

## Proposal for a Symposium

### *Approaches to Developing a Theoretical Understanding of Networked Learning: From personal inquiry to generic coding*

The purpose of this symposium is to provide an opportunity to engage in a discussion of theoretical frameworks for understanding and methodologies for representing and investigating the nature of networked learning, grounded in instantiations of practice and experience of studying, teaching and researching networked learning.

The symposium brings together the work of five different researchers in this area, all of whom are developing their understanding of networked learning through analysis of networked learning interactions and/or from experiential accounts of participating in networked learning.

Specific aspects focused on: methodology; theoretical frameworks; learner and tutor experience; communication for learning; and participation in networked learning communities.

The symposium will consist of the presentation of short papers, followed by brief focused discussion. In the last half-hour of the symposium, the discussant will summarise and lead an open-floor discussion of identified key issues.

#### Presenters

Dr Glynis Cousin, Coventry University, [g.cousin@coventry.ac.uk](mailto:g.cousin@coventry.ac.uk)

Ms Helen Chappel, University of Glasgow, [hchappel@hol.gr](mailto:hchappel@hol.gr)

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Ms Sue Tickner, University of Glasgow, [S.Tickner@udcf.gla.ac.uk](mailto:S.Tickner@udcf.gla.ac.uk)

Chair: This role will be shared between presenters

Discussant: Professor David Jenkins, University of Coventry

Length of symposium: 3 hours

Abstracts

Contribution to Symposium on *Approaches to Developing a Theoretical Understanding of Networked Learning: From personal inquiry to generic coding*

Virtual Community or Virtual Playground

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Symposium Paper

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Number of words: 249

Five key words: virtual communities of practice, power, inclusion/exclusion, learner accounts, 'thick' descriptions

## VIRTUAL COMMUNITY OR VIRTUAL PLAYGROUND?

This paper presents a conversation with those researchers into online learning who are interested in assessing evidence of virtual communities of practice (Wenger, 1998) in electronic learning environments. The nature of contributions to the online discussion facility for various modules across Coventry University will be explored against the respective metaphors of 'community' and 'school playground'. The aim of such an exploration is to examine the explanatory capabilities of these metaphors particularly with respect to issues of power, inclusion, the formal/informal and the social and the educational. The metaphor of playground is mobilised to address ways in which discussion forum space can be colonised by specific groups of learners and the impact this has on 'outsiders' and on the tutor.

In addition to the raw data from the discussion forum, evidence from learners' accounts of this facility will be included in the analysis. This inclusion is presented as important in the light of the difficulties of a reliance on a cyber ethnography that treats the sum total of discussion contributions as a 'field' in the anthropological sense. In showing diverse data sets and in considering the emergent metaphors being used in online research, issues will be raised about the ways in which 'thick' descriptions (Geertz, 1993) can be generated about what is happening inside electronic learning environments.

Geertz, C. (1993). - The interpretation of cultures: selected essays, Fontana Press, London

Wenger, E. (1998) Communities of practice : learning, meaning, and identity. - Cambridge University Press

Contribution to Symposium on *Approaches to Developing a Theoretical Understanding of Networked Learning: from personal inquiry to generic coding*.

Elements of on-line learning – a generic coding set

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Symposium Paper

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No. of words: 315

Key words: computer mediated conferencing, qualitative methodology, interactional analysis

## Elements of on-line learning – a generic coding set

This paper outlines one way in which we might characterise teaching and learning behaviours for co-construction of knowledge in collaborative on-line learning environments.

An 'elements' approach was adopted. This approach to qualitative coding seeks to define a very small set of elements which allow, by their various possible combinations, a richly characterised picture of the learning process to emerge. Particular characterisations become apparent through study of which elements combine with which others in various messages. This approach allows complex qualitative insight into the character of message within (fully contextualised) on-line learning events. It is supported by the availability of improved software for qualitative research – in particular, NVIVO.

The six elements proposed in this paper are derived from psychological, educational and socio-cultural theory, principally from Piaget, Vygotsky, Wenger and Crook. They are informed by reference to work by various researchers including Anderson, Gunawardena, Tolmie, McAteer, Lalley and deLaat. The proposed codes are 1) Organisation, 2) Dissemination, 3) Divergence, 4) Convergence, 5) Framing and 6) Facilitation.

Examples of the coding scheme in use in three different learning environments will be provided, with open discussion of the advantages, and the disadvantages, of the methodology. Interaction with the conference audience will be actively sought, and if space permits (and the exercise is of interest to those present) a short exercise in coding and cross-coder compatibility will be essayed as a part of the session.

