



Nottingham 2011



The Call Triangle: student, teacher and institution

“... then click on the correct answer”:
which way ahead for the field of CALL?

Cornelia Tschichold*

Department of English Language and Literature, Swansea University, Singleton Park, Swansea SA2 8PP, Great Britain

Abstract

Despite the promise it holds, tutorial CALL has been marginalized within the CALL community. Where the computer is used solely as a tool, the beneficial effects of feedback for language learning are absent. Vocabulary would be one of the areas where tutorial CALL can be of great use to the individual learner. A small study on learning Welsh vocabulary shows some of the areas where feedback in vocabulary CALL could be improved.

© 2012 EUROCALL All rights reserved

Keywords: tutorial CALL; feedback; ICALL; vocabulary

1. Introduction

For some time now, authors in the area of CALL have talked and written about the normalization of CALL (Bax 2003) or the (vertical and horizontal) spread of CALL (Chapelle 2010), and teacher education programs increasingly include an element of CALL. With computers fast becoming part of the expected infrastructure of any desk, and the next generation growing up with smartphones and tablet PCs as ubiquitous as pen and paper in the last century, what will there be to distinguish CALL from Applied Linguistics in ten years? Focusing on materials development, Chapelle (2010) argues that the distinction between CALL and traditional language teaching materials is becoming blurred and is losing its usefulness. This begs the question whether this argument can be applied to the field of CALL as a whole.

Following Levy's categorization of CALL into tool CALL and tutorial CALL, Hubbard & Bradin Siskin remarked several years ago that tool CALL is now part of the mainstream and is well represented at conferences such as TESOL. Tutorial CALL on the other hand has been marginalized, not only among the language teaching community in general, but also in the narrower CALL community (Hubbard & Bradin Siskin 2004, Blake 2007).

The one aspect that still distinguishes the computer medium from other materials used for language teaching is the feedback it can give. Good CALL, and especially ICALL, can give individualized feedback to the language learner that no printed material can. Pronunciation training can make use of speech recognition software to give individualized feedback to the learner. Vocabulary learning can be made more efficient not just by using electronic multimedia flashcards, but also by using these in a spaced repetition sequence (Leitner system) instead of relying on the learner to take these decisions. Texts produced by the learner can be checked for simple grammar and appropriate feedback given to the writer. These are the areas that CALL researchers should be concentrating on because these are the areas that neither the learners nor colleagues from other subjects would necessarily know much about. Ubiquitous

* E-mail address: C.Tschichold@swansea.ac.uk.

microlearning might be just around the corner, but as long as it uses only canned material, the learning success is likely to be limited (Beaudin et al. 2007). The question of feedback, and how it can be improved, is one of the oldest questions in CALL, and we should make sure we do not lose sight of it in the flood of digital developments around us. Feedback is the area where CALL can offer a clearly distinct and considerably better service to the language learner than traditional language classes (Heift 2001).

2. Feedback in CALL

A quick review of the literature about feedback in language learning shows that corrective feedback is beneficial (Chandler 2003; Nagata 1993, 2002) and best given immediately after the learner's production in small units of clearly worded feedback, not just in terms of "correct" or "wrong". Areas of language knowledge that are suitable for this kind of feedback include pronunciation, morphosyntax, and vocabulary. Vocabulary especially seems to be ideally suited for tutorial CALL. Vocabulary learning is an area which has suffered decades of neglect by teachers and materials developers while communicative approaches to language learning were in fashion and it was widely believed that teachers could do little to help learners master the thousands of words necessary for fluency in the foreign language; learners would have to somehow pick up the large majority of these words in a rather mysterious process called incidental vocabulary acquisition (Folse 2004, Godwin-Jones 2010). This attitude on the part of their teachers notwithstanding, many learners felt the need to improve their vocabulary, and they still do. The number of applications for PCs, and more recently for smartphones, that aim to help users improve their vocabulary is growing as a response to this demand. Unfortunately, many of these apps have questionable linguistic underpinnings, and if anything only contribute to the bad name of tutorial CALL among teachers.

3. Learning Welsh vocabulary

In an attempt to arrive at an empirically motivated list of features that tutorial CALL apps for vocabulary could be evaluated against, a long-term, single-subject study was conducted with a beginning adult learner of Welsh. The subject followed a communicatively oriented Welsh course ("Cymraeg I oedolion – Cwrs mynediad dwys") over two school years, with the class meeting for one hour a week. The vocabulary content of the course was entered into a vocabulary training programme called V-Train (© Paul Rädle), and the learner used this for several short study sessions each week. V-Train uses the Leitner system of spaced repetition (cf. Godwin-Jones 2010) and was set up with 10 "boxes" that would suggest repetition of a given word in intervals increasing from one day after the previous successful encounter to 64 weeks. After the two years, the first 30 lessons of the course were covered. The database contained a total of over 900 electronic cards, tagged with statistical information about the number of times each card had been seen. Of these 900+ cards, the following cards were deleted: doubles, cards containing morphological variants of words on other cards, cards containing phrases rather than single words, and cards containing grammatical words. Only the remaining 549 cards are taken into account here.

nouns	278
verbs	72
adjectives	89
adverbs	33
numerals	20
other (preposition, conjunction, etc.)	57
TOTAL	549

Table 1: Word classes of single word cards.

