



University of  
**Salford**  
MANCHESTER

# Reflections on the use of blended learning

Heinze, A and Procter, CT

<b>Title</b>	Reflections on the use of blended learning
<b>Authors</b>	Heinze, A and Procter, CT
<b>Publication title</b>	
<b>Publisher</b>	University of Salford, Salford
<b>Type</b>	Conference or Workshop Item
<b>USIR URL</b>	This version is available at: <a href="http://usir.salford.ac.uk/id/eprint/1658/">http://usir.salford.ac.uk/id/eprint/1658/</a>
<b>Published Date</b>	2004

USIR is a digital collection of the research output of the University of Salford. Where copyright permits, full text material held in the repository is made freely available online and can be read, downloaded and copied for non-commercial private study or research purposes. Please check the manuscript for any further copyright restrictions.

For more information, including our policy and submission procedure, please contact the Repository Team at: [library-research@salford.ac.uk](mailto:library-research@salford.ac.uk).

# Reflections On The Use Of Blended Learning

Aleksej Heinze, a.heinze@salford.ac.uk, Chris Procter, c.t.procter@salford.ac.uk

## Abstract

*This paper reflects upon the experience of the delivery of a program at the University of Salford using blended learning. Facilitated by action research, it reports on the lessons learnt since the paper by Procter "Blended Learning in Practice" (Procter, 2003). Within the first cycle of action research we captured staff and students' opinions regarding the program, these are discussed in this paper. A number of lessons and conclusions are drawn, in particular, we argue for the need for theoretical underpinning and that Laurillard's Conversational Framework (Laurillard, 1993) is a valuable tool for blended learning, leading us to test the theory in practice over the coming two years. One of the main findings is the importance of transparent communication on a blended learning course.*

## 1. Introduction

Online learning has its drawbacks. One of the main disadvantages is the lack of social interaction which is taken as given in conventional settings. This creates a special need to motivate the less independent student (Salmon, 2002). The need for a compromise between the conventional face to face sessions and online learning leads us towards a new approach to teaching and learning, the so called hybrid or blended learning (Rogers, 2001).

The Department for Education and Training (DET) provides a definition of blended learning:

"learning which combines online and face to face approaches".

(DET, 2003)

Figure 1 visualises blended learning as defined above. There are overlaps between the pure

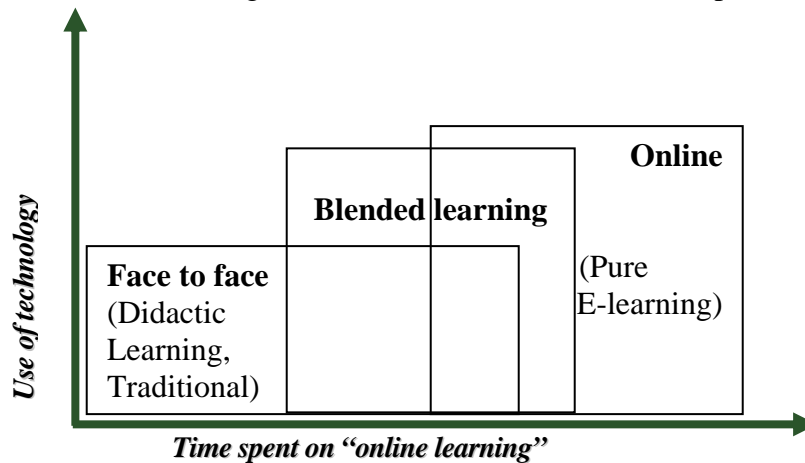


Figure 1. Conception of Blended Learning.

face to face sessions, which use some kind of online activities, and the “pure” online learning, which combines some kind of face to face event. The DET has the virtue of simplicity but does not capture the potential richness of it as expressed in the definition from (Procter, 2003: 3):

“Blended learning is the effective combination of different modes of delivery, models of teaching and styles of learning”.

