

This handout is designed problems that lead to out of this exercise, a line vertically down of slow reading are covered, list those you believe may be slowing your reading on the left side of the line. On the right side of the line, list some of the suggested remedies you are willing to try.

When finished reading this handout and making your list of problems and remedies, you will have a self-diagnosis of some of the factors that affect your reading speed and some definite steps you may take to increase it. Whatever you discover, it's a good idea to discuss your results with a staff member in your campus learning center and set up a plan for further refinement of college reading skills.

Keep in mind that campus learning centers have many kinds of written materials and exercises to help with faster reading and Detter memory. AIso, there are easy-to-use-computerized exercises available for increasing reading speed and comprehension. As long as you are willing to work on remedies, there are no good reasons why you should not be able to improve reading speed and comprehension (understanding).


The average person reads at about 250 words per minute (wpm).
 adjusted to the material being read. For example, reading at 700 wpm with the ability to remember $20-30 \%$ of what was just read is not very useful unless you are reading for entertainment. If you are looking up a phone number, you are probably "reading" at about 25,000 wpm! Other than a phone number you looked up, there is no comprehension, and you are likely to forget that number in less than 1 minute. For textbook learning, reading faster than 250 wpm increases the risk that important ideas and clarifying details will be missed. Most problems with reading speed come from the lack of practice and from trying to read and commit the information to memory at the same time.

For information that must be remembered, humans learn faster and remember better when they keep reading and learning separate. Most humans can be in the information-gathering mode $O R$ in the learning mode, but not in both modes at the same time.

Learning is promoted when reading material is mentally manipulated in some form. Mental manipulation speeds learning. Simply stroking words with your eyes involves little mental manipulation, consequently, little learning results. More later on ways to mentally manipulate what it is you need to learn and remember.


Having to regress or reread frequently may be caused by the lack of concentration. Here are some typical symptoms of and remedies for ineffective concentration:

lack of interest in the subject
Did you know that when natural interest isn't present in a subject, artificial interest can be created? The good news is artificial interest works just as well as natural interest on improving reading speed and comprehension. Try the Create An Interest Technique.

The responsibility for learning rests with the learner. That translates into you being willing to do whatever it takes to learn ideas and concepts contained in reading assignments. Inevitably, some assigned readings will not be as interesting as others but the responsibility for reading and learning the material is the same as it is for more interesting material.

Artificial interest may be created by actively finding reasons for reading and learning. Some sources to tap for reasons are friends, classmates, professors, and one's own mind. Below are some reasons students use to create artificial interest and make reading easier.

## Paydreqming If you catch

yourself daydreaming while you read and don't know what to do to stop it, try The Mark Technique. Put a checkmark, an "X", or a star on a piece of paper each time you catch yourself daydreaming. By doing this one simple task, many students find that they daydream less and concentrate

## Worrying about

problems
This impediment to reading is common to college students but can be controlled by The Worry List Technique. Each time you catch yourself thinking about something not related to what you are reading, write that thought down with the intention of doing something about it later. Then DO something about it later.

## OQn't remsmber what is raad Check the distraction level in your study

 environment. Auditory and visual distractions interfere with concentration. Eliminate TV, radio, stereo and other sources of sound or remove yourself from the environment in which they are contained. In other words, study where it is quiet and where it is going to stay quiet. The potential for noise can be just as distracting as the actual noise itself.Remove pictures, souvenirs, and objects from easy view. They can attract visual attention and interrupt concentration. Don't try to study in front of a window. While it is a good idea to rest the eyes by looking up from the page periodically, if the view is more appealing than the reading assignment, there will be trouble returning to the reading.

A remedy for visual distractions may entail moving to a less visually attractive study environment where an open textbook is the most stimulating thing to see.

Relate reading to life after college such as on a full time job upon graduation from college.

Tactfully question the professor on the relevance of the subject matter to your major and/or life after graduation.

Choose to be positive and see assignments as 3 opportunities to learn something new, a chance to expand knowledge and broaden horizons, and acquire information that may turn out to be vital to you later. After all, you have come to college to learn. Don't buy into the limiting attitude that something must be interesting for you to learn it. That's like saying: "If all food doesn't taste like cake, I won't eat it."