It remains to be seen whether sufficient understanding of the character of on-line learning can be derived solely from this source. Further work involving situated participant reflection is being conducted by the SCROLLA research group with colleagues from the universities of Sheffield, Strathclyde, Loughborough and the UK Open University. Further work is also in progress with relation to appropriate quantitative description of wider patterns emerging from cross-contextual data derived from this approach, as well as deeper investigation of theoretical frameworks for understanding on-line learning environments.

### References:

- Anderson, T., Rourke, L., Garrison, D.R., Archer, W. (2001) 'Assessing Teacher Presence in a Computer Conferencing Context' *Journal of Asynchronous Learning Networks* 5(2)
- Gunawardena, C.N., Anderson, T. (1997) 'Analysis of a Global Online Debate and the Development of an Interaction Analysis Model for Examining Social Construction of Knowledge in Computer Conferencing', *Journal of Educational Computing Research* 17(4) 397-431

Lally, V and De Latt, M (2001) Cracking the Code, Learning to Collaborate and Collaborating to Learn in a Networked Learning Environment. University of Sheffield, Centre for Educational Studies.

McAteer, E., Tolmie, A. and Lally, V. (2001) 'Characterising On-Line Learning Communities' ALT-Conference on Changing Learning Environments, University of Edinburgh, Scotland

Contribution to Symposium on *Approaches to Developing a Theoretical Understanding of Networked Learning: From personal inquiry to generic coding*

Understanding Networked Learning: A Personal Inquiry into an Experience of Adult Learning On-line

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Symposium Paper

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Number of words: 411

Five key words: Personal inquiry, identity, community, reciprocity, literacy

Personal inquiry involves the researcher in a conscious and critically reflective investigation into an area of the researcher's own experience. Such a process is founded on the assumption that personal experience is a valid source of knowing and that critical reflection is an essential process in this coming to know. The critical element of the reflection involved brings a rigor into the process which would otherwise risk falling into self-deception and self-absorption. The understanding gained through such a process both informs the researcher's personal understanding and research purpose, and forms a framework within which to further investigate the issues raised outwith the realm of the personal (Marshall, 1999; Marshall, 2001).

This paper reports on a personal inquiry I undertook into the experience of networked learning through participating as a student on an on-line adult education course on Scottish Literature. My purpose was to both pursue an intrinsic interest in the subject of the course and to provide myself with an experience through which I could begin to develop a grounded understanding of the networked learning process.

Critical reflection on my experience of participating in this course has led me to identify four areas which were of particular significance to me. These areas are: 1) the Presentation of Self – issues of anonymity and identity; 2) the Invisible Other – issues in becoming a member of a virtual community; 3) Loose Ends – issues of response and maintaining conversational threads; and 4) the Weight of the Words – issues in reading and writing on-line text, developing on-line literacy.

In the presentation of this paper, I will therefore:

- 1) Provide a brief overview and rationale of the process of personal inquiry.
- 2) Describe the particular design features of the course participated in.
- 3) Examine each area identified, firstly in terms of its experiential grounding and secondly, in terms of the implications this has for a theoretical understanding of the networked learning experience. In doing this, I will draw on the work of Goffman and the Presentation of Self in Everyday Life, of Derrida and the idea of community, and of Gergen and the idea of reciprocity.
- 4) Draw conclusions from this discussion for an understanding of networked learning and the pedagogical challenges it poses.

Marshall, J. (1999) 'Living Life as Inquiry', *Systemic Practice and Action Research*, Vol 12, No 2, pp 155-171.



Marshall, J. (2001) 'Self-Reflective Inquiry Practices', in P. Reason and H. Bradbury (Eds.) *Handbook of Action Research: Participative Inquiry and Practice*. London: Sage, pp 434-439.

Contribution to Symposium on *Approaches to Developing a Theoretical Understanding of Networked Learning: from personal inquiry to generic coding*.

Characterising communication within networked learning environments

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Symposium Paper

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No. of words: 315

Key words: communication, theoretical frameworks, socio-cognitive conflict, expert guidance, social glue, situated participant reflection

## Characterising communication within networked learning environments

A central feature of on-line learning environments can be argued to be the presence and extent of communication, in genuine sense of transactive exchange, via computer. This stands in contrast to more didactic, or at least tutor-controlled dialogue that takes place in traditional learning environments (refs). On-line environments allow 'more heterogeneous discourse forms, more 'whispering' among the students". Since their inception, there has been sense amongst those involved in on-line learning environments that this communication is an important, possibly crucial part of learning process, and thus a corresponding desire to pin down both its characteristics and its functions.