This definition is more comprehensive, adding the dimensions of teaching and learning styles. In this paper we use theoretical frameworks, and real life data to help our understanding of blended learning in practice and the way it fits the above definition. As a case for our action research we focus on one year of a program on a part time course in the Information Systems Institute. This particular part time course was re-designed in 2003 to reduce the face-to-face contact time in order to accommodate the expansion of the online resources. Our evaluation draws on data from practical experience of staff and students on the course and educational theories such as the E-moderating model (Salmon, 2002) and the Conversational Framework (Laurillard, 2002).

## 2. Literature

We focus on the conversational framework because one of the main arguments of it is that learning should take the form of an interactive dialogue and no one medium is perfect for it – hence the need for a mixture of media. The e-moderation model is perceived to be valuable as it focuses on the introduction of online media onto the course.

### 2.1. E-moderating

Gilly Salmon’s e-moderating model (Salmon, 2000), (see Figure 2) describes a five-stage process, engaging the student with online communication technology. It is based on a principle that there are certain things that have to exist in order to achieve the effective operation of the learning via technology. One underlying issue here is the use of activities, to make students interact with each other and the E-moderator, rather than only accessing information such as handouts and presentation material.

One drawback of the E-moderating model is its prescriptive nature. Lisewski and Joyce (2003) argue that in practice there is a need for flexibility not provided by this model. The application of this model to blended learning is limited as the face to face aspect is not incorporated in this framework.

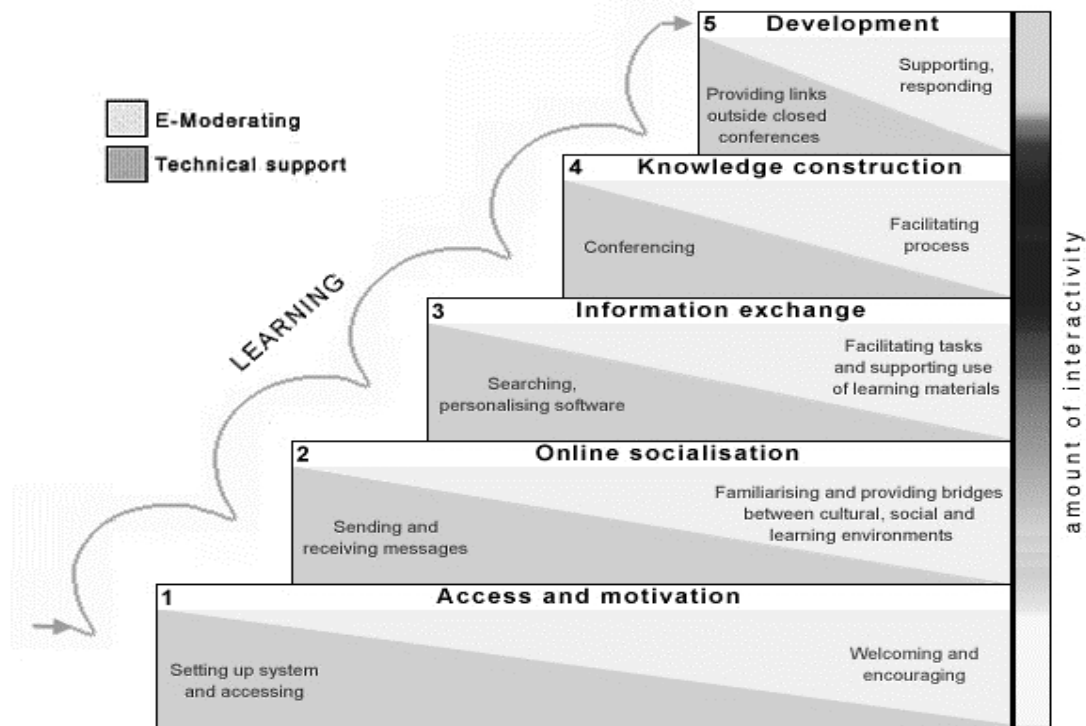


Figure 2. E-Moderating model. Reproduced with kind permission of Gilly Salmon

## 2.2. Conversational Framework

Diana Laurillard applied the underlying ideas of dialogue as proposed by educators and psychologists to teaching and learning such as Pask (1976) and Ramsden (1992). The conversational framework depicts the communication process which occurs between the lecturer and student in the development of student's knowledge. The 2002 version of this framework is shown in figure 3.

