

**Learning at the Screenface:
A pentadic analysis of email discussion lists**

**Alison Ruth
BSc, MAppSc, DipEd
Department of Management
Faculty of Business and Law
Griffith University**

Submitted in fulfilment of the requirements of the degree of Doctor of Philosophy

August 2004

Abstract

Online learning ('e-learning') is a 'hot topic' (EdNA, 2004) within Australian higher education, yet remains under-researched and, therefore, not fully understood. Existing research consistently associates low levels of student engagement with online learning modes with, although not limited to, changes required in students' learning behaviour and that of their instructors. Responding to both sets of findings, this thesis focuses on understanding the pedagogic properties and potentials of online learning within higher education to guide both the practice of and deliberations about this hot topic.

Sociocultural theories of learning provide a conceptual framework for studying both individual and social levels of human practice and relations between them (Kuutti, 1996, Lewis, 1997, Wertsch, 1998), such as those afforded by online learning arrangements. This thesis uses these theories, which posit the individual in a social framework, to assist in addressing questions about "what is involved, when we say what people are doing and why they are doing it?" (Burke, 1969). Burke proposes a framework, the Pentad, which is a valuable methodological tool for understanding and illuminating online learning environments. Using Burke's framework, it is proposed that these environments mediate learning through a complex relationship among five factors: the act of interacting (i.e. act), the person interacting (i.e. agent), the purpose for the interaction (i.e. purpose), the context in which the interaction takes place (i.e. agency) and the location of the interaction (i.e. scene). While the mediation afforded by online learning environments allows interaction between agents (e.g. students and teachers), a greater emphasis on interactions, such as those between peers and between novices and experts, arises. This thesis examines forms of interaction in the context of email discussion lists. The research questions addressed here are:

- What are the pedagogic properties of email discussion lists that influence students' learning in electronically mediated environments?
- What new understandings of pedagogic processes can be gained from using "different angles of analysis" (Rogoff, 1990 p26) and a holistic analysis of email discussion lists such as provided by Burke's (1969) Pentadic schema?

Both qualitative and quantitative methods are deployed in a case study of one university's provision of online learning. Demographics of the student population are

combined with content analysis of online conversations and reinforced by responses from students to a survey. These are drawn from four email discussion lists.

The findings lead to the identification of key pedagogic principles for organising online learning. Like Lave and Wenger (1991), this research questions “what kinds of social engagements provide the proper context for learning to take place” (Hanks, 1991 p14). It is proposed that for the learners, negotiating an online learning environment through the use of email discussion lists requires understanding their own ways of learning. The instructors in these online environments can shape the learning outcomes through framing activities both before and during the course of study. Thus, the influence of agents, both learners and instructors, is highlighted. This accounts for and emphasises adults’ abilities and need to act agentially in facilitating their learning. Further, the research confirms that participation in an email discussion list *is* predictive of learning knowledge assessable through courses and substantiates the view that email discussion lists are helpful equivalents to distance learning, because they facilitate ‘anywhere/anytime’ interactions. Thus, the principle of engagement for different purposes at different times stands, but is extended to include individuals’ agency. The findings suggest reconceptualising Vygotsky’s (1978) Zone of Proximal Development into the Zone of Learning Capability, a more personally agentic view and promote Burke’s Pentad as being useful for analysing learning environments.

In summary, the thesis identifies and elaborates a means by which the pedagogic properties and potentials of online learning can be elucidated, and proposes practices for both learners and instructors as means of enacting an effective online pedagogy. In doing so conceptual premises of interaction between the individual and social contributions to learning have been extended.

This work has not previously been submitted for a degree or diploma in any university. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made in the thesis itself.

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Acknowledgements

This thesis would not have been possible without the extensive assistance of Professor Michelle Barker and Associate Professor Stephen Billett. Without them, it would have been a pile of recyclable paper. Michelle has provided me with opportunities that I had not considered before meeting her. Stephen has taught me to write. His influence on the construction of my thesis was immense and provided an understanding of both the product and the process of research.

The participants in the study also need to be acknowledged. Their willingness to respond to my survey and the wealth of information they provided are the very foundations of this thesis. Likewise, the university, which provided the opportunity to engage with this research and provided support for this research, is acknowledged.

The people with whom I have shared many offices over the course of this research, Lynda, Wendy, Stacey, Mike, Heather, Sara, Jane, Daniel, Jamal, Aaron, and Abdullah have been another source of encouragement and support for me.

I thank Fiona de Mestre for proofreading this thesis and ensuring an easier task for the examiners.

I thank my sister, Janet, for without her help and assistance, I would have been homeless and without possibility of completing this thesis.

Finally, my daughter, Darcy, has been source of inspiration for me. Her joy in life and, at times, her need for her mother have been grounding for me. Her contribution to my understanding of online communication has been immense.