Knowledge, like food, comes in varying degrees of "taste" appeal. Just as a variety of foods are needed for healthy physical and mental development, a variety of knowledge is needed for healthy intellectual development.

Watch what is eaten. What is eaten and not eaten can significantly affect the ability to concentrate while reading.

Hard to believe? Try this. One morning for breakfast, drink coffee with sugar or hot chocolate, eat a couple of donuts or pastries, toss down some jelly toast, and add a glass of sugary fruit drink. Watch what happens to your ability to concentrate and read during the remainder of the day.

The next day, make a special effort to eat a breakfast with no sugar in it. Try some combination of the following: whole wheat toast with butter or peanut butter, an egg or two and/or some meat, drink milk or 100\% fruit juice and have some fresh fruit. If you have cereal, make sure it does not contain sugar. Then, keep an eye on your ability to read and concentrate after this fare. Many students have found that with a better diet, there is an increased ability to concentrate while reading.

Set a goal of a high grade or grade average. As long your mind focuses on that goal, the fact that reading may be uninteresting won't have a slowing effect because reading is done for reasons other than interest.

A second cause of slow reading involves a vocabulary in need of further development. A large part of a college requires learning new terminology with which to grasp new ideas and concepts.


Therefore, successful college students must be willing to do what's necessary to acquire and expand vocabularies and refine techniques for doing so. Below is a list of symptoms characteristic of a vocabulary in need of development and some remedies which successful college students use to make learning new vocabulary easier.

## Difficult to lean new vocabulary The Notecard Technique is an easy-to-use

 technique involving the use of common notecards. When you run across a word or term of which you are not absolutely certain of the meaning, write that word on one side of a notecard. Look up the definitions (many words have more than one) and place them on the opposite side of the card along with a sentence in which you have correctly used the word or an example demonstrating the concept or idea.For only 5 minutes per day, go over these cards by looking at the word and recalling as much of the meaning as possible from memory. If you want to speed learning these words, recite the definition outloud, as best you can from memory. Then, turn the card over to see how you did. Read incorrectly recited definitions aloud. Then turn the card over and try to recite the definition from memory again. Do this as many times as necessary to recite the definition correctly from memory. Then, go one to the next notecard.

Take every opportunity to use these new vocabulary words in your themes, essays, exams, research papers, and class participation. As your vocabulary grows, you will stop to look up words less often while reading, thus increasing reading speed.


## not fure of the beft place to find word meanings

If this is a problem for you, try The Reference Book Technique. A must for every serious college student is the purchase of two reference books. One of these essential reference books is a dictionary. Look up words with uncertain or unknown meanings. Record the words and definitions on notecards. A college bookstore is usually well stocked with the kinds of dictionaries their customers need. Repeatedly stumbling over the same term will significantly slow reading. Multiply that by 5 or 10 or 15 unclear meanings, and reading is very difficult and understanding nearly impossible.

The second essential reference book is a thesaurus. Thesaurii contain valuable synonyms, antonyms, and related words. Its use is valuable for anyone refining the ability to write and speak. Use a thesaurus to "spruce-up" papers and essays. Using new words in your speech also results in faster word recognition while reading. This will lead to faster reading speed.


Ltishand to undierstand my elasses $\stackrel{e r}{3}$ The secret to increase understanding in coursework and to increase reading speed is called the Customized Vocabulary Technique. Each discipline in college such as psychology, biology, history, chemistry and the like have their own vocabulary that most precisely represents important ideas and concepts to be learned. The sooner these vocabularies unique to each discipline are learned, the faster is the reading speed and more accurate is the understanding. This fact is so important that it is worth repeating:

## Without learning the new vocabulary for each course, grasping new ideas and concepts is difficult for most and impossible for the rest.

Learning new ideas and concepts involves developing a custom vocabulary for each discipline. Understanding the precise meaning of terms is important because the same term may have several meanings depending on the course taken. For example, the term "theme" may have a different meaning depending on whether it is being used in a writing, education, music, art, or psychology class.