Figure 3 depicts the 12 stages that are recommended to take place when teaching students. This includes three cycles on which a student has the opportunity to communicate with the teacher. The teacher in turn has the opportunity to evaluate students' understanding at an early stage and correct it if there are any misconceptions. Using conversation as the basis for teaching, the learning relationship becomes more transparent and open to both student and teacher. The two important issues emerging from the conversational framework are:

- 1) The iterative dialogue nature of the model, requiring at least three engagements with one topic, meaning that a student will have the opportunity to improve on the same task
- 2) There is no one right media for delivery, each media has its own drawbacks

Subsequent criticism of the conversational framework includes the work of Draper (1997) who argues that there is lack of attention to the management of learning and the need for

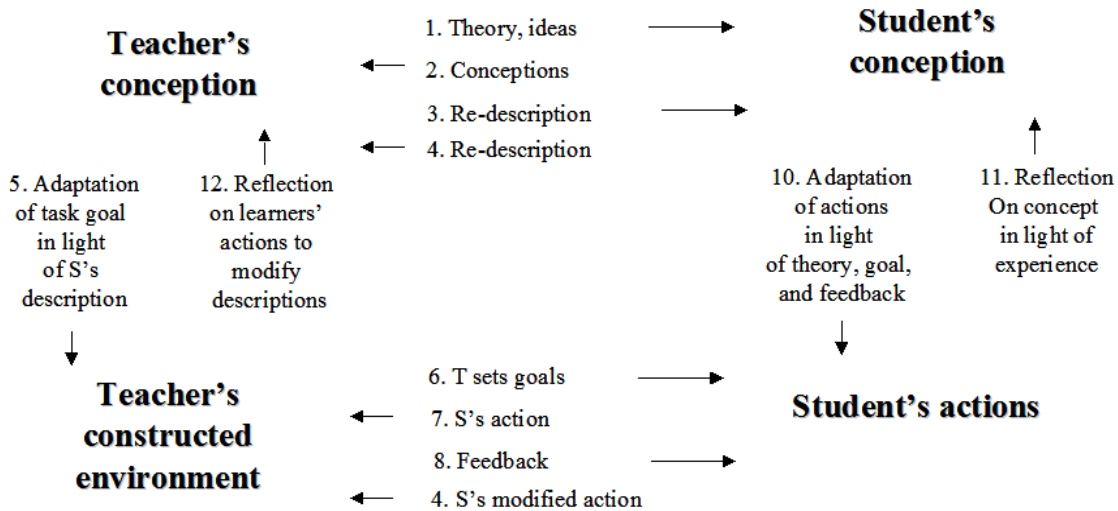


Figure 3. A framework for analysing educational media. Adapted after Laurillard (Laurillard, 2002)

learning negotiation between the students and the teacher. Other limitations include the application of conversational framework to online group based learning (Britain and Liber, 1999). Further critiques are discussed by Rosa Michaelson (2002).

### 3. Research method

An action research model has been adapted for the overall structure for our work. It offers a good combination of practical and theoretical enquiry; it is a means of generating and proving scientific theory (Baskerville, 1999, Mumford, 2001).

Lau advocates the definition of action research as provided by Hult and Lennung (1987):

(Action research) simultaneously assists in practical problem-solving and expands scientific knowledge, as well as enhances the competencies of the respective authors, being performed collaboratively in an immediate situation using data feedback in a cyclical process aiming at an increased understanding of a given social situation, primarily applicable for the understanding of change process in social systems and undertaken within a mutually acceptable ethical framework.

