# ACADEMIC STUDY SKILLS HANDOUTS


NAME:

NUMBER:

GROUP:

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## *Section 1: Study Skills Diagnostics*

*Study Skills Diagnostics*

*Learning Style Inventory*

*Measure Your Test Anxiety*

# Inventory of College Level Study Skills

By Dennis H. Congos, MSEd.

Name_____ Date _____

To gain a better understanding of yourself as a learner, it is helpful to identify the study skills you now employ. When compared to learners who get A's, you can see where your study skills need refinement or are maximized just the way they are. The following diagnostic test is a short and quick device for assessing your study skills.

This is *not a timed test*. You surely may ask for assistance when and where you feel you need it. Answer each question as honestly as you can. There are 51 questions.

Directions:

1. Read each statement. Think carefully about each statement and respond as truthfully as you can.

2. Place an X in the column that best describes your study skill. For example, the first question is:

1. I formulate questions from a chapter before I begin reading that textbook chapter.

| Almost Always | More than half of the time | About half of the time | Less than half of the time | Almost never |
|---|---|---|---|---|
| | | | X | |

If, in your case, this happens to be true only sometimes, place an X as shown in the example.

## TEXTBOOK READING

| | Almost Always | More than half of the time | About half of the time | Less than half of the time | Almost never |
|---|---|---|---|---|---|
| 1. I formulate questions from a chapter before, during, or after reading. | | | | | |
| 2. Before reading an assignment, I survey headings, bold print, italics, questions, summaries, etc. | | | | | |
| 3. I try to get the meaning of new terms as I encounter them the first time. | | | | | |
| 4. I formulate answer to questions I have made as I read an assignment. | | | | | |
| 5. I look for main ideas as I read. | | | | | |
| 6. I am able to readily identify clarifying details under each main idea. | | | | | |
| 7. I read a textbook chapter more than once. | | | | | |
| 8. I use a textbook study system such as SQ3R, OK5R, etc. | | | | | |

## NOTETAKING

| | | | | | |
|---|---|---|---|---|---|
| 9. I take notes as I read textbook assignments. | | | | | |
| 10. I take notes in lectures. | | | | | |
| 11. After taking notes, I review them before going on to something else. | | | | | |
| 12. I rewrite lecture notes. | | | | | |
| 13. I compare notes with one or more other students to check completeness and accuracy. | | | | | |

## MEMORY

| | Almost Always | More than half of the time | About half of the time | Less than half of the time | Almost never |
|---|---|---|---|---|---|
| 14. I review notes more than once or twice for exams and quizzes. | | | | | |
| 15. I use mnemonics. | | | | | |
| 16. I use visuals in my notes such as sketches, mind maps, diagrams, charts, etc. | | | | | |
| 17. I quiz myself over material that could appear on future exams and quizzes. | | | | | |
| 18. I organize details to main ideas into numbered or lettered lists. | | | | | |
| 19. I convert text and lecture material into my own words. | | | | | |
| 20. I think about material that could be on exams and quizzes when I am not studying. | | | | | |
| 21. I try to *understand* material in my notes as opposed to memorizing. | | | | | |
| 22. I try to organize main ideas and details into some logical or meaningful order. | | | | | |

## TEST PREPARATION

| | | | | | |
|---|---|---|---|---|---|
| 23. I study with a classmate or group. | | | | | |
| 24. When I don't understand something, I get help from classmates, tutors, instructors, SI leaders, etc. | | | | | |
| 25. I do all homework assignments. | | | | | |
| 26. I turn in all homework assignments on time. | | | | | |
| 27. I can easily identify what I have learned and what I have not yet learned before I take a test. | | | | | |

| | Almost Always | More than half of the time | About half of the time | Less than half of the time | Almost never |
|---|---|---|---|---|---|
| 28. I review notes for a class before I go to that class. | | | | | |
| 29. I read assigned material before I go to class. | | | | | |
| 30. I begin studying for an exam from the first week material is assigned or covered in lecture. | | | | | |
| 31. I review lecture notes soon after class. | | | | | |
| 32. I keep up to date on assignments and homework. | | | | | |
| 33. I eat well-balanced meals daily. | | | | | |
| 34. I exercise daily. | | | | | |
| 35. I attend learning skills class or learning skills workshops when I know about them. | | | | | |

## CONCENTRATION

| | | | | | |
|---|---|---|---|---|---|
| 36. I study where it is quiet when trying to learn and remember something. | | | | | |
| 37. I study for a length of time then take a short break before returning to studying. | | | | | |
| 38. I study in the same place. | | | | | |
| 39. I avoid cramming. | | | | | |
| 40. I have all my study equipment handy to my study place (pens, paper, calculator, etc.) | | | | | |
| 41. When I sit down to study, I tell myself that I intend to study. | | | | | |
| 42. I break larger tasks into smaller segments in order to complete a large assignment. | | | | | |
| 43. When the subject matter in not naturally interesting, I find ways to learn it anyway. | | | | | |
| 44. It is not difficult to pay attention in class. | | | | | |

45. I avoid studying in the evenings as much as possible.

| | | | | |
|---|---|---|---|---|
| | | | | |

## TIME MANAGEMENT

46. I use a calendar book for recording daily and weekly upcoming academic and personal activities.

| | | | | |
|---|---|---|---|---|
| | | | | |

47. I use lists such as daily “to do” lists, assignment lists, etc. to organize academic and personal activities.

| | | | | |
|---|---|---|---|---|
| | | | | |

48. I set up a master schedule of fixed monthly activities such as work, club meetings, etc.

| | | | | |
|---|---|---|---|---|
| | | | | |

49. I write out short-term and long-term academic goals.

| | | | | |
|---|---|---|---|---|
| | | | | |

50. I start papers and projects way before they are due.

| | | | | |
|---|---|---|---|---|
| | | | | |

51. I study at least 2 hours for every hour I am in class.

| | | | | |
|---|---|---|---|---|
| | | | | |

Go to the next page and add up your scores.

# SCORING PROCEDURES & EXERCISE

BY DENNIS H. CONGOS, MSED

For each statement, find the point value for each of your responses and place it on the line next to the corresponding statement number below. Next, total each of the columns to determine your study skills efficacy score.

**Almost Always** = 5 points
**More than 1/2 of the time** = 4 points
**About 1/2 of the time** = 3 points
**Less than1/2 of the time** = 2 points
**Almost never** = 1 point

## STUDY SKILLS EFFICACY SCORES

| TEXTBOOKS | | NOTETAKING | | MEMORY | | TEST PREP | | CONCENTRATION | | TIME MGMT | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Question Number | Points | Question Number | Points | Question Number | Points | Question Number | Points | Question Number | Points | Question Number | Points |
| 1. | | 9. | | 14. | | 23. | | 36. | | 46. | |
| 2. | | 10. | | 15. | | 24. | | 37. | | 47. | |
| 3. | | 11. | | 16. | | 25. | | 38. | | 48. | |
| 4. | | 12. | | 17. | | 26. | | 39. | | 49. | |
| 5. | | 13. | | 18. | | 27. | | 40. | | 50. | |
| 6. | | | | 19. | | 28. | | 41. | | 51. | |
| 7. | | | | 20. | | 29. | | 42. | | | |
| 8. | | | | 21. | | 30. | | 43. | | | |
| | | | | 22. | | 31. | | 44. | | | |
| | | | | | | 32. | | 45. | | | |
| | | | | | | 33. | | | | | |
| | | | | | | 34. | | | | | |
| | | | | | | 35. | | | | | |
| Textbook Skills Score | | Notetaking Skills Score | | Memory Skills Score | | Test Prep. Skills Score | | Concen. Skills Score | | Time Mgmt. Skills Score | |
| Less than a score of 30 suggests changes in textbook reading skills are likely to increase your grades | | Less than a score of 20 suggests changes in notetaking skills are likely to increase your grades | | Less than a score of 30 suggests changes in memory skills are likely to increase your grades | | Less than a score of 40 suggests changes in test preparation skills are likely to increase your grades | | Less than a score of 35 suggests changes in concentration skills are likely to increase your grades | | Less than a score of 20 suggests changes in time management skills are likely to increase your grades | |

List the study skills in the box below that are likely to increase your grades if you made changes.

**Talk over your skills with a Learning Skills Specialist or a Learning Skills Instructor.**

University of Central Florida

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# BARSCH LEARNING STYLE INVENTORY

Jeffery Barsch, EdD.

Name _____ Date _____

To gain a better understanding of yourself as a learner, it is useful to identify the way you prefer to learn. Learning is easier when study skills are used that are consistent with your individual style for learning. The following diagnostic test is a short, quick device for assessing your learning style.

This is ***not a timed test***. You surely may ask for assistance when and where you feel you need it. Answer each question as honestly as you can. There are 32 questions.

When you have finished, transfer each number to its proper place on page 4. Then total each of the 3 columns according to directions. You will see very quickly where your strength is for learning. At that point you will know whether you are a **visual, auditory, tactile, kinesthetic** learner. You will discover if you as an individual learn best through *seeing* things, *hearing* them, through the sense of *touch*, or through *body movement*.

| **Check mark the appropriate line after each statement:** | **Often** | **Sometimes** | **Seldom** |
|---|---|---|---|
| 1. Remember more about a subject by listening than reading. | _____ | _____ | _____ |
| 2. Easier to follow directions when written vs. given orally. | _____ | _____ | _____ |
| 3. Performs new physical skills or movements quickly and with few errors. | _____ | _____ | _____ |
| 4. Bear down extremely hard on a pen/pencil when writing. | _____ | _____ | _____ |
| 5. Require explanations of diagrams, graphics, charts, or visual directions. | _____ | _____ | _____ |
| 6. Enjoy working with tools. | _____ | _____ | _____ |
| 7. Am skillful with and enjoy making graphs, charts, diagrams. | _____ | _____ | _____ |
| 8. Can tell if sounds match when presented with a pair of them. | _____ | _____ | _____ |
| 9. Can watch someone do a dance step and copy it easily. | _____ | _____ | _____ |
| 10. Can understand directions on maps & follow them easily. | _____ | _____ | _____ |
| 11. Do better in academic subjects that rely mainly on listening to lectures and tapes. | _____ | _____ | _____ |

**Check mark the appropriate line after each statement:** **Often** **Sometimes** **Seldom**

12. Commonly play with keys, change, other objects in pockets. _____ _____ _____
13. Enjoy perfecting a movement in a sport or in dancing. _____ _____ _____
14. Can better understand by reading about news in the paper rather than listening to it on the radio. _____ _____ _____
15. Chew gum, smoke, or snack while studying. _____ _____ _____
16. Best way to remember is to picture something in my head. _____ _____ _____
17. Enjoy activities where I am aware of my body's movement _____ _____ _____
18. Would rather listen to a good lecture or speech than read the same material in a textbook. _____ _____ _____
19. Consider myself an athletic person. _____ _____ _____
20. Am likely to have something in my hands when studying. _____ _____ _____
21. Prefer listening to the news on radio rather than reading about it in a newspaper. _____ _____ _____
22. Like to get information on interesting subjects by reading. _____ _____ _____
23. Highly aware of sensations and feelings in my hips and shoulders after learning new skills or movements. _____ _____ _____
24. Follow oral directions better than written ones. _____ _____ _____
25. Easy for me to memorize something when I can use my body in some way. _____ _____ _____
26. Prefer to write things I have to remember down. _____ _____ _____
27. Remember better when writing things down over and over. _____ _____ _____
28. Learn to spell better by repeating letters aloud than by writing the words. _____ _____ _____
29. Can frequently visualize body movements to perform tasks such as swinging a golf club or dancing. _____ _____ _____
30. Learn spelling by tracing over letters. _____ _____ _____
31. Feel comfortable touching, hugging, shaking hands, etc. _____ _____ _____
32. Good at working and solving jigsaw puzzles. _____ _____ _____

# BARSCH LEARNING STYLE SCORING PROCEDURES AND EXERCISE

by Dennis H. Congos, MSEd

## Scoring Procedures

Find the point value of each question and place it on the line next to the corresponding number below. Next, total each of the 4 columns to determine your learning style preference score.

**Often** = 5 points **Sometimes** = 3 points **Seldom** = 1 point

### PREFERENCE SCORES

| VISUAL | | AUDITORY | | TACTILE | | KINESTHETIC | |
|---|---|---|---|---|---|---|---|
| Question Number | Points | Question Number | Points | Question Number | Points | Question Number | Points |
| 2 | _____ | 1 | _____ | 4 | _____ | 3 | _____ |
| 7 | _____ | 5 | _____ | 6 | _____ | 9 | _____ |
| 10 | _____ | 8 | _____ | 12 | _____ | 13 | _____ |
| 14 | _____ | 11 | _____ | 15 | _____ | 17 | _____ |
| 16 | _____ | 18 | _____ | 20 | _____ | 19 | _____ |
| 22 | _____ | 21 | _____ | 27 | _____ | 23 | _____ |
| 26 | _____ | 24 | _____ | 30 | _____ | 25 | _____ |
| 32 | _____ | 28 | _____ | 31 | _____ | 29 | _____ |
| **VPS =** Visual Preference Score Maximum score = 40 | | **APS =** Auditory Preference Score Maximum score = 40 | | **TPS =** Tactile Preference Score Maximum score = 40 | | **KPS =** Kinesthetic Preference Score Maximum score = 40 | |

# VISUAL LEARNERS

**In learning skills**, if your strength is ***Visual Learning*** (you have a high visual score), then by all means be sure you **emphasize the use of *sight* on all study materials**. For example, use existing and/or make charts, maps, pictures, overheads, and rewrite notes. Practice visualizing concepts and ideas or to picture spelling words in your head, for example, will help you learn. Regularly test yourself by looking at main ideas or questions and write the details or answers. Doing this frequently is an efficient way to review visually.

**In thinking**, ***Visual Learners*** **tend to think in images or pictures**. It is as if they have a video camera in their minds. They take in what they hear or read and translate it into images in their brain. When ***Visual Learners*** want to recall what he or she has learned, they simply look at the image that they have stored on their mental "picture screen". This process is much like going to the movies and then recalling what one has seen, in order to tell a friend. The memory process is taking place by reviewing the pictures from the movie and then talking about the story line to someone else. **Visual Learners** speak in terms of "I see, I get the picture."

**In a classroom**, ***Visual Learners*** find it easier when testing is conducted in a written "visual" format because this requires that visual images be made to recall information. Good ***Visual Learners*** read the

black and white text and then convert the information into pictures, maps, sketches, diagrams, lists, etc. This makes storing of information and later recall easier. The ***Visual Learner*** will easily conform to most classroom standards, such as sitting quietly, writing neatly, and organizing materials well.

**When choosing careers**, ***Visual Learners*** should select those fields which fit their learning style: architect, designer, decorator, engineer, surgeon, and those careers which require a "vision" of the future, such as CEOs and other executive positions.

Visual learners make up around 65% of the population.

# AUDITORY LEARNERS

**In learning skills**, ***Auditory Learner*s** will learn more effectively if they **emphasize the use of their sense of *hearing* to learn ideas and concepts**. For example, **Auditory Learners** will benefit more if they sit in the front of the class so they can hear lectures clearly. They more readily join discussion groups so they can hear ideas and concepts verbalized by themselves and others. They practice lectures by themselves or test themselves by reciting details aloud after looking only at a main idea.

**In thinking, *Auditory Learners*** do not emphasize make pictures in their minds, as do visual learners, but rather filter incoming information through their listening and repeating aloud. ***Auditory Learners*** tell wonderful stories and solve problems by "talking" about them.

**In the classroom**, the ***Auditory Learner*** learns by listening and can more easily repeat statements back to the teacher. The ***Auditory Learner*** likes class discussions but can become easily distracted by noise. Of the three styles, the ***Auditory Learner*** is the most talkative but has more difficulty writing.

**In careers**, the excellent listening skills of this type of learner are what make great musicians, disc jockeys, psychologists, etc. Speech patterns will represent exactly how the ***Auditory Learner*** thinks, i.e., "I hear ya, that clicks, that sounds right, that rings a bell" etc.

Auditory learners make up about 30% of the population.

# TACTILE LEARNERS

**In learning skills**, ***Tactile Learners*** benefit if they **emphasize the use of their sense of *touch* in learning**. For example, they should rewrite notes frequently or make questions from main ideas and regularly try to write the answers from memory. Putting this information on notecards is an easy way to organize main ideas and details while using tactile skills. It is also easy to quiz themselves and to touch what they need to learn and remember. They prefer to study with a pen or pencil in hand and write things down. They benefit from drawing pictures and diagrams in their notes. ***Tactile Learners*** prefer to learn through the body or feelings. If they can touch and feel whatever they are learning about, ***Tactile Learners*** will process and remember the information quite well.

**In thinking, *Tactile Learners*** do not have the internal pictures of neatness and organization that visual learners make so easily in their minds. This is one of the reasons that ***Tactile Learners*** have a more difficult time demonstrating what they know in a traditional classroom. ***Tactile Learners*** do not usually make pictures in their minds. If they do not make pictures, it follows that there are no pictures to either keep neat, or to "mess up." Therefore, it is normal for them not to be organized. A sense of time is also quite difficult for the student who prefers to learn tactily. Often, there is little projection of consequences of actions, simply because this learner does not "see" out into the future. They are better at understanding the present moment.

**In the classroom**, these students are usually quite restless, have more difficulty paying attention, and can't seem to get " focused " (a visual term). These learners like to speak about learning in terms of feelings and say things like "I feel" or "I'd like to get a better handle on this information." ***Tactile Learners*** excel in a classroom where ideas are "acted out" and where they can choose assignments that allow them to build things and get their hands involved in learning.

**In careers, *Tactile Learners*** prefer careers in athletics, building, construction, dancing, etc., any work that involves using the senses.

Tactile learners make up around 2.5% of the population.

# KINESTHETIC LEARNERS

***Kinesthetic Learners*** benefit if they **use their body in learning**. For example, some ***Kinesthetic Learners*** walk while studying notes and find that it improves learning. Using some sort of movement when memorizing is another way to increase learning for ***Kinesthetic Learners***.

**In thinking, *Kinesthetic Learners*** are better able to think and process information while doing something physical.

**In careers, *Kinesthetic Learners*** also prefer careers in athletics, building, construction, dancing, etc., any work that involves the body and movement.

Kinesthetic learners make up around 2.5% of the population.

# FOR ALL LEARNERS IN COLLEGE

Learners taking written tests are expected to retrieve the information in the VISUAL learning style. The very fact that the information is written down produces a visual image. Nearly all subjects demand that learners make internal pictures of the information, store them, and then recall the information in pictures to write onto a piece of paper.

*All students* must learn how to strengthen their visual learning skills if they are to succeed in college because nearly all college testing is conducted in the visual or written mode. If you do not naturally learn in the visual style, you can get the most help by discovering and adopting some of the visual learners' techniques.

