Chapter 36

Interaction in Google Wave Sends Chat Rooms Out with the Tide

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ABSTRACT

This chapter focuses on Google Wave, a new, emerging world-wide technology by Google that supports both synchronous and asynchronous communication. Research on this technology took place during two sessions of an advanced second language (L2) technology course whereby synchronous conversations in Google Wave were compared to synchronous conversations in Blackboard chat rooms. Students experienced both forms of technology while discussing cross-cultural and pedagogical discussions relevant to L2 learning. Structural comparisons in terms of message length, message turns, numbers of words, and clarification revealed that students were more patient and wrote lengthier, more complex posts when conversing in Google Wave as compared to the chat room. Students’ impressions further confirmed their awareness of writing and reflecting more within Google Wave. These results suggest that Google Wave will support flexible, innovative learning and will provide researchers with multiple opportunities for expanding our understanding of students’ interactions in synchronous environments.

INTRODUCTION

Today’s students are “digital natives,” technologically sophisticated learners who process information differently than many of us did at their age (Prensky, 2001). Instead of being “native” to today’s technology, many of us teachers are either “digital immigrants” or “naturalized digital citizens,” brought into the digital world after experiencing, for the most part, an analog way of life. As this digital world continues to evolve, new technologies emerge and trends we once took for granted, say an interactive chat room, now face creative challenges that we never imagined possible. To support new trends, or to utilize new
emergent technologies, we must understand how much such changes can potentially influence our students’ learning as well as our own teaching.

The buzzword today is Web 2.0, an overarching technology paradigm that facilitates interaction between individuals, both socially and educationally. A sub-term in this Web 2.0 world, computer-mediated-communication (CMC), has long focused on the use of communication tools, such as synchronous chat rooms, to support collaboration, interaction, and rich, deep conversation both in and out of the classroom. Given that technology never remains static, it is no surprise that new applications and new trends emerge that literally “blow our minds”! It is, in fact, a new form of CMC that is the focus of this chapter, a new technology that has been projected to “wash away” how we interact, communicate, and collaborate electronically with each other. This new emerging tool is Google Wave, an online communication environment that supports multiple forms of interaction, including synchronous and asynchronous communication.

This chapter demonstrates how Google Wave can support synchronous conversation among students. In a recent advanced-level second language (L2) technology course, this researcher compared synchronous conversations in Google Wave to synchronous conversations in a standard Blackboard chat room. Students enrolled in the course experienced both forms of technology while participating in cross-cultural and pedagogical discussions relevant to L2 learning. A structural comparison in terms of message length, message turns, numbers of words, clarification, and technical issues revealed the extent of students’ expression in both formats. To present these findings, this chapter begins with a review of literature relevant to computer-mediated communication (CMC) and the emerging technology, Google Wave. The chapter next turns to the active research study that examines the extent to which Google Wave and chat rooms are similar and/or different when students synchronously discuss specific topics.

The chapter then concludes with a summary of the results, and recommendations for teaching and research using this rich, innovative tool.

**BACKGROUND**

**CMC and Learning**

Web 2.0 technologies empower learners to develop cross-cultural understanding and pedagogical knowledge through exploration and discussion in a target and/or native language. Through interactive learning, individuals share knowledge, identity, experiences, and make connections in socio-collaborative environments such as chat rooms (Tu, Blocher, & Roberts, 2008). Vygotsky’s sociocultural theory illuminates the role of social interaction for learning and it is his “Zone of Proximal Development,” the zone between what a student knows and what he or she can aspire to know, that is particularly relevant to socio-collaborative learning (Vygotsky, 1978). Individuals and, in today’s modern age, technology, both support students’ progression through “the zone,” support the achievement of a given activity, and can influence learning outcomes (Darhower, 2002).

Chat rooms have long been used to engage students in synchronous conversation given their simple interface and archiving capabilities (Warschauer, 1997). In its early stages, computer-mediated communication (CMC) was known for its anonymity not to mention its simplistic appearance (McKenna & Bargh, 2000). In a chat room, one simply typed a message and anonymity through pseudonyms made personality a great mystery, leaving users to wonder with whom they were really communicating (Joinson, 2001). Students’ lack of ownership over the technological environment also tended to hamper their freedom to explore and construct knowledge based on their interests (de Bruyn, 2004; Pena-Shaff, Altman & Stephenson, 2005). Despite this, researchers found...