In another example, imagine taking an organic chemistry class with reading assigned on a chapter discussing water and hydrates over a total of 30 paragraphs. The definitions of the terms are contained in the 1st sentence of the 1st paragraph for each concept. Six paragraphs explain heavy water and the term is used 12 times, 4 paragraphs clarify specific gravity and the term is used 9 times, 6 paragraphs explain anhydrous and the term is used 11 times, 7 paragraphs demonstrate hydrolysis and the term is used 11 times, 3 paragraphs describe efflourescent and is used 6 times, and 4 paragraphs detail hydroscope where the term is used 6 times. If a reader does not learn the definition of each term before reading further, reading speed will be agonizingly slow and understanding impossible.

Learning the definitions of terms in bold print and italics will speed reading and understanding. Also, use glossaries at the end of each chapter or end of the book. Glossaries contain main ideas and brief definitions and explanations that help in understanding main ideas.

A third cause of slow reading for college students stem from insufficiently refined reading techniques for handling college level reading material. The good news is that students can improve reading speed and comprehension by practicing effective reading techniques used by successful college students.

In response to the poor reading technique problems listed below, there are suggestions you can implement to overcome them.


## Stuck in one gear.

The cure for this problem is to Vary Reading Speed. Understanding what you read depends on the type of material you are reading and the reading speed you use on it.

Textbooks - Reading speed for textbooks should be slow to gather the main ideas and details necessary to do well on exams and become an educated person. When textbook reading skills are working properly, a textbook chapter need only be read once. Learning should take place from notes.

Newspapers and novels should be faster because recall is not as important as it is with text material.

Journals for research papers should be scanned very quickly. The secret to success here is to look for key words only. For example, if you are writing a paper on student affairs' programs in college, "student affairs" are key words to look for as you scan pages in articles related to that topic.


The Phrase Technique is an excellent way to increase reading speed. One characteristic of college students who read more rapidly is the ability to read words in groups instead of one by one. Instead of stopping the eye on each word, some students have learned to focus the eye slightly above the line they are reading. This encourages the use of peripheral vision that is necessary for seeing several words at one time.

The next page contains an example of text that is divided into groups or phrases. Focus your eyes on the dots slightly above these groups of words and discover how many words you can see without looking directly at those words. With practice, you will get better at perceiving phrases without looking directly at them as you increase you reading speed.

By using / the study skills / explained and illustrated / in this book,
you should / be able to / master any assignment
at the level / of even the / most brilliant student. / After all,
there is just / so much to know / about an assignment. / Once you
have mastered it, / you have reached / the theoretical $100 \%$ mark.

The brilliant student / can't do any more / than that.

When more than one word is perceived and understood at a time, it is called "phrase reading". Below is another example of reading in phrases:

> By using the study skills / explained and illustrated / in this book, / you should be able to / master any assignment / at the level of even / the most brilliant student. / After all, / there is just / so much to know / about an assignment. /
> Once you have mastered it, / you have reached the / theoretical 100\% mark. /
> The brilliant student / can't do any / more than that.

> From How To Study In College by Walter Pauk, p. 8-9.

Phrase reading involves literally "reading between the lines" because the eyes are focused slightly above each line of text.

Develop phrase-reading skills by practicing on magazines and newspapers to begin with. College level textbooks are not best for initial practice because they require well-developed phrase reading skills for speed and good understanding. Try reading at least, one magazine or newspaper article per evening practicing your phrase reading techniques. Once confidence is gained with the phrase reading technique, transfer the new techniques to textbooks.

The May I Introduce Technique is one way to spot main ideas and important details. Virtually every author uses cue words, phrases, and location in the text to attract attention and introduce important ideas and facts. Textbooks, being instructional in nature, are especially noted for this. The reader's job involves learning to recognize the special words and phrases that typically introduce major points and important facts.

Once this ability is mastered, main points and valuable facts literally "jump out" at you as you read.

Without the ability to recognize cues that introduce main points, college reading is difficult to master. Below are examples of introductory cue words and phrases to important information:

First...
This means...
For example...
Next...
Finally...
The first thing... An important reason..
An illustration... In other words...
Note that... The evidence is...
There are many kinds of introductory cue words and phrases which authors use to draw attention to important material. The above list includes a few of many examples of how authors try to attract attention to important information in college textbooks.