# ANALYSIS

Which score is highest? _____ What are 3 study techniques you can use that will utilize your primary learning style as you study?

1.
2.
3.

Which score is second highest? _____ What are 3 study techniques you can use that will utilize your secondary learning style as you study?

1.
2.
3.

Which score is third highest? _____ What are 3 study techniques you can use that will utilize your secondary learning style as you study?

1.
2.
3.

Which score is lowest? _____ What are 3 study techniques you can use that will utilize your tertiary learning style as you study?

1.
2.
3.

Most students have one dominant learning style. Those who have ties in scores can use either learning style equally as well. Those who adapt study skills to incorporate ***all 4 learning styles*** learn faster and remember longer.

To develop the best learning skills for you, information from tests like these should be used in conjunction with a learning skills counselor's guidance and assistance.

USE ALL 4 STYLES OF LEARNING TO LEARN FASTER AND REMEMBER LONGER.


Some test anxiety can actually sharpen the senses and speed recall. However, when test anxiety rises above a certain level, it can interfere with remembering, especially on tests. The following diagnostic test can give you an idea of how much text anxiety you experience and what to do about it if it has become an impediment. Only through honest responses will this diagnostic be helpful.

How much test anxiety do you have? Circle "True" or "False" according to your response to each statement.

1. **True False** While taking a test, I am nervous because I think other students are smarter than me.
2. **True False** If I know I have to take a standardized test (SAT, GRE, LSAT MCAT, etc.), I feel anxious and tense.
3. **True False** While taking an exam, I perspire a lot.
4. **True False** During an exam, I find myself thinking of things unrelated to the exam.
5. **True False** I feel super anxiety when there is a surprise quiz or exam.
6. **True False** During a test, I think about what would happen if I failed.
7. **True False** Even after a test, I am still anxious about it.
8. **True False** I freeze up on tests.
9. **True False** I freeze up on final exams.
10. **True False** Getting a good grade on one test doesn't lower my anxiety for the next one.
11. **True False** I get so anxious that I cannot concentrate sometimes during a test.
12. **True False** I feel my heart beating very fast during exams.
13. **True False** I get so anxious during that I am very slow.
14. **True False** After taking a test, I feel that I could have done better.
15. **True False** I get depressed after taking a test.
16. **True False** I get quite upset before taking a final examination.
17. **True False** When taking a test, my emotions interfere with my performance.
18. **True False** I am so nervous that it is difficult to remember what I have learned when I take tests.
19. **True False** The harder I work at trying not to be anxious, the worse it gets.
20. **True False** As soon as I finish a test, it is difficult to stop worry about it.
21. **True False** When studying for and during exams, I sometimes feel I will never graduate.
22. **True False** I would rather write a paper than take an exam for my grade.
23. **True False** I truly wish I did not have such test anxiety.
24. **True False** I think I could do much better on tests if there weren't time limits.
25. **True False** Worrying about the grade I may get interferes with studying for them.
26. **True False** If tests could be eliminated, I think I could learn more.
27. **True False** I wish I did not get so nervous before taking a test.
28. **True False** I see why some people get so upset about tests.

**29. True False** Fear of doing poorly interferes with my performance on tests.
**30. True False** Even when I think that I have prepared well for an exam or quiz, I feel anxiety about it.
**31. True False** Before an important examination, my hands shake.
**32. True False** I often have to cram to prepare for a test.
**33. True False** I feel nervous just before finding out my test grade.
**34. True False** I dread classes where instructors give "pop"quizzes.

**Scoring**

The total number of "True" responses is your test anxiety score. Count and place that number in the box. [ ]

A score of 11 or below suggests low test anxiety.
A score of 12 to 20 suggests medium test anxiety.
A score above 20 indicates high test anxiety.

As a guide, 11 or lower suggests that you have some normal anxiety when taking tests. Scores between 12 and 20 suggests that you may benefit from meetings with a learning skills specialist or campus counselor to discuss anxiety lowering strategies. A score of 20 suggests that you experience excess text anxiety and that it interferes with learning and recall but can be overcome. Getting help with anxiety reducing strategies is very important here.

Some of the anxiety reducing techniques can produce dramatic results. More often though, changing the way you respond to tests normally takes time. Permanent changes in how you handle test anxiety very rarely happen immediately; but they can happen in a reasonable amount of time with help from a campus learning center counselor or a staff member who works with test anxiety in counseling services.

Keep in mind that one of the best test anxiety lowering technique is <u>to know that you know the material well</u>. That requires self-testing ahead of time.

From: Test Anxiety Scale from Sarason, I. G. (1980), Test Anxiety: Theory, Research, and Applications.

*First Year Advising and Exploration*
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Rev10/09, 1/11 Edited by Dennis H. Congos, Academic Advisor & Learning Skills Specialist, First Year Advising and Exploration, 116 Phillips Hall, University of Central Florida, Orlando FL, 32816 407-823-3789 Email: dcongos@mail.ucf.edu

## *Section 2: Goal Setting and Attitudes*

*How Attitudes Affect Grades*

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# How Attitudes Affect Grades

## What are attitudes?

**American Heritage Dictionary –** State of mind
**Webster 9th New World Dictionary –** Mental position related to a fact or state.
**Psychology: The Short Course –** An expectancy; organization of concepts.
**McKeachie and doyle –** Beliefs, habits, and motives associated with a particular object.

In the most simple sense, it appears an attitude is **some state of mind about an object, fact or situation**. Since attitudes are revealed through our behavior, the way we behave lets others know our state of mind about something.

It was once believed that attitudes were unchangeable and once acquired, we were stuck with them. Now we know this is ***not true***. Psychologists say that we tend to do what we tell ourselves to do. Therefore, if we have negative attitudes, these negative attitudes affect what we expect of ourselves which in turn, affects our actions. For example, those with the negative attitude that they "can't do math", are almost assured of trouble when attempting math. A negative attitude limits performance, saps motivation, and inhibits learning.

## What do you have negative attitudes about?

## How do these attitudes affect your performance?

There is no guarantee that you will *instantly* be able to understand mathematics through eliminating a negative attitude about math. A less inhibiting attitude like *"in the past I may have not done well at math, but I can still learn to do math and earn better grades in the future*," removes self-imposed limits.

This more positive attitude *creates the opportunity for learning and motivation* that leads to success in math **regardless of past performance**. By changing this negative attitude into a positive one, the door is opened to the possibility of not only learning math but becoming superior at it, **regardless of past performance**. Positive attitudes combat frustration from self-imposed limits on your potential to change through learning.

The basic premise underlying any teaching is that the pupil has the capacity to learn and change and wants these things to happen regardless of past performance. Negative attitudes discourage, limit, and even prevent learning, positive change, and growth. What are your attitudes about learning, teachers, certain subjects, or becoming a better student? What effect have these attitudes had on your potential to learn and earn excellent grades?

Changing an attitude ***is possible***. For success in acquiring attitudes that promote your success ***you must be willing to admit and face the truth about yourself and admit and face the truth about what you are willing to change.***

One model for doing so is presented below. Complete the following exercise and see how you can replace negative attitudes that may have limited your success in college.

# Steps

1. **Identify a negative or limiting attitude** you have about something related to college and write it down here. It may be academic, personal, or social. It is important to do this because unless you identify what it is you want to change, change is unlikely to occur. Record it below.

   Limiting Attitude-

2. **Declare to yourself that you intend to change**. In this step, 1) write down a statement that reflects your intention to change the limiting attitude above. Also, 2) re-word the limiting attitude from step 1 into a positive statement and write it down here. It is important to do this because you tend to do what you tell yourself to do and what you tell yourself to do is influenced by your attitudes.
   1)
   2)

3. **List 3 people who you believe currently have the positive attitude you recorded in Number 2 above.** For each person, include what s/he does that communicates that s/he has this attitude. This is important to do because we tend to become like people we admire or with which we surround ourselves.
   1) _____
   2) _____
   3) _____

4. **List 3 different behaviors or actions you can do that could lead others to believe you have this new attitude.** By practicing the expression of your new attitude, you create the opportunity to become better at it and see the results. Positive results speed habitualization of desired attitudes.
   1) _____
   2) _____
   3) _____

5. **Describe 3 situations in which you commonly find yourself where you could practice the 3 behaviors or actions listed above.** We tend to do what we practice and what we practice often enough becomes habitual.
   1) _____
   2) _____
   3) _____

6. **List 3 people you could talk to about changing and becoming more the person you want to be.** We tend to do what we tell others we intend to do.
   1) _____
   2) _____
   3) _____

7. **List 3 times during the day when you intend to visualize what you will be like and how you will feel** once you acquire this new attitude and master expressing it. We tend to do what we visualize ourselves doing.
   1) _____
   2) _____
   3) _____

8. **Write down at least one way to reward yourself** for acting in a way that demonstrates your new attitude. We tend to repeat those behaviors and patterns of thinking for which we are rewarded.

   _____
   _____
   _____
   _____
   _____

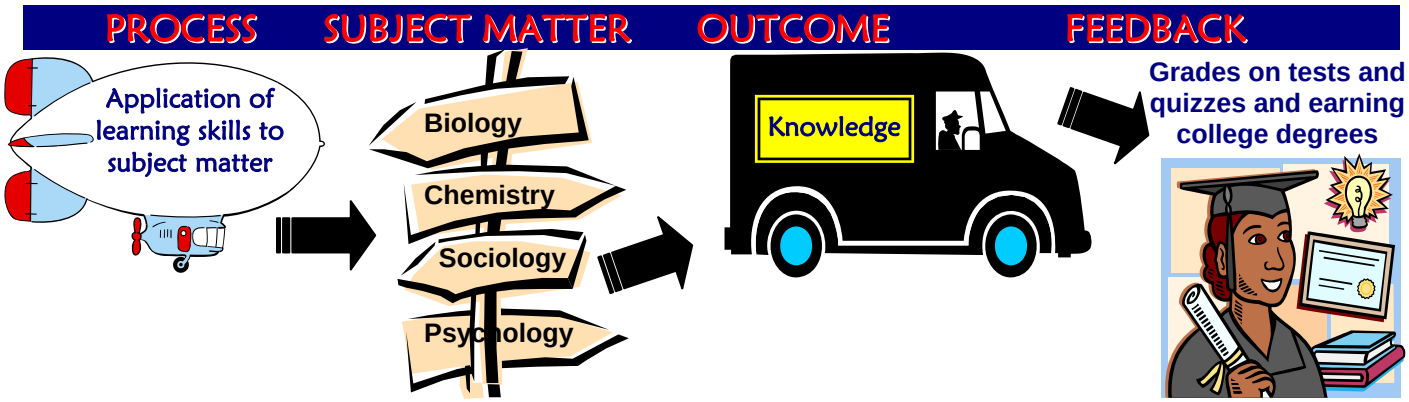
Life is full of impediments and problems. That may be why humans developed such a complicated brain; to solve problems that ultimately lead to success and survival.

***Each problem is an opportunity for success.*** In fact, many believe solving problems is the **only way** to be successful. How you approach life's problems, which are **your opportunities for your success**, is largely dependent on the attitudes you choose to keep or acquire. How quickly you become the person you want to be is *your choice*.

# Are you an Academic Estimator?

Many students earn grades below potential or flunk out of college because they believe they already have all the learning skills they need. They also believe their academic performance is due to factors outside of themselves that they cannot control therefore learning skills courses, workshops, books, or handouts are not relevant. As a result of this attitude, many students **so *GREATLY UNDERESTIMATE THE IMPORTANCE OF LEARNING SKILLS*** that they never allow themselves to discover the way to earn better grades.

To help see where learning skills fit into the picture for students, look at the model below.




**PROCESS** - application of learning skills to specific subject matter.
**SUBJECT MATTER** - the material to be learned.
**OUTCOMES** - results of applying learning skills to subject matter. If the outcome is not what is desired, then refining the PROCESS for learning is where effort should be focused. This is where students have control over knowledge and grades.
**FEEDBACK** – grades let you know how well your skills for learning are working.

## If you want better grades, refine your learning skills

It is your learning skills that lead to knowledge that yields better grades. Directing energy toward blaming something or someone else for grade performance below your potential is a waste of time.

Since skill at learning exists in varying degrees in all students and not as something "you have or don't have", there is promise for anyone who wishes to improve academic performance if focus is placed on refinement of the skills for learning.

In this light, it is wise for students to determine how effectively they have refined learning skills to date and where there is room for further refinement. To determine this, look at the outcomes in school. Are you earning the grades you'd like to earn? If desired knowledge, grades or expression of intelligence are not attained, further refinement of learning skills is the key to greater success regardless of past performance.

# Indispensable Importance of Setting Goals in College

**Setting and achieving goals overall is the most underestimated skill for success in college.**
The result of poor goal setting and achievement skills is low motivation, lack of direction, and performance below one's potential. The outcome is often unnecessary low grades, frustration, discouragement, and sometimes leaving college.

The ability to set and achieve goals in college is so important that without it, it's difficult, perhaps impossible, to feel motivated to and learn what's necessary to succeed or excel.
A major step in **mastering the skill of setting and achieving goals** is to understand the benefits:

**1. It specifies clearly what is to be achieved.** This is vital because it provides a direction and makes progress and achievement recognizable. Without clearly defined educational goals, it is normal for you to experience feelings of stagnation, low motivation, and lack of purpose. Clearly defined goals **provide direction.**

**2. It defines a plan of action** for the process of achieving. A plan of action provides a map, a guide, a visible pathway to goals. When there is no plan for achievement, it is normal for you to experience discouragement, succumb to distractions, or feel that aspirations are unreachable. It is very difficult to start or do well at something if you cannot see a way to achieve it. A plan of action **shows how to achieve what you desire.**

**3. It acts as a continuous progress report on how well you are is doing as you move toward goals.** A progress report is vital because it provides immediate and regular feedback to help you discover if you are on or off course toward short and long-term goals. The more frequent the feedback, the sooner you discover when you have strayed from the chosen path, need to modify a plan, or are exactly on course. **Without continuous feedback** on progress towards goals, **there is no way to know how you are doing** in the process of achieving.

The **definition of progress** is "movement that increases the chances of achieving something you desire".

If goals have not been defined and a plan of action developed, there can be no "going forward" because there is no way to tell which way is forward. Without goals, you are like a leaves in the wind, forward is whichever way the wind happens to blow. Like a leaf in the wind, if you are without goals, you are not in control of your destiny **but someone or something else is.**

**4. It identifies exactly what is achievement or success for you.** Unless what constitutes success or achievement in college is clearly identified in terms of goals, there is no way to tell if you are making progress because without a target, there is no way to tell if you are moving toward anything, let alone toward something meaningful. **Without defining what constitutes success and achievement, you can't experience either.**

**5. It tells you when it is time to reset goals.** One of the *motivation-sapping* things you can do is not to reset new goals after one or more have been achieved. Resetting is absolutely essential if you are to maintain motivation and momentum. If resetting doesn't take place, you run the risk of feeling aimless, stagnating, and losing motivation and direction. **Resetting goals maintains motivation**.

If goals are not set, you are apt to feel like you aren't getting anywhere in college, and you are definitely not in control of your life's direction. There is much hope for students who choose to master the process of setting and achieving goals for college. The task is easy……

The process for setting and achieving goals has 4 simple steps. First, what is a goal?

# A 4-Step Process

**DEFINITION OF A GOAL** – choosing to pursue something you desire. This means virtually anything you desire can be used as a goal and becomes achievable by following the steps below.

**Step 1. Set A Goal. It identifies something *you* want.** It may be pleasing parents, a new car, impressing friends, a personality trait, physical appearance, a college degree, a grade point average, a major field of study, etc. Setting a goal is also the first step in experiencing motivation.

**Motivation comes from one source and one source only:**
**YOU are going after something that YOU want.**

Unless you identify what you want, you haven't done what's necessary to feel motivation.

**Step 2. Devise A Plan Of Action. Identify the steps or tasks** to complete that lead to your goal. These are sometimes called mini-goals that must be achieved in order to reach a larger goal. Effective plans of action have completion dates for each mini-goal that provide a timetable to determine how well you are progressing toward your larger goal.

**Step 3. Follow Your Plan To Your Goal.** - As a rule, it is easier to modify something than develop something altogether new. Follow your plan and ask: **"Am I meeting my mini-goals on time?"** Do not hesitate to add or modify mini-goals, dates, and times as you learn more about what it takes to reach your larger goal.

**Step 4. Reset Goals.** Goals must be reset after they are achieved if you are to continue to feel motivation. Goal setting and achieving is a *lifelong process* for those wishing continuous success. When resetting goals cease, achieving stops. Stagnation, aimlessness, and frustration take over as motivation fades.

Like anything that is repeated often enough, becomes a habitual. Setting, achieving, and resetting goals can become a habit and so can achieving success if you choose to do what is necessary to achieve goals and become successful.

This is why there are different degrees of success among various people. If you are willing to master the process for setting and achieving goals, you are one of the few who chooses to do what it takes to be successful and to make success a habit.

# Goal Setting

Goal setting is one of the cornerstones of personal and academic success. A goal is something toward which you work. It is something that you want to attain. A goal provides you with a direction for your energies. Goals can vary from being admitted to university; being admitted to the program of your choice; graduating in the top 10% of your class; being admitted to the professional school of your choice; or landing a good career-related job once you graduate. Often the most important goal is simply not to give up on a task. Goals are useful and can be applied to all areas of your life. Set goals and work toward them but enjoy the process of attaining your goals along the way.

## Types of Goals

- **Academic Goals.** These are goals that you want to accomplish while at university, i.e. getting an 'A' on a term paper, graduating in the top 10% of your class, or completing an assignment two days before it is due.
- **Personal/Social Goals.** These goals might include such things as spending more time with your family, undertaking a fitness program, or joining a student club.
- **Work/Career Goals.** These goals are the ones that you want to achieve at work or accomplish in your career such as gaining the position of your choice, working for a specific firm, or gaining admission to the professional school of your choice.
- **Financial Goals.** Financial goals focus on how you use money and how money influences your other goals. You may need to earn money to purchase an item, you may have financial needs for the school year, or you may have a long-term goal of paying back your OSAP.

**Setting goals for yourself has several benefits, one of which is improved academic performance:**

- **Enhanced Attention and Focus.** Having a goal can keep you focused on what it is that you have to do and to minimize distractions from outside.
- **Increased Motivation and Effort.** You can measure your success against your goals. If you are not achieving the grade that you need for a specific course, by reassessing your progress you will know that you have to increase your motivation and effort in order to reach that goal.
- **Reduced Anxiety and Increasing Confidence.** Reaching a goal can make you feel more confident in your abilities and increase your belief in yourself. Your confidence helps you to feel more relaxed and less anxious, thus helping you to continue on your progress toward reaching subsequent goals.

