

A GUIDE TO TEXTBOOK READING



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SYSTEMATIC APPROACHES TO TEXTBOOK READING

In 1941, the psychologist Francis P. Robinson developed a study-reading system called SQ3R (see following pages). Based on learning theory, the SQ3R was carefully researched and tested. It was found that the method provided an effective means of learning textbook material. Thousands of students have been taught to use this system. Other systems have adapted the basic SQ3R method, but it is presented here as the classic study-reading system.

You will want to develop your own personal system to study textbook material. Look at SQ3R as a model. Once you see how it works, you can adapt it to suit your own style.

It will be important for you to use some study-reading system. Results of research studies show that students who apply one of these systems comprehend and remember better than students who don't. If you consider how you have learned things in the past, the purpose becomes clearer. For instance, you probably learned the multiplication tables through repetition. Study-reading systems supply some of the repetition necessary for learning. In contrast to the "once-through" style of reading, a system like SQ3R provides numerous, varied repetitions to ensure learning.

The SQ3R is a logical progression of steps. These steps have psychological advantages over ordinary reading. First, they give you a mental organization so that you know what to expect from the chapter. Secondly, you know what you are looking for in the material, so you won't read aimlessly. Third, immediate review of the material will store information in your short-term memory. Finally, periodic review will allow you to remember the information over the long haul.

Steps in the SQ3R System

1. Survey

A. Reasons for Surveying

1. Plan a reading strategy.
2. Predict contents.
3. Evoke prior knowledge.
4. Create a mental outline.
5. Arouse curiosity and interest.

In addition, surveying allows you to divide the reading task into natural, manageable units. With practice, you can begin to gauge the time needed to read a chapter or set of chapters.

B. How to survey

1. Read the chapter's title, headings, and subheadings. This will give you a skeleton outline of the chapter's content.
2. Read the introduction or first paragraph. This will often prepare you to read for important points.
3. Read the summary or concluding paragraph. This will often briefly state the most important concepts discussed in the chapter.
4. Notice learning aids.
 - a. charts
 - b. graphic aids
 - c. graphs
 - d. diagrams
 - e. illustrations
 - f. learning objectives

- g. special print
- h. marginal notes

2. Question

A. Reasons for questioning before you read.

1. Increases concentration and interest.
2. Directs attention.
3. Creates purposeful reading.
4. Allows you to anticipate tests and class discussion.

B. How to question:

1. *Turn boldface headings into questions.* These don't need to be intricate; simple questions of definition or purpose will suffice (e.g., "What does this word mean?" "Why is this discussed here?"). The main thrust of the questions is to give you a purpose for reading—something to look for.

2. *Read end-of-the-chapter questions.* These represent what the author considers to be the key points. Often the author's and your instructor's ideas about what is important will match.

3. Read

For many college students, the most difficult thing about this step is maintaining attention while reading. The key is to stay in the present rather than allowing your mind to wander into the past or future. Hopefully, by now you have found a place to study that meets your needs for

concentrating. If your mind habitually strays, try making “tick” marks on a piece of scratch paper. Each time you make a mark, it will serve as an alarm system to bring you back to reality. If you are obsessed by a problem, write it down to get it out of your mind and on paper. Commit to a future course of action; write that plan down. Allow yourself five to ten minutes to do this. You will be amazed at how this works to clear your mind of the problem and allow you to get on with the task at hand.

Schedule breaks for yourself. Most students burn out after about 45 minutes of intensive study. When you begin to lose concentration, stop reading for ten to fifteen minutes. Get up and move around. Put your kids to bed, talk to a friend, get a cup of coffee—do something to break the downward learning spiral that occurs. When you start studying again, you will do so with a clearer mind.

Read in a sitting position. (You have probably heard this before from English teachers). If you read while lying down, your chances of falling asleep are greatly increased.

If you find your attention wandering, start reading out loud. By using your sense of hearing to aid your vision, you will bring yourself around.

While reading, answer the questions you posed in the previous step and ask new questions. This will keep you focused on your intent. As you read, highlight and mark the material. This will not only make for easier review but will also help you concentrate because you are using multiple senses.

Decide how many pages you intend to read in one sitting. This establishes a goal. “If you aim at nothing, you’ll hit it every time.” This gives you something to hit or to surpass. It allows you to feel that you are not looking eternity in the eye.

Finally, try to visualize as much of the information being read as possible. Not only will the chapter seem more interesting, but research shows that students who use mental imagery comprehend and remember material better than students who don't.

