REVIEW OF *CALL RESEARCH PERSPECTIVES*

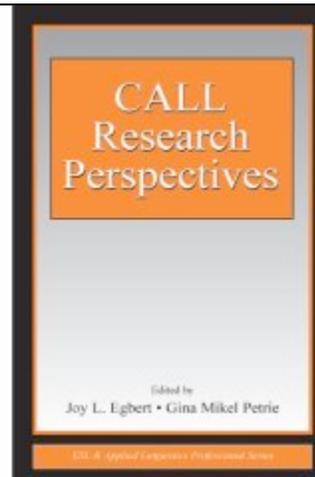**CALL Research Perspectives**

Joy L. Egbert and Gina Mikel Petrie

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This book brings fresh ideas to the field of Computer Assisted Language Learning (CALL). According to the editors, it is "not a how-to-do research book" (p. ix), nor is it a practical volume in the traditional sense of addressing teachers' and researchers' needs; at times it is directed more at knowledgeable specialists than general practitioners. Thus, although the volume will probably be well received by a general audience, some parts may be difficult to understand for readers not familiar with material in certain parts of the book.

The book is broadly divided into three parts: introduction to CALL research, research perspectives, and conclusions. Chapter 1, "Conducting Research on CALL" by Joy L. Egbert, provides a general introduction to CALL research. Although the author clearly states the importance of field research conducted by many practitioners, readers might be surprised by the oddly disrespectful tone adopted by the author toward general researchers (such as administrators, teachers in their classrooms, and even learners). The author assumes that although "informal research" is constantly carried out by practitioners, and reported in "practical journals" (p. 6), at times its importance is limited to providing ideas to those who have "bright and original ideas", those researchers standing out because of their "rigor, originality and ideas" (p.6). Although many might agree, this overgeneralization might be taken as a sign of disrespect toward many practitioners and the field. The remainder of this first chapter is devoted to initial considerations in research on CALL in different areas, such as procedures, methods, and a general introduction to the twelve chapters of the second part.

Although the book is aimed at both researchers and general practitioners, the language requires a certain degree of familiarity with CALL, which some of the intended audience may lack. Chapter 2, "Criteria for Effective CALL Research" by Keun Huh and Wen-chi Hu defines the criteria for CALL research, such as "valid design, firm grounding in theory, and close analysis of both advantages and limitations" (p. 19). This chapter addresses general problems and constraints in selected topics, beginning by criticizing some current research for weak theoretical foundations, especially in L2 acquisition, its limited (not general) applications and conclusions (usually limited to the sample), and its focus on technological progress, such as "technocentrism" (p. 15) rather than language learning. The chapter also provides examples of what the authors consider good or deficient research.

In the second part of the book, twelve chapters provide a summary of the range of current perspectives in the field of CALL. Carla Meskill, in "Metaphors That Shape and Guide CALL Research", describes general metaphors used by Stevens (1984) and Higgins (1988) in CALL research, asserting that metaphors determine the way researchers understand and look at what they do. The chapter describes and evaluates the metaphors of the "conduit" and "berry-bush", "magister/pedagogue", "community and meeting place" (pp. 28-31). Meskill explains how they shape research by selecting certain properties that help define the design and functions of the research, and she provides ideas for further research, such as researchers considering "the world of [computer-learner] interactions" or proceeding to research that shows perspectives of interaction "with others in enriching ways as communities" (p. 37).

Mark Warschauer's chapter on "Sociocultural Perspectives on CALL" looks at three of Vygotsky's sociocultural theory concepts, which are also an undercurrent throughout the other chapters: mediation, social learning, and genetic analysis. Warschauer reviews previous research on classroom learning, out-of-class learning, and, most interestingly, cross-cultural learning in light of these three concepts. The author claims that CALL advocates should not view the use of computers as an end in itself but as "another tool to promote language learning [that] mediates and transforms human activities" (p. 48).

Carol Chapelle, in "Interactionist SLA Theory in CALL Research", presents one of the most powerful justifying arguments for CALL. Like other chapters in the book, Chapelle begins with an anecdote enhancing the positive aspects of computers in today's world, which facilitates the reader's ability to contextualize and understand interactionist theory. Chapelle's chapter is the most explicit and best supported by theory in the book. Especially informative is a table that outlines the different studies on Interactionist SLA Theory in CALL up until the present time. Also, Chapelle claims that computers present contextual situations similar to face-to-face communication although "the variety of interaction that can occur in the electronic setting may require additional constructs for analysis" (p. 61). Chapelle concludes that "[if] interactivity is the interaction that occurs between the learner and the computer, this is indeed an important construct for the study of CALL" (p. 63), since new perspectives toward computer-learner interaction can lead to greater gains in SLA.

"Metacognitive Knowledge, Metacognitive Strategies, and CALL" by Mirjam Hauck reflects the author's experience teaching online courses. She treats two main ideas considered fundamental in self-directed learning: learners' metacognitive knowledge and metacognitive strategies. The first term relates to the knowledge of how to learn while the second is the real application of this knowledge. Both are considered part of the metacognitive knowledge that has been emphasized in the last 20 years and which is considered necessary for self-directed online language learning since the development of strategic knowledge facilitates interaction and learning in CALL (Luke, 2006; Victori & Lockhart, 1995; Wenden, 1998).

"A Systemic Functional Linguistics Perspective on CALL" by Bernard Mohan and Lynn Luo is the most complex chapter in the book. Based on their ideas of interaction between CALL and discourse analysis (a systemic functional approach), Mohan and Luo suggest that pragmatics rather than syntax should be at the center of the study of language. In this sense, the authors' focus moves from the structural traditional perspective of grammar at the sentence level toward the need to develop a grammar based on full text meaning. According to the authors, such a perspective would be useful for CALL in telecollaboration and cooperative environments, but, more importantly, for investigating the texts that students use and read.