## Setting Goals

You need to decide what you want to achieve and then define that as your goal. When setting goals it is important to **be specific**. Your goals should be **measurable** so that you can assess your progress. It is harder to determine your success if your goal is "to do well" in first year economics than if your goal was to "get an A" in first year economics. Your goals should be **challenging but realistic**. If you can never reach your goals you will become discouraged and want to give up. It is reaching goals that keep you motivated to set higher goals for yourself.

It is very helpful to **write out your goals** and put them someplace visible, such as your bulletin board over your desk. Then, when you are feeling overwhelmed by the amount of reading that you have to do or if you are struggling with an assignment, looking up at your goals will help you to refocus and be motivated again toward meeting those goals. If you only have your goals listed in your head it can be too easy for you to forget them or to modify them based on how you are feeling. For example, if you are feeling discouraged you could be tempted to reduce that goal from an 'A' in economics to a 'B'. By writing the goal on paper you can be more committed to it. Be careful not to have too many goals as you can become overwhelmed.

Obtain support for your goals from your family and friends. Choose people who will support your efforts and encourage you toward meeting those goals. It is always helpful to have a cheering section!

## Self-Assessment Exercise

1. State a program-related goal that you have for yourself this year (be specific, such as gaining admission into a co-op program; getting a career-related volunteer position; achieving an A average).

2. Identify what you need to do in order to meet that goal (i.e., attend the *Volunteer and Internship Fair*, boost your GPA; take required courses for that program to see if you enjoy that discipline).

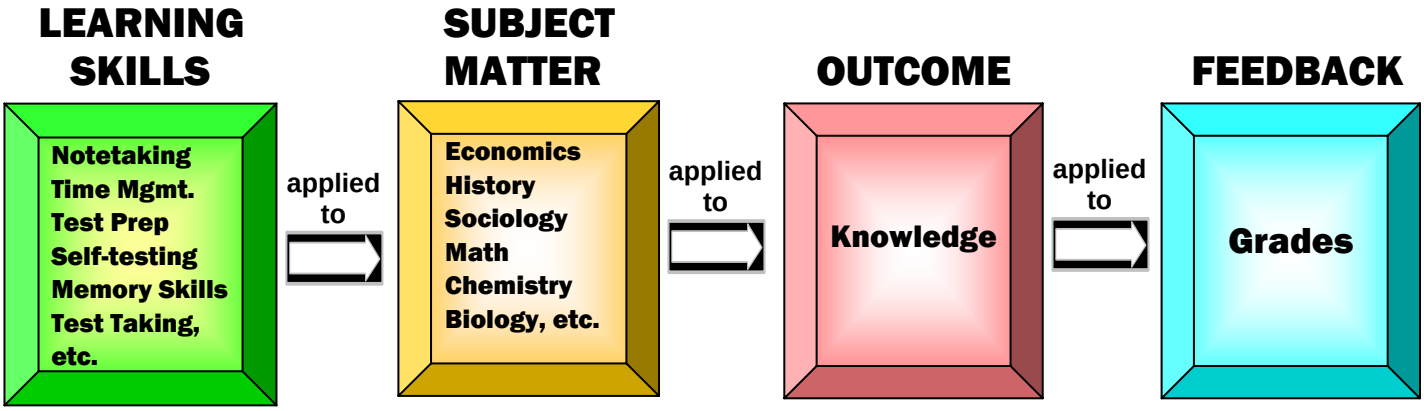
3. Identify possible obstacles to meeting your goal (i.e., working too many hours at a part-time job).

4. What strategies could you use to overcome those obstacles (i.e., apply for financial assistance so that you can reduce the hours you have to work).

5. Evaluate, on an on-going basis, your progress toward reaching this goal.

# How Learning Skills Affect Grades

Many learners earn grades below potential because they ***believe*** they already have all the learning skills they need. They also believe their academic performance is due to factors *outside of themselves* that they cannot control, therefore learning skills courses, workshops, books, or handouts are not relevant. Because of this attitude, many learners **GREATLY UNDERESTIMATE THE IMPORTANCE OF LEARNING SKILLS** in learning so badly that they never *allow themselves* to discover the way to earn better grades. This group composes a large portion of students who never graduate. To see how learning skills fit into the learning picture, examine the model below.




The term **LEARNING SKILLS** refers to the skills that are indispensable to learning.
The term **SUBJECT MATTER** refers to the material to be learned.
The term **OUTCOME** refers to the knowledge gained as a result of applying learning skills to a subject.
The term **FEEDBACK** refers to the grades that reflect how well learning skills work.

To change how much knowledge is learned and earn higher grades, learners must focus on refining the learning skills ***indispensable*** to getting knowledge and grades. If grades are not as desired, then learners must modify skills for learning. It is ***ONLY*** via learning skills that learners have control over knowledge and grades. Directing energy toward blaming something or someone else for poor grade performance is a waste of time.

Skill at learning exists in varying degrees in all learners. It is not something "you have or don't have." ***There is hope for anyone*** who wishes to improve academic performance if focus is placed on refinement of the skills for learning.

# 12 Diseases in Learning

Learning how to succeed in college is on-the-job training but not without ailments. Beware of these common diseases of college students. Too often, they can be fatal.

**1. Negative attitudusitis** - Doesn't realize how much negative or limiting attitudes affect mood, motivation, &&and learning.

**2. Chronic quitosis** - Quits just before success or if something requires effort.

**3. Dietitis** - Sees no connection between a poor diet and problems in learning.

**4. Goal absentheria** - Unclear or unidentified goals result in low motivation.

**5. Duhitis** - Believes showing up is success in college.

**6. Socialis Prioritum** - Other activities are more important than academic ones.

**7. Taint myfaultosis of You mademedoititis** - Blames someone or something else for behavior and performance.

**8. Ignoramus Innocentio** - Doesn't know. Doesn't want to know. Doesn't suspect what it takes to succeed in college.

**9. Chronic Ignoramus Fatalis** - I can cram and get by in college.

**10. Macho/Tarsanitis** - I don't need help. I can fail by myself.

**11. Entertain me Orelsia** - If it isn't entertaining, I won't pay attention.

**12. Revengitis** - I will punish my boring instructors by getting an F in their classes.(Often associated with chronic ignoramus innocentio and duhitis).

**For help on skills for better learning, make an appointment with the Learning Skills Specialist in SARC, 113 Phillips Hall, 407-823-5130**

# 16 Ways to Lower your Grades or Flunk Out of College from Students who have done it

***Tired of school and all those late-nighters?*** **Try these sure-fire ways to ease the load, lower your GPA, and increase your chances to flunk out of college! We know from experience that these techniques work.**

## 1. Eat an unbalanced diet.

**Eat lots of sweet things and fatty foods.** "When I don't eat right, I don't feel like studying."*Shay Dalton*

## 2. Choose not to review and recite notes regularly.

**No review, no learning**. "I reviewed for tests by rereading the material 2 to 3 times" *Rod Henry - An academic suspension statistic.*

## 3. Choose to have negative and limiting attitudes.

**Have negative attitudes about learning, instructors, and your ability to succeed.** "This one got me on the bad side of every instructor. I didn't know attitudes were a choice." *James Singer – Burger maker at Wendy's*

## 4. Don't get enough nighttime sleep.

"Fighting sleep in class kept me from concentrating. I thought naps would help, but they didn't. Because I was sleepy in class, I didn't have complete class notes so I failed several lecture quizzes." *Senta Walsh*

## 5. Study where it is noisy.

"I studied with the stereo or TV on,or around noisy roomates. I seemed to study so much more than other students but I kept getting low grades." Tory Sellman

## 6. Don't use a calendar book.

**Don't organize your time for classes, study, tests, papers, recreation, social activities,work, etc.** "I thought I could always make time to study when I had to so I didn't need to write anything down. It didn't work. I would always forget assignments and forget to study for tests." *Wakesha Mosley - academically dismissed and applying for readmission (SAT score - 1270).*

### 7. Skip class of arrive late repeatedly.

"This lowered me from a C to a D because I missed so much material and the professor thought I didn't care." *Barry Longly*

### 8. Be like everyone else.

"Our counselor told us that about 60% of our classmates won't graduate and that to be successful we had to be different than they. I didn't believe her". *Maralynn Weekman - cashier*

### 9. Don't do what is required.

**"Don't do homework, or turn in papers, projects late.** I found this a quick and easy way to flunk out of college." *Tom Marlinski - Unemployed*

### 10. Don't takes notes in class from textbooks.

"I tried this and spent 2 semesters working in the fast food industry before I could to re-enroll in college. I was embarrassed." *Cynthia Stall*

### 11. Overload yourself.

"Take too many classes, work too many hours on jobs, participate in too many student activities, and/or let your social life dominate your college life." *John Deidrich – Business graduate with a 2.2 gpa. Still looking for a job in my field 2 years after graduating.*

### 12. Cheat

"I got myself to believe that everyone did it until I got caught. I got an F in the course and was placed on probation. It would have been easier to learn the material.....and smarter." *Eric Johnson*

### 13. Cram

"I waited until I felt like or had to study instead of making time to study daily. My 1st semester gpa was .09." *Hadly Martin*

### 14. Don't use campus learning resources.

**"Don't see a learning skills counselor, attend learning skills workshops or classes**. I thought learning skills were only for remedial students. I found out no one learns without good skills for learning. I worked hard to develop my learning skills and my grades went up far enough to consider medical school." *Dr. Jim Beal, MD*

### 15. Study by reading… reading… reading.

"This worked in high school but killed me in college." *Delbert Clyburn - short order cook*

### 16. Don't choose to set clear goals.

"Avoid short-term (like a specific GPA) or long-term goals (like a certain degree or career). When I realized how much motivation I got from setting goals, even simple ones, I set them daily on my "to do" notecard." *Nelson Scopes, a 3.89 graduate student (once a 1.3 gpa undergraduate student)*

# Recipe for College Success

Step 1: Fill the bowl with going to class.

Step 2: Fold in 5-6 hour per day for studying (ingredients: homework, re-writing lecture notes, taking notes from textbooks, quizzing yourself over testable material, writing papers, working on projects, participating in study groups, attending tutoring and supplemental instruction sessions).

Step 3: Mix in 1-3 hours per week for clubs and organizations.

Step 4: Add at least 3 hours per week for exercise and physical recreation.

Step 5: Blend in a healthy diet that promotes learning.

Step 6: Stir in a calendar book to record times for class, study, meals, jobs, appointments, social activities, tests, due dates and any ingredients for individual taste.

Step 7: Mix well with 7-9 hours of nighttime sleep.

Step 8: Sprinkle with energy, motivation and desire to keep improving at whatever you do.

Step 9: Bake well with routine (A college student's friend) until you can do this recipe by habit.

## *Section 3: Time Management*

*Balancing Act Exercise*

*Beating Procrastination*

*16 Traits of Effective Time Management*

*8-Hour Time Schedule*

*List Your Way to Success*

*Time Management Worksheet*

# Time Management Balancing Act

**Directions: For this exercise, prioritize each item in the order you think all of it should be accomplished. Number the items from one to ten. One is the item that should be done first.**

____Chemistry exam tomorrow morning that you've known about for a week.
____Two-page English paper due tomorrow afternoon.
____A friend needs your expert help with algebra - ***NOW***!
____Party tonight with a live band, free food, etc..
____German quiz tomorrow morning that the teacher announced in class today.
____Drama club meeting tonight at 8:00 p.m. and you are the president.
____You promised your girlfriend/boyfriend that you would go to dinner tonight.
____No clean socks or underwear. You have to do laundry.
____History paper due in two days, but there is a big concert tomorrow in Orlando so you won't have time to do it tomorrow.
____You need some sleep.

1. What is your rationalization for the order you selected?

2. What are at least 5 ways to avoid letting so many things pile up?

3. How should you work through and plan for upcoming commitments and assignments?

# Beating Procrastination

Some people who put things off have what seems like an internal, almost knee-jerk resistance to doing jobs they believe *they* ***have to do*** *or* ***should do***. If you procrastinate more than you like, you may be unconsciously struggling with this internal resistance. Fortunately, there are ways to use that resistance to your advantage in your battle to reduce procrastination.

One way involves putting off something that you feel you ***should do*** or ***have to do*** and do something less pressing instead. You may set this up so that what you actually do is what you need to do in the first place.

For example, to help you do this innovative exercise in **BEATING PROCRASTINATION**, tell yourself your job is to procrastinate. Your job is to put this enjoyable exercise off. You do not have a choice; you ***have to*** put off doing this enlightening exercise.

As you tell yourself you **HAVE TO PROCRASTINATE** on doing this exercise, you may feel your built-in resistance start to rise against to things you have to do. Because it is required in this exercise that you **HAVE TO PROCRASTINATE**, and because you seem to naturally resist what you have to do, it would not be surprising that you begin to feel a desire to do this exercise. While this may sound strange, these are normal feelings and reactions for many people who have been in the habit of putting things off more than they prefer.

At this point, it would not be unexpected for some people to feel curious as to what the rest of this handout is about and want to go on. If you feel like that, you might choose to read on. You may stop any time you wish. You might even be curious about what are the possible alternatives to procrastination and want to read the first one. If you don't want to read any further, that's OK. You may prefer not to do anything about procrastination, now.

## POSSIBLE SOLUTIONS

1. Some people who procrastinate **become curious about what is it they put off** when they procrastinate. Some of these people have kept a log for only 1 week where they jot down whatever it is they put off.

   Maybe after a few days of logging "procrastinatables," you may begin to see certain patterns about what kinds of tasks you put off. You may see avoidance of certain kinds of work or situations that are potentially conflict arousing. Maybe you will see that "putting off" has to do with certain kinds of people, teaching styles, environments, moods, feelings, tasks, etc. Possibly, you may notice a "first impulse" resistance to required work as you log things.

   It could be that doing this first step might give you insight into whatever it is you keep putting off.

Some people begin to see possible solutions to procrastination at this point and some do not, yet. Either way is ok.

2. If you choose to do a log, you may want to **look for common "delaying tactics".** Many procrastinators discover an "inner voice" telling them what to do just before something is put off. This inner voice is normal and exists in all of us. You may feel like jotting down some of the things this inner voice says just before you put things off. This inner voice is called "self-talk."

**It is normal for people to do what they tell themselves to do. Maybe when you put things off you do a normal thing and do only what your inner voice is telling you to do.**

Some people become curious about this "inner voice" and want to know more about what it says. This inner voice is normal and is called **self-talk.** You may choose to listen more consciously for any negative or delaying self-talk when faced with commonly put-off tasks. You might discover what your self-talk is saying to you when facing commonly procrastinated tasks. You may even realize that, like many other people who put things off more than they want to, that you are likely to do what you tell yourself to do when facing unpleasant tasks or even unpleasant tasks. It might be interesting to see what happens if you change your self-talk and repeatedly tell yourself not to put something off. Some ex-procrastinators have found that describing exactly what they intend to do and for how long, just before doing it, makes procrastinating more difficult.

3. You may believe it is "good news" when you **realize that negative or delaying self-talk can be consciously changed to positive self-talk**. For example, if your self-talk when facing a disliked task is, "*I don't want to do this,"* you are likely to do what is normal and do what you tell yourself to do*. "I don't want to do this"* is only a small logical step away from, *"so, to hell with it!"*

Perhaps you might like to experiment and see what happens to you if you attempted the kind of positive self-talk which says the opposite of your habitual negative or delaying self-talk.

Some ex-procrastinators jot down positive self-talk phrases on notecards that they carry with them. If you feel this may be a good idea, you might use notecards for reminders of what to say to yourself when facing commonly put off tasks.

Some examples of positive self-talk that you could put on a notecard are:

| | | |
|---|---|---|
| ***I will do it now.*** | ***I may not want to do it, but I will for ½ hour.*** | ***I'd rather swim, but it won't help me graduate so I will study first.*** |
| ***I'll feel better when it's done, so I'll do it at 2pm.*** | ***I'll do this for 1 hour and then go out.*** | ***I'm a good student & good students do this, so I will do it now.*** |
| ***I may hate this but I will finish it done before I watch tv.*** | ***I haven't liked this in the past, but maybe I can learn to like it..*** | ***I haven't done well on this in the past, but I will learn to do it well.*** |

You may come to agree that more positive self-talk involves saying the opposite of what you used to tell yourself just before you procrastinated.

4. Just as most people can't eat a whole birthday cake in one bite**, some jobs cannot be done all at once**. Some people come to realize that it is harder to put something off if they slice a job up into manageable pieces and do the task piece by piece, little by little. This might mean **breaking down the time required to-do a task into smaller chunks** that are spaced over several days or weeks. Some people don't like large doses of something distasteful. They find that smaller doses spaced over time makes things easier to do and less procrastinatable.

5. Another way some people have reduced procrastination is to **begin with an easy, an enjoyable, or the least distasteful piece of a job to get started**.

6. Many ex-procrastinators have realized that **working with someone else** makes it less likely that they will put something off. Perhaps this would work for you.

7. It could be that you will come to realize **that making a commitment to someone or setting a deadline** for completing a task is one way to make procrastination more difficult. It is known that for many people, setting a goal results in motivation. For this to work, ex-procrastinators have found that the goal must be something they want to achieve.

8. Maybe you will discover that **doing a job in the least distracting environment** makes putting off work a little harder. For many college students, homes, dorm rooms, or apartments have many distractions and potential distractions. Perhaps you will find a place like the library to study where it is quiet and is going to stay quiet until you are ready to leave.

9. Like many non-procrastinators, you may find it enjoyable to **reward yourself** for doing a part of a job and for completing a task. Some examples of rewards are treating yourself to some ice cream, going to a movie, visiting with friends, or just doing something that you enjoy.

10. You may find it easier not to put things off when **you match the outcomes of what you do with your goals**. In other words, “How will not procrastinating on a task move me toward my goals?.” Possibly, you would come to realize that it is much easier to do something if you see that it is getting ***YOU*** where ***YOU*** want to go. You may even begin to believe that "your life is ***YOUR*** life" and that you have the freedom to pursue YOUR OWN GOALS, if you choose to do so.

11. Some counselors and researchers have discovered that **procrastination is one characteristic of adult children from dysfunctional family’s** i.e., families with alcohol abuse, physical abuse, emotional neglect or abuse, drug abuse, etc. Many people from dysfunctional families find this difficult to believe, accept, or even acknowledge, at first. If you think a background similar to dys-functional families may be one reason why you put things off, you might choose to tell a college counselor about it. It could be that you would find a way to use their training and experience to help you reduce the number of times you put things off.

12. A normal reason for procrastinating is because a person is **trying to do something they really and sincerely do not want to do just now.** After acknowledging that something may be difficult or distasteful, it is not uncommon for people to get the help of a friend or counselor. Many former procrastinators have found that doing something they deeply and truly don't want to do just now is a primary reason why they put things off.