Work over past decade or so provides a very clear idea of what types of dialogue are important in learning situations, derived initially from theories of Piaget and Vygotsky and followers of each, but subsequently fleshed out in detail via considerable amount of empirical research on interaction and learning, providing a well-developed framework that is grounded in both theory and data. At core of this are two basic processes: socio-cognitive conflict and expert guidance. Recent empirical work indicates which obtains to greater extent in any instance is a function of various factors such as age, familiarity with subject matter, friendship etc. Basically the more familiar participants are with resolving conflict in given circumstances, the more likely they are to make new constructions jointly 'on the fly'.

Central point for current purposes, though, is that these approaches pinpoint specific types of interactional turn as symptomatic of learning, and the importance of these has been validated by demonstrating that they are predictive of actual learning outcomes..

One further strand of dialogue which has been noted to be important by *socio-cultural, situated learning and activity theorists* working in the Vygotskian tradition. This dialogue relates to what might be called the 'social glue' of interaction: strategies employed for management and maintenance of learning community activity.

Where does this leave us with respect to the investigation of productive communication in on-line learning environments? At the very least these strands of research may provide us a common framework or language for specifying the characteristics of on-line learning environments under different conditions. This is a crucial first step towards discerning in systematic fashion the influences associated with greater and lesser incidence of productive interaction. However, this is not sufficient in itself to move things forward, since we also need to agree how this framework is to be used in the effort toward *understanding*, if not *predicting*, communicative behaviour and learning development within on-line education.

We argue that that the 'physical' record of communication is in itself too flat to be informative about processes driving communication, effective and otherwise, in educational settings – participants' commentary is needed to make explicit the subjective effort after meaning that is central to communicative process.

A common approach across work of Vic Lally in Sheffield and the Glasgow/Strathclyde/Edinburgh/Loughborough group was the examination of on-line communication via use of 'critical incidents' method. In this, in addition to examination of the communication records themselves, participants' recall of activity is also collected, stimulated by presentation of records of their communications at points pre-selected by researcher as being of interest (e.g. tutor interventions) or else identified by participants themselves as being of significance. Analysis of communications is then based on both direct records and situated participant reflection on what they were thinking/feeling/ attempting to do at the time.

This paper develops work undertaken by the members of the research group with colleagues over the past year, on coding and characterisation of computer-mediated conference archives. It takes groups of students and tutors back to their 'virtual classrooms' to elicit comment and explanation, with a second encounter where the initial 'sense' made by the researchers is shared and criticised.

#### References:

Bruner, J.S. (1985). Vygotsky: a historical and conceptual perspective. In J.V. Wertsch (Ed.), *Culture, Communication and Cognition*. Cambridge: Cambridge University Press.

Clark, H.H. & Wilkes-Gibbs, D. (1986). Referring as a collaborative process. *Cognition*, **22**, 1-39.

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Tolmie, A., Thomson, J.A. & Foot, H.C. (2000). The role of adult guidance and peer collaboration in child pedestrian training. In R. Joiner, K. Littleton, D. Faulkner & D. Miell (Eds.), *Rethinking Collaborative Learning*. pp.101-118. London: Free Association Books.

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Wood, D. (1986). Aspects of teaching and learning. In M. Richards & P. Light (Eds.), *Children of Social Worlds*. Cambridge: Polity Press.

CONTRIBUTION TO SYMPOSIUM ON *Approaches to Developing a Theoretical Understanding of Networked Learning: From personal inquiry to generic coding*

TITLE: Charting Change in Networked Learners: What can we learn about what they learn?

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SESSION TYPE: Symposium paper

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5 KEYWORDS: Change, learning, development, social construction

## **Charting Change in Networked Learners: What can we learn about what they learn?**

Despite its shortcomings as a comprehensive guide to the activity in an online course, the conference transcript nevertheless remains one of the most distinctive and potentially useful features of networked learning (as opposed to face-to-face, or other form of learning which does not record student interactions). Through the transcript, alongside other documentary evidence, it is possible to chart the development of learners and discern changes in the way they acquire new concepts, present themselves and their views, construct socially supportive and collaborative groups and develop their skills, from the beginning to the end of a course.

This paper will explore the process of students' development in networked courses. It will examine the nature of the developments and identify some of the factors that contributed to initiating the change, drawing out indicators for good practice in the design and management of the environment. The analysis will contribute to a theoretical understanding of the ways in which learners adapt to networked learning, and throw some light on what is actually created or learned by individuals and groups through the process. It will close with some suggestions for further research.