(Lau, 1997: 34)

Action research offers considerable potential for educational research, which can benefit both the students who take the researched course as well as those who research it. On the other hand, we are aware of drawbacks. These include the data validity and potential infinite length of research.

Seeing the action research model (Figure 4) some readers might be reminded of the Kolb's "Experiential learning cycles" (Kolb, 1984). Kolb divides learning into four stages: Concrete experience learning, Reflective observation, Abstract conceptualisation and Active experimentation. The similarities between the two are in the ideas of reflective practice and continuous improvement, in essence it is "learning by doing". Features, such as iteration (see arrows on figure 4.), structure for enquiry, combination of theory and practice, allowance for the researcher to take part in the change activity etc. have been perceived as important, hence the choice of action research.

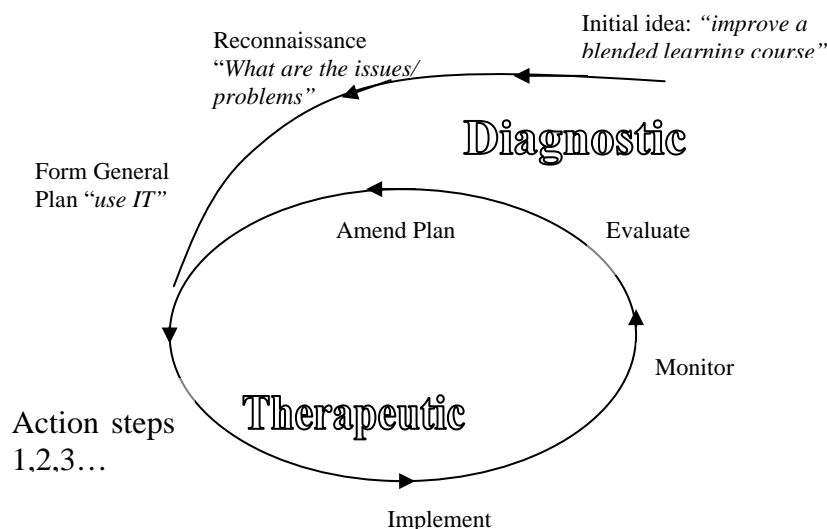


Figure 4. Lewin's cyclical model after Burns (Burns, 2000)

### 3.1. Data analysis rationale

Data was collected using focus groups and interviews. Every participant was issued with a consent form that outlines the research background and draws attention to the anonymity of the participants. A video recording of the interview/focus group was made and transcribed afterwards. The transcription was shown back to the participants for verification.

The objective of the data collection was to gather the real life staff and student experience of being part of blended learning course.

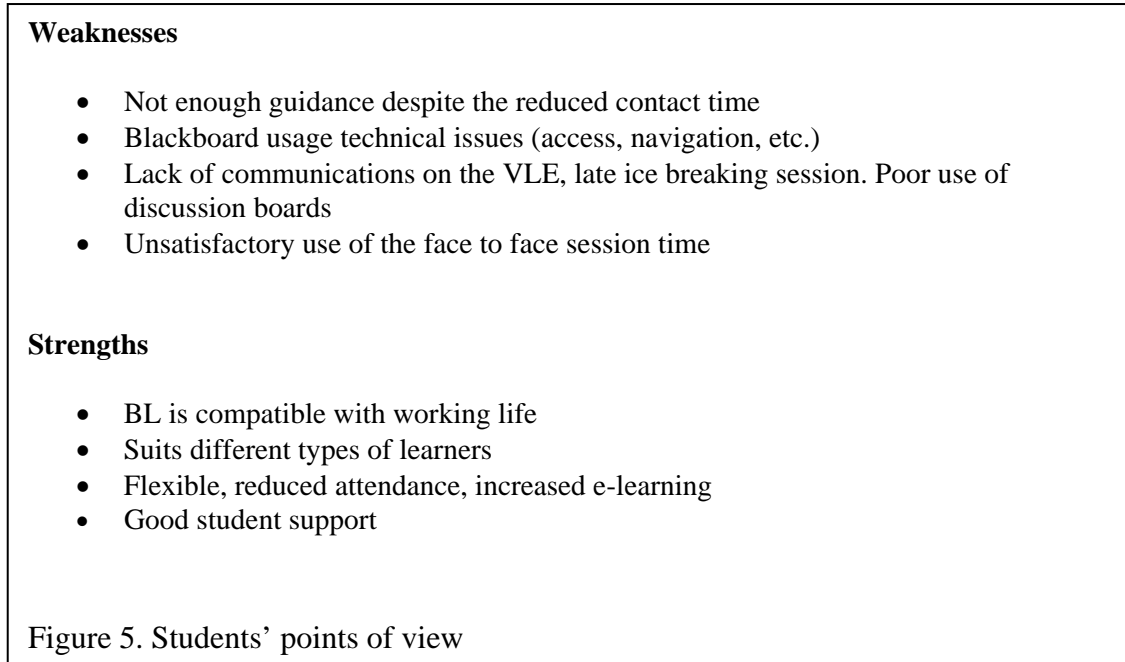
Having collected the data, we identify the main categories emerging and relate these to educational theories (Conversational Framework and the Five Stage model), and finally we draw conclusions on our understanding of blended learning.