The words were sorted by word class and by the number of repetitions. Table 1 shows the distribution of these words into word classes. As the system was set up with 10 boxes, each word would have to be seen at least 9 times before it reaches the last box. Every time the user's answer does not match the expected answer letter by letter, the card goes back to the first box. Whether the mismatch is the result of a typo, or the use of a synonym is irrelevant. In the vocabulary acquisition literature, figures given for the number of repetitions a learner typically needs for any given word tend to be around 8 to 12 (Nation 2001). On this

basis, one might expect most words to require fewer than 20 repetitions. Of the 549 words, 88 had clocked up 50 or more repetitions, and 14 even had over 100. This group of obviously particularly difficult words was then examined and classified. Table 2 shows the word classes of these difficult words.

nouns	21
verbs	18
adjectives	26
adverbs	4
numerals	1
other	18
TOTAL	88

Table 2: Word classes of words with more than 50 repetitions.

In terms of word classes, it is very obvious that nouns are relatively easy to learn; their proportion shrinks as we zoom in towards the words with numerous repetitions. (Only one noun is left among the cards with over 100 repetitions.) Verbs and especially adjectives become more prominent. Another relevant factor is clearly the spelling of Welsh words. While Welsh has a relatively shallow orthography with few of the difficulties that English presents, the spelling, especially of words containing combinations of the letters 'y' and 'w' (both representing vowels) clearly is not easy for beginners: some of the most difficult words with very high counts of repetitions are *hwyr* (late), *rhywbryd* (some time), *tywydd* (weather). Other potentially detrimental factors can be traced back to less than ideal presentation in the course material, e.g. in semantic groups.

4. Concluding remarks

The small-scale study described here must suffice to expose the serious flaws of generic electronic flashcard programs for language learning. V-Train is one of the best such programs available today, not least because it requires the answer to be entered, not just self-evaluated, but still cannot offer the kind of personalized feedback with the potential to transform the learning experience. There is no provision for the fact that nouns are considerably easier than adjectives and verbs, or that Welsh spelling is a major difficulty for beginners. While such information can easily be added to the cards, this would have no consequence for the repetition cycle. Flashcard programs, while often allowing for various kinds of information such as sound or picture files to be inserted, use static cards. The only dynamic aspect – and even that only in the better programs – is the spaced revision of the cards. Even aspects that seem quite easy to solve from a technical point of view are not used for a more dynamic treatment of word difficulty. The repetition cycle of today's flashcard programs does not take into account the difficulty level of the various word classes, of individual words, or of specific problems an individual learner might have. Nor do we have flashcard programs that are capable of adapting the depth of information displayed or requested to the learner's stage of knowledge for individual words. The software used in CALL still has a long way to go.

5. References

- Bax, S. (2003). "CALL – past, present and future". *System*, 31(1), 13-28.
- Beaudin, J., S. Intille, E. Munguia Tapia, R. Rockinson & M. Morris (2007). "Context-Sensitive Microlearning of Foreign Language Vocabulary on a Mobile Device". LNCS 4794, pp. 55-72.
- Blake, R. (2007). "New trends in using technology in the language curriculum" *Annual Review of Applied Linguistics* 27, pp. 76-97.
- Chapelle, C. (2010). "The spread of computer-assisted language learning". *Lang. Teach*, 43:1, pp. 66-74.
- Chandler, J. (2003). "The efficacy of various kinds of errors feedback for improvement in the accuracy and fluency of L2 student writing". *Journal of Second Language Writing*, 12(3), 267-296.

Godwin-Jones, R. (2010). "From memory palaces to spacing algorithms: approaches to second-language vocabulary learning". *Language Learning & Technology*, 14(2), 4-11.

Heift, T. (2001). "Error-specific and individualised feedback in a web-based language tutoring system: Do they read it?" *ReCALL*, 13 (1), 99-109.

Hubbard, P. & Bradin Siskin, C. (2004). "Another look at tutorial CALL" *ReCALL*, 16 (2), 448-461.

Folse, K. (2004). *Vocabulary myths: applying second language research to classroom teaching*. Ann Arbor. University of Michigan Press.

Nagata, N. (1993). "Intelligent Computer Feedback for Second Language Instruction" *The Modern Language Journal*, 77(3), 330-339.

Nagata, N. (2002). "BANZAI: an application of Natural Language Processing to web-based language learning" *CALICO Journal*, 19(3), 583-599.

Nation, I.S.P. (2001). *Learning vocabulary in another language*. Cambridge. Cambridge University Press.