TITLE OF PAPER: An analysis of learning conversations in two networked collaborative teaching interventions
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PROPOSAL:

Introduction

The Multimedia Education Group at the University of Cape Town researches a growing number of teaching interventions which make use of online discussions to facilitate students in knowledge management and collaboration either at the level of the whole class or within smaller project groups. These interventions are designed to support the development of information literacy, writing skills, numeracy and economic literacy. Project design generally incorporates both constructivist assumptions and scaffolding of learning experiences.

Theoretical Basis

A number of relevant assertions emerge from the literature of online collaboration and online collaborative learning including :

1) The online environment fosters fluidity and multiplicity of identity which contributes to the narrowing of social differences. (Turkle 1995, Rheingold 1994, Sproull and Kiesler 1995)
2) Online communication can be used for shared reflective conversations in communities of practice and in learning contexts (Comstock and Fox 1995, DiMauro and Gal 1994)
3) The social design is a key determinant of successful online collaboration. (Pattison-Gordon 1998, DiMauro and Gal 1994)
4) Thoughtful choices need to be made concerning the balance of online and face to face communication (Lipniak and Stamps 1997) and the balance of group and individual communication. (Pallof and Pratt 1999, Salmon 2000)
5) Effective facilitation and shared agreements concerning process contribute to successful online collaboration. (Pallof and Pratt 1999, Salmon 2000)

Many of these assertions require rethinking in a formal educational environment when most online collaboration occurs across limited physical distance in a laboratory and where their peers typically know participants' real life identities.

Research into online collaboration in the Multimedia Education Group at the University of Cape Town is intended to 1) develop instruments for the analysis of online discussions and chats; 2) Analyse the relationships between face to face and online learning conversations; 3) Analyse the costs and benefits of online collaboration interventions. This paper will focus on the first two objectives in the context of two case studies:

a) The **International Trade Bargaining simulation** is a module in Economics 3. In the second semester of 2001 approximately 100 students took part in a simulated World Trade Organisation bargaining round as representatives of

member states. They made extensive use of online chats, online discussions and e-mail for knowledge management and bargaining.

b) **Images of Africa** is a postgraduate module offered by the Centre for African Studies. In the second semester of 2001 approximately 25 students took part in a series of face to face seminars and online discussions about representations of Africa. (Cox and Hall 2001)

The analysis of online discussions and chats through the use of metrics of online interaction (Hall 2000) and through the coding of conversational moves (Mason 1992) is essential to this research. There are several highly sophisticated approaches to discourse analysis which require considerable experience and subject specific knowledge for their effective use. Some schemas attempt cognitive classification of educator or student moves (Henri 1992) but finegrained classifications (used by researchers such as Newman et al 1996) limit inter-coder reliability. Exchange Structure Analysis (Kneser et al 2000) is a subset of the far larger DISCOUNT scheme (Pilkington 1999) and has been used to analyse the relative roles of students and educators in online learning conversations. It is contended that a relatively simple coding of online conversation can support a rich analysis when used in combination with data from classroom observations and educator and student interviews and surveys.

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