Computer Applications in Second Language Acquisition
THE CAMBRIDGE APPLIED LINGUISTICS SERIES

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Computer Applications in Second Language Acquisition
Foundations for teaching, testing and research

Carol A. Chapelle
Iowa State University
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For my parents
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Series editors’ preface

Perhaps no single area of applied linguistics has seen such explosive growth over the past 15 years as computer-assisted instruction. Books and journal articles on the subject abound – indeed, new journals have appeared dedicated exclusively to it. Rapid developments in computer hardware and software are obviously a driving force, but so, too, is the increasing number of computer-literate people entering the field, whether as graduate students or language teachers.

Amidst all the excitement and innovation, however, a degree of healthy skepticism has survived in some quarters. Just how much of the work has produced genuine advances in language sciences? How much has really been a case of computer-buffs in search of a justification for their love of the technology, or worse, computer manufacturers in search of new markets for their products?

Carol Chapelle is a rare and valuable blend of enthusiast and skeptic. She is unquestionably one of the leading authorities on computer-assisted language instruction, and sees exceptional opportunities in computer-aided research for applied linguists. However, she is equally well known, and justifiably so, as an expert on second language acquisition, language teaching, and language testing, in each of which area she had published extensively before her work with computers in applied linguistics began, and in each of which she has continued to publish since. Her knowledge in those fields enables her to review research and practice involving the new technology fairly, but critically – to distinguish substantive contributions from commercial gimmickry. In particular, she regards research in second language acquisition as both a field in which computer technology can be of immense value, and as a valuable source of knowledge for researchers and practitioners working in the related areas: language teaching and testing.

Professor Chapelle’s new book, *Computer Applications in Second Language Acquisition: Foundations for Teaching, Testing, and
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Research, provides a comprehensive analysis of past and current work in the field. It is well organized and clearly written, and should provide an invaluable resource for language teachers, language testers, and SLA researchers alike. It is a substantial contribution to knowledge, and a valuable addition to the Cambridge Applied Linguistics Series.

Michael H. Long
Jack C. Richards
Thanks

I am indebted to all members of our profession who have identified and addressed substantive issues of practical relevance to language teaching and assessment, especially Lyle Bachman, Mike Long, Teresa Pica, and Peter Skehan. I hope the influence of their work is evident and constructively built upon in this volume.

I thank my colleagues and friends who got me interested in the topics covered in this volume over 20 years ago, especially Lyle Bachman, Doug Brown, Bob Hart, and Joan Jamieson. I hope each of them sees this work as a worthwhile product of their teaching. I also thank Mike Long and Alison Sharpe for encouraging me at the start of this project as well as Julia Harding for her careful editing.

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I thank those who waited patiently for so many years while I worked on this project, especially Tess.
Abbreviations

CACD computer-assisted classroom discussion
CASLA computer applications in second language acquisition
CALICO Computer-Assisted Language Instruction Consortium
CALL computer-assisted language learning
CALT computer-assisted language testing
CASLR computer-assisted second language research
CAT computer-adaptive testing
CMC computer-mediated communication
ESL English as a second language
IRT item-response theory
ITS intelligent tutoring systems
LAN local area network
MTMM multitrait multimethod
SLA second language acquisition
TESOL Teachers of English to Speakers of Other Languages
TOEFL Test of English as a Foreign Language
UCLES University of Cambridge Local Examinations Syndicate