Need "Drilling" = "Boring"?

A Computer-based Approach to Word-drilling in Language-learning

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1. INTRODUCTION

• Drilling is an early strategy used by most L2-learners
  – Familiarity with realia, authentic genre & literature written in L2 gradually supplants this method of vocabulary-building,

• Drilling is:
  – Inherently boring & repetitious,
  – Usually syllabus-centric, not learner-centric. The learner may have little direct control over the vocabulary used/prescribed,

• Program designed for personal L2-learning
  – These ideas may be of interest to others for both L2-learning and English-learning.
2. FLASH CARDS

• Flash Card method is a common way of word-drilling

• Benefits
  – light,
  - cheap,
  - portable,
  - unobtrusive,
  - expandable,
  - needs no electrical power,
  - definitely learner-centric!

• Disadvantages:
  - cumbersome to use beyond a few 10's of words,
  - no way of associating performance with each word,
  - more ambitious structures are inconvenient - e.g. phrases, sentences,
  - sub-selection of elements from the entire lexicon is not feasible.
3. COMPUTERISE IT!

• Conversion to a computer program is straightforward

• What are the disadvantages?
  - electrical power is needed,
  - learner must have access to a computer – expensive,
  - learner needs some PC literacy (to create the dictionary files),
  - no longer portable, or cheap.

• Advantages are:
  - performance record keeping,
  - easily expanded to phrases, sentences, or complete paragraphs,
  - dictionaries can be sorted and subcategories can be preselected,
  - vocab can be organised into specific dictionaries/glossaries (e.g. words just from specific lessons, disciplines, books being read, technical genre, etc.)
3(a) COMPUTERISE IT! (2)

• **Principles & algorithms used are universal,**
  – Applicable to any pair of languages, not just <language> to/from English,

• **Consistent file format useful for <any language> to/from English**
  – In fact, <any language> to/from <any other language>, provided both languages use Latin characters,

• **User interface & caption language can be changed to other languages**
  – Program equally useful for learning English, or English-speakers learning another language (author’s focus).
4. PROGRAM DESIGN & FUNCTIONS (1)

4.1 Dictionary File

- a small plain text file (ASCII file) created by the user which contains their target words & meanings,

- Format is one word/phrase/sentence per line written in L2, followed by the meaning in English on the following line,

- Word pairs are analogous to flash cards,

- Any text editor can be used to modify dictionaries
  
  * e.g. Microsoft ‘Notepad’ supplied free with all versions of Windows from Windows 95 onward (95,98,2000,ME,XP)
e.g. fragment of a French dictionary file

'French
'DOS
'This file (frencsam.txt) created 14/03/2001 with 165 entries
'Notes:
'1. é=ALT130, à=ALT 133, ç=ALT135, è=ALT 138
'2. Comment lines may be inserted using a leading ' anywhere in the file.
'3. Extra word pairs may be added to this file using Notepad or MSDOS 'Edit'.

la canard
duck
avec
with
en
in
pompe
pump
citron
lemon
pont
bridge
4.2 Entering Foreign Characters in the Dictionary

- **Entry of foreign characters in Windows PC’s is mystic art**
  - From earliest DOS-based PC’s, accented European characters could be entered from an English-language keyboard, without special program support,

- **Use numeric keypad, and type <ALT>nnn sequence**
  - Works for most accented characters used in Fre, Ita, Spa, Trk etc,

- **ASCII characters & value ‘nnn’** usually published in one of the rear appendices of the DOS or Windows manuals,

- **Characters 128 to 167 are:**
  - 128 Ç 129 ü 130 é 131 à 132 ä 133 à 134 à 135 ç
  - 136 è 137 ë 138 è 139 ï 140 i 141 ï 142 À 143 Ä
  - 144 É 145 ë 146 Æ 147 ö 148 ø 149 ô 150 ü 151 ù
  - 152 ý 153 Ö 154 Ü 155 ç 156 £ 157 ¥ 158 P 159 f
  - 160 á 161 í 162 ó 163 ú 164 ñ 165 Ñ 166 ° 167 °
4.3 PROGRAM FEATURES

• 4.3 Random selection
  – PC program reads words in chosen dictionary file to memory and then words of either language can be randomly retrieved & presented for the user to translate to the other language,

• 4.4 Sub-selections possible
  – Program is designed so that the user can selectively access either all the words in the dictionary file, only verbs, only suffixes, or even only complete sentences,

• 4.5 Scoring
  – Record is kept of how many times each word has been previously encountered, and of how many times an error was made,
  – Scores of new word are shown on the screen every time it appears,

• 4.6 Focus on difficult words
  – Users are regularly confronted by problem words, because each time the program first begins, the words that have created the highest error rate are presented first.
4.7 MAIN USER SCREEN
User-screen language can be changed
4.8 TRANSLATION SCREEN

• When the “Begin” key is pressed, the translation screen appears, showing the worst-scoring word in the file “MAMTEK2001.txt”, which was “etkili”, which had been presented 12 times previously, and which I got wrong 10 times out of 12.
ASSESSMENT SCREEN

• The user types their translation in the lower box, and if the answer differs from the translation in the dictionary, the following assessment dialogue box appears:

• In this case, my answer was wrong again!
• Comparison algorithm is not sophisticated & user can dissent (or cheat!)
POST-DIFFICULT-WORD SCREENS

• After first 4 words disposed of, program randomly seeks the type of words nominated in the “Word Filter” box,

• When “Verbs only” is selected, only infinitive verbs are presented:
e.g. SELECT “Entire sentences”

• Most ambitious mode of all = “Entire sentences”
• These sentences are entirely authentic, derived from scientific conference proceedings, novels, etc. e.g.
Now the program has outlived its primary purpose...

• **When the student has reached this stage:**
  – he or she clearly no longer needs this program as a scaffold to develop their word-recognition skills or sentence deconstruction skills,
  – Now deep into real & authentic language.

• **But**
  – Program is still fun to use from time to time & challenging!
4.9 EXIT PROGRAM

• When user exits the program, a summary screen is shown:
  – Shows the order of (de)merit of the worst 12 words
  – Worst word of all is listed first (error rate = 78%).

![Image of statistics window]

• The next time the program is run,
  – Words 77, 91, 54 & 78 will appear in that order first, and with repeated attention their recognition rate will progressively improve.
5. CONCLUSIONS

- Word-drilling need not be boring,

- This program can be used both as recreation, and to collect useful examples of L2 usage & idiom in a systematic way,

- The collection of statistics relating to student errors provides a means of focusing on these problem words,

- Microsoft Visual Basic version 4, professional edition for Windows 95 was used for the programming,

- The handling of foreign-language characters and languages under Microsoft Windows is continuously changing, resulting in some annoying foreign-language-support incompatibilities between Windows 95, 98, & 2000.