Chapter XVII
CMC for Language Acquisition

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ABSTRACT

Authentic experiences encourage the student to cognitively engage the content by actively trying to make sense and to integrate the experience. This chapter describes a range of currently available and emerging mediated communication technologies for supporting both didactic and constructivist approaches to language acquisition. Even though CMC has several unique characteristics that make it suitable for designing authentic instructional experiences but as the research indicates, using CMC effectively requires careful consideration of the intended discourse goals. Through collaborative discourse, student and teacher engage the content and incorporate it into their cognitive repertoire. These activities are discursive in nature, writing, verbal interaction, and presentation. Consequently, this chapter discusses how to effectively choose the CMC software most effective for epistemic engagement.

INTRODUCTION

Numerous studies and reports have documented the tremendous increase in the development and delivery of instruction through the use of network-based technologies. Warschauer (1997) remarked 10 years ago that this rapid growth “arguably the fastest growth of any technology in history has caught the attention of language teachers” (p. 470). In fact, colleges and universities have enthusiastically embraced these modes for delivering instruction which has resulted in a transformation as Larreamendy-Joerns and Leinhardt (2006) observe “distance learning and teaching have moved from the periphery to the center of university life” (p. 570).

There has also been a tremendous amount of research conducted during the past ten years investigating the delivery of instruction (see Tallent-Runnels, Thomas, Lan, et al., 2006) using online technologies. One clear trend from all of this research is that the delivery of online instruction has embraced a variety of different delivery models, theories, and philosophies. According to
Larreamendy-Joerns and Leinhardt (2006), these delivery models can be distilled into three major design views: presentational, performance-tutoring, and epistemic engagement.

The presentational view makes use of multimedia for instruction that is delivered primarily through text, which integrates visual and aural experiences that “may be more appealing to students than printed materials” (Larreamendy-Joerns & Leinhardt, 2006, p. 585). In contrast, the performance-tutoring approach relies on the computer to provide adaptive individualized instruction based on the student’s performance. This approach has a long history and is based on the premise that we “learn by doing” (Larreamendy-Joerns & Leinhardt, 2006, p. 587).

Finally, Larreamendy-Joerns and Leinhardt (2006) identify a third approach, which they call epistemic engagement. This technique is dependent on using computer-mediated technologies to effect teacher-student and student-student interaction in authentic experiences. The idea is that “the learner engages in questioning, makes connections, draws inferences and validates learning” (Larreamendy-Joerns and Leinhardt, 2006, p. 590) in an authentic context.

This chapter is divided in two sections. The first section discusses authentic instructional experience and the process of epistemic engagement. Students who study a language are better equipped to encounter and to interact with other peoples by being sensitive to the cultural and social mores of this society. This acquisition is facilitated by a shift in instruction from abstract exploration of language to dynamic authentic experience. The second part reviews research on the use of computer-mediated communications (CMC) technologies for engaging epistemic engagement along with a way of matching the most appropriate technology with the intended discourse goal.

**AUTHENTIC EXPERIENCE**

An authentic experience is an instructional assignment that has an intrinsic relevance. Ahern and El-Hindi (2000) write that:

*These environments create situations in which schoolwork is perceived as an authentic opportunity to engage a community of peers on issues of personal importance. Each student develops an awareness of authorship and the need for rhetorical competence. Consequently the student engages to inform, explain, persuade, or entertain based not only on simple opinion but also on the rational development of an argument (p. 385).*

Any authentic instructional activities must, at a minimum, possess internal coherence and build on prior assignments.

Authentic experiences also can be naturalistic and have external coherence to a student’s real world contexts or problems. Consider the situation with airline pilots who train in flight simulators. This naturalistic environment allows them to experience real-world situations without the actual consequences. This allows them to learn from their mistakes and gives the student an opportunity to reflect on their own performance, to test their understanding, and to draw conclusions on why any one particular solution is preferable. “It requires evaluation, not simply accumulation. Understanding results from the testing of theories-in-action, and the efforts of learners to reconcile their beliefs in the face of ever-changing experience” (Hannafin & Land, 1997, p. 189).

Authentic assignments require students to not simply react but to engage the content. As Wells and Chang-Wells (1992) observe:

*When students in school are encouraged to treat texts not as authoritative pronouncements but as contributions to an ongoing dialogue in which*
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