

Thursday, January 31, 2008

Teacher Resources

Flash Card Technology: A Low-Tech How-To

Drill has been discouraged for the past decade, and flash cards have lost some of their savory flavor.

But, flash cards can serve an important function in all sorts of learning that requires the memory of multiple words, phrases, formulas, functions, directions, steps, patterns, etc. And, while computer driven flash cards are possible, the on screen flash cards lack one important benefit. Portability!

The other benefit that flash cards of the 3" x 5" variety hold is economy. The note card beats the notebook computer, hands down in economy. Not your Grandmother's Flash Card! If you want to "Upgrade" your flash cards with a bit of modern technology, you can do this with a printer that accepts 3" x 5" index cards. Sidebar Some laser printers can print on 3" x 5" index cards, and some ink jet printers will also. But, be sure to use a laser printer that can print both sides at once. The reason that the laser printer must print two sides at once is that you must be careful in feeding previously copied cards of pages through a laser printer. Because a laser printer uses a hot fuser process and toner from previously printed paper can rub off and "gum up the insides" of the printer.

The same problem exists with the expensive laser printer sheets that have index cards that tear apart with "micro-perforations." Besides the expense, you should not feed these sheets through a laser printer twice. Besides, the mirror image printing doesn't work, and the heavy paper stock tends to curl as it travels through the laser printer paper path because of the rollers and the heat. And, never, ever feed photocopies through a laser printer. The toner for photocopiers fuses at much lower temperatures than the high-temperature laser printers, and the laser printer melts the photocopy's toner. But, why would you want to print the flash cards? Don't you learn the words better, faster, more quickly if you write the words out in your own handwriting?

Answer: Yes, but we are only putting lines on the flash card, making learning templates.

But, why put lines on the flash cards, aren't we just going to write a word or phrase on one side, and the information, definition, formula, or foreign vocabulary item on the other?

Answer: That is the old way. Our "upgraded method" uses more than one word on each side of the card. The lines, table cells to be exact, keep the words lined up with the correct definition.

Here are samples of what these "upgraded" flash cards look like.

The reason for the different number of spaces on the first flash card sample is provide more space to write if phrases, idioms or longer formulae are the target for learning.

One More Trick for the Modern Flash Card

You will notice that these "Upgraded" flash cards are printed in "Portrait" style, i.e., the long side is vertical. And, this is what makes the "Upgraded" flash card superior to the "Old School" flash card that is used in Landscape mode.

She secret is in the "Flip."

Instead of flipping the card right-to-left and reading left-to-right, we flip these flash cards bottom-to-top, and read normally.

Note: If you flip these cards right-to-left, the words will appear upside-down. One Other Special Feature Notice that there is a table cell between the number and the cell for the word or definition.

That cell is included in this design because you might like to mark certain words for extra attention.

For example, if you were listing the Spanish words between 20 and 30, you might use that space to mark 22, 23 and 26 because those numbers, when spelled out, require accent marks. Or, if you were listing all the days of the week in Spanish, you would mark Wednesday and Saturday as the days whose name, when spelled out, require accent marks. So, this cell serves as a "flag" to mark the word, definition or formula for special attention.

It is also possible to color code this cell if your to-be-learned list has multi-dimensional features.

Why the "Upgrade" in Flash Cards?

The first benefit of the "Upgraded" flash card is that you need a stack of cards that is substantially smaller. With this design, you could place 100 words on only ten cards instead of on 100 cards.

There is also the benefit of being able to keep categories of words together. For example: "Question words" could all be listed on one or two cards, and these would be easy to find since the words are clustered together. Clustering multiple words on one card makes it easy to find a certain category of words or ideas during review. (And reviews should be quick, frequent, daily.)

In addition, the bottom-to-top flip is more natural and easier to perform while holding a pack of cards in your left hand.

With the flash card deck in your left hand, you can review

Of course, you must carry these cards everywhere you go, and use them during every spare moment if you are to take full advantage of this flash card technology. Further Technology Enhancements? But, couldn't these flash cards be developed and used with Personal Digital Assistants, such as the PalmͲ and Pocket PC™? And, what

about creating video flash cards for Apple's iPod or Microsoft's Zune? What about flash cards for cellular telephones?

Answer: Sure, but besides being expensive, this seems like a lot of work and there doesn't seem to be many pre-built applications. The lack of pre built study applications may be because drill and practice was deprecated over the past decade or more, so software developers didn't find a market for these products.

Or it may be that these devices were too expensive for teachers and students. A Pocket PC, for example, can cost more than a new desktop computer.

But, if you want to create a learning system for one of these products, please make your product and share it with others.

One of the benefits of merging low-tech with high-tech is that repeatable processes can be duplicated. For example: A high school Spanish teacher could create flash cards and provide them for all 180 students. And, the same files would remain usable for future classes that the teacher teaches. Note: We are indebted to Barry Farber in his book, *Hot to Learn Any Language* for these ideas. Classroom Toolkit reviewed this book during our December 2007 issue.

[Link to the Classroom Toolkit Book Review](#)

Posted by Classroom Toolkit Newsletter in Teacher Resources at 05:00