    You may discover, as other have, that this is a ***normal response*** to distasteful tasks. By making

a change to do something they r*eally want to do*, many people like you have reduced or eliminated procrastination in their lives.

13. Sometimes people are **unaware of a degree of self-criticism or self-anger** which is a common cause of procrastination. Through no fault of their own, procrastinators in this escapable trap lapse into a cycle of thinking, feeling, and behavior that promotes procrastination. You may choose to examine the cycle below to see if any part of it fits you. If any part fits you, you may choose to enlist the help of a professional counselor to eliminate this possible cause of your procrastination.

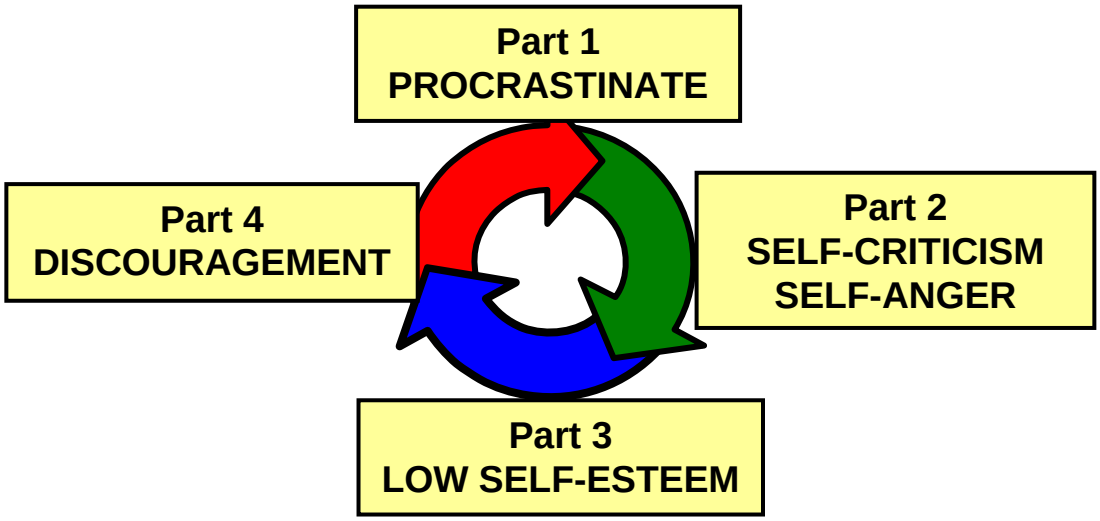
When some people procrastinate, they become critical of themselves and that cause them to become angry at themselves. This leads to low self-esteem and discouragement. The self-talk language may go something like this.

**Part 1** "I'll do that later."

**Part 2** "Now it's too late and I screwed up again!" "Why do I do this? It makes me so angry when I get into this situation."

**Part 3** "I just don't have what it takes to succeed, I guess."

**Part 4** "Maybe I'll quit."




The sinister part of this cycle is that you may inadvertently enter at any point and continue circling until you realize what is happening. To exit this cycle, many ex-procrastinators have chosen to practice one or more of the possible solutions listed above.

By using some of these solutions to procrastination, you may realize that you are not stuck with your present degree of procrastination, if you don't want to be. You may also begin to realize as others have, that you are not powerless to modify and eventually control this behavior. You may even find that reading over this handout several times could possibly give you more ideas to try in order to reduce your procrastination behaviors. You may come to believe, as many ex-procrastinators have, that you may choose to control and even eliminate procrastination by making habits out of one or more of the suggestions listed above, when you are ready.

# 16 Traits of Effective Time Managers

1. **Break projects into *steps* with *specific deadlines*** for completion of each step.

2. **Generate manageable due dates for the achievement of these steps** and *schedule* specific times to complete the steps to meet these due dates.

3. **Use due dates to monitor progress** towards the completion of steps in your plan.

4. **Write down daily tasks** and cross them off as they are accomplished.

5. **Use calendar books** to record appointments and intended dates for completion of tasks.

6. **Have daily objectives** to move them toward the completion of multiple tasks.

7. **Continually review long-term goals** so the sight of long range objectives is not lost.

8. **Begin projects early** to give yourself time and freedom to brainstorm about the best ways to accomplish your tasks. Begin early on assignments to create the opportunities to gather information, think over the matter, and collaborate with others for assistance and suggestions.

9. **Be honest** about how plans are going. Don't hesitate to modify plans to achieve better results.

10. **Seek advice from others**. Accept and even seek input from anyone in a position to assist you or offer helpful information. Review other's materials, converse and correspond with expert sources, and consider other's ideas as you plan a course of action.

11. **Use available resources** and don't try to go it alone unless it is unavoidable.

12. **Inform people involved** as much in advance as possible about any role these people may have in any activity. This allows time for others to plan ahead as well.

13. **Remain flexible and prepare for the unexpected**. Successful people have plans B and C.

14. **Try to anticipate obstacles** but be ready to adapt plans in cases of the unexpected.

15. **Remain persistent in the face of adversity** by considering other avenues of approach when encountering barriers. Effective time managers don't give up easily.

16. **Realize that a polite "No" is sometimes a proper response**. An effective time manager has the ability to say, "I will get back to you on that. I want to think about it overnight" or "No, I cannot do that now" if the request is disruptive to task completion and progress toward goals.

# The 8-Hour Day College Time Management Schedule

One of the most important study skills in college is time management. Many students earn grades below potential or flunk out of college because of poor time management skills. One model for organizing time in college centers around the 8-hour workday.

Without a college degree, you will most likely be working at the entry level in the fast food industry, doing clerical work, toiling in labor oriented jobs and at pay scales near minimum wage. These jobs are fine as long as they are what you ***choose*** to do. In any case, you will be working 8 hours per day and 40 hours per week if you are not in college. After 4 or 5 years of working in these types of jobs, where will you be? At what wage level?

The 8-hour per day model for managing time in college has you in class or studying for 8 hours per day. These are the same 8 hours you will be putting in each day if you weren't in college only this time you will be *self-employed*.

Most students are in class 2 to 3 hours per day (not counting labs). This leaves 5 to 6 hours per day for studying – reading textbooks, taking notes, revising notes, building and practicing solutions to problems, and reciting and self-testing on existing notes, etc. Students who spend 5 to 6 hours per day studying usually do quite well in college. Looking at another factor:

***The 8 hours per day model leaves every evening and weekend free from studying!***

That means you can use evenings and weekends to focus on personal growth activities.

On the next page, set up an 8-hour per day model for managing your time in college. Remember that only time in class and studying count toward the 8 hours. **The steps are:**

1. ***Cross off class times***
2. ***Cross off meal times***
3. ***Cross off work or activities times***
4. ***Cross off study times***
5. ***Total should be 8 hrs./day and 40 hrs./ week on the job as a student.***

# College Schedule Time Controller

Set up your personal 8-hour per day schedule for doing your job as a student. Use a pencil or erasable ink to allow for changes later.

| Times | Monday | Tuesday | Wednesday | Thursday | Friday |
|---|---|---|---|---|---|
| 7:00-7:30am | | | | | |
| 7:30-8:00 | | | | | |
| 8:00-8:30 | | | | | |
| 8:30-9:00 | | | | | |
| 9:00-9:30 | | | | | |
| 9:30-10:00 | | | | | |
| 10:00-10:30 | | | | | |
| 10:30-11:00 | | | | | |
| 11:00-11:30 | | | | | |
| 11:30-12:00 | | | | | |
| 12:00-12:30pm | | | | | |
| 12:30-1:00 | | | | | |
| 1:00-1:30 | | | | | |
| 1:30-2:00 | | | | | |
| 2:00-2:30 | | | | | |
| 2:30-3:00 | | | | | |
| 3:00-3:30 | | | | | |
| 3:30-4:00 | | | | | |
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| 9:00-9:30 | | | | | |
| 9:30-10:00 | | | | | |
| 10:00-10:30 | | | | | |
| 10:30-11:00 | | | | | |
| 11:00-11:30 | | | | | |
| 11:30-12:00 | | | | | |
| Hours in Class | | | | | |
| Hours Studying | | | | | |
| Total Hours as a Student | | | | | |

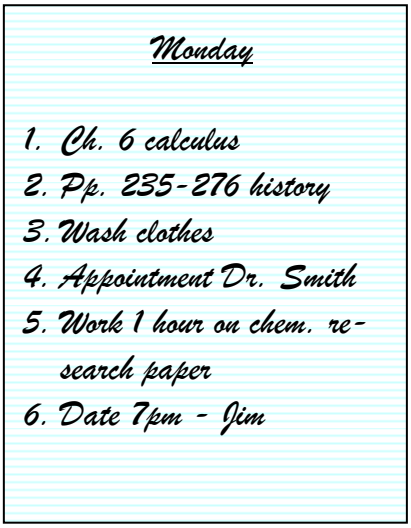
| | |
|---|---|
| Hrs. in class/wk | |
| Hrs. studying/wk | |
| Total hrs. as a student/wk | |

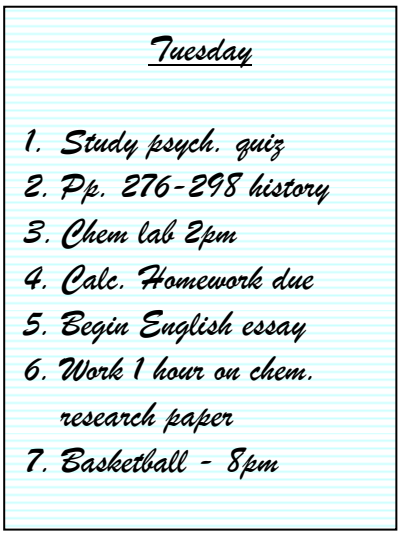
# List your Way to Success

Researchers who study the characteristics of successful people have found that organizational skills are a common characteristic. Successful people keep track of what needs to be done on the way to success; if you don't control your time or your life, something (or someone) else will.

## 1. Daily to-do List

This type of list entails writing down what you need to do ***day by day***. For example, you may use a notecard for recording your "to do's, then check off each item as you complete it. This allows you to see your progress and feel a sense of accomplishment each day.



## 2. Priority List

This type of list involves recording what needs to be done ***in order of importance or by due dates***. The most important or "first due" item is listed at the top and down to the lesser important items.

**More important**

**Less Important**

*Friday*

1. *Study group for bio. Test 8-9am*
2. *Hand in math homework 10am*
3. *See Dr. Jones about next week's test - bring my questions 11am*
4. *Practice math problems 11:30*
5. *Lunch - go over notecards for bio*
6. *Bio class 1pm*
7. *Chem lab 2pm*
8. *1 hr for hist. research paper 4pm*
9. *Dinner Photography club 5pm*
10. *Get a date with Karen*

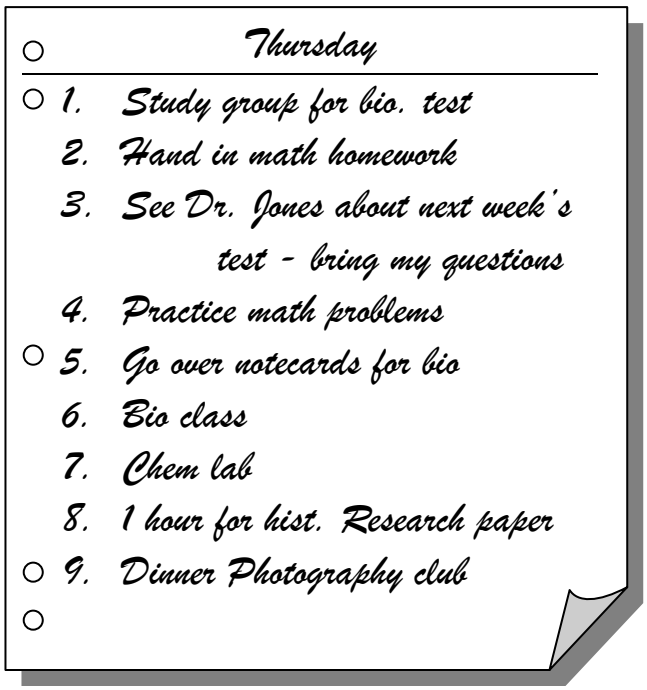
Another version of a priority list includes what must be done *today*, what must be done by date, and what is *coming up* with due dates. These tasks could also be listed in order of importance or by deadline.

| Must Do Today | Must Be Done By _____ | Upcoming Due Dates |
|---|---|---|
| ○ | | |
| ○ | | |
| ○ | | |
| ○ | | |

*Dates*
*Squeeky*
*Annette*
*Minnie*
*Rodenta*

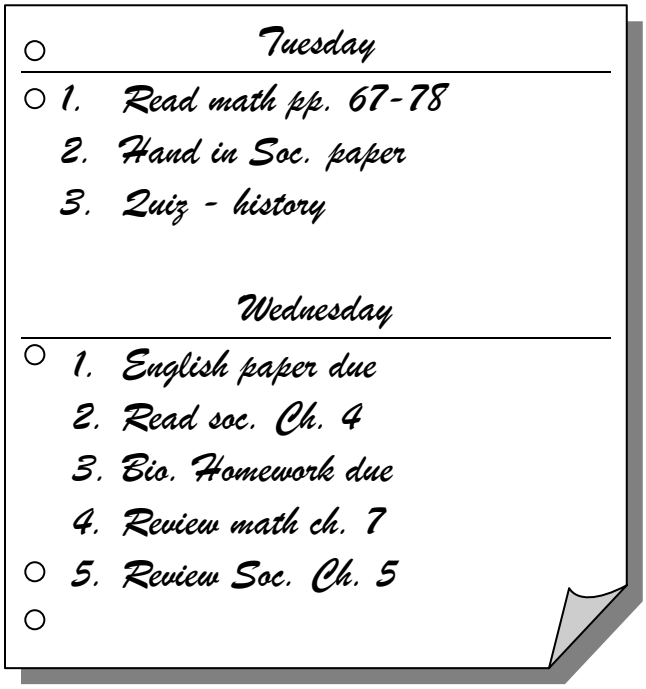
## 3. Chronological List

This third type of list ***uses time*** to indicate when tasks need to be completed. This list can be kept on notebook paper but is done best using a calendar book available at campus bookstores and office supply stores.




## 4. Assignment List

Here, ***assignments*** are recorded just as you would tasks on a real job after college. You may prefer to record assignments and due dates for a whole week instead of one day at a time.

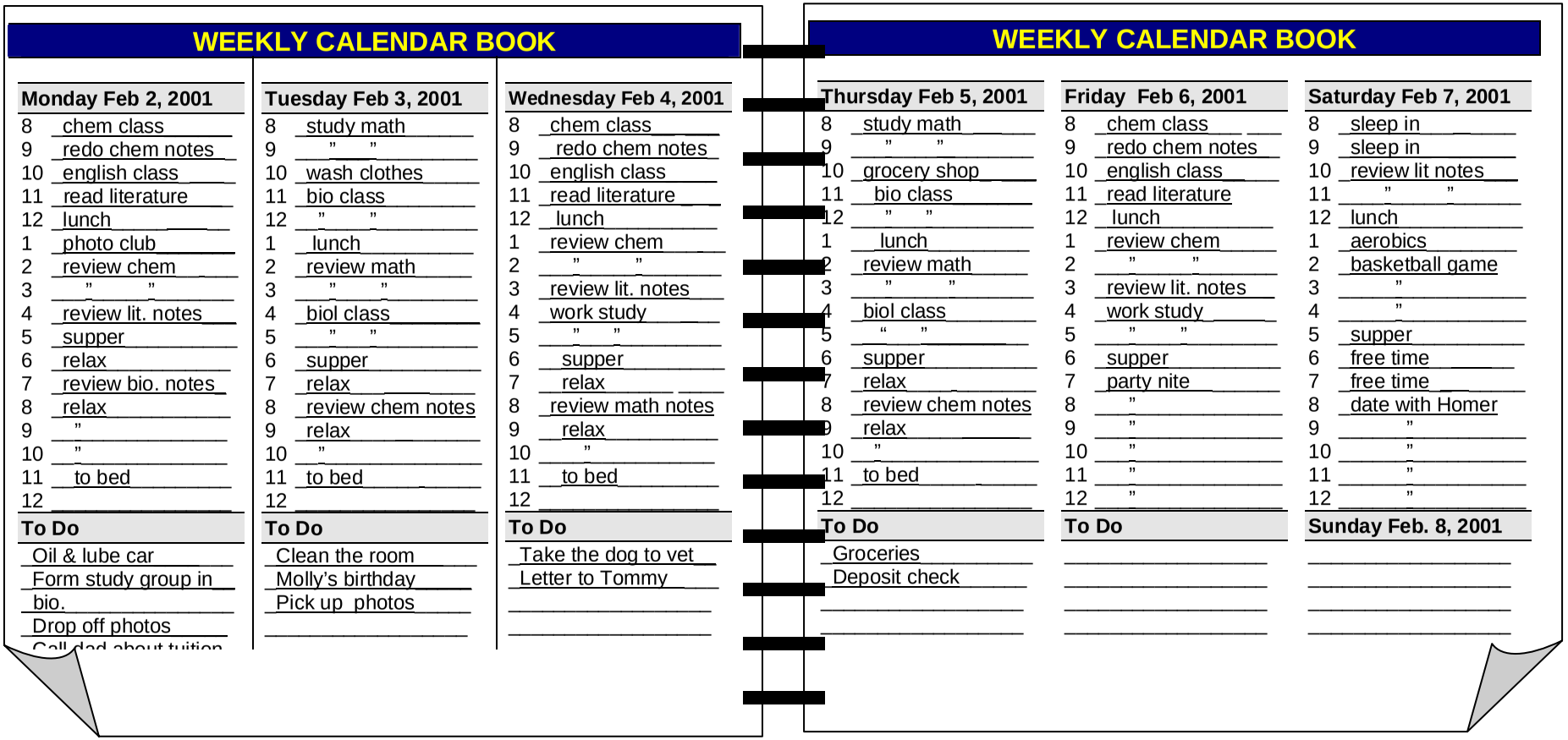


## 5. Weekly Calendar Book

One of the most effective, easy to use and most popular methods of tracking and completing college tasks involves the use of a weekly calendar book. These are available at most college bookstores and offices supply stores. When open, a whole week is displayed before you. This way it is easier to see what is coming up a day or more ahead.