### 3.2. Data sample

Students, predominantly mature, with widely diverse skills and experience, are studying on a part time course in information technology. This comprises of 4 modules per academic year and is supported by one lecturer and a graduate teaching assistant per module, who were available online, via email, telephone or for face to face support by appointments.

#### 4. First year evaluation/ reflection

The following issues were collected from student focus groups. Figure 5 illustrates some of the main course related strengths and weaknesses emerging from these groups. Below we will reflect on some of the weaknesses.



##### 4.1.1. Student guidance

Some students felt that they were not receiving enough guidance or structure to their learning, one said:

“Students don’t get ideas about reading round, etc – need some guidance outside of lecture to put what is learned into overall perspective which only emerged at the time of final assessment”

They wanted to have an exact list of activities that tells them precisely what is expected of them. A member of staff, who stated that part time mature learners require a more structured approach to material delivery, supported this claim. This could imply that blended learning is not welcome if it involves more student centred approach.

We believe that we are confronted with the “culture” of adult learners, who have been through the school system with the teacher playing the role of ‘sage on the stage’ and the students absorbing the knowledge.

##### 4.1.2. Communication on the VLE

In order to “break the ice” (Online Socialisation Step 2 of the E-moderating model - figure 2.), a free non-assessed discussion was facilitated. Some students felt very enthusiastic about it and posted very long and technical messages. The situation deteriorated once the same students had to contribute to an assessed discussion. At this stage the discrepancy of

the students knowledge/experience made some of them uneasy about their contribution. Comments on this were as follows:

People felt out of their depth by online discussion forums, which knocked confidence. [Need for] closer control from lecturers or graduate teaching assistants to calm people down. Discussion forum guidelines are good but are they observed? It would be nice to mention these issues in the induction where dos and don'ts for online discussions will be explained.... Long postings are skipped [by some people] and only short, sharp points are read and responded to. Long postings usually have people digressing – long winded.

...Due to recent events in my personal life and the frustration of not being able to connect to the internet at an earlier date, I have decided not to return to the course this year. I have already achieved [X] but seeing what my fellow students were contributing online with all their experience in IT where mine is mainly educationally based, quite frankly, scared me and made me realise that I could be letting my 'team' down...

One student gave the latter comment as one of the reasons for leaving the course. The issue of governance of online communications was researched and discussed by Bell and Heinze (2004). In practice this issue was addressed in the second semester:

- a) Lecturers were not using assessed online discussions (discussion boards are only used for student support)
- b) Online discussion board guidelines were introduced

However, the damage had been done and the following are comments from the second semester focus group:

“There is a lack of communication on VLE” and

“I don't like discussion boards because there is too much off topic communication”.

