

Section 4, Chapter 50:

Underlining (or Highlighting): **Cueing the Computer Brain**

There are many good reasons to get your students in the habit of underlining (or highlighting) words which they don't know while they are reading. The most obvious is that it allows you, the teacher (or parent, as the case may be) to find out which words they don't know.

It also leaves a record which can be rewarding to both you and your students when you later on have them re-read from a book with loads of underlined (or highlighted) words which they – by then – can read.

As a teacher, I learned to prefer having my students mark up their books with pencil marks than to copy something and call it a book report. By giving students the choice of writing a 500 word report or underlining (or highlighting) words they don't know, I usually was able to get students to do it "my" way.

And "my" way did have its built-in teacher advantages. I could easily tell:

1. How far into a book they were. If words are only underlined (or highlighted) in the first 25 pages, that's as far as they are.
2. Whether or not the book is too easy or too difficult.

A. More than five underlined (or highlighted) words per page, may indicate it's too difficult. Certainly, three underlined (or highlighted) words per line (as has happened) indicates the book might as well be written in Sanskrit.

B. No underlined (or highlighted) words or only one every five or six pages usually indicates the book is too easy. In fact, no underlined (or highlighted) words usually meant that the student hadn't read the book. Of course, there will always be those who think they are smarter than the teacher. They will swear up and down that they read all 1200 pages of Tolstoi's *War and Peace*, but they didn't underline or highlight any words because they knew all of them. A quick check of:

1. What's this word?
2. What's this word?
3. What does this word mean?

generally reveals the story. They were bluffing.

I tell my students that they must remember the agreement. They are to read the book and underline in pencil (or highlight) all the words they can't pronounce AND all words whose meaning they are not sure of even though they may be able to pronounce them. If they are not willing to do the underlining (or highlighting) then they must do the writing of the 500 word book report.

But the real reason for having my students underline or highlight words is to help them discover that they can learn words by themselves--if, they alert their computer brains, that there is something that needs to be learned.

That's where Underlining (or highlighting) comes in. The very act of underlining (or highlighting) is a cue—a cue—to the computer brain that there is a problem to solve. Without the cuing by underlining (or highlighting), the pattern of letters skipped over will no more be retained by the computer brain than the *zvxtwmtqs* of a foreign language or the position of the telephone poles and fire hydrants you pass by every day on the way to work.

When I give my students the instructions about underlining (or **highlighting**) (or the "choice" of underlining (or **highlighting**) or writing a 500 word report), I also give them the reason. I don't want to leave the impression that I'm asking them to underline or **highlight** because I have stock in a pencil or a **highlighter** company.

I tell them that when they are reading they are bound to come across words they can't pronounce or whose meaning is beyond them. They can't just stop reading because the word is *lough*.

They must go on. Unfortunately, the student doesn't just go on, the student SKIPS the word. Skipping is something we do when it isn't important. Skipping words gives the computer brain the incorrect message. But underlining (or **highlighting**) doesn't.

Underlining (or **highlighting) CUES the computer brain that this is a problem for it to solve.**

If a cue is repeated frequently enough, one of two things is liable to happen. The most common is that the computer brain will solve the problem and all of a sudden you just know what the word is and what the word means. This is how we learned all our basic vocabulary as infants and small children. The computer brain solved problems for us.

The other thing that happens after a specific word is underlined (or **highlighted**) time after time after time, is that even though the computer may not have solved the problem it is now triggering you into action. It will try to help you learn by making you mad enough to ASK, "Hey Ma, Hey, teacher, Hey anybody, what does **lough** mean? Does it rhyme with tough, bough, dough, or through?"

I know that constant encountering of the same word can be infuriating, because that's what happened to me when I was reading *Trinity* by Leon Uris. After about the seventh time, I encountered that *#!@&%!#⁵⁴ -ough word that I couldn't pronounce or even puzzle out the meaning from context (there never was any), I was so furious, I actually used the dictionary. Because I was so angry, I learned that **lough** is the Irish spelling of lake and is pronounced the same as in Scotland where they spell it *loch* but say something that sounds to me like "lock."

Good readers, like you and I, mentally underline words which we don't know as we read. And because we read a great deal, our vocabularies are large. What the readers who aren't as good as you and I can do to develop the MINDSET for learning is to get into the habit of using a pencil to underline or **highlight** words that they don't know.

THERE ARE TWO MAIN REASONS FOR UNDERLINING (OR **HIGHLIGHTING**):

1. To alert the computer brain that the word is a word that you need to learn.
2. To alert the computer brain that the particular passage is meaningful to you and you want to remember it.

Underlining (or **highlighting**) is an active process and it helps to make reading an active rather than passive process.

We urge you to adopt this method, and we urge the researchers at the universities to test out this theory that underlining (or **highlighting**) can be a cue to the computer brain.

Section 4, Chapter 51:

⁵⁴ We recognize these dingbats as representing censored cuss words. But do we ever teach our students that this is what *#!@&%!# means?

The Proper Editing of Notes: The Key to Successful Learning



Although the very act of taking notes does help a student learn the material being presented by the teacher, it certainly does not guarantee it being remembered come time for the final exam. In fact, if all a student does with his notes is to stick them in his notebook and forget about them until just before a test, he will find out that he will not be able to read half his notes. And the other half won't make any sense.

Actually, the act of taking notes is only the very first step in learning from lectures. The second step is editing. This, very simply, is the deliberate re-writing of the notes taken. The notes are put into a form that will enable the student to properly study them and to review them.

One technique is the outline technique. Below you will find the outline technique explained, using the outline technique.

THE OUTLINE TECHNIQUE

- I. MAIN POINTS ARE PUT IN SOLID CAPS
 - A. EXAMPLES are listed underneath.
 - B. Lots of WHITE SPACE is used.
 - C. FACTS can be QUICKLY spotted.
 1. Especially important facts are underlined or **highlighted** with transparent coloring.
 2. Note the effect of:
 - a. CAPITALIZING
 - b. underlining
 - c. **highlighting**

The advantage of the outline technique is that to use it, the student must think in terms of what are main points and what are examples or secondary points. The very act of THINKING and ORGANIZING helps to impress the information upon the mind.

In today's academic jargon it is "instantiating schemata." It also provides a neat set of notes which the student can use and in which he can quickly find what he is looking for. And now for the DIVIDED PAGE TECHNIQUE.

THE DIVIDED PAGE TECHNIQUE

Names & Dates

I must remember that

George Washington

Crispus Attucks

Dec. 7, 1941

Oct. 4, 1957

Identification & Reasons for learning

Name the person who...

1st President

1st man to die in
Amer. Revolution --
Boston Massacre--A Black

Pearl Harbor--WWII
date?

Sputnik--awoke interest
in science & math educ.
date?

The advantage of the divided page technique is that the student can use it to quiz himself DAILY on the material that s/he must master. All s/he has to do is to cover up one side of the sheet, read a name and then try to think of who the person is. If the student can't remember, then the student knows that more studying is in order.

With ordinary notes, the student would immediately see both the name and the identification and would not know for sure whether s/he actually can recall it in a test situation. Actually, the divided page technique is simply a variation on the time-honored flash card method of studying.

The editing and studying of notes really boils down to TWO important elements: **Quality of time** spent studying and **frequency** of studying. It's NOT how LONG you spend studying that really counts.

What counts is:

A. HOW OFTEN

1. 5 minutes daily for three weeks is better than 6 hours at one sitting.
2. Study at a regular time.

B. HOW WELL

1. Reading because you have to makes studying boring.
2. Thinking-Organizing-Actively involving your mind with a *reason* and *DESIRE to learn* activates the learning process.