

DEVELOPING ON-LINE COMMUNITIES: PERSONAL GOALS, ROLES, RELATIONSHIPS AND CRITICAL INCIDENTS.

Alison Hudson and Richard Pountney
Sheffield Hallam University

In this paper we discuss outcomes of research into the roles and relationships that have developed in an international Masters programme and the concerns, tensions and difficulties that can arise as illustrated through a number of 'critical incidents' and the analysis of student 'reflections'.

This paper focuses on the learner's viewpoint in the Digital Multimedia Application module and builds on ongoing research (Hudson, Hudson and Steel, 2002) by using data collected from a variety of sources which include end of module questionnaires, focus groups and the analysis of critical incidents.

In designing and planning the module considerable emphasis has been placed on enabling collaborative activity in multinational teams. In relation to this aspect we share the general perspective offered and the distinction between co-operation and collaboration made by Lehtinen et al. (1999).

The module enables the students to gain a critical appreciation of the development process and also a better understanding of the potential and limitations of Digital Media Applications. Student activity includes working online in international project teams to produce a DMA prototype. The activity is used as the basis for personal reflection, the outcomes from which are compiled into a digital portfolio for assessment.

The paper draws on current thinking associated with on-line communities of learning and emphasises the role that virtual learning environments can play to support, facilitate and encourage communal aspects of study. It explores the relationships that develop around an 'orchestrated' online project-based activity and the role of the tutor in dealing with negotiation of meaning and the clarification of goals. This aspect of the tutor's role has been found to have a direct bearing on student satisfaction and experience of learning.

Finally it presents some reflections on the way that pedagogical practice can be enhanced to achieve the optimum environment for collaborative learning and teaching.

INTRODUCTION

The context for this study is the International Masters Programme in E-Learning Multimedia and Consultancy <http://www.shu.ac.uk/msce-learning/>. The programme involves an active partnership between Arnhem-Nijmegen University of Professional Education in the Netherlands and Sheffield Hallam University in the UK. It is embedded in professional practice and seeks to develop the profile of the ‘problem solver’/team coordinator at the interface of pedagogical, technological and cultural dimensions of development.

The framework for the programme is founded on a socio-constructivist perspective of teaching and learning that places emphasis on communication, interaction and collaboration. The theoretical framework as a whole owes its influence to the ideas of Vygotsky (1962 and 1978) and Lave and Wenger (1991). This framework has also influenced the approach taken to associated research which is underpinned by an emphasis on the social aspects of computer mediated learning and the affordances of technology. It is framed within a Virtual Learning Environment (VLE) and has an international student cohort and a tutor team from partner universities. The programme has been designed to integrate online learning, local studies and independent learning and emphasizes Personal and Professional Development Planning and the importance of peer and formative assessment practices. A project and team-based approach towards learning underpins each module which involves a gradual shifting balance from more directed and supported to more independent learning through the course of each module.

CONTEXT

The specific context for this case study is the second module of the programme the Digital Media Applications (DMA) module. This module uses a range of electronic communication, on-line resources and on-line support and makes heavy demands on the Virtual Learning Environment.

The module aims to enable students to develop an overview and a critical appreciation of the development process and the potential and limitations of Digital Media Applications (DMA). It focuses on developing up to-date understanding and knowledge in the area of DMA. The module enables the students to gain a critical appreciation of the development process and also a better understanding of the potential and limitations of Digital Media Applications through the development of practical skills and critical analysis and evaluation.

The main activity involves working online in international project teams to produce a DMA prototype and forms the basis for personal reflection, the outcomes from which are refined and integrated into a digital portfolio. The portfolio presents the following aspects; a team report including the DMA prototype and the evaluation of the prototype; a personal evaluation of the development process with evidence of individual contributions to the team effort and a personal critical reflection on the learning process with reference to DMA and ICT developments.

The digital portfolio is the main means of summative assessment in the DMA module. An aspect of the portfolio and of the learning process is an ongoing reflective diary that students post in the open learning environment. It is intended as an aid for systematic reflection and as a tool for linking theory with practice.

The reflective diary is used in the DMA module as a means to support formative and summative assessment. The students are asked to provide an account based on personal reflection on individual roles within the team producing the DMA prototype. It involves reflection on the processes of planning, time management and the appropriateness of approaches and techniques to DMA development. By reflecting systematically on experience at an individual level, the aim is to help link theory with practice at the social level. This approach is currently being developed systematically across the programme through a process of Professional Development Planning that is focused around the overall aims of the programme as a whole and the anticipated learning outcomes for each module.

APPROACHES TO RESEARCH

Module questionnaire and focus group

At the end of each module students are asked to fill in an on-line questionnaire. In addition they are invited to contribute to an end of module discussion with their tutors at their local centre. The questionnaire is a means of collecting data on the student experience and seeks to investigate personal context and expectations, guidance and support, feedback from tutors and peers, the international dimension, student satisfaction and the importance and meaning of being part of a learning community. Over a four year period all students have indicated that they felt part of a learning community. When asked what helped to create the community the students emphasised the importance of practical considerations, the social dimension and the role of the tutor in ensuring the best possible conditions for learning. The following comments from students have been clustered under emerging themes:

Learning design and the role of the tutor

“in my opinion the prototype assignment did it...”

“In order to initiate really collaborative learning, one must have good assignments. One cannot exaggerate the importance of good assignments in this context...”

“..... we now have really collaborative learning. I guess that this is especially the result of the assignment: it is really group-based.”

