

# **SYSTEMATIC APPROACHES TO STUDY**

Source: Alton Raygor & David Work's Systems for Study, Chapter 5

In this paper we will present some techniques for developing your best method for study. Notice we didn't say **the** best method of study. Why? Because there is no single best method. Students differ. Textbooks differ. Sources differ. Instructors differ. Each mix of books and students and instructors requires different techniques of study. Unfortunately, many study skills manuals are written as if there were only one method that could be applied under all conditions. This just does not seem reasonable. In this chapter you will get a brief overview of the experimental literature on study methods. We will point out the implications of these experiments for various ways to study. Then you can decide which mix of techniques works best for you in each of your courses.

## **STEPS IN STUDY**

### **Overview**

What is the first thing you do when you sit down to study? If you are like many students, you simply begin at the first page of your assignment and work towards the end. Or maybe you count the number of pages in the assignment to find out how much you have to do. You put a bookmark at the end of the assignment, and then you start to work. Do you know that there is a much better way to spend the first few minutes of your study? Don't just start at the front, and don't just count all the pages. What should you do for openers? Take a few minutes to overview your assignment. Skim quickly over everything that you are going to read. Glance at any problems at the end of the chapter. Thumb through any vocabulary in a foreign language, look at any graphs in economics, read the titles under data tables in sociology. Try to grab a quick overview of what you will study.

McClusky did a little experiment on presurvey before reading. He had students in one group survey their assignment before they read it. The other group just started reading. He found that the preskimmed group read faster, including the time for the preskim, than the students who just sat down and went to work. What do his findings mean to you? It looks like you will get much more out of your study time if the first thing you do is overview the assignment.

The technique probably applies to more than just a chapter. The method can be applied to a whole textbook.

Here's how you do it. The first time you opened the book, do a survey of the whole thing. Read the introduction to find out if the author gives you any tips about his orientation to the subject. He may tell you a great deal about how he has it organized.

Look at the table of contents. It would give you some more ideas of how the author organized his work.

How should you make questions? Don't wait until you have completed the entire assignment. Read a section of a chapter. Then stop. Make up a question that was answered by the material. Finally, recite the answer from memory. A little later in the chapter we will see why it is very important that you give that answer from memory, not from reading.

### **Immediate Recitation**

A few paragraphs back, we said that reciting, not just reading the answers to questions in very important. Demonstrating this, Spitzer studied the effectiveness of questions and recited answers at various times after learning. He found that the best time to recite, or self-test, is immediately after studying the material.

It is important that you understand what is meant by the term "recite" or "self-test". In Spitzer's study, it means answering questions from memory. In this book, it means the same thing—answering questions with the textbook closed. It's the difference between recalling and just reading and rereading and again rereading. Students who self-tested immediately after learning tended to retain much more than students who didn't self-test until twenty-four or more hours later. The general finding is presented on page forty-eight. Notice that if you don't do any self-testing, twenty-four hours after learning you'll forget half of what you knew. And after one week, you're down to thirty percent of what you knew. Three weeks after the original learning, just in time for a surprise quiz, you'll recall fifteen percent.

However, look what happens if you plug in a recitation trial right after learning. Twenty-four hours later you will retain almost everything you knew. Three weeks later you'll still be way ahead. And the effects seem to continue through time.