Below is an example of a weekly calendar book.

| Monday Feb 2, 1999 | Tuesday Feb 3, 1999 | Wednesday Feb 4, 1999 | Thursday Feb 5, 1999 | Friday Feb 6, 1999 | Saturday Feb 7, 1999 |
|---|---|---|---|---|---|
| 8 | 8 | 8 | 8 | 8 | 8 |
| 9 | 9 | 9 | 9 | 9 | 9 |
| 10 | 10 | 10 | 10 | 10 | 10 |
| 11 | 11 | 11 | 11 | 11 | 11 |
| 12 | 12 | 12 | 12 | 12 | 12 |
| 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 2 | 2 | 2 | 2 | 2 |
| 3 | 3 | 3 | 3 | 3 | 3 |
| 4 | 4 | 4 | 4 | 4 | 4 |
| 5 | 5 | 5 | 5 | 5 | 5 |
| 6 | 6 | 6 | 6 | 6 | 6 |
| 7 | 7 | 7 | 7 | 7 | 7 |
| 8 | 8 | 8 | 8 | 8 | 8 |
| 9 | 9 | 9 | 9 | 9 | 9 |
| 10 | 10 | 10 | 10 | 10 | 10 |
| 11 | 11 | 11 | 11 | 11 | 11 |
| 12 | 12 | 12 | 12 | 12 | 12 |
| **To Do** | **To Do** | **To Do** | **To Do** | **To Do** | **Sunday Feb. 8, 1999** |




## Myths about Lists and Schedules

1. Time schedules **restrict you**. Ridiculous! How can something restrict you that you control 100%?
2. **I can’t do what I need to do if I schedule everything**. Absurd! You decide what to include in your schedules and lists. A schedule contains only what you put there. It is a tool for keeping track of what you need to do instead of leaving important tasks to memory, mood, or chance. Schedules are tools that increase chances for success.
3. **I don’t like to schedule my life**. Silly! You can choose to schedule your life every minute of every day intentionally or by chance. Which way will help you reach your goals quicker? A list only helps you keep better track of what needs to be done, helps you get it done, and moves you toward your goals much faster and more successfully.

COLLEGE OF Saint Benedict Saint John's UNIVERSITY

# Time Management Worksheet – Academic Advising Office

Study the suggestions on the back before making out your schedule.

| Cycle Day: | 1 | 2 | 3 | 4 | 5 | 6 | SATURDAY | SUNDAY |
|---|---|---|---|---|---|---|---|---|
| 6 – 7 AM | | | | | | | | |
| 7 – 8 AM | | | | | | | | |
| 8 – 9:10 AM | | | | | | | | |
| 9:10 – 9:40 AM | | | | | | | | |
| 9:40 – 10:50 AM | | | | | | | | |
| 10:50 – 11:20 AM | | | | | | | | |
| 11:20 – 12:30 PM | | | | | | | | |
| 12:30 – 1 PM | | | | | | | | |
| 1 – 2:10 PM | | | | | | | | |
| 2:10 – 2:40 PM | | | | | | | | |
| 2:40 – 3:50 PM | | | | | | | | |
| 3:50 – 4:20 PM | | | | | | | | |
| 4:20 – 5:30 PM | | | | | | | | |
| 6 – 7 PM | | | | | | | | |
| 7 – 8 PM | | | | | | | | |
| 8 – 9 PM | | | | | | | | |
| 9 – 10 PM | | | | | | | | |
| 10 – 11 PM | | | | | | | | |
| 11 – 12 PM | | | | | | | | |
| 12 – 1 AM | | | | | | | | |

Resources:

CSB Office of Academic Advising, ASB 210, ext. 5687
CSB Math Skills Center, HAB 4A, ext. 5236
CSB Writing Center, HAB 103, ext. 5499
CSB Counseling & Health Education, ASB BSMT , ext. 5605
CSB Career Services, ASB 214, ext. 5707

SJU Office of Academic Advising, QUAD 155, ext. 2248
SJU Math Skills Center, PEngl 232, ext. 2061
SJU Writing Center, QUAD 266, ext. 2711
SJU Counseling & Health Education, Mary Hall #010, ext 3236
SJU Career Services, Mary Hall #10, ext. 3236

# Hints For Planning A Better Study Schedule

The success of your study schedule will depend on the care with which you plan it.
Careful consideration of these points will help you **make a schedule that will work for you**.

**1. Plan a schedule of balanced activities.** College life has many aspects which are very important to success. Some have fixed time requirements and some are flexible. Some of the most common which you must consider are:

| | | | |
|---|---|---|---|
| **FIXED:** | **Eating** | **FLEXIBLE:** | **Sleeping** |
| | **Organizations** | | **Recreation** |
| | **Classes** | | **Study** |
| | **Church** | | **Relaxation** |
| | **Work** | | **Personal Affairs** |

**2. Plan enough time in studying to do justice to each subject.** Most college classes are planned to require about three hours of work per week per credit in the course. By multiplying your credit load by three you can get a good idea of the time you should provide for studying. Of course, if you are a slow reader, or have other study deficiencies, you may need to plan more time in order to meet the competition of college classes.

**3. Study at a regular time and in a regular place.** Establishing habits of study is extremely important. Knowing what you are going to study, and when, saves a lot of time in making decisions and retracing your steps to get necessary materials, etc. Avoid generalizations in your schedule such as "STUDY." Commit yourself more definitely to "STUDY HISTORY" OR "STUDY CHEMISTRY" at certain regular hours.

**4. Study as soon after your lecture class as possible.** One hour spent soon after class will do as much good in developing an understanding of materials as several hours a few days later. Check over lecture notes while they are still fresh in your mind. Start assignments while your memory of the assignment is still accurate.

**5. Utilize odd hours during the day for studying.** The scattered one- or two-hour free periods between classes are easily wasted. Planning and establishing habits of using them for studying for the class just finished will result in free time for recreation or activities at other times in the week.

**6. Limit your blocks of study time to no more than 2 hours on any one course at one time.** After 1 ½ to 2 hours of study you begin to tire rapidly and your ability to concentrate decreases rapidly. Taking a break and then switching to studying some other course will provide the change necessary to keep up your efficiency.

**7. Trade time – don't steal it.** When unexpected events arise that take up time you had planned to study, decide immediately where you can find the time to make up the study missed and adjust your schedule for that week. Note the weekend evenings - most students can afford no more than one of them for recreation, but may wish to use different evenings on different weeks. This "trading agreement" provides for committing one night to study, but rotating it as recreational possibilities vary.

**8. Provide space for review.** That is, a regular weekly period when you will review the work in each of your courses and be sure you are up-to-date. This review should be cumulative, covering briefly all the work done thus far in the quarter.

**9. Practice self-recitation as a device for increasing memory.** Organize your notes in a question and answer form and think in terms of questions and answers about the main ideas of the material as you review weekly. When preparing for exams, try to predict the questions the instructor may ask.

**10. Keep carefully organized notes on both lectures and assignments.** Good notes are one of the best bases for review. Watch for key ideas in lectures and try to express them in your own words in your notes. Watch for headings and bold face type in your reading to give you clues for main ideas in your notes. Take down careful notes as to exactly what assignments are made and when they are due.

## *Section 4: Concentration*

*10 Tips to Improve Concentration*

*Creating a Concentration Environment*

*Making Concentration a Habit*

*Clues to Concentration*

*Concentrating While Studying*

# 10 Tips to Improve Concentration

1. **Intend To Concentrate -** Humans tend to do what they tell themselves to do. Therefore, it's easier to concentrate if you set a *specific* length of time to study and consciously tell yourself that "I will concentrate" for that length of time.

2. **Prepare To Concentrate -** Have everything you will need before you begin to study: pencils, pens, paper, notes, textbooks, reference books, etc.

3. **Use Concentration Promoting Activities -** Study with a pen or pencil in hand and condense what you read into organized notes. Rewrite and better organize lecture notes. *If you study by rereading and suffer from poor concentration and poor recall, you are normal.*

4. **Vary Your Study Activities -** If your study style is not to focus on one subject for long periods of time, then vary what you do. Read and take notes for awhile, formulate questions and answers for a time, recite and review to break the monotony. Another example is to do math problems for awhile, then read another subject, review that subject, and then go back to math.

5. **Find A Non-Distracting Study Environment -** Study in the same place and use that place ***only*** for studying. Remove potential sources of visual and auditory distractions or remove yourself to a less distracting study environment.

6. **Set Up A Specific System for Studying and Learning -**
An effective step-by-step plan for studying and learning makes concentration easier. For example, take main ideas and turn them into questions and place them on one side of a notecard. On the other side, use the details that clarify and explain each main idea as answers for your questions. Frequently and regularly look at the questions and practice reciting answers aloud from memory. Then, turn the notecard over to check your answer. If right, move on to the next notecard. If wrong, don't move on until you read the answer aloud and quiz yourself again until you get it right.

7. **Eat Regular and Well-Balanced Meals -** Research suggests those with healthy diets earn higher grades. Avoid quick uppers such as sugary snacks because quickly rising and falling blood sugar levels negatively affect concentration. High fat foods cause sluggishness and drowsiness. Snack on fresh fruits and vegetables.

8. **Get Plenty of Night-time Sleep -** Fighting sleepiness lowers concentration.

9. **Set Daily, Weekly, Monthly, and Semester Academic Goals -** It is easier to concentrate and feel motivation when you have goals and can see yourself progressing toward those goals.

10. **Take Regular Study Breaks -** It is normal for concentration time to vary individually from 5 minutes on up. Take a short 5-minute break when concentration wanders.

# Creating a Concentration Environment

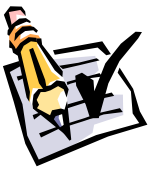
According to Dr. Walter Pauk, a learning skills expert, concentration is focused thinking. When you are focused, you can think with "greater precision and penetrate difficult ideas," according to Dr. Pauk. Since concentration is an outcome, a product, a result, you must adopt habits that eliminate distractions and concentration will result.

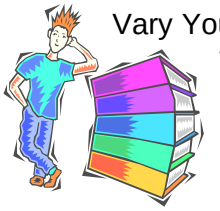
**Find a place that is quiet and will stay quiet.** Research is clear that certain sounds slow and even prevent learning. Some of those sounds are most types of music, talking, and intermittent sounds such as doors opening and closing, noise from children, pet sounds. etc.

Have everything you will need before you begin to study: pencils, pens, paper, notes, textbooks, reference books, etc.

**Study in the same place as much as possible.** You will associate that place with study which enables you to begin concentration sooner, do it deeper, and get the job of learning done faster. Psychologists call this a conditioning effect and it speeds learning.

**Study with a pencil or pen in hand.** According to an expert in concentration, Dr. Walter Pauk, you should study with a pencil or pen in hand and use it to take notes. The activity of taking notes ensures concentration.





Vary Your Study Activities. If your study style is not to focus on one subject for long periods of time, then vary what you do. Read and take notes for a while, formulate questions and answers for a time, then recite and review to break the monotony. An example is to do math problems, then take notes from your psychology text, review the psychology notes, and then go back to math.

**Eat Well Balanced, Regular Meals.** Research suggests those with healthy diets earn higher grades. Avoid quick uppers such as sugary snacks because quickly rising and falling blood sugar levels negatively affect concentration. High fat foods cause sluggishness and drowsiness. Choose to snack on fresh fruits and vegetables.

**Get Plenty of Nighttime Sleep.** Fighting sleepiness lowers concentration. If your living environment prevents sufficient nighttime sleep, elect to change it.

**Use a worry sheet.** Each time you catch yourself worrying about something, jot it down on a piece of paper. Then do something about each item as soon as you can.

# Making Concentration a Habit

## While Studying

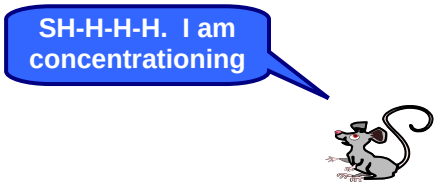
Think of concentration improvement as a 3-step process:
Step 1) Learn the causes of poor concentration and decide which apply to you.
Step 2) Understand what you can do to control them.
Step 3) Apply these controls and make your concentration habitual.

| EXTERNAL CAUSES OF POOR CONCENTRATION | WHAT YOU CAN DO TO CONTROL THEM |
|---|---|
| TV/stereos in background<br>Too comfortable chairs<br>Food nearby<br>Friends & family nearby<br>Music<br>Pets<br>Telephone | Leave or re-arrange a distracting environment.<br><br>Go to a library or an empty classroom when you seriously intend to study.<br><br>Train yourself to study away from others and in silence. |
| **INTERNAL CAUSES OF POOR CONCENTRATION** | **WHAT YOU CAN DO TO CONTROL THEM** |
| Hunger | Eat high-protein or fruit snacks and regular, balanced meals. |
| Drowsiness | Plan to study when you are most alert.<br>Get adequate nighttime sleep.<br>Do 5 minutes of light exercise to wake up. |
| Boredom, dislike, or disinterest in a class | Find reasons for taking a class that satisfy you.<br>Join a study group.<br>Ask instructors about the relevance of the course or the material in their class.<br>Visit with a campus counselor. They help students with these problems frequently. |
| Anxiety about a class | Talk with students/instructors about the class.<br>Make sure you know how to study effectively.<br>Make sure anxiety about your studies is not something personal. See a campus counselor. |
| Intimidating assignments | Break up large assignments into smaller pieces and do a little each day.<br>Do the most intimidating part first.<br>Give yourself rewards for progress.<br>Work with one or more other students. |

| | |
|---|---|
| Daydreaming | When your mind wanders, write down the interrupting thought and go back to studying.<br>Focus on spotting main ideas and details in textbooks and lecture notes. Make questions from main ideas using the details as answers.<br>Deliberately stop trying to study and intentionally daydream. When you're ready to read again, do so. Don't try to read and daydream at the same time. |
| Personal worries | Identify and define the problem and develop a concrete, specific plan to resolve it. Talk with someone who can help: a friend, relative, a college counselor. |

## You can make concentration a habit

Even if you lapse into old habits of distraction and daydreaming, keep expecting yourself to practice concentrating. Use the controls above until you can routinely concentrate well on your studies for fifty minutes out of every hour.



# Clues to Concentration

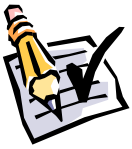
**Intend to Concentrate.** Humans tend to do what they tell themselves to do. Therefore, it's easier to concentrate if you set a *specific* length of time to study and consciously tell yourself that "I will concentrate" for that length of time.

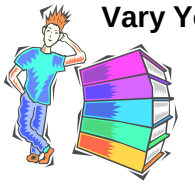
**Prepare to concentrate.** Have everything you will need before you begin to study: pencils, pens, paper, notes, textbooks, reference books, etc.

**Find a place that is quiet and will stay quiet.** Research is clear that certain sounds slow and even prevent learning. Some of those sounds are most types of music, talking, and intermittent sounds such as doors opening and closing, noise from children, pet sounds, etc.


**Study in the same place as much as possible.** You will associate that place with studying which enables you to begin concentration sooner, do it deeper, and get the job of learning done faster. Psychologists call this a conditioning effect and it also speeds learning.

**Study with a pencil or pen in hand.** According to an expert in concentration, Dr. Walter Pauk, you should study with a pencil or pen in hand and use it to take notes. The activity of taking notes ensures concentration.



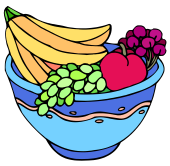


**Vary Your Study Activities.** If your study style is not to focus on one subject for long periods of time, then vary what you do. Read and take notes for a while, formulate questions and answers for a time, then recite and review to break the monotony. An example is to do math problems, then take notes from your psychology text, review the psychology notes, and then go back to math.

**Take regular study breaks.** It is normal for concentration time to vary individually from 5 minutes on up. Take a short 5-minute break when concentration wanders.

**Use a worry sheet.** Each time you catch yourself worrying about something, jot it down on a piece of paper. Then do something about each item as soon as you can.

**Eat Well Balanced, Regular Meals.** Research suggests those with healthy diets earn higher grades. Avoid quick uppers such as sugary snacks because quickly rising and falling blood sugar levels negatively affect concentration. High fat foods cause sluggishness and drowsiness. Choose to snack on fresh fruits and vegetables.



**Get Plenty of Nighttime Sleep.** Fighting sleepiness lowers concentration. If your living environment prevents sufficient nighttime sleep, elect to change it.

**Set up a specific system for studying and learning.** An effective step-by-step plan for studying and learning makes concentration easier.

**Set daily, weekly, monthly, and semester academic goals.** It is easier to concentrate and feel motivated when you have goals and can see yourself progressing toward those goals.

*Prepared by Dennis H. Congos, Certified Supplemental Instruction Trainer, University of Central Florida*
*Edited by Brandy Espinosa, Learning Specialist, University of Central Florida*

**Division of Student Development and Enrollment Services**

http://studygs.net/concent.htm

# Concentrating while studying

**Concentration: the ability to direct your thinking**

**The art or practice of concentration,**
no matter if studying biology or playing pool,
is to focus on the task at hand and eliminate distraction

We all have the ability to concentrate -- sometimes. Think of the times when you were "lost" in something you enjoy: a sport, playing music, a good game, a movie. Total concentration.

**But at other times,**

- Your mind wanders from one thing to another
- Your worries distract you
- Outside distractions take you away before you know it
- The material is boring, difficult, and/or not interesting to you.

**These tips may help:** They involve

1. What you can control in your studies
2. Best practices

**What you can control in your studies:**

- "**Here I study**"
  Get a dedicated space, chair, table, lighting and environment
  Avoid your cellphone or telephone
  Put up a sign to avoid being disturbed or interrupted
  If you like music in the background, OK, but don't let it be a distraction. (Research on productivity with music versus without music is inconclusive)
- **Stick to a routine, efficient study schedule**
  Accommodate your day/nighttime energy levels
  See our Guide on *Setting goals and making a scheduling*
- **Focus**
  Before you begin studying, take a few minutes to summarize a few objectives, gather what you will need, and think of a general strategy of accomplishment
- **Incentives**
  Create an incentive if necessary for successfully completing a task,
  such as calling a friend, a food treat, a walk, etc.
  For special projects such as term papers, design projects, long book reviews, set up a special incentive
- **Change topics**
  Changing the subject you study every one to two hours for variety
- **Vary your study activities**
  Alternate reading with more active learning exercises
  If you have a lot of reading, try the SQ3R method

Ask yourself how you could increase your activity level while studying? Perhaps a group will be best? Creating study questions?
Ask your teacher for alternative strategies for learning. The more active your learning, the better.

- **Take regular, scheduled breaks that fit you**
  Do something different from what you've been doing (e.g., walk around if you've been sitting), and in a different area
- **Rewards**
  Give yourself a reward when you've completed a task

**Best Practices:**

- **You should notice improvement in a few days**
  But like any practice, there will be ups, levels, and downs:
- **It will benefit other activities you do!**

**Be here now | Worry time | Tally Card | Energy level | Visualize**

**Be Here Now**

This deceptively simple strategy is probably the most effective.
When you notice your thoughts wandering astray, say to yourself *"Be here now"* and gently bring your attention back to where you want it.

**For example:**
You're studying and your attention strays to all the other homework you have, to a date, to the fact that you're hungry. Say to yourself

*"Be here now"*

Focus back on subject with questions, summarizing, outlining, mapping, etc. and maintain your attention there as long as possible.