#### **4.1.3. Unsatisfactory use of the face to face time**

There are several comments that recur in both focus groups where students express their disappointment at the time usage during face to face sessions:

“Poor use of time in college” was a typical comment.

#### **4.2. Staff points of view**

The staff workshop/focus group was held at the end of the first academic year and was attended by academic staff involved with the course delivery, support and administration.

##### **4.2.1. Technological platform**

The standard technological platform (Blackboard) offered this course a robust, centrally supported and comprehensive infrastructure. However, there was the aspect of being overwhelmed by the functionality:



“I think that one of the things that I would say is that when I first looked at the VLE last year I was a bit horror struck at how much functionality there was there.”

This was perceived as an opportunity rather than a threat:

“...we are one year into it, and we are all on a learning curve aren't we, it's just, eventually you will just say oh it can do this and it can do that and you just build on this I suppose.”

#### **4.2.2. Student centred/ increased flexibility**

Staff believed that the course was indeed student centred, and that there was a higher level of flexibility. However, they also believed that students abused the flexibility issue:

I asked them to read things... they weren't doing it. ... Well that is then the nub of the course, it is the expectation of the student of what they [students] are expected to do [by a student centred course]. If they [students] think by coming in half as many hours a week as a traditional part time course it is to do half as much work, we haven't really achieved what we were initially trying to achieve. What we are expecting them to do is quite a bit more on their own, aren't we? Using whatever resources we provide them.

One of the suggestions to resolve this issue was by assessment:

...”So that is carrot and stick then isn't it, just the same with the [full time] undergraduate students, they won't do it unless you make it assessed.”

Staff also mentioned that the induction was neither successful in technically equipping the students nor socialising. Too many induction issues were left to students to discover on their own.

#### **4.2.3. Facilitation of blended learning**

Some of the members of staff had attended an e-moderating course, which provided them with some theoretical background, however this was not used to its full potential. Generally there was no consistency between the lecturers and the way they interpreted blended learning on the individual modules. Simply using Blackboard instead of web pages to deliver the handouts and presentations and combining it with discussion boards resulted in some staff stating that we were not really doing any e-learning on the course:

“At the moment the VLE is a communication and support tool, it is not a learning tool.”

“... at the moment it is used as a central repository, it is keeping everyone together, especially the discussion board.”

In respect to the face to face sessions, lecturers outlined their actions as follows:

...I tended to do ... a formal lecture when they came in, not every time but that is what I ended up doing, because it seemed to be the only thing that worked. I found that when I asked them to read something and then expected them to come in and be ready to discuss it, they hadn't read it they just haven't done it. So you had to tell them things before they could discuss it.

## **5. Discussion and conclusions**

### **5.1. Communication**

Communication emerged as one of the major issues in the first academic year (i.e. 4.1.1.; 4.1.2). We believe that implementation of aspects related to aspects of the Conversational Framework will be able to address the difficulties with communication. This is because central to the concept of it is the dialogue between the student and teacher, if a continuous dialogue is established, misunderstandings are more likely to be pre-empted and learning facilitated.

Figure 6 illustrates the way the communication channels, available within our environment, can be ordered in respect of their Efficiency and Effectiveness.

In this model we grade options to both staff and students to communicate on channels available on the course. Most efficiency is achieved online on discussion boards, and maximum efficacy is achieved in the face to face sessions. For example greater efficiency can be achieved through encouraging students to support each other through discussion boards, leaving the resolution of the more challenging issues to the face to face sessions with members of staff. This means that students don't have to wait until they have a chance to speak to a member of staff, but can get help and continue with their work. If a question and/or the answer are complex, it is better to use face to face sessions, which have greater efficacy, and are "richer" (Daft and Lengel, 1984), the same applies to issues that are sensitive and are best discussed in person. This emerges from students' comments that understanding/learning is easier in class (using visual, audio and body language) than through online discussions (textual communication).