“tutors were well organised, a positive and friendly atmosphere was created”

“the feeling that tutors kept an eye on how things were going”

“the importance of clear aims and objectives, good communication and support”

Communication and Interaction

“my frequent and significant input into group activity”

“giving and receiving feedback”

“regular synchronous chat”

“feedback from our peers”

“discussion with other students”

“really useful feedback from our peers.....on our project plan”

Collaboration

“it was really group based, good collaboration between students and tutor”

“common responsibility, working together on assignments and mutual help”

“open and positive attitude among group members and with tutors”

“the feeling that no question is a silly question”

“my frequent and significant input into group activity”

“strong social element in the working process”

In recent evaluations students have been less concerned about issues associated with the Virtual Learning Environment. Although 80% of learning activity is supported through a VLE, issues and anxieties associated with the VLE are negligible. The VLE has become an essential but transparent infrastructure supporting learning.

Reflective diary/work log

Analysis of the diary entries is one technique used for accumulating data as part of an action research approach. Having agreed a statement of research ethics at the outset of the project, the diaries were used as a source of data collection. Interrelated and overlapping themes emerged; these were: listing of process; culture and language; communication and collaboration. Other significant threads that emerged were around the areas of action and activities, obligation and identity, Hudson, B., Hudson, A. and Steel, J. (2002).

The various ways in which the diaries have been used throughout the module tells us quite a lot about the learning potential of the diary, especially within the context of a collaborative community of learners. What we see in the diary entries are snapshots of the students' learning experiences, which are in turn utilised as study aids. The reflective component of the diary is one that has attempted to encourage students to think and re-examine their actions and activities, their obligations, and their sense of identity as students working together within this international and virtual context. The overlap or interconnectedness of these meta-themes throws up other issues that span across the content of the learning diaries.

The way in which the diaries were used reflects the range of learning opportunities that are provided in the use of such a strategy. The sense that a diary is generally perceived as a personal and private thing, yet in this context was available for everyone to see and comment on, provided an interesting insight into how the diary was perceived at different times, and the specific functions it performed. The value of being able to air one's concerns or grievances to the whole group, in a sense not only provided space for a release of frustration, but was instrumental in prompting other team members and tutors to engage in discussion about the problem or attempt to clarify issues. The diary thus performed a variety of different functions at different stages of the working life of the team, depending on the progress of the team. The reflective aspect of the diary seemed to be more evident when there was a difficulty of some sort that the student was attempting to overcome. Thus the diary seemed to be being used as a means not only for reflecting, communicating and recording processes, but also as a release valve.

CRITICAL INCIDENTS

Thinking through the whole complex of issues involved in any single teaching and learning interaction requires careful observation and attention to detail on the part of tutor and learner (Gibbs, 1994). Consideration of the means of change, planning for change and action for improvement are critical and here, reflection and action are part of the same process (Rowland, 1994). The approach taken to teaching and learning in this module centres on the development of online communities of learning with an emphasis on the relationships that this requires and engenders. Here, the reflective diaries/work logs form part of a reflective process that might develop understanding of the critical events and issues arising during the course of learning (Schon, 1987). The postings might contain notes on events, actions or episodes, and things which are experienced or simply reported as having happened (the analysis and synthesis of this takes place later in the module in the portfolio).

These might include reports of unexpected (sometimes forced) changes in group dynamics (e.g. students leaving the course, or absence due to illness or holidays). These events or critical incidents can include any noteworthy event and might also involve changes to procedures, routines or patterns of working. The extent to which these are challenges or difficulties will vary from incident to incident, but it is clear that these are real and problematic for the learner, presenting the need for a solution (or in some cases, a resolution).

In an approach such as that taken in this module the reflective diary/work log helps the tutor team to anticipate critical incidents and to some extent there is seen to be several aspects / stages of students' work that increases the potential for critical incident:

- i) forming groups
- ii) deciding on roles and responsibilities (and the fluid / changing nature of this)
- iii) developing the prototype (high potential for Critical Incidents of a technical nature – e.g. problems with server space)
- iv) completing the portfolio work for assessment

The use of the reflective diary/work log increases the transparency / level of visibility of problems as they occur and for the student to share publicly their concerns. Reviewing and responding to critical incidents is a way of reflecting on the causes and impact of unusual incidents in teaching and learning practice. The aim is to highlight the learning needs of individuals or the team and then incorporate this learning into everyday practice. However, while the experience of

the tutor team might assist in anticipating difficulties that students face these are different and are unique to each group. The task of the tutor to help this is fundamental to the approach taken.

CONCLUSION

Lehtinen et al. (1999) refers to the importance and power of collaborative group working and the use of technology-aided learning environments and makes the distinction between cooperation and collaboration.

“The distinction is based on different ideas of the role and participation of individual members in the activity.....”

“...collaboration involves the mutual agreement of participants in a coordinated effort to solve the problem together.”

This importance of collaboration is emphasised in student feedback.

“I am wondering in what way more collaboration is going to develop in coming units, Is collaboration a result of building a community or is a community built on the need of collaboration? The need to be each other’s teachers and learners? And where does this need of collaboration come from?”

“My communication skills and understanding of team developments have vastly improved during this module and I now see group activity as something other than a collection of individuals working on the same project.”

“we now have really collaborative learning.”

This module provides a pedagogical and technical framework to enable collaborative learning and teaching. It presents the students with a challenging and complex group based activity. It demands social interaction to accomplish the assignment and emphasises reflection on the process. The assessment process, which requires reflection and the presentation of evidence through individual eportfolios, provides a framework to support collaboration and group activity and personal and individual approaches to learning.

Through systematic evaluation by students and tutors it has become clear that the pedagogical practices developed in this module have been fundamental to achieving

the aim of establishing on-line communities of learning. Our experiences resonate with the perspectives offered by Salomon and Perkins (1998) and Cole & Engestrom, (1993) of a socio-cultural conception of learning as a collective, participatory process of active knowledge construction, emphasizing context, interaction, and situatedness.

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