When it wanders again, repeat

*"Be here now"*

and gently bring your attention back, and continue this practice, repeatedly. It will work!

Do not try to keep particular thoughts out of your mind. For example, as you sit there, close your eyes and think about anything you want to for the next three minutes except cookies. Try not to think about cookies...When you try not to think about something, it keeps coming back. ("I'm not going to think about cookies. I'm not going to think about cookies.")

You might do this hundreds of times a week. Gradually, you'll find that the period of time between your straying thoughts gets a little longer every few days. So be patient and keep at it. You'll see some improvement!

Do not constantly judge your progress. Take it easy on yourself. Good practice is enough to say that you did it, and that you are on the road. The mind is always different and the practice unfolds over time with many ups and downs.

#### Worry or Think Time

**Research has proven that people who use a worry time find themselves worrying 35 percent less of the time within four weeks.**

1. **Set aside a specific time each day to think about**
   the things that keep entering your mind and interfering with your concentration.
2. **When you become aware of a distracting thought,**
   remind yourself that you have a special time to think about them,
3. **Let the thought go,**
   perhaps with "Be here now,"
4. **Keep your appointment**
   to worry or think about those distracting issues

For example, set 4:30 to 5 p.m. as your worry/think time. When your mind is side-tracked into worrying during the day, remind yourself that you have a special time for worrying. Then, let the thought go for the present, and return your focus to your immediate activity.

#### Tallying your mental wanderings.

Have a 3 x 5 inch card handy. Draw two lines dividing the card into three sections. Label them "morning," "afternoon," and "evening."

Each time your mind wanders, make a tally in the appropriate section. Keep a card for each day. As your skills build, you'll see the number of tallies decrease

#### Maximize your energy level

When is your energy level at its highest? When are your low energy times?
Study your most difficult courses at your high energy times. Sharpest early in the evening? Study your most difficult course then. Later in the evening? Work on your easier courses or the ones you enjoy the most.

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Most students put off the tough studies until later in the evening when they become tired, and it is more difficult to concentrate. Reverse that. Study hard subjects at peak energy times; easier ones later. This alone can help to improve your concentration

**Visualize**

**As an exercise before you begin studying,**
think of those times when concentration is not a problem for you--no matter what situation. Now try to feel or image yourself in that situation. Recapture that experience immediately before your studies by placing yourself in that moment.
Repeat before each study session.

## *Section 5: Memory*

*Memory and Concentration*

*Why We Forget*

*Memorizing vs. Understanding*

*Memory Skills: Links, Stories, Journies, and Rooms*

*9 Types of Mnemonics*

*Mind Mapping*

*Mental Manipulation: The Key to Remembering*

*Practicing Mnemonics*

# Concentration & Memory

**Concentration** is defined as the ability to give something our undivided attention to the exclusion of other distractions. Most students report dissatisfaction with their ability to concentrate and feel they do not work as efficiently as they would like. You need to bear in mind that most adults can concentrate on a task for a period of 35 to 45 minutes before growing distracted. However, there are some techniques that you can utilize that may help minimize external and internal distractions so you can use your study time more effectively.

## Try the *PATS* Model to Help You Stay on Task

- ***P*ick the Best Environment for You to Study In.** Choose a place to study where you feel secure and comfortable (but not too comfortable—you may fall asleep). Does it have adequate lighting? Is it too warm or cool?
- ***A*lways Reduce Visual Distractions.** Are there too many line-of-sight distractions? Is there a television nearby that might tempt you? Do friends find and distract you easily? (Hide, disable the "instant messenger" on your computer, or learn to say "Sorry, I'm studying!")
- ***T*ry to Eliminate Noise Around You.** Some people are distracted by music while others are helped by music. Generally music with lyrics is distracting. Some find listening to baroque music (a type of classical music with a very slow beat) improves their ability to concentrate. If noise distracts you, use earplugs or a machine that generates white noise, like a fan. And turn off that cell phone!
- ***S*elf-talk to Control Internal Distractions.** When you notice your mind has drifted off task, stop what you are doing and put a checkmark on some scrap paper. Keep track of your checkmarks as a way to keep track of your tendencies to lose focus. Also, talk to yourself and direct your attention back to studying with an affirmative statement: "I know I have a lot to do today, but I have to read this chapter first." Keep a notepad next to you and if you start to worry about something, write it down, promise yourself to attend to it later, and then get back to work.

## Set the Stage for Success

- Plan out your study times in advance. Be specific about what you want to accomplish and timelines for doing so.
- If you are distracted by the amount of material you have to cover, "chunk" (divide) the information into smaller, more manageable units.
- Schedule your most demanding subjects at the time of day you feel best (after breakfast for "morning people"; late evening for "night people").
- Establish a regular routine of proper nutrition, sleeping and exercise.
- Watch the caffeine. While small amounts can improve alertness in the short term (like in a single can of pop or cup of coffee), higher doses can cause anxiety, dizziness, headaches, and the "jitters" and can interfere with normal sleep. Try herbal tea if you need the comfort of a warm beverage.
- Know and respect your own concentration span. If you find yourself consistently daydreaming, schedule more frequent breaks, take a walk, take a nap, etc. Some days it will be tougher to concentrate than others—and that's okay. Expecting peak efficiency 100% of the time isn't realistic. Aim for improvement—not perfection!

## Improving Your Memory

Having a good memory is a cornerstone of academic success. Don't berate yourself for absentmindedness. Start today by telling yourself you have a good memory and it's improving every day!

It is thought that humans possess two major types of memory: Short-Term Memory (STM) and Long-Term Memory (LTM). If you wish to be successful on tests and exams, it is important to have crucial information stored in your long-term memory. Frequent review of material is important. Always review your lecture notes and recite material within 24 hours of your class to encourage information transfer from your STM to your LTM. LTM allows retrieval of information decades after it is stored, and its capacity is considered to be infinite.

## Hints from Cognitive Psychology

Here are some research findings from studies on cognition that you can utilize to improve your memory:

- **Chunking.** This involves learning small pieces of a concept first and later putting them together to form the whole. A good example of this is your student number. It is far easier to recall separate groups (or chunks) of numbers than nine individual digits.
- **Elaborative Rehearsal**. We are more likely to remember things when we consider the *meaning* of something as opposed to its structural components. A good way to remember a theory or concept is to find everyday examples so the information is more relevant. Putting material into your own words also makes it more meaningful.
- **Generation Effect.** You are more likely to remember information that you come up with individually (i.e. you generate on your own) than information that is simply presented. Consider studying in pairs so you have ample opportunity to generate information. Using flash cards is also beneficial.
- **Dual Coding**. If we have a verbal and visual memory for a piece of information, we are more likely to remember it. For example, if you want to remember someone's name you can say their name out loud while visualizing a particular image. Having both a verbal and visual memory makes it much more likely you will recall their name.
- **State and Context Dependant Memory**. We tend to remember information best when the state/context we are in matches the state/context we were in when we acquired the information. The state refers to your state of mind, and the context refers to any part of your environment. This finding comes into play during tests and exams. Students get stumped on a question and grow anxious, which is a very different state of mind from when they originally studied the material. If this happens to you, simply move on to another question and try to relax. Other questions may provide you with the retrieval cues necessary to answer the question correctly!
- **Spacing Effect**. Not surprisingly, spacing out your review is much more effective than "cramming" in the long term. Research indicates that the best study intervals (time between study sessions) are those that match the retention interval (the time between the last study session and the test). For example, if your test is two days away, study once a day. If your test is in two hours, study once an hour.

  Adapted from Tigner, Robert B. (1999) *Putting Memory Research to Good Use: Hints from Cognitive Psychology*. Journal of College Teaching, *47*, 149-152.

## Resources Available at the Academic Advising & Career Centre

You will find more information on **memory and concentration** in some of the study skills books in the Academic Advising & Career Centre (AA&CC). Some books to begin with include: *Learning Power, 2nd Edition*, and the *The Memory* Book.

# Why We Forget

Forgetting is normal under certain circumstances, but in college, forgetting leads to low grades and sometimes academic dismissal. Below are 7 reasons why students forget and some suggestions on what you can do to overcome each one.

## 1. Changed Clues

You may have information stored away in your mind but are unable to recall it if the right cue or "handle" is missing. In other words, if you study material one way and a test question asks for the material another way, you may be unable to recall it.

To prevent this, it is important that you learn material using as many of your own words as possible. When you can put something completely and accurately in your own words, it significantly increases your ability to remember.

## 2. Interference

Psychologists have discovered that recently learned material interferes with recall of previously learned material.

To deal with this, all material to be remembered must be refreshed in the mind by regular review and repetition.

## 3. Mental Overcrowding

This cannot only inhibit memory but can also prevent learning. Too much input at one time into the senses inhibits learning and remembering. That is why it is normal to experience poor learning and recall when studying with the stereo on, TV going, talking in the background, and worrying about personal problems, etc. Study where it is quiet and where it is going to stay quiet until you are finished studying.

## 4. Negative Thinking

Students who ***believe*** that they cannot remember are the ones most likely to forget. You must believe you can remember before you can.

If believing in your ability to remember is difficult for you, see a counselor, or a learning skills specialist, or start reprogramming your mind with positive self-talk such as, "I will remember this," and "I have a good memory."

## 5. Underlearning

The most common reason why students forget is because the material is *under learned*. To remember something, it must first be learned, that is, stored in long-term memory. If you don't do what is necessary to get information into your long-term memory, you have under learned the material and forgetting is normal.

To combat underlearning, repeatedly recite or quiz yourself on your textbook and lecture notes. Discover what you have learned and have not learned before you take a test when you can still do something about it. Learning is a process that takes time and repetition for humans to move information from short-term memory toward long-term memory. That is why when material is reviewed once or twice; it is difficult to remember for quizzes and exams.

Neurochemical and biochemical studies of the brain during the past 15 years have revealed another factor in the remembering-forgetting process. Long-term memory does not occur unless protein synthesis takes place in the brain. Protein synthesis can now be measured using brain-imaging technology.

In 1992, Rose in his book, The Making of Memory, shows that when something new is introduced to and understood by the learner that ***sufficient review of this material must take place during the following 24 hours for protein synthesis to take place and to achieve long-term memory***. With the tight schedules of today's college students and those who have not yet mastered this skills in college level time-management, student either do not or cannot prevent other activities from interfering with this crucial 24-hour window for learning. Sufficient review is critical to learning.

## 6. Disuse

Forgetting something because you don't use it is another normal and unavoidable human characteristic. Most forgetting takes place immediately after hearing or seeing new material.

To address disuse, you must regularly recite and *review material to be remembered* until it is stored in long-term memory then, it is less likely you will forget.

## 7. Effort and Intention are Lacking

What is meant by the term "***Effort***" above is to find out what humans need to do in order to remember and then do it. "***Intention***" means to deliberately choose to remember.

The art of remembering is a direct result of the amount of effort exerted coupled with the intention to remember. Recall is the outcome of the effort you choose to allot to the task of remembering. Furthermore, your mind does what you tell it to do, for the most part. If you don't intend to remember something, you are telling your mind, indirectly, not to remember, so you don't.

To help you remember the 7 reasons why we forget, you can use the memory device below called a mnemonic, or make your own mnemonic. Here, we have taken the 1st letter of each reason and formed the expression mnemonic:

C? I'M NUDE

# Memorizing vs. Understanding

| MEMORIZING | UNDERSTANDING |
|---|---|
| Tries to learn ideas and concepts word for word only. | Converts ideas and concepts into own words. |
| Difficult to explain ideas to someone else other than word for word. | Able to use own words to explain something clearly to someone else. |
| Difficult to see how ideas apply in real-life situations or case studies. | Can apply ideas to real life situations or case studies. |
| Relevance of ideas outside the classroom is difficult to see and are typically not sought. | Seeks connections between knowledge from the classroom and the outside world. |
| Does not see differences, similarities, and implications of ideas. | Can identify differences, similarities between ideas and implications of these ideas. |
| Interprets ideas literally. | Realizes that there can be figurative as well as literal interpretations of ideas. |
| Strives for rote learning and has trouble solving problems when numbers or components are changed. | Strives for understand and can solve problems even when numbers or components are changed. |
| Believes there is 1 "right" answer for every question. | Accepts that there may be more than 1 "right" answer to a question depending on circumstances. |
| Has trouble seeing beyond the basic concept or idea. | Can see meaning, effects, results, consequences beyond the basic idea or concept. |

**You become better at that which you practice. If you practice not doing chemistry problems, you become better at that, also.**

# Memory Skills: Stories, Links, Journeys and Rooms.

## The Link Method

This method involves creating ***associations*** between items in a list to be remembered. Although it is possible to remember lists of words where each word is just associated with the next, it is *more effective* to organize items and their associations into a story: otherwise by forgetting just one association, the whole of the rest of the list can be lost.

As an example, you may need to remember a list of counties in the South of England:

**Avon, Dorset, Somerset, Cornwall, Wiltshire, Devon, Gloucestershire, Hampshire, Surrey**

The Link Method for this list relies on a series of images associated with each other and organized into a story format:

**An AVON (Avon) lady knocking on a heavy oak DOoR (Dorset). The DOoR opens to show a beautiful SuMmER landscape with a SETting sun (Somerset). The setting sun shines down onto a field of CORN (Cornwall). The CORN is so dry it is beginning to WILT (Wiltshire). The WILTing stalks slowly fall onto the tail of the sleeping DEVil (Devon). On the DEVil's horn a woman has impailed a GLOSsy (Gloucestershire) HAM (Hampshire) when she hit him over the head with it. Now the Devil feels SoRRY (Surrey) he bothered her.**

Note that there need not be any reason or underlying plot to the sequence of images: all that is important are the images and the links between images.

Alternatively this information may be coded by vividly imaging the following scene:

**An AVON lady is walking up a path towards a strange house. She is hot and sweating slightly in the heat of high SUMMER (Somerset). Beside the path someone has planted giant CORN in a WALL (Cornwall), but it's beginning to WILT (Wiltshire) in the heat. She knocks on the DOoR (Dorset), which is opened by the DEVil (Devon). In the background she can see a kitchen in which a servant is smearing honey on a HAM (Hampshire), making it GLOSsy (Gloucestershire) and gleam in bright sunlight streaming in through a window. Panicked by seeing the Devil, the Avon lady panics, screams 'SoRRY' (Surrey), and dashes back down the path.**

Given the fluid structure of this mnemonic, it is important that the images stored in your mind are as vivid as possible. The more outlandish, comical, ridiculous the images, the stronger they are in your memory. This eases recall.

This technique is expanded by adding images to the story. After a number of images, however, the system may start to break down.

## The Journey Method

The journey method is based on using landmarks on a ***journey that you know well.***

This journey could, for example, be your journey to work or school in the morning, the route you use to get to the front door when you get up in the morning, the route to visit your parents, or a tour around a campus. Once you are familiar with the technique you may be able to create imaginary journeys that fix in your mind, and apply these.

### Preparing the Route

To use this technique most effectively, it is often best to prepare the journey beforehand so that the landmarks are clear in your mind before you try to commit information to them. One way of doing this is to write down all the landmarks that you can recall in order on a piece of paper. This allows you to fix these landmarks as the significant ones to be used on your journey, separating them from others that you may notice as you get to know the route even better.

You can consider these landmarks as stops on the route. To remember a list of items, whether these are people, experiments, events or objects, all you need do is associate these things or representations of these things with the stops on your journey.

### Example

For example, I may want to remember something mundane like a shopping list:

**Coffee, salad, vegetables, bread, kitchen paper, fish, chicken breasts, pork chops, soup, fruit, bath cleaner.**

I may choose to associate this with my journey to the supermarket. My mnemonic images therefore appear as:

1. **Front door: spilt coffee grains on the doormat**
2. **Rose bush in front garden: growing lettuce leaves and tomatoes around the roses.**
3. **Car: with potatoes, onions and cauliflower on the driver's seat.**
4. **End of the road: an arch of French bread over the road**
5. **Past garage: with sign wrapped in kitchen roll**
6. **Under railway bridge: from which haddock and cod are dangling by their tails.**
7. **Traffic lights: chickens squawking and flapping on top of lights**
8. **Past church: in front of which a pig is doing karate, breaking boards.**
9. **Under office block: with a soup slick underneath: my car tires send up jets of tomato soup as I drive through it.**
10. **Past car park: with apples and oranges tumbling from the top level.**
11. **Supermarket car park: a filthy bath is parked in the space next to my car!**

## Extending the Technique

This is an extremely effective method of remembering long lists of information: with a sufficiently long journey you could, for example, remember elements on the periodic table, lists of Kings and Presidents, geographical information, or the order of cards in a shuffled pack of cards.

The system is extremely flexible also: all you need to do to remember many items is to remember a longer journey with more landmarks. To remember a short list, only use part of the route!

## Long and Short-Term Memory

You can use the journey technique to remember information both in the short-term memory and long term memory. Where you need to use information only for a short time, keep a specific route (or routes) in your mind specifically for this purpose. When you use the route, overwrite the previous images with the new images that you want to remember. To symbolize that the list is complete, imagine that the route is blocked with cones, a 'road closed/road out' sign, or some such.

To retain information in long-term memory, reserve a journey for that specific information only. Occasionally travel down it in your mind, refreshing the images of the items on it.

One advantage of this technique is that you can use it to work both backwards and forwards, and start anywhere within the route to retrieve information.

## Using the Journey System with Other Mnemonics

This technique can be used in conjunction with other mnemonics, either by building complex coding images at the stops on a journey, linking to other mnemonics at the stops, moving onto other journeys where they may cross over. Alternatively, you may use a peg system to organize lists of journeys, etc.

## Summary

The journey method is a powerful, effective method of remembering lists of information, whether short or long, by imagining images and events at stops on a journey.

As the journeys used are distinct in location and form, one list remembered using this technique is easy to distinguish from other lists.

Some investment in preparing journeys clearly in your mind is needed to use this technique. This investment is, however, paid off many times over by the application of the technique.

Alternatively this information may be coded by vividly imaging the following scene:

**An AVON lady is walking up a path towards a strange house. She is hot and sweating slightly in the heat of high SUMMER (Somerset). Beside the path someone has planted giant CORN by a WALL (Cornwall), but it's beginning to WILT (Wiltshire) in the heat. She knocks on the DOoR (Dorset), which is opened by the DEVil (Devon). In the background she can see a kitchen in which a servant is smearing honey on a HAM (Hampshire), making it GLOSsy (Gloucestershire) and gleam in bright sunlight streaming in through a window. Panicked by seeing the Devil, the Avon lady panics, screams 'SoRRY' (Surrey), and dashes back down the path.**

Given the fluid structure of this mnemonic, it is important that the images stored in your mind are as vivid as possible, and that significant, coding images are much stronger that ones that merely support the flow of the story.