Taking into account the E-Moderating model as proposed by Gilly Salmon, we can see some parallel developments emerging that urge us to think about a more careful student induction. In particular the student induction to the communication tools available, would benefit from an approach that introduces the discussion boards and the way these have to be used by individuals for communication. It would also be of benefit to encourage the use of appropriate media by suggesting good practice examples. However, we contend that one advantage that Blended Learning has over E-learning, is the participants being able to socialise face to face.

In relation to learning styles, a reliance on the conversation within the learning process may disadvantage those students who are not keen on discussions. Discussions, however, are an important component of Key Skills (Verbal Communication), which in turn are essential for student employability. Adoption of the conversational framework would require interactive lectures/tutorials that are extended to online discussions. Students will be expected to do more reading and preparation outside the face to face sessions and interact with their peers online, discussing for example answers to some homework questions.

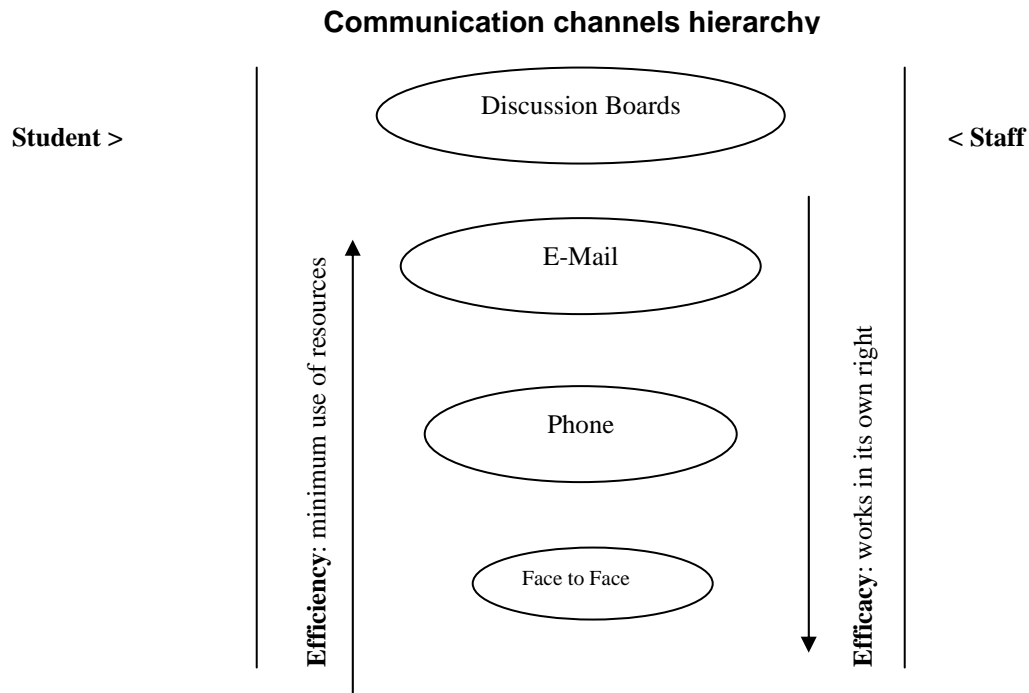


Figure 6. Communication channels on a course

## 5.2. Experience

There was a lack of experience amongst both staff and students with regards to a blended learning course. It is our opinion that being able to see both the practical side of the course and further reflect upon the course is a major step forward for our understanding of blended learning. We believe that the advantages offered by action research have materialised, and have provided an ethical framework for co-operation of staff and students, encouraging the reflective practice to take place. Being exposed to the theory i.e. through staff training, cannot replace experience, hence we will continue with our action research framework.

We believe that it is also important to maintain a team culture that enables communication between members of staff. It was the sharing of the experience and group reflection upon the course that made our progress possible. Several issues have been agreed as being important. These include the management of expectation where students will be expected to do more independent learning by all members of staff who will adopt the same approach. Within the E-moderating model greater attention will also be paid to enrolment and induction processes.

