Chapter VII
Conversation Design in the Electronic Discussion Age

Gregory MacKinnon
Acadia University, Canada

ABSTRACT

The electronic age offers technologies that have great potential to empower conversation. The following chapter introduces a model for coding electronic discussion. Inherently the use of the so-called “cognotes” has been shown to improve the quality of conversation by promoting more analytical and substantive contributions to asynchronous discussion. The chapter further elaborates on tested classroom models that embed the coding approach in second order technology exercises. The chapter culminates in a synopsis of what has been ascertained about the coding strategy over a range of action research studies.

EDUCATOR’S INTEREST IN CONVERSATION

The study of discourse has long been of interest to educators (Cazden, 1988; Edwards & Westgate, 1994; Young, 1992) and has culminated in sophisticated research agendas that include semiotics (Lemke, 1997), symbolic interactionism (Charon, 1998), and most recently a renewed interest in the notion of distributed cognition (Courtney, 2002; Karasavvidis, 2002). In the context of teaching, these interests all surround the educational aim of supporting and promoting quality student conversation. Ideally, conversations within classrooms or asynchronously through communication technologies have the potential to promote social construction of knowledge (Brooks & Brooks, 1993; Prawat, 1996). With respect to discussions, Davey and McBride (1986) suggest that the process of generating questions helps students’ comprehension and “encourages them to focus attention, make predictions, identify relevant information, and think creatively about content” (McTighe & Lyman, 1988). Some instructors have gone so far as to devise analytical symbols to cue students to the nature of their conversation and further, to
involve them in metacognitive exercises where they examine how it was that they interacted in conversation (Knight, 1990). All of these research endeavours point to the fact that conversation is a complex process.

Often conversations are categorized based on their purpose. As such, Jenlink and Carr (1996) have identified four types of conversations—dialectic, discussion, dialogue, and design. Taylor (2002) further elaborates on these. “Dialectic conversation is a form of ‘disciplined inquiry into whatever is being examined’ (Jenlink & Carr, 1996). Its procedures are those of logical argument, and the underlying intention is the formation of rigorously defensible interpretations.” “Discussion is the form of conversation where participants tend to argue their own position, and is more subjectively influenced by opinion and supposition” (Jenlink & Carr, 1996). Thus personal experience and assumptions tend to be at the centre of the conversation.”

Dialogue is a form of conversation focused on the sharing and construction of meaning. It helps to develop collective mindfulness, and thus, “is a community building form of conversation.” The dialogic processes require individuals to “first examine their personal assumptions or opinions and then suspend these assumptions before the entire group” (Jenlink & Carr, 1996).

Design is focused on the creation of something new through “disciplined inquiry grounded in systems philosophy, theory, and thinking and practice” (Jenlink & Carr, 1996).

In particular, design conversations tend to look beyond existing constraints, seeking to design new systems that avoid or minimize those constraints. They require that participants suspend assumptions about what ‘ought to be,’ as well as ‘what is possible.’ Thus design conversation ‘goes beyond the suspension of personal opinions and moves into a suspension of mindsets themselves.’ These types of conversations tend to be unusual in everyday experience, and to be associated with the work of creative teams.

These modes of conversation can easily be envisaged in face-to-face settings yet Web-based models and variations are becoming increasingly popular with educators.

**Electronic Conversation Communities: Productive Strategies?**

Electronic discussion has become a typical tool for teaching in online learning environments. In addition, asynchronous electronic discussion is commonly used to: (1) prepare students for face-to-face (hereafter Ftf) discussions in an ensuing class, (2) introduce a new reading in preparation for an ensuing Ftf class meeting, (3) discuss a topic that required further investigation than the Ftf class time allowed, (4) interview class members, and (5) provide an open forum for discussion led by student interest.

From early studies (Harrington & Hathaway, 1994, 1995; Harrington & Quinn-Leering, 1994) it has become clear (Kuehn, 1994) that the asynchronous nature of the electronic discussion group (hereafter EDG) and the accessible transcripts of dialogue, make the EDG a unique phenomena that is curiously different from Ftf conversations.

Considerable effort has gone into developing electronic environments that foster positive and productive discourse (Daradoumis & Marques, 2002; Hewitt & Scardamalia 1989; Scardamalia, 2002; Scardamalia & Bereiter, 2003). The CSILE (computer-supported intentional learning environment) is a communication tool developed by Scardamalia et al. that allows students to purposefully process information via access to a unique database of information. This electronic model promotes quality conversation based on