Neon Arrow Technique. Another way that helps spot main ideas and important details is the Neon Arrow Technique. Authors of college textbooks really do care and want students to learn what is contained in their books. If flashing neon arrows could be included in textbooks that point to important ideas, many authors would include them. Until that is possible, there is something just as useful which indicates the location of major points and valuable details and, in a way, point to the key ideas just as bright, flashing "neon arrows" would.


Once you are able to recognize "neon arrows" in textbooks, reading speed and comprehension improve. Examples of "neon arrows" which authors use to indicate the location of important material are listed below:

## TITLES... HEADINGS...

 SUB-HEADINGS...Bold print... Italics... CAPITAL LETTERS...
Numbers...1, 2, 3. Hilighted phrases...
Letters - A, B, C Summaries...
Material inset in highlighted boxes
Terms in margins...
Diagrams, charts, pictures, graphs...
End of chapter questions...
Glossaries at the end of a chapter or the book

## When you encounter "neon arrows", they mean:



Learn to recognize the "neon arrows" and enjoy the benefits of greater understanding in textbook reading.

## HOW FAST SHOULD YOU READ ?




Effective readers have different reading speeds for different material. In other words, reading speed should be flexible depending on what is read. Below, there is a chart containing five common reading speeds and the kinds of material on which to use each of them.

READING RATE CHART

| TYPE OF MATERIAL | TYPE OF READING | PURPOSE | SPEED |
| :---: | :---: | :---: | :---: |
| Dictionaries, thesauri, telephone directories, material where material is clearly presented. (lists, numbered items, outlines, etc.) | SCANNING | Location information | About 1500 words per minute or more |
| Newspapers, journals, novels, research. | SKIMMING | Reading for general topics and main ideas. | About 1000 words per minute or more. |
| $\begin{array}{lr} & \\ \text { Easy } & \text { textbooks, } \\ \text { newspapers, } & \text { stories, }\end{array}$ magazines. Any material where only main ideas are to be learned. Generally lighter study. | EXPLORATORY READING | General understanding of main ideas and details or relate new information to what is already known; creating interest in reading material; reading where you will be tested on details. | About 400 to 600 words per minute |
| Most textbooks, journals and technical materials. | READING FOR LEARNING | Reading with maximum understanding of main ideas and their relationships to each other; making questions from main ideas; taking notes; material where you are responsible for recall. | About 250 words per minute |
| Detailed textbooks in math, science, poetry, love letters; material to be studied intensively or read aloud such as drama, philosophy, religion; any material that requires or stimulates deep thinking. | ANALYTICAL \& CRITICAL READING | Evaluate and/or reflect on content, to follow directions as in performing a chemistry experiment, extract precise meanings, read aloud, reading intimate material, reading for emotional stimulation. | Less than 250 words per minute |

## To find your reading speed:

1. Have someone time you for 1 minute on a magazine or newspaper article.
2. Read to understand the material but don't try to memorize it on this first reading.
3. After 1 minute has passed, count the average number of words in one complete line you have just read and multiply that times the total number of lines read during that one minute.
4. The result will give an approximate reading speed or words per minute reading rate.

Remember 2 very important factors: 1) your reading rate should speed up or slow down depending on the type of material you encounter. For example, you run the risk of overlooking important information if you read faster than 250 to 300 words per minute for college textbooks. 2) You will become better at that which you practice, so


If you practice NOT reading or avoiding reading, you become better at that, also.


Success at any task is more likely if a strategy, a system, or method is used. In other words, your chances of doing well are enhanced if you have a plan. A plan is like a racing car, once you have one, you can make modifications and refinements to increase speed and handling to satisfy personal preferences. But, unless you have a car in the first place, there is no chance to modify anything let alone win a race.

Plans for reading textbooks include specific skills for increasing understanding and reading speed. The plan can be refined and modified as needed to suit the subject matter or individual preference. In general, students who have a plan for reading textbooks read faster and with greater understanding.


