System, Vol. 21, No. 2, pp. 257–274, 1993
Pergamon Press Ltd. Printed in Great Britain

REVIEWS

Scholars who would like to publish in this section of *System* are requested to contact the Review Editor before submitting a paper. As a rule, all contributions should be made in English. French and German will, however, be considered. The Review Editor may be contacted at the following address:

Sprachenzentrum der Universität Bayreuth
Postfach 101251
D-8580 Bayreuth
Federal Republic of Germany.

System, Vol. 21, No. 2, pp. 257–260, 1993
Pergamon Press Ltd. Printed in Great Britain

DUNKEL, PATRICIA (ed.), *Computer Assisted Language Learning and Testing: Research Issues and Practice.* New York: Newbury House (Division of HarperCollins), 1991, 300 pp.

The most significant contribution of *Computer Assisted Language Learning and Testing: Research Issues and Practice* is to document the point we have reached with CALL and CAT research: a general rejection of studies which have compared one delivery system with another, with focus now tending to specific variables that render a particular implementation effective. As Nina Garrett points out in her cogent Foreword, inappropriate research questions have in the past produced contradictory findings, when what we should be asking is: 'What are the presuppositions about how human beings learn language that suggest that the environment created by technology will make a difference?'' (p. xiii). The articles in this book are timely, thorough, and well balanced—they frequently reference one another, and helpfully each has a final section entitled ''Implications for the second/foreign language classroom''. The contributors have in common that they are at least addressing appropriate questions.

John Esling stresses in his chapter that a major impact of computers on language learning is in how interactions in learning environments are restructured. Accordingly, Neu and Scarcella note how use of word processing alters the role of the teacher and organization of the instructional setting. Donna Johnson's chapter discusses how computers promote new ways of students working together with ''higher levels of interest, motivation, and achievement'' (p. 65). Johnson points out, however, that it is not the computer per se that brings on these effects, but the ways teachers structure the social aspects of learning environments when computers are present.

One of Johnson's contentions is that social use of computers is consistent with discourse based theories of SLA. Accordingly, Esling proposes techniques applying Brown and Yule's categories for discourse as a means of demonstrating the effectiveness of computers in

networking and word processing, and in engendering spoken language. Along these lines, Abraham and Liou find that three different kinds of computer programs are capable of eliciting spoken language comparable to that produced in small-group work, but suggest the design of courseware capitalizing on Doughty and Pica's (1986) finding that negotiation is more frequent when negotiants have information the others need.

As Dunkel contends that the tendency to use flawed and inadequate software is a major weakness in CALL research, it is well worthwhile to ask whether the courseware studied by Abraham and Liou engenders the kind of conversation expected, and, if not, what does? Esling, who found that students writing over networks engage in generally long turns, as opposed to predominantly short turns found in Abraham and Liou, attributes such results to use of a certain methodology rather than of a certain medium. Recalling how the language lab faltered over its limited research base and failure to meet unwarranted expectations, Dunkel appeals for "more 'hypotheses' and less 'hype'" in hopes of helping CALL avoid a similar fate.

A healthy preoccupation with methodology in the design and implementation of CALL characterizes Robinson's chapter on applying perception and social learning theories to the design of feedback in CALL. These theories suggest that CALL designers should avoid focusing on errors, and that CALL developers should encourage learners to continually reappraise failed tasks as doable. Though Robinson had in mind programmed CALL and answer judging, these remarks could equally apply to more exploratory software—like word processing, desk-top publishing, database management, or programming—which successfully invoke perception and social learning theory in non-judgmentally doing what users instruct, while users see from results of an operation if the instructions succeeded, and figure out what went wrong if not. Furthermore, use of such tools often entails real exchange of information as students use and learn how to use the programs.

Martha Pennington also illustrates how use of technology in L2 learning can be consistent with theory. Noting that research shows that learners practice more when given visual in addition to auditory feedback, she says (p. 150) that "One of the most innovative uses of the computer, one which cannot be easily matched by a human instructor, is to provide the student with on-line feedback or instructional modeling" in the form of graphic and aural feedback. Other fruitful applications of technology discussed here are use of data show tablets in teaching writing process (Johnson), and discourse analysis over networks (both Esling and Johnson). Esling in particular suggests many imaginative uses of software and peripheral devices which might emulate Brown and Yule's conversational task types, including: videodisc technology used in databasing, hypercard in organizing and linking images, articulating directions for learning word processing or CAD, describing scenarios on laser disk, and having simulations create action or disasters.

But there are also many omissions of provocative options with CALL. Concordancing is mentioned only once, by Chapelle and Jamieson as a means of assisting researchers in discourse analysis of spoken interaction. Video-interactive technology is mentioned only by Esling, and only in the sense of students creating animated videos using graphics packages. CD–ROM is mentioned only briefly and never in regard to an integrated delivery system for instruction. Considering that valid research on CALL effectiveness relies so

heavily on the use of optimally configured software, it is surprising that neither concordancing, nor interactive video, nor CD–ROM figure in research reported here.

