

13:20–14:20 3F Main Hall

a-003

Errors and Intelligence in CALL: Bridging a World of Diverse Learners

Trude Heift

In the field of ICALL, the field integrating Natural Language Processing and other AI techniques into Computer-Assisted Language Learning, research has been conducted in many of the same sub-areas being studied in applied and computational linguistics. This talk will not cover all aspects of ICALL, but instead, will be restricted to two sub-fields of my own work: firstly, using NLP techniques to diagnose and explain a variety of learner errors and, secondly, using AI techniques to address issues relating to an inherently diverse population of language learners.

What ties the two areas together is a focus on learner-centered aspects of CALL for different language learners. In the first part of this talk, I will provide a brief introduction to ICALL including an overview of its historical developments with its success stories and failures. In the second part, I will focus on learner feedback and demonstrate that CALL programs, including my own, have focused on enhancing learner-computer interaction by providing program and learner guidance and thus improving learner feedback. Finally, I will explore aspects of learner modeling for language assessment, individualized instruction and learner autonomy. The talk will conclude with current trends in research and development in ICALL.

Trude Heift received a Ph.D. in Linguistics from Simon Fraser University, Canada focusing on applied and computational linguistics. She is currently Associate Professor of Linguistics at Simon Fraser University teaching German and linguistics. Her areas of research include several aspects of CALL, applied and computational linguistics: ICALL system design, human-computer interaction, learner feedback, error analysis, learner modeling and L2 morphology and grammar acquisition. Her publications include: *Errors and Intelligence in Computer-Assisted Language Learning: Parsers and Pedagogues*,

Routledge, 2007 (with M. Schulze), and articles in *System*, *CALL*, *ReCALL*, *CALICO*, *Canadian Journal of Applied Linguistics*, *Journal of Artificial Intelligence in Education* and *Journal of Educational Technology & Society*. She has also edited special journal issues for *CALICO*, *CALL* and *Language Learning & Technology* and authored the *E-Tutor*, a widely used ICALL system for German. Her work is funded by grants from the Social Sciences and Humanities Research Council Canada to investigate issues relating to Second Language Acquisition and learner-computer interaction. At Simon Fraser University, she recently received the Dean's Medal for academic excellence.