This technique is expanded by adding images to the story. After a number of images, however, the system may start to break down.

## The Room Method

Imagine a room that you know well: perhaps this is your sitting room, a bedroom, an office, or a classroom. Within this room there are features and objects in known positions. The basis of the Roman Room system is that things to be remembered are associated with these objects, so that by recalling the objects within the room all the associated objects can also be remembered.

For example, I can imagine my sitting room as a basis for the technique. In my sitting room I can visualize the following objects:

**table, lamp, sofa, large bookcase, small bookcase, CD rack, tape racks, stereo system, telephone, television, video, chair, mirror, black & white photographs, etc.**

I may want to remember a list of World War I war poets:

**Rupert Brooke, G.K. Chesterton, Walter de la Mare, Robert Graves, Rudyard Kipling, Wilfred Owen, Siegfried Sassoon, W.B. Yates**

I could visualize walking through my front door, which has a picture on it of a scene from the Battle of the Somme, with an image of a man sitting in a trench writing in a dirty exercise book.

**I walk into the sitting room, and look at the table. On the top is RUPERT the Bear sitting in a small BROOK (we do not need to worry about where the water goes in our imagination!) This codes for Rupert Brooke.**

**Someone seems to have done some moving: a CHEST has been left on the sofa. Some jeans (Alphabet System: G=Jeans) are hanging out of one draw, and some cake has been left on the top (K=Cake). This codes for G K Chesterton.**

**The lamp has a small statuette of a brick vaulter (WALTER) next to which a female horse (MARE) stands. This codes for Walter de la Mare. etc.**

## The Expanding Room Method

The technique can be expanded in one way, by going into more detail, and keying images to smaller objects. Alternatively you can open doors from the room you are using into other rooms, and use their objects to expand the volume of information stored. When you have more experience you may find that you can build extensions to your rooms in your imagination, and populate them with objects that would logically be there.

Other rooms can be used to store other categories of information.

Moreover, there is no need to restrict this information to rooms: you could use a view or a town you know well, and populate it with memory images.

## SUMMARY

The Expanding Room Method is similar to the Journey Method, in that it works by using known visual pegs upon which to hang information to be remembered and/or learned, in this case to objects in a room or several rooms.

The Expanding Room Method is most effective for storing lists of unlinked information, whereas the Journey Method is most effective for storing lists of related items.

We knew back in 1967 from a study by Gerald R. Miller that mnemonics increased recall. He found that students who regularly used mnemonic devices ***increased test scores up to 77%!***

# 9 Types of Mnemonics for Better Memory

**Mnemonics** are memory devices that help learners recall larger pieces of information, especially in the form of lists like characteristics, steps, stages, parts, etc. We knew back in 1967 from a study by Gerald R. Miller that mnemonics increased recall. He found that students who regularly used mnemonic devices ***increased test scores up to 77%!*** Many types of mnemonics exist and which type works best is limited only by the imagination of each individual learner. The 9 basic types of mnemonics presented in this handout include **Music, Name, Expression/Word, Model, Ode/Rhyme, Note Organization, Image, Connection**, and **Spelling Mnemonics**.

## 1. Music Mnemonics

How many lyrics to songs do you remember? How did you come to remember them? Music is a powerful memory technique and it can work just as well in school, also. Many learners have made songs out of information when a list of items must be learned. Advertising on radio and TV uses this technique to help potential customers remember their products when shopping. You can make a song or jingle using any type of music you choose for any list of items. **Music Mnemonics** work best with long lists. For example, some children learn the ABC's by singing the "ABC" song. Other children learn all the states in alphabetical order using the "50 Nifty United States" song.

## 2. Name Mnemonics

In a **Name Mnemonic**, the 1st letter of each word in a list of items is used to make a name of a person or thing. An example is:

1. **ROY G. BIV** = colors of the spectrum (**R**ed, **O**range, **Y**ellow, **G**reen, **B**lue, **I**ndigo, **V**iolet.)

## 3. Name of Expression Mnemonics

This is by far the most popularly used mnemonic. To make an **Expression or Word** mnemonic, the first letter of each item in a list is arranged to form a phrase or word. Examples include:

1. For physical laws dealing with gasses, try these:

   **Charles' Law**: For a constant volume, pressure is directly proportional to temperature.
   **The simple way to remember Chuck is if the tank's too hot, you are out of luck.**

   **Henry's Law:** The solubility of a gas increases with pressure.
   **The way to remember good old Hank is think of bubbles in the Coke you drank.**

   **Boyles' Law:** At constant temperature, pressure is inversely proportional to volume.
   **Boyle's law is best of all because it presses gasses awfully small.**

2. In English, the 7 coordinating conjunctions are **F**or, **A**nd, **N**or, **B**ut**, O**r**,** **Y**et**, S**o **= FANBOYS**.

3. The order of operations for math is **P**arentheses, **E**xponents, **M**ultiply, **D**ivide, **A**dd, and **S**ubtract **=**

**PLEASE EXCUSE MY DEAR AUNT SALLY**.

4. The categories in the classification of life are **K**ingdom, **P**hylum, **C**lass, **O**rder, **F**amily, **G**enus, **S**pecies, **V**ariety = **KINGS PLAY CARDS ON FAIRLY GOOD SOFT VELVET**.

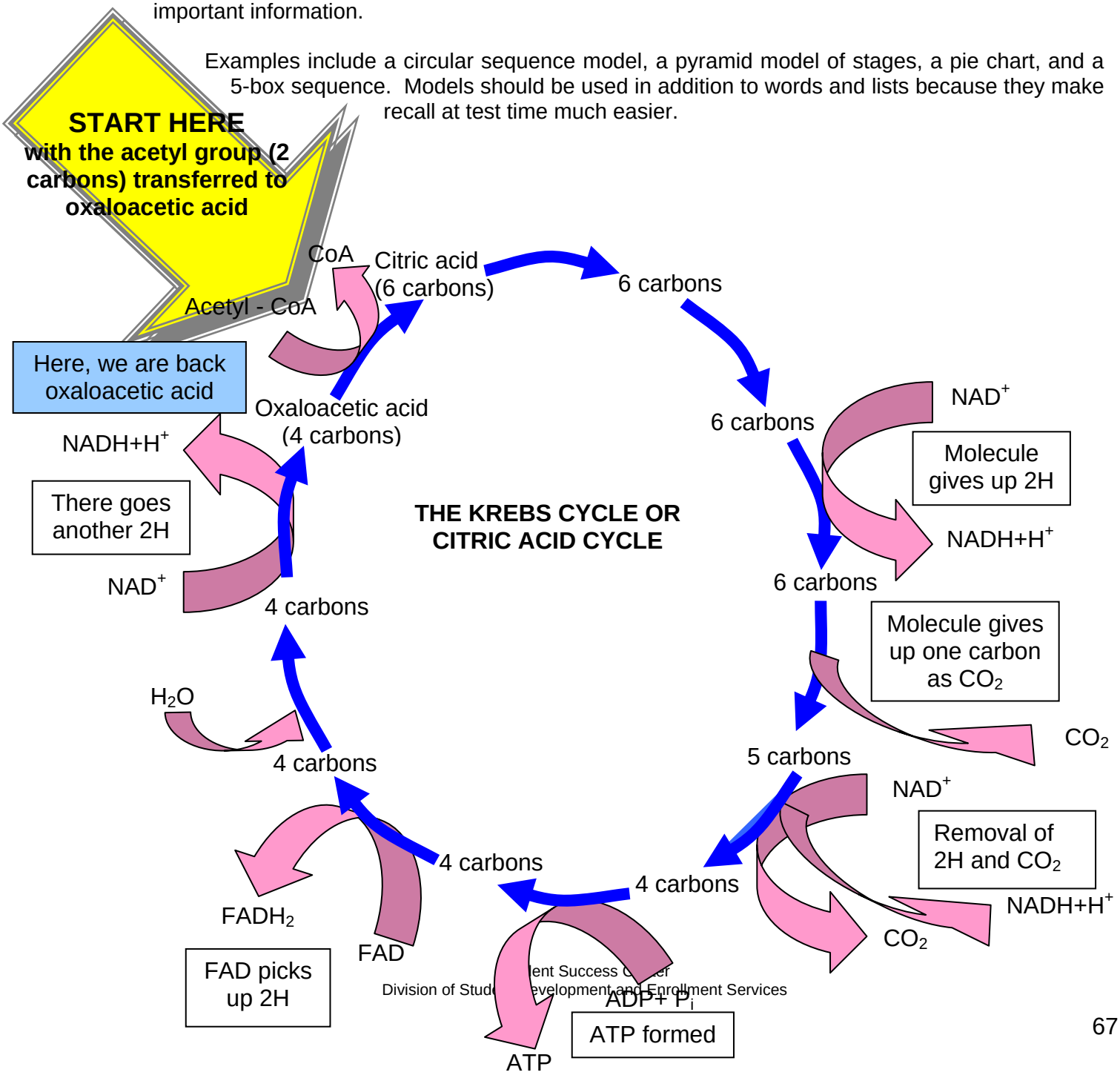
5. For those who have to remember the order of color coding on electronic resistors: **BLACK, BLUE, RED, ORANGE, YELLOW, GREEN, BROWN, VIOLET, GRAY, WHITE, SILVER, GOLD.**
   **B**ad **B**oys **R**ile **O**ur **Y**oung **G**irls**, B**ut **V**iolet **G**ives **W**elts (to) **S**illy **G**uys

6. Almost every anatomy class has to remember the eight small bones in the wrist: **NAVICULAR, LUNATE, TRIQUETRUM, PISIFORM, MULTONGULAR (GREATER), MULTONGULAR (LESSER), CAPITATE (**and) **HAMATE.**
   **N**ever **L**ower **T**illy's **P**ants, **M**other **M**ight **C**ome **H**ome**.**

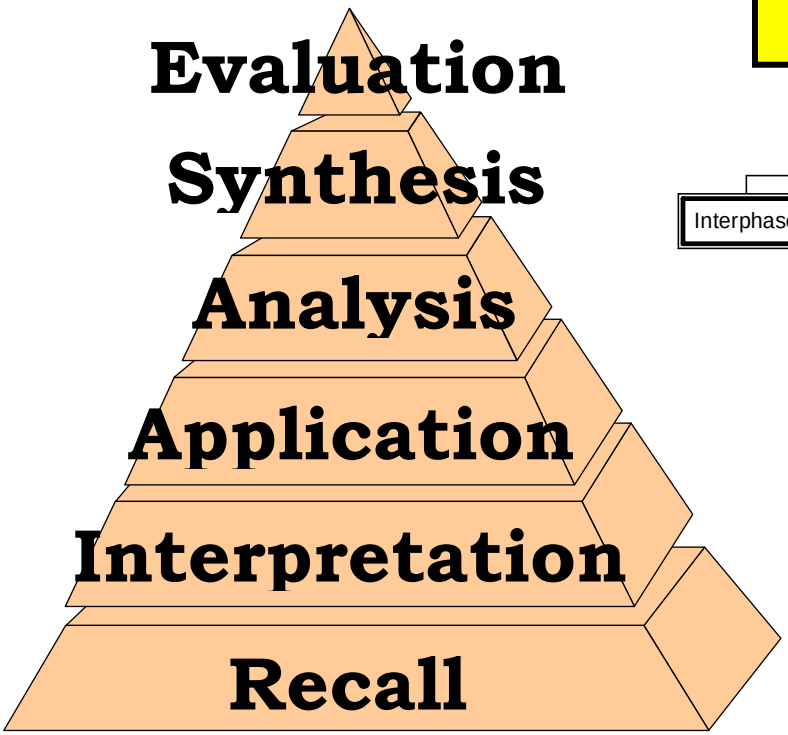
## 4. Model Mnemonics

In a **Model Mnemonic**, some type of representation is constructed to help with understanding and recalling important information.

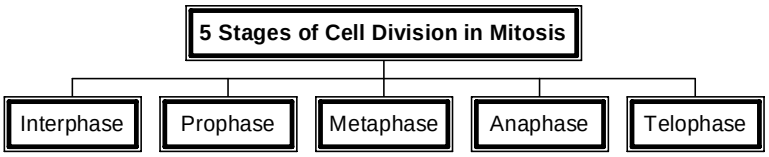
Examples include a circular sequence model, a pyramid model of stages, a pie chart, and a 5-box sequence. Models should be used in addition to words and lists because they make recall at test time much easier.



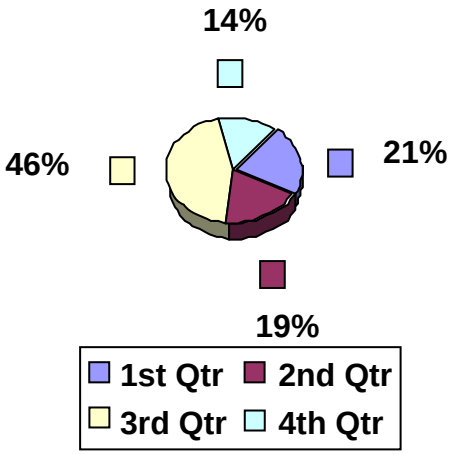
## PYRAMID MODEL



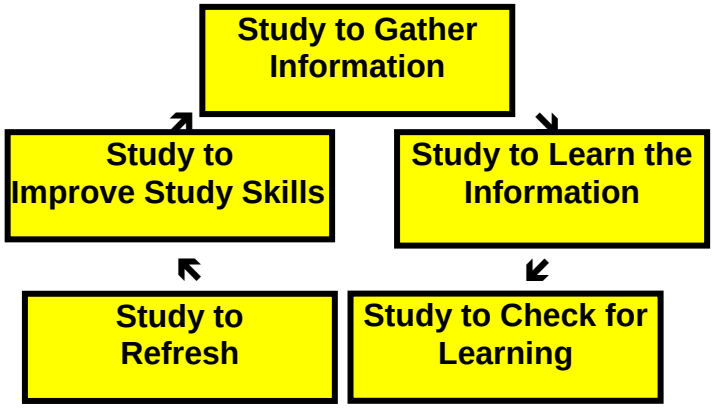

## ORGANIZATION CHART OR IDEA TREE



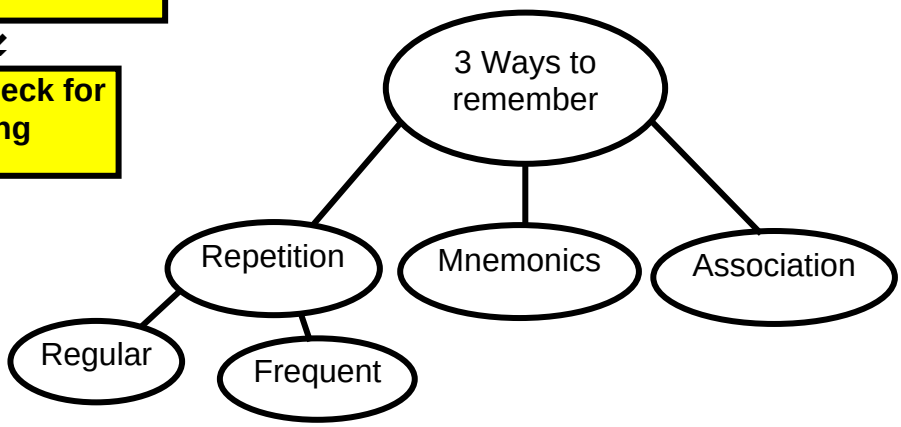

## PIE CHART




## 5 BOX SEQUENCE




## MIND MAP



## 5. Ode or Rhyme Mnemonics

An **Ode or Rhyme Mnemonic** puts information to be recalled in the form of a poem.

Examples include:

1. A commonly used **Rhyme Mnemonic** for the number of days in each month is:

   30 days hath September, April, June, and November. All the rest have 31,
   Fine! February 28 except when 29.

2. You'd probably like your doctor to know the difference between cyanate and cyanide: **Cyanate "I ate"** and **Cyanide "I died."** Cyanide is a deadly poison.

3. **In 1492, Columbus sailed the ocean blue.**

4. **I before *e* except after *c***
   **or when sounding like *a***
   **in *neighbor* and *weigh***

5. Here is an easy way to remember the nerves: olfactory, optic, oculomotor, trochlear, trigeminal, abducens, facial, acoustic, glassopharyngeal, vagus, spinal accessory and hypoglossal.

   **On Old Olympus' Towering Tops, A Finn And German Viewed Some Hops**

## 6. Note Organization Mnemonics

The way textbook and lecture notes are organized can inhibit learning and recall or promote it. In the sense that the organization of notes can promote recall, it is a memory device.
Three examples of organizing note formats that promote recall are as follows:

### 1. Notecards

Notecards are an easy way to organize main ideas and relevant details to be recalled. If main ideas are formatted into possible test questions, notecards can give learners practice in seeing questions and recalling answers as they must do on exams.

| Front | Back |
| --- | --- |
| *According to Pauk, what are 2 ways to discourage internal distractions?* | *1. Concentration score sheet - put a checkmark on the sheet every time I lose concentration.*<br>*2. Jot worrisome thoughts on paper and do something about them after studying.* |

## 2. Outlines

Outlines clearly separate main ideas from details. This helps organize the information in the mind making it easier to remember.

I. PIAGET'S THEORY
  A. Four Stages
    1. Sensorimotor
    2. Preoperational
    3. Concrete Operations
    4. Formal Operations
  B. Definition of each stage
    1. Sensorimotor means .... Etc.

## 3. Cornell System

The Cornell System is another way to use a **Note Organization Mnemonic** to promote recall. A vertical line is drawn 3 inches from the left margin of notebook paper. Main ideas or questions from them are placed to the left of the line and details or answers placed to the right.

| Questions | Answers |
|---|---|
| *text p.292*<br>*What is the Frontier Vocab Sys.?.* | *A system for mastering new vocab.* |
| *text p.293-294*<br>*How does the FVS Sys. Work?* | *1. Look for somewhat familiar words.*<br>*2. 2. Learn these meanings* |
| *lecture 10/30*<br>*Why use the FVS?* | *1. Frontier words=are easiest to lrn*<br>*2. Foundation for lrng other frontier words* |
| *Example of one of my Frontier words.* | *Prodigal - Has something to do with a son who left home and was living an extravagant, carefree life.* |

The topic used here is from How To Study In College (3rd edition) by Walter Pauk, pages 292-300.

## 7. Image Mnemonics

The information in an **Image Mnemonic** is constructed in the form of a picture that promotes recall of information when you need it. The sillier the **Image Mnemonic** is, the easier it is to recall the related information. These images may be mental or sketched into text and lecture notes. Don't worry about your artistic ability. As long as you know what your sketch means, **Image Mnemonics** will help you learn and remember.

