Goal-Oriented Design of Online Pronunciation Training: the Spraakmakkers Case

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Abstract

The present project is aiming at developing and testing a prototype of an ASR1-based CALL2 application for training oral proficiency for Dutch as a second language (DL2). The application optimizes learning through interaction in realistic communicative situations and provides intelligent feedback on various aspects of DL2 speaking, viz. pronunciation, morphology and syntax.

The speech technology modules are specifically designed for non-native speech recognition and do not stand on their own, but are embedded in the whole system, and their suitability is related to the goals of the targeted users, and the feedback scenarios provided.

The design is situated in the genre of “interactive participatory drama” (Hubbard 2002), in which learners play an active role in a pre-programmed scenario by interacting with computerized characters or “agents”, in this case through simulated conversation.

Tailored feedback is given on mistakes, depending on learner choice: immediate corrective feedback, favouring self-correction, is given to learners who wish to receive frequent and overt correction; recasting is used as a corrective feedback strategy for learners who prefer to go on with the conversation even if they make mistakes. The application keeps track of learner mistakes and offers remediation exercises on discrete linguistic topics.

Linguapolis was responsible for the design of Spraakmakker. In this presentation we will show how we designed for authenticity by taking into account both the pedagogical goals for and personal goals of the target users. On the pedagogical level, authenticity appears in the design of content (real-life communicative situations) and tasks (simulated conversation with virtual partners, methods for authentic assessment). On the personal level, authenticity is achieved by respecting the learner’s identity.

We hypothesize that the effect of ICT can be maximized when its potential usefulness is defined as the extent to which it contributes to the creation of a language learning environment geared towards realizing both pedagogical and personal goals of learners and teachers. This is the approach adopted within Distributed Language Learning (DLL), a conceptual and methodological framework based on more than twenty years of experience in the theory and practice of CALL design. DLL is a form of educational engineering, meaning that real-world hypotheses are formulated on the basis of theory and previous experience, in a cyclic but staged approach.

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