

“Listen to Danish in medicine – while you read!” - a usability and efficiency evaluation of an e-tool for vocational L2

By Lars Linnet - 2003

Good pronunciation is a prerequisite for a good communication between doctor and patient.

Among other European languages Danish holds the largest distance between spoken and written forms, including medical professions’ Danish. Addressing this issue, an e-tool in the form of a cd was produced with the aim of enabling doctors with a non-Danish background to hear the spoken pronunciation of texts, while reading the printed edition of a small but comprehensive basic Danish medical book. This book, a coat pocket book often used by Danish junior doctors, had, in an integration programme, been chosen by us to be the language book for our foreign colleagues.

Six of these doctors participated in a usability laboratory test, being recorded on video while working with 12 different clinical information tasks, constructed for their *de novo* use of the cd, such as preparing questions for taking a gynaecological history. While some problems were found, e.g. in relation to managing the media player, they were of no great magnitude. A questionnaire, answered by 30 doctors who had one month of experience with the cd, revealed that the problems had largely vanished. Almost all found the cd to be of great support to their efforts in learning the difficult pronunciation of the Danish language. Likewise, five teachers of medical vocational L2 found the cd to be of use for pronunciation development, and highly recommended it for homework.

We further developed a pronunciation test with recorded words being scored by two experts. Six doctors pronounced 40 difficult words, with one week’s interval, using a blind setup. We were able to depict only small, statistically insignificant, improvements. But hope is that the recordings may be subjected to further digital work; work related to automatic speech recognition technology and development of fluency assessment tests.

Plans are to make the cd available as a Web-application. The concept may easily be “translated” to other languages with the same need.

The abstract above summarizes a 3rd year annual report in the educational programme: Master of Information Technology, Health Informatics, University of Aalborg, Denmark.