## 5.3. Conversational framework

Our findings are limited to one year of experience (see 3.1.). However, because the issue of communication is so interleaved with the other aspects of Blended Learning such as different media and modes of delivery, we believe that it is possibly one of the vital

components of a blended learning course. Therefore we could add communication to our definition, which can be based on the Conversational Framework.

#### **5.4. Blended learning**

An initial definition of blended learning encompassed the need for an effective combination of different modes of delivery, methods of teaching and styles of learning. In the light of the above findings we believe that the definition would have to be either altered, or we will not be able to refer to our course as a “true” Blended Learning course. The course has room for improvement. We think that the Conversational Framework and the E-Moderating model are theories with potential and we hope these will add the necessary structure to our course; this will be tested in the coming years.

An appreciation of communication is so strong on a blended learning course that we feel that a new definition can therefore read as follows:

*Blended Learning is learning that is facilitated by the effective combination of different modes of delivery, models of teaching and styles of learning, and founded on transparent communication amongst all parties involved with a course.*

#### **Acknowledgements**

We would like to thank staff and students of the First year IT degree in 2003/2004 academic year for their cooperation.

The course received support through the European Social Fund project “Flexible IT for workers”.

#### **References**

- Baskerville, R., (1999) Investigating Information Systems with Action Research, in *Communications of the AIS*, 2(19).
- Bell, F. and Heinze, A., (2004) With regard to respect: a framework for governance of educational virtual communities, in *International Journal Web Based Communities*, 1(1), 19- 34.
- Britain, S. and Liber, O., (1999) A Framework for Pedagogical Evaluation of Virtual Learning Environments, In *Report 4/IJISC Technologies Applications Programme*, Manchester.
- Burns, R. B., (2000) *Introduction to research methods*. Sage Publications: London.
- Daft, R. L. and Lengel, R., (Eds.) (1984) *Information Richness: a new approach to managerial information processing and organisational design*, JAI Press, Greenwich, Connecticut.
- DET, (2003) *Blended Learning*, NSW Department of Education and Training.
- Draper, S. W., (1997) Adding (negotiated) learning management to models of teaching and learning, Vol. 2004 ITFORUM.

- Hult, M. and Lennung, S., (1987) Towards the Definition of Action Research: A Note and Bibliography, in *Journal of Management Studies*, 17(2), 241 - 250.
- Kolb, D. A., (1984) *Experiential Learning: Experience as the Source or Learning and Development*. NJ: Prentice Hall: Englewood Cliffs.
- Lau, F., (1997) A Review on the Use of Action Research in Information Systems Studies, In *IFIP 8.2*.(Ed, A. Lee, J. L. a. J. D.) Chapman & Hall, London, pp. 31 - 71.
- Laurillard, D., (1993) *Rethinking university teaching: A framework for the effective use of educational technology*. Routledge/Falmer: London.
- Laurillard, D., (2002) *Rethinking university teaching: A framework for the effective use of educational technology*. Routledge/Falmer: London.
- Lisewski, B. and Joyce, P., (2003) Examining the five stage e-moderating model: designed and emergent practice in the learning technology profession, in *Alt-J*, 11((1)), 55-66.
- Michaelson, R., (2002) in *The International Journal of Management Education*, 2(2), 15 - 29.
- Mumford, E., (2001) Advice for an action researcher, in *Information Technology & People*, 14(1), 12-27.
- Pask, G., (1976) Conversational techniques in the study and practice of education, in *British Journal of Educational Psychology*, 4612 - 25.
- Procter, C., (2003) Blended Learning in Practice, In *Inaugural Education in a Changing Environment conference* University of Salford, Salford.
- Ramsden, P., (1992) *Learning to teach in higher education*. Routledge: London.
- Rogers, P. L., (2001) Traditions to Transformations: The Forced Evolution of Higher Education, in *Educational Technology Review*, 9(1).
- Salmon, G., (2000) *E-Moderating: The key to Teaching and Learning online*. Kogan Page Limited: London.
- Salmon, G., (2002) *E-Tivities: The key to active online learning*. Kogan Page Limited: London.