

Title of Project: Empirical evaluation of CALL use for ESL students' learning processes and outcomes

Priority Addressed: New technologies in TESOL and learning processes and outcomes

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Addressing the TIRF theme of informed instruction involving computer technology, this study evaluated ELL learners' use of state-of-the-art multimedia computer-assisted language learning (CALL) materials, *Longman English Interactive*. Traditionally, studies comparing CALL with classroom instruction have shown no clear advantage or disadvantage of CALL, possibly due to the difficulty of controlling the large number of factors that effect individuals' learning (e.g., Burston, 2003). Such studies often made use of quasi-experimental research designs in which the researcher tries to reduce or exclude other factors in the context from what is being studied in order to focus on the few variables of interest and to increase generalizability of the study. The attempted exclusion of context in the study of CALL has proven problematic for interpretation of results in part because contextual factors typically contribute greatly to success or failure. This is one reason that researchers have called for alternative research strategies (e.g., Chapelle, 2001, 2003). One way of framing alternative research is to investigate to what extent particular CALL materials can be argued to be appropriate for a particular class of learners at a given point in time. We examined a number of different contexts in order to find the extent to which appropriateness evaluations were constant across settings. In particular, we sought to answer the following question: What is the evaluation of the CALL materials given by English language learners and their teachers in different institutional contexts for each of six criteria?

We defined appropriateness of CALL materials in terms of the six criteria from theory and research in instructed SLA (language learning potential, meaning focus, learner fit, authenticity, impact, and practicality). We conducted the analysis by considering opinions about these criteria from two distinct, yet related, groups of stakeholders: the teachers who included the CALL materials, and the language learners who used the CALL materials. The data gathered allowed for responses to our question for the group as a whole and for different sites including those in and out of the United States, where the materials were developed. Two hundred and twenty-one students and ten teachers from six schools participated in the study. Three US schools had intensive English programs—in Arizona, New Jersey, and New York; the majority of these students were immigrants or international students wanting to improve their English to attend an American college. Three non-US schools, in Chile, Japan, and Thailand had different kinds of programs. Students in Chile signed up for this special course; those in Japan were required to take the course as part of their college curriculum; those in Thailand were in an English teacher preparation program. The students who agreed to participate in the study were all over 18 years of age. *Longman English Interactive (LEI*; Rost and Fuchs, 2004), a video-based multimedia software, was used in the study. *LEI* aims at developing integrated language skills of beginning to intermediate learners, offering four levels of increasing difficulty (i.e., *LEI 1*; *LEI 2*; *LEI 3*; *LEI 4*). Each *LEI* level has 12-15 units, and each unit includes two video-clips that are accompanied by comprehension exercises. In

addition to the video-based listening, each *LEI* unit provides explanations and practice in listening (not video-based), vocabulary, grammar, pronunciation, speaking, and reading.

Based on the results of students' responses on questionnaires, descriptive statistics for each of the six criteria (language learning potential, meaning focus, learner fit, authenticity, impact, and practicality) indicated that overall the multimedia CALL materials were judged to have a moderately good level of appropriateness. However, when descriptive statistics for individual classes were examined, differences were evident. Results of statistical testing of differences showed that particularly the mean scores for classes in Japan were significantly lower on many criteria.

Teachers were asked how much they thought that their students had improved as a result of their use of *LEI* in listening, vocabulary, speaking, grammar, pronunciation, and reading. Findings suggested that except for two of the three teachers in Japan, *LEI* had "good" language learning potential. All of the teachers felt that the learners were at least a little engaged in the story, although both questionnaire and interview responses indicated teachers' perceived more favorable and positive engagement on the part of learners in the United States than of those outside the United States. Results indicated at least "good" learner fit based on responses to two questions "Do you think that the *LEI* level was appropriate for the students?" and "Would you like to use *LEI* again for a similar group of students?" Teachers' perspectives on authenticity were divided between positive in the United States to more negative outside the United States. All of the teachers indicated that they integrated *LEI* at least a little with their classroom instruction, and many of the teachers reported that the students liked *LEI* a lot or some, with only two of the teachers, in Japan, saying that the students only liked *LEI* a little. Finally, teachers varied widely in their levels of reported technical and logistical problems, or practicality.

By refining a methodology that was developed specifically for the evaluation of CALL, this study has revealed the extent to which a multimedia CALL series was appropriate for ESL and EFL learners across a variety of contexts. Overall, the findings that *LEI* was good held for all classes except for those in Japan, where results were mixed to negative. This finding in addition to the positive findings from other classes outside the US suggests that state-of-the-art multimedia materials created in an English-speaking context may be appropriate more broadly, but that this is a proposition that needs to be tested through evaluation. This finding was clearly supported from a wide range of detailed information collected in the research. Our attempt to evaluate CALL materials in a classroom setting raised some important methodological issues. For example, should authenticity be valued in an EFL setting, and if so, how should it be operationalized? Second, an interesting problem for data analysis is how to reconcile conflicting data sources for a single criterion. Third, the goal of the project was to look at CALL use within classrooms, but because the majority of the teachers were using the software for the first time, the project in fact investigated a new practice rather than ongoing classroom events.

References

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Appendix

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