4. Recite

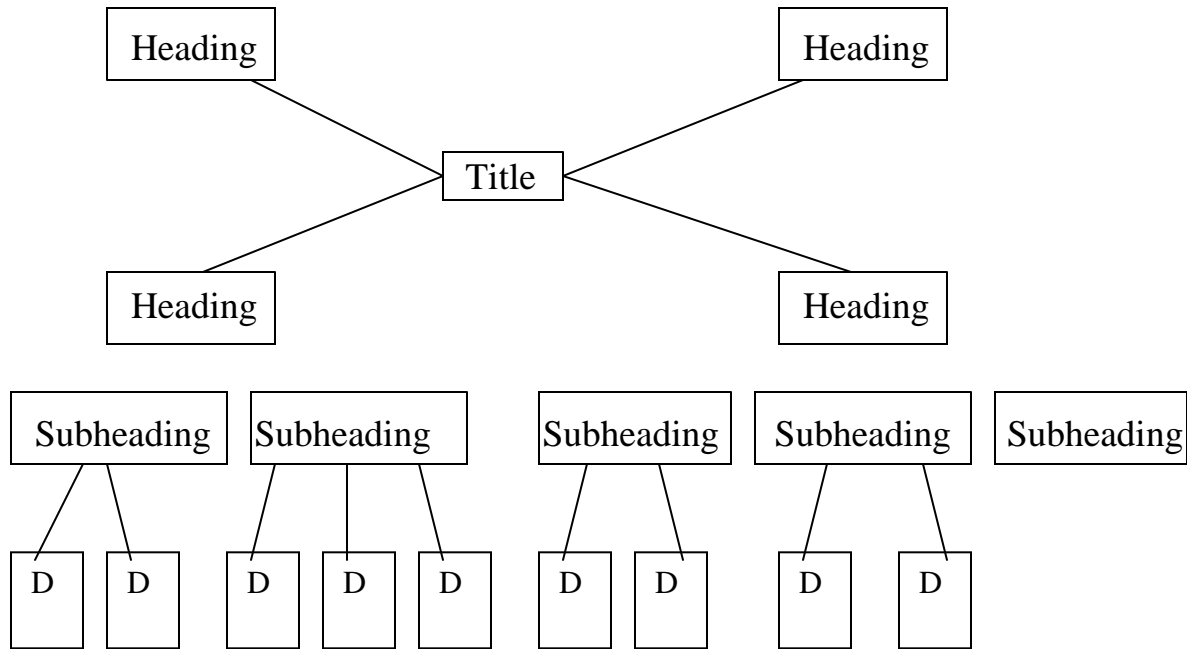
A. Reasons for Reciting

1. Check to see that the first three steps were successful.
2. Store information in short-term memory.
3. Promotes understanding.
4. Saves time.
5. Trains memory process.
6. Heightens concentration (you expect something of yourself).
7. Creates written reference.

B. How to Recite

Right after reading a chapter, answer end-of-the-chapter questions and questions you posed during the “question” step. Answer these out loud or on paper. It will be least helpful to just recite the answers in your mind. The following are options you can use to enhance your mind and your recitation. This step is crucial because you are storing information.

1. Look at each heading and summarize the information you remember. You may do this either out loud or in writing.
2. Map information.



D=Detail

3. Take notes section by section. Your highlighting of the chapter during the “read” step will facilitate your note taking.
4. Stand in front of your study area and make a speech about the material you have just studied.
5. Teach the concepts to someone else. This not only impresses the information into your mind but also allows you to share and clarify it to someone else.

5. Review

A. How to review

1. Skim through the chapter's headings. State the important ideas presented under each from memory.
2. Skim through highlighted material to refresh your memory about key points and important details.
3. Scan when needed to clear up any remaining questions.
4. Analyze word meanings which seem important.
5. Review periodically. Your first review should occur within 24 hours after completing the first four steps. You need to do this because massive amounts of forgetting will occur after 24 hours. By beginning to review soon after initial learning, memory is strengthened, and the process toward long-term recall has begun.

Adapting The SQ3R System

The classic SQ3R system will work for many people without alteration. It may serve you best in an adapted form, however, depending on the material you are studying, the way you learn, and the kind of learning that is expected.

Your textbooks vary from course to course. You may need to use the SQ3R as a model and rearrange the steps, add extra ones, or eliminate a step in order for the method to fit the material. For example, you may need to add an outlining or note taking step. You may need to add a step that involves working math problems or replace the recite step with a problem-solving step.

Our learning styles differ. You probably prefer learning in one of three ways: visually, auditorially, or experientially (hands-on). Ask yourself the following questions (answer “yes” or “no” to each):

- ___1. Does repeating things out loud help me learn?
- ___2. Do I learn more from a lecture than from a textbook?
- ___3. Does it help me to talk to people about what I’ve learned?
- ___4. Do I learn best when involved in a study group?
- ___5. Do charts, lists, diagrams, and graphs help me learn?
- ___6. Does writing and rewriting information help me learn?
- ___7. Does making outlines and writing summaries help me learn?
- ___8. Do I tend to forget things if I don’t write them down?
- ___9. Do I learn best by watching someone perform a process?
- ___10. Do I generally need to see something operate before I understand how it works?
- ___11. Do I tend to learn things by trial and error, then remember the appropriate way to complete a task once I’ve figured it out?

If you answered “yes” to questions 1-4, you favor auditory learning; “yes” to 5-8, visual learning; “yes” to 9-11, “hands-on” learning.

You may need to experiment with various methods to learn how you learn best. Then adapt the SQ3R to more nearly match your own style. For example, if you learn best by listening, you might tape record the information during the “read” step, listen to the recording rather than recite, and review by answering questions into a recorder and listening again. If you learn best by experiencing, you may need to focus your study on lab, shop, or clinical experiences. Unfortunately, much of what you are tested on will be from your textbooks and lectures. You will need to compensate by adapting your preference to include auditory and visual options. If you are a visual learner, the classic SQ3R system should work best for you.

Review:

After 24 hours, complete your first review. Try to answer the questions you made up from chapter headings from memory. (Attach a separate sheet of paper for your answers.)