groups do reflect on their processes and procedures and use this as a source of learning. But at times group two is very single-minded about this, and it pervades the life of the group. The group never seems to get over its anxiety about itself, and the members constantly discuss and scrutinise themselves and their actions.

What does group two feel in danger of? Not achieving its objectives? Not “working” as a group? Not “fitting” into the required model of an effective group (whatever that is)?

The group doesn’t seem to know itself – a condition which Giddens (1991) suggests is necessary for ontological security. It seems to be struggling to find some kind of collective identity: some kind of ongoing narrative (Giddens p54) of itself. In a real sense it does not know who it is or where it is going. This seems to be a major source of anxiety. Members of the sub-groups try to work out how they came to be where they are, and how they can bring about change and development so that they can influence where the group collectively is going. But this is perhaps inevitably doomed to failure as long as it is the work of the sub-groups and not the work of the group as a whole. Factions, no matter how well intentioned and how insightful they are, cannot mend the fractured group. As long as some individual members are not involved in the project of making the group “better”, it is probably the case that the group will not function well as a collective. If some members of the group are with-holding their engagement, then the other members of the group will either

- carry on the group’s work without those people, or
- spend a lot of time and energy trying to understand why those people are engaging in the way they are, whilst at the same time not functioning as a group. They can function as sub-groups and get some of their work done, but the division will make it impossible for them to achieve a collective group product.

In the other groups there is a high sense of self-identity as a group. They seem to have a strong ongoing narrative, which they keep active throughout the collaborative project. These groups are inclusive and mainly work in harmony. Sub-groups evolve from collective work and discussion as a source of production which feeds into the main group task of producing the final product. Divisions, differences of opinion and so on exist, but the groups want to achieve and be successful, so they are handled with considerable understanding and willingness to be inclusive and supportive. The focus on the well being of the members of the groups seems to ensure this, as well as each group’s need to succeed. These two groups work at establishing their identity, constantly creating and sustaining it through reflexive processes.

### **Control and ontological security**

Implicit in the actions of groups one and three is a high degree of “routinised control” (Giddens, 1991 p56) which helps protect the members of these two groups against themselves. Their high need to collaborate and be productive within the agreed parameters of the course requirements may mean that each member monitors themselves so as to prevent schism and division within the group. Competition and disagreement do exist, but are supported in subtle ways by processes of negotiation, give and take and reciprocity. Members are willing to “give” so long as that is taken as a criterion for existence in the group and for successful production.

Self-control can be a powerful mechanism in these two “successful” groups. The language used in these two groups is perhaps an indicator of this: it is always positive and the group members tell themselves that they are working well. They say they are collaborating and succeeding in their work. They sustain an ongoing narrative about collaboration and success, which is largely absent in group two. They believe what they say, and it has the effect of sustaining that belief. They trust each other in these circumstances. This helps produce a sense of ease within the group about who they are and how they are working. The effort needed to sustain the group is therefore greatly reduced, and with it any anxiety about the group is reduced. All of this helps the performance of the group.

On the other hand, the members of group two tell themselves they are not doing this and perhaps therefore reduce the chances of it happening? They come to believe that they cannot collaborate successfully. They cannot seem to begin to develop a positive ongoing narrative about themselves, let alone sustain it throughout their time together. This keeps the level of anxiety high within the group, which in turn has the effect of requiring extra resources from the members in their efforts to sustain the group. Their anxiety is a source of constant examination and questioning which diverts them from effective collective production.

There may be a need to control in order to produce harmony and effectiveness. The patterns of the work of the groups may indicate the ways in which control is established and maintained.

The “successful” groups discuss and support each other. Members do not go off and do their own thing. They do however work as sub-groups, but only after they have been given ‘permission’ to do so by the whole group. At other times the enthusiasm to achieve and be productive and the interest inherent in their collective work makes it possible for individuals to legitimately go off and work separately and not be punished or ignored for doing so. Group two does not easily perform and has not developed routines conducive to sustaining the group and its work. At the end of the collaborative work, this group is still trying to develop its routines. It is still negotiating with itself.

The way group two functions helps throw light on how the other two groups function, and vice versa. No one group is “typical”, “correct” or “normal”. Groups one and three may achieve collaborative and collective products which they are pleased with and which meet the requirements of the course. But group two learns in different ways: it learns about *itself*, and it learns about the dynamics of group-learning in difficult circumstances. Members may not choose to view this *as learning* or as being worthwhile, though several of them do in fact see the learning potential of this and say so. The members of this group may in fact learn so much about collaborative group work that they are better equipped to participate and survive in future groups. Disharmony and division open up the group processes and make them available to the members for scrutiny in ways that do not occur in more harmonious and less divided groups. The experience may be difficult and challenging, but the potential to learn from it (if taken) can be high.

