Implementing Computer Technology into the Language Learning Process: What Difference Does It Make?

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Abstract
The purpose of this article is to describe a language-learning environment for beginning Chinese learners in Australia in which technology plays a crucial role in the overall planning of the curriculum. In this curriculum priority had been given to listening and speaking skills rather than helping learners to learn through reading romanization of the Chinese language. The integration of computer enhanced learning materials in the curriculum not only provided easy access to the pronunciation of the Chinese language throughout the learning process; it also effectively motivated learners to be autonomous learners outside the classroom. Oral results from this group of learners suggest that the curriculum design of this course actually speeds up the rate of acquisition of Chinese evidenced by a substantial reduction of errors made by Chinese learners. The ways computer technology can help students’ strategy use in beginning Chinese classes are also explored.

Introduction:
This article aims to describe a language-learning environment in which computer technology had been used extensively. The progress of the first group of beginners who finished their first semester of study in Mandarin at the University of Canberra in 2001 was followed. These students were zero-beginners when they started and were taught exclusively by a technology-rich methodology. By the end of the study, they would have completed 65 face-to-face contact hours over one semester. This group of beginning students consisted of 10 total beginners in any L2 learning.

The essential characteristics of this environment were firstly, the input of Mandarin from day one was provided without pinyin—the romanization of Chinese sounds using the English alphabet and other traditionally ‘helpful’ techniques of teaching such as translation, sound systems comparison and so on. Secondly, students were provided with easy access to audiophiles and other authentic video materials through Cdroms.

Significant results:
Data collected from the 2001 group of students were compared with two other groups of total beginners from 1995 and 1996. The fundamental difference between the groups was that the 2001 group of students was not taught pinyin at all from the very beginning. Analysis of students’
oral performances revealed that the rate of acquisition of Mandarin initials and finals was faster for these students. For instance, in all the pinyin groups’ data, a large number of errors with palatals [x] and [j] and [q] were present. While the 2001 group made some errors with [x] and [q], errors with [j], even in the first oral, i.e. only after 6 weeks of instruction did not even occur. Furthermore, by the time the 2nd oral (after 65 hours of instruction) was conducted, no errors were made with respect to these initials.

The faster rate of Mandarin sound system acquisition can be attributed to the removal of romanization and the availability of sound files on CDs. It seems that combined effect of both procedures helped to reduce the transfer effect from the students’ mother tongue-English. For this group of students, preparation for class did not constitute reading through the vocabulary for the week only. They had to play the data and audio CDs for the class and listen to the pronunciation in the preparation phase. This pattern of behaviour was confirmed by the indication that 85% of the students regularly used the audio and data CDs for at least 1 to 3 hours per week in an evaluation survey conducted at the end of the first semester in 2001.

Computer Technology and Strategy Training: Differences in strategy use of 2001 groups of students were measured by Oxford's Strategy Inventory for Language Learning questionnaire.[1] Analysis of the students’ responses revealed that for inexperienced learners of a L2, cognitive strategies such as pattern searching and hypothesis testing were seldom used. Yet the successful employment of these strategies serves to engender positive reinforcement for the students especially at the beginning stage of learning a L2. Frequent engagement with target language materials through the use of VCDS, DVDS and so on can dramatically increase opportunities for hypotheses testing and pattern recognition as well as catering for different ways of learning the target language material.

Specialised computer enhanced language learning programs such as ‘Mmbrowse’ [2] can also play a key role in improving students’ pronunciation [3] and strategy use. However, any integration of computer technology needs to be systematically and carefully planned into the learning environment for maximum effectiveness.

Conclusion:

Limited findings described in this article demonstrated that a clearly considered and implemented curriculum involving computer technology can increase the amount of authentic materials that the learners are exposed to in the foreign language classroom which can lead to better pronunciation and increased students’ motivation for learning the language and culture of an L2.

References: