

# Chapter 18

## Learning Relationships: A Condition and Consequence of Learner– Learner Interaction in Online Contexts

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### ABSTRACT

*This chapter reports research which examines the processes of, and relationship between, learner-learner interaction and knowledge construction within an online undergraduate communication course. Vygotsky's theory of development serves as a sensitising framework for the investigation. The research strategy is a single case study with an embedded case design. Social network analysis and constant comparative method are utilised to analyse data collected from the case. The results reveal how a single cohort of learners interacts and construct knowledge within large and small groups using asynchronous and synchronous communication. A substantive theory, which explains the conditions, interactions and consequences of learning relationships in online contexts, has been constructed. The research has important implications for educational practice as it reveals a range of conditions which are conducive for learner-learner interaction, dialogic learning and a sense of community in online courses.*

### INTRODUCTION

The online environment offers an educational domain unique in its potential for interaction, participation and collaboration. As a result, universities are increasingly adopting computer-mediated

contexts for teaching and learning purposes. Although the question of how learners interact in online environments has received increasing research attention, we remain remarkably ignorant about the processes and dynamics of group interactions and how these relate to learning in

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online contexts. If, as educators, we are to promote learning through interaction in online courses we must be able to identify and understand how learners interact within online discussions.

This conversation locates online learning within the field of distance education and offers a report of research which examined the processes of, and the relationship between, learner-learner interaction and knowledge construction within an online course. The prevalence of social constructivist perspectives of learning within current educational literature is acknowledged and Vygotsky's (1978) theory of development is identified as a sensitising concept within the investigation. One of the outcomes from the study was the construction of a substantive theory about learning relationships in online contexts. An illustrated model of the theory is used to exemplify and explain the conditions, interactions and consequences of learning relationships within the context of an online, undergraduate, communication course. Thus, the study contributes to knowledge about online learning contexts, learner-learner interaction and collaborative learning and computer-mediated environments. However, the primary purpose of the discussion is to share knowledge of, and draw attention to, the range of conditions which were found to be conducive for learner-learner interaction, dialogic learning and the development of a sense of community among learners engaged in an online course.

## LITERATURE REVIEW

Distance education is a complex, diverse and rapidly evolving field (Anderson, 2008a), one which has moved to the forefront of educational practice as the result of unprecedented developments in technology and communication (Garrison, 2000). Many higher educational institutions offer distance education programs and have begun to invest heavily in on-line teaching (Bartolic-Zlomislic

& Bates, 1999). In Australia, this investment is evident in government policy, which has placed increasing importance on flexible learning and online delivery (Kirkpatrick & Bound, 2003) and a financial commitment of \$2.2 billion, from 2008 to 2012, to fund a *Digital Educational Revolution* (Australian Government DEEWR, 2008). The inclusion of technologies within education represents change at every level from pedagogy, curriculum and infrastructure to policy, organisation and governance (Moyle & Owen, 2008). It has also created a relentless demand for new skills (Hodgins, 2000) and presents educators and learners with a number of educational challenges (Andrews & Crock, 1996; King, 2002). Although online contexts have the capacity to make interaction possible, the interactive use of technology by learners is acknowledged as difficult to achieve, because it requires time, practice and support to be effective (Andrews & Crock, 1996). The 'increasingly powerful mix of media and technologies' (Daniel, 2010, p. vi), together with the complex conceptual challenges of pedagogy's multiple theoretical and practical perspectives, have had an impact on teaching and learning in online environments (Leach & Moon, 2008). Despite the considerable effort expended to develop and implement online courses, they often fail to create effective settings for learning and knowledge construction (Oliver & Herrington, 2003) and collaborative knowledge construction, information seeking and sharing and learner debate are a rarity in computer-mediated learning environments (Smith & Brown, 2005). Consequently, the educational potential of, and opportunities for, online learning have not been fully realised (Mishra, Koehler, & Kereluik, 2009; Oliver & Herrington, 2003).

Australia has a long history of distance education, which has traditionally been associated with correspondence learning and conceptualised as an independent form of study (Garrison, 2009). In keeping pace with technological innovation,

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