## **Outsiders**

The MEd functions as a large learning community, with activities, structures and mechanisms which involve all participants outside of the particular groups. The concept of outsiders can function in at least two ways in this context:

- when participants become members of a group, each group exists on its own, outside the community. Each group can “visit” the other groups and see how they are working, and compare their own group to the other groups. It is therefore possible for a group to feel like an outsider in this context.
- individuals in each group can also feel like an outsider in their group, lacking the necessary personal and social relations to feel part of the group

We know that outsiders are able to “look- in” with insight through the experience of being at the edge (Goffman, 1971) They are part of something larger, yet set apart from it. They struggle to exist in the group and produce something worthwhile, but at the same time they are outside the group and view it as an outsider. This may also apply to groups, as well as to individuals. So in this virtual learning environment, group two can simultaneously carry on with its work towards producing a final product while also looking at itself in a search for some kind of identity. This e-learning medium allows this group to continue with their work whilst also continuing to try and understand themselves.

Defensiveness is another trait of this group and another aspect of being an outsider. Some individuals are highly defensive, which is one way of protecting oneself against anxiety. Similarly, not contributing to the groups’ work and not participating in discussions, and ignoring others’ entries and questions directed at you are other ways of keeping one’s identity. By these mechanisms, anxiety is kept to a minimum and to a level that can be dealt with. By choosing how often, and in what ways, one contributes to the group’s work, you are staying in control (and to some extent, controlling the work of other members too) and therefore reducing the possibility of anxiety of one kind ie that which arises from confrontation and argument. This is, however, likely to produce other kinds of anxieties, such as feelings of guilt about not participating and about the effects of non-participation on others.

## **Guilt, trust and the community**

Clearly the emotions of the members of these groups play an important part in shaping the work of the groups. Anxiety is present in all the groups to some extent, but is pervasive in group two. The members of this group talk of their “struggle” to collaborate, and at some time or other they all indicate a certain degree of guilt about the way they are interacting and behaving. Their identity does not match up to the implicit and explicit contract of collaborative learning ie to work together through processes of negotiation and participation. The existence of

feelings of guilt pre-supposes people going against norms sanctioned by the group or community (Giddens, 1991). The very presence of guilt therefore suggests the existence of some kind of community.

At times trust is lost in group two between certain individuals. This has the effect of unsettling the group by raising questions about trust generally. Although it is never actually mentioned openly, a reading of the communication transcripts indicates an implicit lack of trust between one particularly strong-minded, and therefore significant, member and the others. Trust is present in the sub-groups, but not across all individuals. Their language and actions are indices of this. In the other two groups, trust does seem to exist across individuals. Members are loyal to each other. They do not abandon decisions made collectively after the event. We have seen that in group two there is a pattern of decisions being made only to be questioned afterwards, or abandoned altogether. To the members of this group, this feels like being betrayed. Groups one and three work hard at developing a sense of trust, and at individuals winning the trust of others in the groups. They are very open about themselves, their interests, worries and concerns. They actively support each other by making every effort to "listen" and respond quickly. They offer to share the workload. They show commitment to the members of the group and to ensuring that the group sustains itself and carries out its job of production. These are all characteristics of people with a well developed senses of identity (Giddens, 1991). These groups could be characterised as being highly sociable.

In group two, being sociable is openly questioned by the significant member. She says she is not interested in socialising or in getting to know the others. She is only concerned with getting on with the job of producing a collaborative product. This admission has profound effects on the other members of the group, and as we have seen, acts to stop them being productive. At the same time this person says she feels like an outsider, and talks of the group being made up of 'cliques' and being apart from her.

Although liking others, socialising and getting on with them is not always a necessary criterion for successful cooperation (Axelrod, 1990), it does seem that in the context of an adult learning environment such as this, there is a real need for a sense of trust and community. Trust is created by people taking time to listen to each other and to nurture an atmosphere of caring (Giddens, 1991). This helps produce feelings of security within the members of the groups. In trustful situations people are more likely to take risks with their learning, to push themselves and others beyond their present boundaries. This can be highly developmental, as well as more likely to produce useful insights into the groups' learning processes.

## CONCLUSION

In this paper, I have attempted to examine issues of self-identity and group-identity in the context of e-learning groups, drawing on concepts and frameworks which are derived from the examination of individuals in modern society. This has, I think, been a worthwhile exercise, which has offered interesting and potentially useful insights into the ways in which e-groups function.

Collaborative e-learning groups exhibit complex dynamics and diverse learning processes and outcomes. Pedagogical designers who ask learners to work in such groups need to be aware of this. It is all too easy to design-in group work in the assumption that the technology itself will "look after" the work of the group. This is unlikely to be the case (Mantovani, 1994).

The issues discussed in this paper – the "reflexive organisation of self" as Giddens puts it – are characteristic of the period we are living in. Reflexive self-control and moral imperatives appear to be guiding principles for the members of these MEd groups. However, as we have seen, their application has different affects in each group. Seen from this viewpoint, this e-learning MEd is highly moral in its explicit educational philosophy and in its learning processes. It perhaps can be seen in this light: as an example of the need to be self-referent in a post-modern society. Identity – of self and of groups – is something to be creatively worked at in order to be sustained:

"The altered self has to be explored and constructed as part of a reflexive process of connecting personal and social change". (Giddens, 1991, p 33).

In the context of this MEd, it would seem that this applies equally to individuals within the groups, as well as to the groups themselves.

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