Chapter 8.10
A New Taxonomy for Evaluation Studies of Online Collaborative Learning

Lesley Treleaven
University of Western Sydney, Australia

ABSTRACT
In this chapter, the literature of online collaborative learning (OCL) is extensively reviewed for contributions to evaluation. This review presents a new taxonomy for evaluation studies of OCL, identifying studies of students’ experiences, studies of instructional methods and sociocultural studies. Studies that focus on evaluating students’ experiences engage approaches from phenomenology and ethnography to explore students’ perceptions of collaborative learning. Instructional method studies attend to evaluation of the tools, techniques and outcomes. Sociocultural studies emphasize the socially constructed nature of the teaching and learning processes and are concerned, therefore, with evaluation in its social context. The sociocultural studies fall broadly into three clusters: pedagogical studies, linguistic studies and cross-cultural studies. The analysis highlights the need for theory-driven empirical evaluation of OCL. Accordingly, three theoretical frameworks for OCL evaluation are discussed. Emphasis is placed on a Communicative Model of Collaborative Learning, developed from Habermas’ Theory of Communicative Action, for its contribution to evaluating what takes place within the social context of students’ communicative practices that is productive of collaborative learning in an online environment.

INTRODUCTION
Collaborative learning, especially as it can now be supported by computer-mediated communication, is receiving significant attention by those concerned with developing higher education students’ capabilities to meet the increasingly complex challenges of working in a postmodern world. Students indicate that they often enjoy and benefit from collaborative learning with and from their peers, when equity and group dynamics are appropriately addressed. Teachers are engaging
new online communication tools and assessing different instructional design techniques to enable better collaborative learning and to improve student learning outcomes (Bonk & Dennen, 1999; Freeman, 1997). Higher education institutions are investing in Web-based learning systems and e-learning support units (Sheely, Veness & Rankine, 2001) often in the hope of saving costs associated with face-to-face delivery of instruction and in attempts to capitalize on globalized higher education markets.

But is collaborative learning actually happening in these new electronically-mediated spaces? What is the nature of that collaborative learning and, most importantly, how can we evaluate the quality of this collaborative learning? How do we know it is worth doing now, and continuing to improve? For whom is evaluation undertaken: students, teachers, educational developers, designers, e-learning specialists or those who stand beyond participation, yet hold the purse strings? What would we evaluate for such different audiences? And would such differently targeted evaluation be undertaken in the same way? Does a cautionary call need to be sounded against those in higher education whose agendas are shaped by assumptions that technologically advanced, flexible delivery, necessarily equates with learning, collaborative or otherwise? This chapter sets out to explore some of these questions, while raising others and, hopefully, provoking still more.

Whereas earlier chapters in this volume have defined and explored the nature of online collaborative learning (OCL), this chapter examines the evaluation of OCL. Evaluation has been defined by Gunawardena, Carabajal and Lowe (2001) as:

A systematic and purposive inquiry that includes the collection, analysis and reporting of data relating to the efficiency, appropriateness, effectiveness, and value of operational characteristics and outcomes of a procedure, program, process or product. (p. 3)

Such a definition needs to be applied to perhaps four questions: Why are we evaluating? For whom are we evaluating? What are we evaluating? How will we evaluate these aspects?

Evaluation of OCL requires attention not only to processes of collaborative learning, but also to the means through which they are achieved—computer-mediated communication. Furthermore, the goal of collaborative learning is understood here, as Ronteltap and Eurelings (2002) state, to “create a situation in which productive interactions between learners can be generated” (p. 14). This notion of productivity, what the learners produce together, necessarily involves evaluating the different contexts, processes and outcomes that facilitate and support such productivity. Evaluation in these new contexts challenge traditional approaches to evaluation and require new theoretical frameworks to guide analysis and interpretation.

Three components of collaborative learning have been identified by Brandon and Hollingshead (1999) as collaboration, communication and social context. While communicative processes have been examined in linguistic studies and the social contexts of these new online learning communities have been the subject of many sociological studies, the majority of the literature reports case studies that only evaluate collaborative learning implicitly, as they focus principally on its perceived benefits in achieving learning outcomes.

Much of our understanding as practitioners, who are deeply committed to the value of collaborative learning as we observe our students engage more fully when we incorporate it into our programs, and as researchers, who are attempting to study those transformative shifts facilitated by collaborative learning processes, rests powerfully on our tacit knowledge (Tsoukas, 2003) of what actually happens within these shared, interactive online spaces. What is therefore required is a theoretical framework that enables explicit and systematic investigation of what takes place within the social context of students’ communicative practices that is productive of collaborative