Fortunately, many successful systems for reading textbooks have been developed by experts in reading skills who want to help college students read faster with better comprehension. Those systems include skills characteristic of excellent readers plus many "short cuts" to efficient processing of text material. One successful textbook reading system is listed below. Try it out a few times and see if you too can notice an increase in your understanding of textbooks. Many successful college students already have.

The name of this textbook study system is called SQ3R. It stands for:

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\text { Survey@uestion } \mathbb{R} \text { ead } \mathbb{R} \text { ecite } \mathbb{R} \text { eview }
$$

urveying consists of previewing a chapter before reading it and looking for clues to main points such as subtitles, bold print, italics, end of chapter questions, chapter summaries, etc. This step should not take more than a few minutes. By surveying, students can see where and what the main topics are. This increases understanding, reading speed and the ability to
locate material likely to appear on exams.
Uestion is the next step that involves making questions out of main ideas. Clues used to indicate the importance of an idea are in the form of bold print, italics, headings, and subheadings among other clues.

When you make questions out of main points, you utilize one of the most powerful aids to reading and that is reading for a purpose and not just because it was assigned. The purpose becomes finding an answer to a question. This leads to better concentration and combats the Blank Mind Syndrome. Many successful students have found that placing a question on one side of a notecard and the answer on the other results in a very fast method for organizing and learning text material. Many of these questions turn up on exams and quizzes.
ead is the next step in SQ3R. Once questions have been made, you read for the purpose of answering them. Reading consists of consciously seeking out definitions, examples, explanations, steps, and sequences of events, etc. that comprise answers to questions. Most textbooks contain one main idea per paragraph and that central idea is frequently contained in the first sentence. The remainder of the paragraph is used to help the reader understand each main idea. This fact helps students know where to look for main ideas and clarifying details thus, increasing reading speed. This system even works well on less interesting material.
ecite is the third R in SQ3R.

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For example, follow these easy steps to get the most out of your notecards:

1. Say questions aloud.
2. Recite as much of the answer as possible OUTLOUD without looking at the details.
3. Look at the answer and check for accuracy of recall.
4. If the answer is recited correctly on the first try from memory, place that notecard in an "I know it" pile.
5. If an answer is not recited completely and accurately from memory, read the correct answer aloud as may times as it takes until you "think" you have it. Then read the question aloud again and try answering aloud from memory, again. Do this as many times as necessary until the complete answer can be correctly recited from memory.
6. Place that card in the "I missed it" pile.

By reciting an answer aloud, there can be no doubt whether it is learned or not. Either it can be recalled correctly from memory or it cannot. This eliminates the problem of believing or thinking something is learned or understood when it really hasn't. Recitation in this manner is an

# direover what har and har not been learned BEFORE THKING 1 TGI when something ean still be done about it. 

eVIeW is the final step in SQ3R and consists of reciting notes regularly at spaced intervals. For most students, the more often material is reviewed, the higher the grade on exams. This is especially true when review is spaced over time. For example, 8 reviews over 2 weeks will get more information into long-term memory than 8 reviews the day or two before a test.


This is not an uncommon phenomenon for students who use reading and rereading as a means for learning. Stroking words with eyeballs does not require mental manipulation of ideas which is very important in learning.

If you have tried to learn by rereading and rereading and come up blank at test
 time, stand up and take a bow............. you are normal! If you are tired of the Blank Mind Syndrome, try some of the following techniques that involve mental manipulation.

Organize lecture and textbook notes using notecards and recite them in the manner described above. Use nature of the details will tell you what kind of question to make. For example, if the details are 5 phases in a process, your question should be "What are the 5 phases in ....... This separating and organizing of ideas requires mental manipulation but the best is yet to come.

What you do from this point on can be the difference between an "A" and lower grades. How you review notecards can speed your learning or slow it down. The following the steps on how to recite properly are repeated below because they are so important to learning:

1. Read your question aloud.
2. Recite the answer aloud without looking.
3. Check for accuracy.
4. If correct, place that card in the "I know it" pile and go on to the next notecard.
If incorrect, read the answer aloud until you "think" you have it and repeat steps 1 through 3 as many times as it takes to get the answer correct. Then place that card in the "I don't know it" pile and go on to the next notecard.

## Do this and avoid

 Hare-y situations.Dennis H. Congos
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