Gina Mikel Petrie brings non-linguistic acts in communication to the reader's attention in her chapter "Visuality and CALL Research". The message is that it is necessary to revise the practices and studies of what is communicated through images and interfaces. This is especially important for topics that are not explicitly mentioned in the book, such as language testing or e-learning platforms with multimedia elements. Petrie focuses on the meaning of language as a symbol system, or "the role of non-linguistic

elements in successful navigation of electronic texts" (p. 103) rather than on the novelties and benefits brought by the inclusion of images in CALL.

Heather Lotherington, in "Authentic Language in Digital Environments," addresses the controversial issue of innovative language used in chat rooms and electronic devices (PDAs, mobile phones); for example, "would u go to concert w/ me?! :-D" (p. 109). Lotherington acknowledges that this use of language is now moving via young people from electronic devices to handwriting (see Baron, in press, for a similar observation). The author wonders if it should be considered "real language" and what makes "real language" with further implications for "online identities" and culture (e.g., netspeak features) (pp. 118-119).

Joy Egbert's "Flow as a Model for CALL Research" is an engaging chapter. Many practitioners in the field wonder if there is "flow" in Computer Assisted Language Learning. "Flow," an experience that "is so intrinsically rewarding that it causes people to push themselves to ever higher levels of performance" (p. 130), can explain why CALL is more successful in moving students to structured language exercises than the traditional face-to-face class because interacting with the computer can be less stressful than personal communication. For Egbert, "flow" is a recent trend in education and has generated limited research interest. However, Egbert's chapter certainly suggests ways to improve research that interrelates flow and CALL. As Egbert says, "investigation [of flow processes] could add valuable information to our knowledge of contexts and processes that support second language acquisition (SLA) and the design and implementation of [CALL]" (p.130).

"Considering Culture in CALL Research" by Birgitte Gade Brander questions the way in which CALL environments are presented to students in the classroom. The author wonders if it is possible to make websites and CALL more internationally oriented by accommodating "language learners' cultural values, interaction and communication skills … and first language" (p. 146). The author believes that it is necessary to develop software that can be equally valuable and "understandable by all users" (p. 147) from different origins and cultures. Since most websites are in English and also designed for English speakers, it would be useful to find formulae that can facilitate not only the understanding of language but also the format of interfaces. For instance, since not all languages are written from left to right, it could be interesting to find ways in which interfaces could facilitate access and full comprehension of content in all international contexts.

"Situated Learning as a Framework for CALL Research" by Yu-Feng Yang describes the changing roles and identities of students becoming immersed in CALL communities and how their roles change from double learners (community and language), or "peripheral participants" (p. 157), to full members in the community of practice. This idea has significant implications for distance learners as it provides a justification for CALL as a legitimate means of education and a valuable social practice within distance communities.

In the next chapter, "Design-Based Research in CALL" (DBR), Sudsuang Yutdhana discusses the importance of task design in CALL research. Traditionally, research has moved practice; however, as stated in Chapter 1, practice provides information on real needs for and sources of research, and "the results of DBR can complement the results of analytic studies that use other perspectives and frameworks to ground their investigations" (p. 171). The author concludes that design-based research is a topic with great possibilities of further research and applications to CALL classrooms.

"A User-Centered Ergonomic Approach to CALL Research" by Françoise Raby is the most technologically oriented chapter, not because Raby claims that ergonomics should address language learning and human interaction with computer devices, but because most ergonomics studies have been meant to improve websites and computer tools. As the author says, "educational ergonomics could contribute to building [a] new paradigm, because it provides scientific knowledge about the non-linguistic

factors of language acquisition and, second, because it sees CALL contexts as cultural and social contexts, not just as linguistic and technical ones" (p. 188).

The concluding chapter, "Toward a Cartography of CALL" by Gina Mikel Petrie, could be summarized in Petrie's words, "Our searching carries us out in many different directions, but we are all attempting to better know the identity of our fascination: computer-assisted language learning. There is no atlas, and our maps will continue to change" (p. 195). Indeed, this final chapter is an invitation for readers to create their own research agenda for personal development.

In summary, the book presents challenges with respect to the ways teachers, administrators, and researchers approach language research and SLA through CALL. A few of the research suggestions in the book are a bit unusual due to their novelty, but nevertheless attractive for further studies. One potential problem of the book is that it fails to mention connections between sociolinguistics and learning aspects, such as the transmission of minority or heritage languages (Peyton, Ranard, & McGinnis, 2001), formality and register acquisition in CALL, or negotiation of meaning within communities in CALL (Peterson, 2006). Some readers may also miss more detailed analyses of computer designed and mediated task definition (Rosell-Aguilar, 2005), effects on language learning interface design (Fulcher, 2003), and the influence of CALL software architecture on mind processes (Vinther, 2005).

Throughout the book, most authors mention Vygotsky's theories of learning as central to second language acquisition because a number of relevant CALL studies have justified their value for social and experiential learning (Wang, Fang, & Lai, 2005). Obviously, Vygotsky's ideas are well regarded in the field since they justify the social interactivity between learners in synchronous and asynchronous communication (Darhower, 2002), but it is also necessary to find additional paradigms that can justify the use of computers as learning tools. Otherwise, we may be guilty of technocentrism as the technology is meant to benefit from SLA, rather than the reverse priority, namely, that SLA is assisted by computers (Cushion, 2006).

However, these issues are more suggestions than flaws. Overall the book is very clear in its approach, with the chapters addressing three main issues: the state of the art of research in CALL, what research has been done in each of the areas presented in the book, and what the different possibilities for further CALL research are. Most readers will find valuable suggestions for cross-field studies or further readings.

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