

# Overview - Organize Textbook Reading

## Unraveling The Textbook Maze

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Often students will ask or say to themselves: "Do I really have to read this whole textbook? Surely my professor doesn't expect me to read the whole thing. After all, he/she doesn't cover all of it during class." There are many differences between high school and college reading assignments. First, there is a greater quantity of material. Secondly, many topics will not be addressed in lecture or they may only be alluded to briefly. Thirdly, the professor doesn't have time to point out the important areas in the book or direct you on how to approach the text. Finally, exam questions probe more deeply than the simple definitions that the author has boldfaced.

Hence you, the student, has a responsibility to study/learn information independently. This causes confusion. You may ask: "How can I schedule time to read all of this material? How do I know what is important? What areas of the text should I focus on? What is a realistic amount of reading to do in a one or two hour period? How do I know what is relevant? What should I mark? I've never underlined before."

The good news is that research by psychologists and educators has resulted in several plans or strategies by which you can unravel the textbook maze. The first system was developed by Francis Robinson at Ohio State University during World War II. It was developed for the military. Men in the military needed to read manuals and retain information effectively. **This method was called SQ3R - Survey, Question, Read, Recite and Review.** Because this method was so effective, other plans developed. **There is a plan called PROR - Preview, Read, Organize and Review** as well as one called **Survey, Explore, Review.** By now you are probably noticing that there are many similarities among all these plans. Hence, I'm not going to describe a specific plan to you, but I'm going to discuss steps that can be beneficial before, during and after reading parts of a textbook chapter. As you experiment with these strategies, it is my hope that you will develop a plan of your own. Perhaps you will use different strategies based on the content of the textbook you're reading. In the videotape which accompanies this text, I'll model some of the thinking processes you might use as you follow these steps. At first glance you may feel that you don't have enough time for this process. However the preview and review process take only a few minutes and will increase your efficiency and understanding tremendously.

## BEFORE BEGINNING THE READING PROCESS

Previewing or surveying the organization of the textbook and then the content of each individual chapter is the best way to motivate yourself to read and to maintain concentration while reading. This step should take only a few minutes. While previewing, note only the key words in the title and the subtitles and how they relate. Do NOT get too involved in the details. Remember you only want a general concept of the ideas the author is going to talk about and how they build on the ideas from the previous chapter. The author has spent much time laying these key words and ideas out for you. You will find them by looking at:

Chapter Title

Chapter Outline

Major Subheadings

Minor Subheadings

Diagrams, Figures, Graphs and Captions

Bold Print

Summary, Study Questions, and perhaps a Glossary

As you preview, think about what you already know from previous classes and your general knowledge. This is called your background information. By calling upon this information, you will be able to build upon the mental scheme in your head. This will increase concentration and motivation.

You'll find questions and even some confusion arising in your mind. This is good. It means you're thinking about the key words and ideas in the text. Use this questioning process to begin predicting test questions the professor will ask on the next exam. Remember the author has completed much of the hard study work for you by outlining the chapter. The exam questions will most probably build on the title and subtitles. If you use the mnemonic 5 W's and H - Who, What, Where, When, Why and How, you can predict test questions by placing these words before the title and subtitles. Avoid asking only "What is \_\_\_\_?" This is the definition level or most basic level of question. Ask higher level questions by asking "How does this concept relate to the title?" and labeling examples. Asking questions above the literal or definition level will insure that you are studying the material deeply. University professors assume you know the definitions and will frequently ask you to make inferences or apply the information. Again I will model some of these questions as we preview the biology chapter in the videotape.

This trip through a textbook has often been compared to planning a cross country trip. If you're traveling from Indianapolis to San Francisco, you'll want to preview the trip before you begin. Then you'll probably plan each day's trip in greater detail. Compare the preview process to using a map that displays only the interstates crisscrossing the United States. You only want the key words and ideas at this point; the minor roads or details will come later.

Remember the study process is often slow. Difficult concepts will require some thinking time as well as reading time. As you preview the chapter, set a goal to read several subsections or pages during a one to two hour period.

## DURING THE READING PROCESS

As you read each paragraph, stay actively involved adding, deleting and revising information as you discover the answers to your questions and compose new questions. Don't lose the answers to these questions but mark them in your text. The diagrams and graphs will explain the text and also indicate the relative importance of particular sections to the main idea of the chapter.

During this marking process, you'll begin to understand how these key words and ideas relate. That's why it's important to do the marking yourself. Don't rely on the marking of another student. For this reason, it's even better to make your own margin notes rather than rely too heavily on the author's notes.

Your goal in underlining/markings is to superimpose your own outline or hierarchy of ideas on the text. You'll use this information to further condense and compose a study guide when preparing for an exam. There are many methods or types of notations you can use when marking. The key is to develop a system for yourself so that the major ideas will stand out in contrast to the details.

Always read an entire paragraph, or if the material is easy for you an entire section, before underlining/markings anything. This is the best way to avoid underlining too much material - which is self-defeating. Also use the author's pattern of organization: listing, compare/contrast etc. to guide your marking.

The following are some ideas you might use in underlining/markings a page of text. Many experts recommend that you use pen or pencil rather than highlighter. This allows you to paraphrase and add margin notes when appropriate.

**DOUBLE OR SINGLE UNDERLINING** After reading a paragraph, use double or single lines to indicate the major and minor ideas. Remember you often don't need to underline whole sentences. Your aim is to reduce the amount of verbiage you're trying to remember for a test. Rather use the key words which will usually be the nouns and verbs. Aim to mark the major idea in each paragraph.

#### **MARGIN NOTES**

Use the left margin to mark recall phrases, to summarize and paraphrase main ideas and details and to predict test questions. Question marks can be used to indicate areas in which understanding is "fuzzy".

#### **DEFINITIONS AND EXAMPLES**

Distinguish between definitions and examples. Both are important. You might underline definitions and put ( ) parenthesis around examples. Another suggestion is to write "def" or "ex" in the margin.

#### **USE NUMBERS FOR MAJOR CONCEPTS**

Numbers can be used in many ways:

1. lists - especially lists of subheadings
2. sequences
3. important details

#### **CIRCLES OR BOXES**

Some students like to circle important concepts, ideas, or subheadings. Other students prefer a box.

#### **USE FIGURES/GRAPHS/EXAMPLE PROBLEMS**

Figures and graphs can help you visualize the text. Read the text. Then apply the information to the figures, graphs or example problems. Underline/mark the corresponding captions just as you would the text.

## **AFTER THE READING PROCESS**

It's important to spend some time reviewing the material you have just finished reading. This may seem like an unimportant duplication of effort; however, it will increase the retention of information by almost 80 percent. This process may take only a few minutes and you may choose among several strategies:

Review the subheadings and recall the main points

This is an excellent strategy because you are forcing yourself to recite the major points without looking at your underlining. It will help you discover which concepts are still difficult for you.

Reread your underlining

This is a good test of whether you have done a good job of underlining. You should be able to read only what you have marked and understand the main points.

Reread the summary -

You'll find that understanding has increased. The gaps in knowledge that were there when you read it during the preview have been reduced.

Reduce your underlining by making annotations in the margin

Reducing your underlining further by making annotations in the margin is one of the best ways to review before an exam.