If the cutting edge of CALL is somewhat neglected, its foundations are at least well elaborated. Validity is a recurrent concern of the authors represented. Grant Henning contributes a chapter about threats to validity with CAT, while Chapelle and Jamieson address validity issues affecting proper interpretation of research findings, and urge researchers to fully describe the language context, subject characteristics, and CALL activities investigated so as to allow readers to make allowances as to external validity.

One threat to validity not mentioned is the effect of intrusion by the researcher into the process under study. In their chapter, Abraham and Liou acknowledge that the presence of investigators was a confounding factor in their emulation of "lab" conditions, and they attempt to estimate a point where subjects largely ignored the researcher and became totally involved in the programs. The onset of this point is often marked in sociolinguistic research, and should be considered as an additional threat to validity. (Because Abraham and Liou's study had only six subjects, its external validity is in question, as when they imply gender to be responsible for male dominance of conversation on the basis of two male–female cross-cultural pairings. Also, failure to transcribe student interactions with instructors may have omitted valuable data, such as evidence of long turns. To their credit, such factors are at least noted by the researchers, as urged by Chapelle and Jamieson.)

Another question on which the authors attempt to shed some light is whether students experience anxiety toward computer use. In the two studies on word processing, Marianne Phinney concludes that use of computers to relieve writer's block is supported, except that several weeks are needed for positive effects to kick in; while Neu and Scarcella report that anxieties were low. This issue is pursued in the chapters on computer-adaptive testing, where Harold Madson, Henning, and Stevenson and Gross tend to feel subjects are not intimidated by CAT. Kaya-Carton, Carton, and Dandonoli, on the other hand, imply that some are, and that this is one of many "unanswered questions" in CAT.

As Garret points out in her Foreword, this book does not provide answers so much as raise questions, and this is particularly apparent in Part II on CAT, especially on the issue of the unidimensionality requirement for Item Response Theory. In Henning's view, the concept of unidimensionality assumes that any other dimensions are "inconsequential by comparison" to the dimension being measured, and that, in any case, where multiple dimensions are encountered, it is possible to tease these into separate unidimensional item banks. Madson raises Canale's (1986) contention that reading is not a unidimensional skill, as required by IRT, but agrees with Henning that the Rasch 1-parameter model is appropriate for CAT, and concludes that CAT can satisfy IRT constraints, and that reading and listening can reliably be adapted to CAT. Kaya-Carton, Carton, and Dandonoli, on the other hand, opt for multidimensional IRT and a three-parameter model in order to scrutinize factors which previous authors appear to have viewed as "inconsequential". However, the discussion is a bit abstract: the specific dimensions, four of which can be handled by present software, are not mentioned, and, most disappointingly, the CAT software could accommodate only one dimension, so the final analysis was only slightly improved over a unidimensional IRT study. The reader is left with the impression of cracks

in the theory having been neatly plastered over, yet beyond repair with the software tools presently available. Awareness of conflicting opinion is of course healthy, but better balance could perhaps have been obtained in one or two chapters presenting the differing points of view.

Though it is incumbent on a reviewer to be critical, I basically agree with Garrett, who has in essence reviewed this book in her Foreword: "The papers collected here do not provide all the answers we need, but they do constitute a thoughtful exploration of what the basic questions really are and how research can best address them" (p. xiii). An applied linguist with interests in CALL *and/or* SLA will swiftly agree that this book is an indispensable addition to his or her bookshelf.

REFERENCES

CANALE, M. (1986) The promise and threat of computerized adaptive assessment of reading comprehension. In Stansfield, C. W. (Ed.), *Technology and Language Testing*, pp. 29–45. Washington, DC: TESOL.

DOUGHTY, C. and PICA, T. (1986) "Information gap" tasks: do they facilitate second language acquisition? *TESOL Quarterly* **20**, 305–325.

Vance Stevens

Sultan Qaboos University
Language Centre
Box 32493
Al-Khod
Sultanate of Oman

System, Vol. 21, No. 2, pp. 260–264, 1993
Pergamon Press Ltd. Printed in Great Britain

ALLWRIGHT, DICK and BAILEY, KATHLEEN M., *Focus on the Language Classroom.* An Introduction to Classroom Research for Language Teachers. Cambridge: Cambridge University Press, 1991, 250 pp., £22.50, pbk £8.50.

Over the last decade quite a number of publications on language classroom research have appeared. Dick Allwright, one of this book's authors, has been a well-known contributor to these studies. A good many of his contributions have centred around the basic question: "why don't learners learn what teachers teach?". In view of the considerable number of publications on this topic one might raise the question: is *Focus on the Language Classroom* by Dick Allwright and Kathleen M. Bailey yet another, perhaps unnecessary, rehash of familiar theories and research results? The answer is a straightforward, unequivocal No! The novelty of this book is that it is not intended for fellow-researchers in the field; its central aim is to bring the results of on-going investigations in classroom research to the attention of practising foreign language teachers, and to encourage and help them to carry out their own research, which will eventually enable them to improve their teaching. Undoubtedly, this is a very ambitious objective. Will the book really arouse the teachers' curiosity about the effects of their teaching? After all this is an audience that, by rights,