Examples include:

1. You can use an **Image Mnemonic** to remember **BAT** (the depressant drugs mentioned above - Barbiturates, Alcohol, and Tranquilizers). Visualize or sketch in your notes a limp, depressed bat that

took **B**arbiturates, **A**lcohol, and **T**ranquilizers.
Picture meeting someone new at a party named John Horsley. Use an **Image Mnemonic** to help you remember his name. Visualize a horse sitting on a john: not pretty but effective in recall.

2. ***What is a numismatist*** ? Visualize an image of a *new mist* rolling onto a beach from the ocean and beach is made of *coins*. Silly? Of course, but sillyography makes it is easier to remember that a numismatist is a *coin collector*.

3. How about using a bad joke to help you remember? Picture an image of two numismatists having a drink for "old *dime's* sake." Corny? Yes, but cornography often makes things easier to remember.

## 8. Connections Mnemonics

In this type of mnemonic, the information to be remembered is connected to something already known.

Examples include:

1. Remembering the direction of longitude and latitude is easier to do when you realize that lines on a globe that run North and South are long and that coincides with **LONG**itude. Another Connection Mnemonic points out that there is an **N** in **LO<u>N</u>G**itude and an **N** in **<u>N</u>**orth. Latitude lines must run east to west, then. There is no **N** in latitude.
2. Another Connection Mnemonic is related to sound. The 1st part of the word **lat**itude **sounds like flat** and **flat runs horizontal or East and West**.

## 9. Spelling Mnemonics

1. Here is an example of a spelling mnemonic: A princi**<u>pal</u>** at a school is your **<u>pal</u>**, and a princip**<u>le</u>** you believe or follow is a ru**<u>le</u>**.

2. Another commonly used **Spelling Mnemonic** is combined with an **Ode/Rhyme Mnemonic**.

> **I before *e* except after *c***
> **or when sounding like *a***
> **in *neighbor* and *weigh***

3. A third example deals with the problems some learners have remembering that there is an "a" in the middle of separate and not an "e." A **Spelling Mnemonic** combined with an **Image Mnemonic** may be used to spell the word sep rate using an exaggerated "a."

4. To spell Mississippi, many learners combine a **Rhythm Mmnemonic** with a **Spelling mnemonic**: **M-iss-iss-ipp-i**.

5. Here are some more examples of spelling mnemonics:

   **Geography**: **<u>G</u>**eorge **<u>E</u>**dwards **<u>O</u>**ld **<u>G</u>**randma **<u>R</u>**ode **<u>A</u>** **<u>P</u>**ig **<u>H</u>**ome **<u>Y</u>**esterday.

   **Arithmetic**: **<u>A</u>** **<u>R</u>**at **<u>I</u>**n **<u>T</u>**he **<u>H</u>**ouse **<u>M</u>**ay **<u>E</u>**at **<u>T</u>**he **<u>I</u>**ce **<u>C</u>**ream.

   **Saskatchewan**: **<u>Ask</u>** **<u>At</u>** **<u>Chew</u>** **<u>An</u>** with an **S** in front of it.

Take the 1st letter of **<u>each</u>** **<u>type</u>** **of mnemonic listed above** and print them below on the line.

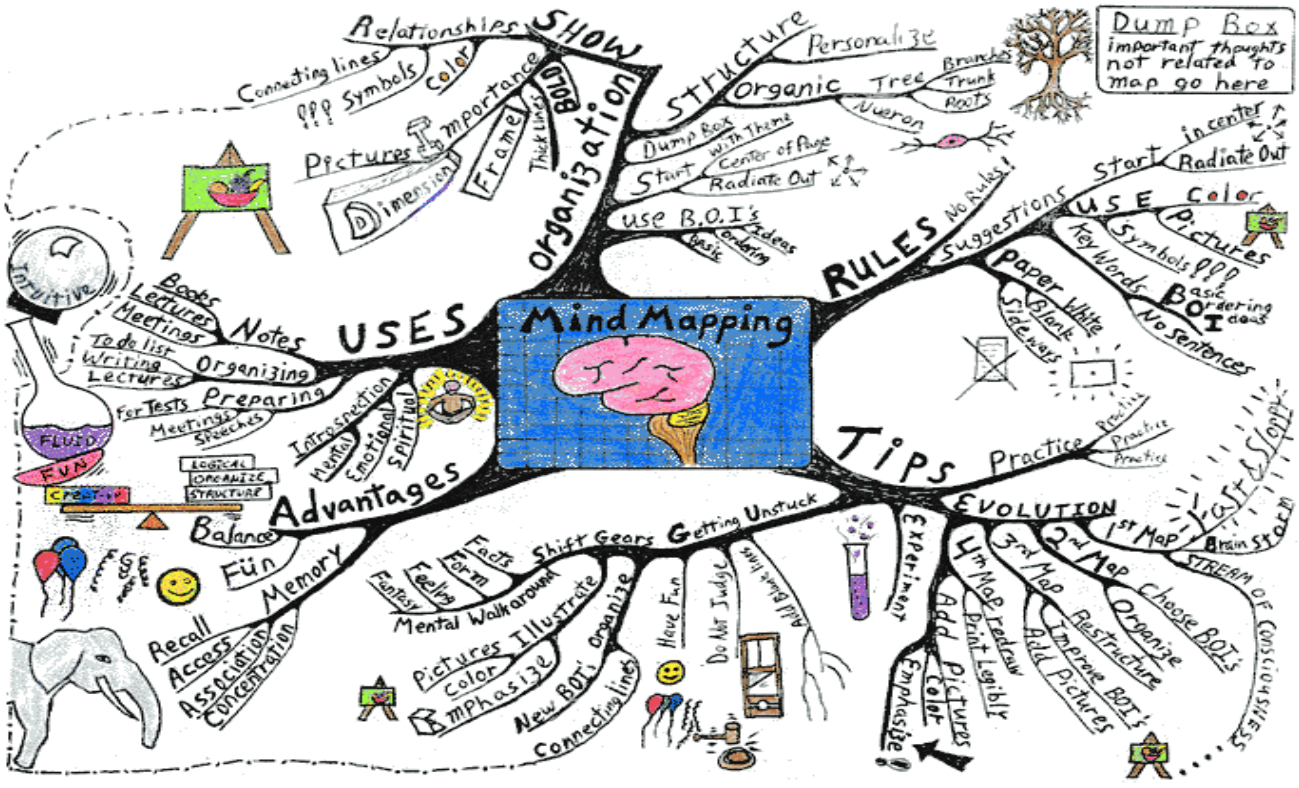
# Mind Mapping:
## Double Your Memory

## MIND MAPPING

Mind mapping is a tool that can make even the most boring task fun and interesting, thereby improving concentration and recall. It encourages thoughts to flow more smoothly. The ability to remember is increased and creativity is enhanced. Mind mapping engages and focuses on using visuals along with the traditional verbiage from lectures and tests. This has a powerful effect on increasing learning speed and later recall.

Mind maps eliminate gaps and omissions in important information. They can be used to take notes, plan a project, solve a problem, summarize a book, improve recall, organize notes to speed learning, and much more. The only limitation for using mind maps is imagination and that is a part of learning that makes it fun. *Get ready to double your memory power.*

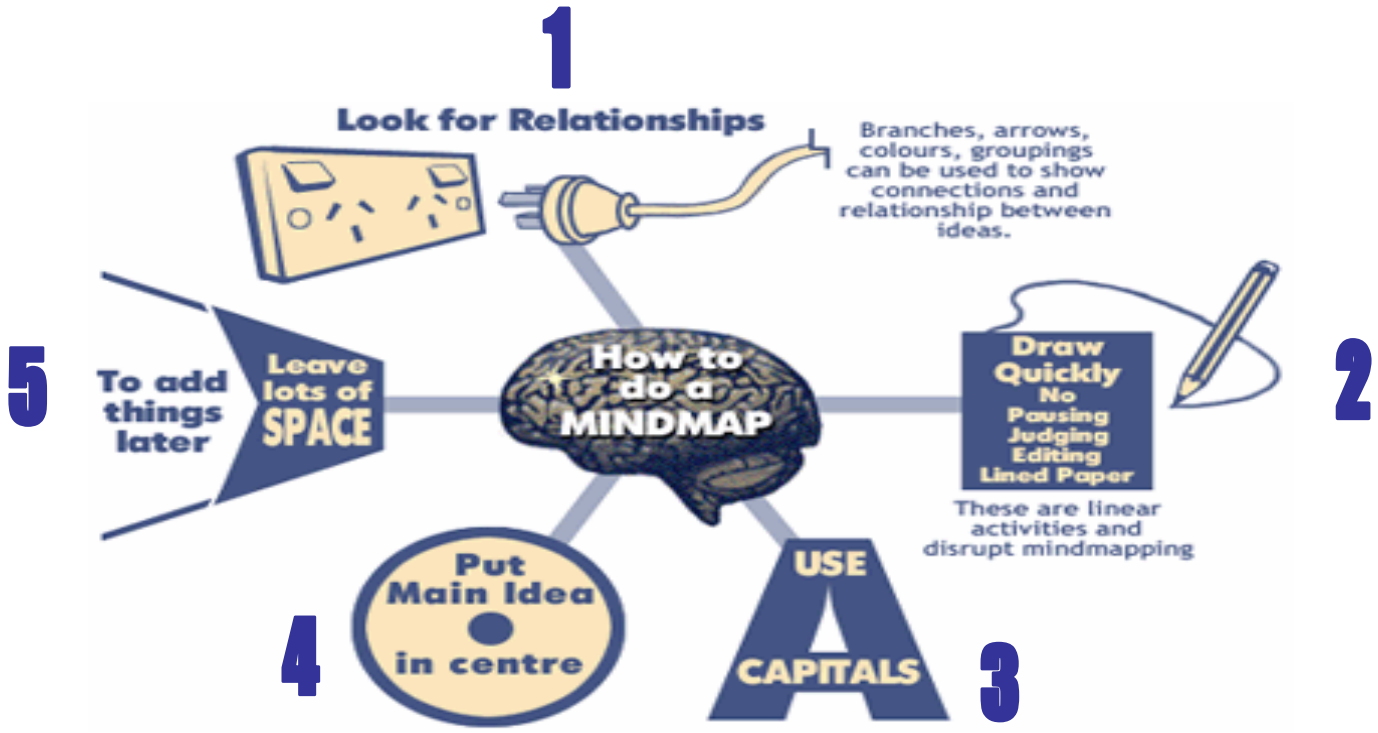
## SAMPLE OF A MIND MAP!



# How to do a Mind Map

Here are some hints on how to construct a mind map. Click on the appropriate part of the mind map below if you want to know more.

## SAMPLE OF A MIND MAP ON HOW TO MAKE MIND MAPS




Mind mapping (or concept mapping) involves writing down a main idea and attaching related ideas which radiate out from the center. By focusing on key ideas written down in your own words, and then making branches and connections with important details, you are mapping knowledge in a manner that will help you understand and remember new information.

**1: Look for relationships -** Use lines, colors, arrows, branches or some other way of showing connections between the main idea and its details on your mind map. These relationships are important for you to understand new information or construct a structure for an essay. By personalizing the map with your own symbols and designs you will construct a visual and meaningful relationship between main ideas and details essential for understanding and later recall.

**2: At first, draw quickly without pausing, judging, or editing -** All of these things promote thinking and the idea of mind mapping is to think creatively which enhances memory. There will be plenty of time for modifying the information later on but at this stage it is important to get every possibility into the mind map. Sometimes it is one of those obscure possibilities that may become the key to your knowledge of a topic.

**3: Use capitals for major ideas -** The idea of using capitals is to quickly identify key points. Capitals are also easier to read in a diagram. Record related details in lower case. Use sketches, graphics, drawings where they can help you visualize important information.

**4: Put main ideas in the center -** Most students find it useful to turn their page on the side and do a mind map in "landscape" style. With the main idea or topic in the middle of the page this gives the maximum space for other ideas to radiate out from the center.

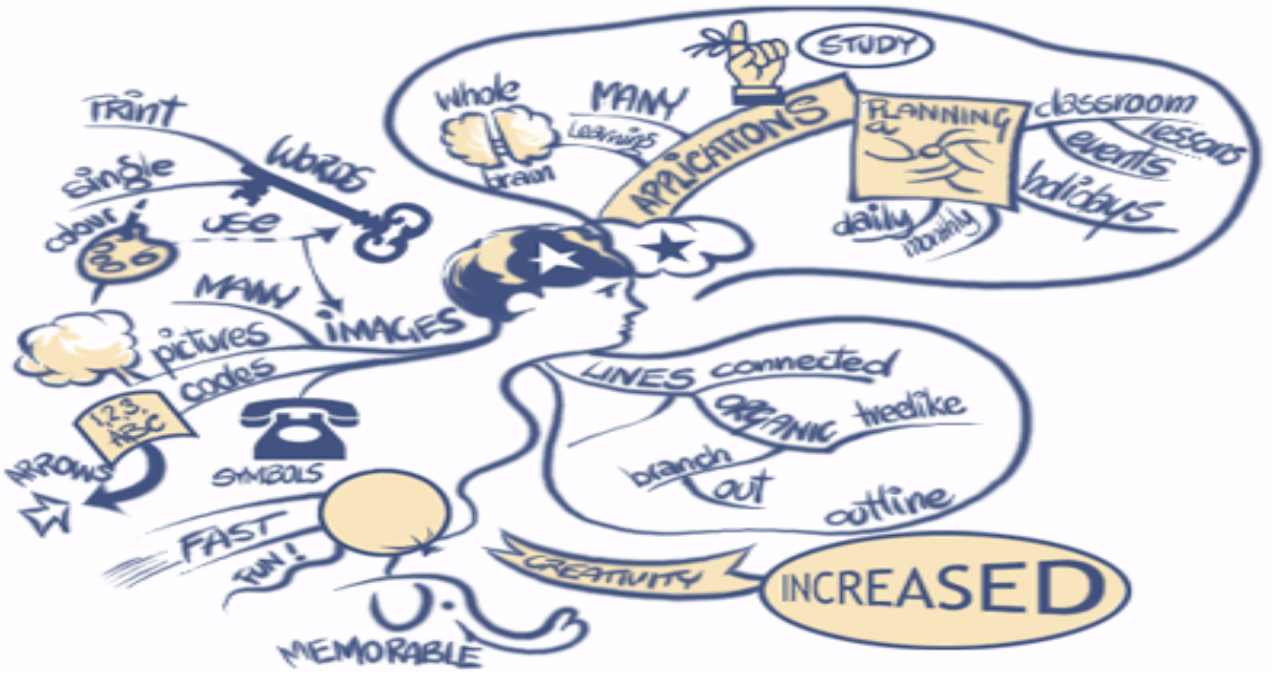
**5: Leave lots of space -** Some of the most useful mind maps are those which are added to over a period of time. After the initial drawing of the mind map you may wish to highlight things, add information or add questions for the duration of a subject right up until exam time. For this reason it is a good idea to leave lots of space.

## Organizational Patterns That May Appear in a Mind Map

- ***Branches****.* An idea may branch many times to include both closely and distantly related details.
- ***Arrows****.* You may want to use arrows to join ideas from different branches.
- ***Grouping****s.* If a number of branches contain related ideas, you may want to draw a circle around the whole area.
- ***Lists.***
- ***Explanatory/Exploratory notes***. You may want to write a few sentences in the map itself to explain, question, or comment on some aspect of your map -- for example, the relationship between some of the ideas.

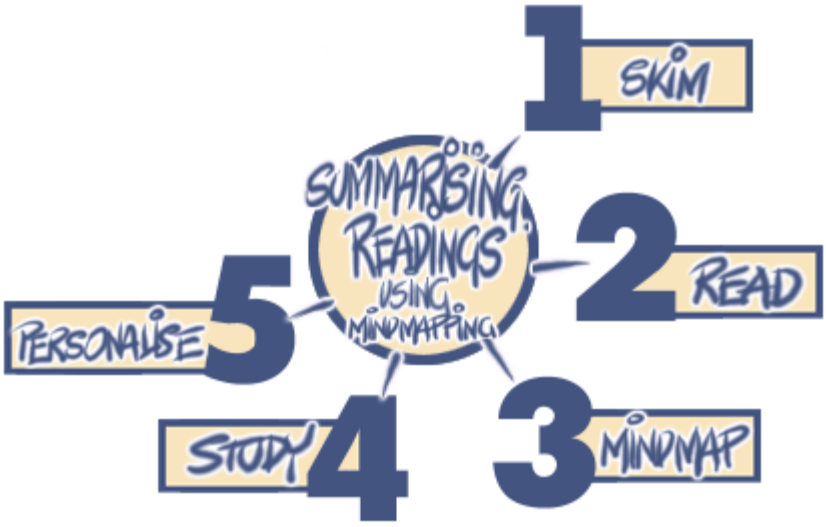
## More About Mind Mapping

Above is a mind map of the concept of mind mapping! It has been adapted from a mind map produced by Tony Buzan, the person credited with much of the promotion of mind mapping as a learning and thinking tool. For a full explanation of the mind mapping technique see ***Buzan, T. (1991). The Mind Map Book. New York: Penguin.***



## Summarizing Readings

Mind mapping can help you understand and remember the important issues in your readings. One way to make a mind map is to follow these 5 steps in creating mind maps for textbook assignments.




**1. Skim**
Firstly, skim over the outline, introduction, conclusion, bold headings, summary, and chapter headings. When skimming through the text, observe any diagrams, pictures, or graphs. These give you an overview of what you are about to read, puts it in context, and may already give you some clues as to where the most relevant parts are located. This should not take more than 2 to 3 minutes.

**2. Read**
Some can read a whole chapter in one sitting while others find it more comfortable to chunk the reading into sections.

**3. Mind Map**
It is important to do the mind map from memory at this stage so don't consult the article or any other source of information.

**4. Update and Study**
The mind map you have just done is very valuable as it will show both areas you have understood and also areas you are not sure of. Compare your mind map to the text to discover the gaps in your knowledge and update your mind map. Quiz yourself on the mind map by trying to draw it from memory before looking at your updated original.

**5. Personalize**
Using different colors or symbols, add your own comments and questions to the mind map. Questions relating to relationships, implications, alternative approaches, usefulness, clarity, personal experience could all be considered at this stage. It is in this personalizing stage where your mind map really starts to help you speed your understanding and learning. The trick now is to address all those questions you have raised and to keep returning to your mind map with the answers!

## Lectures, Seminars, Workshops and Tutorials

Some students find it useful to create mind maps for various sessions where new information is presented. Look at the various parts of the mind map below to discover why mind mapping can be a helpful note-taking and summarizing tool.


**Adds structure**
This memory strategy helps you record information in a structure that suits your learning style and has meaning for you. This is an important strategy for increasing understanding, learning, and recall. The content of a course may be come at you thick and fast but a mind map allows you to organize information in a format that promotes memory.

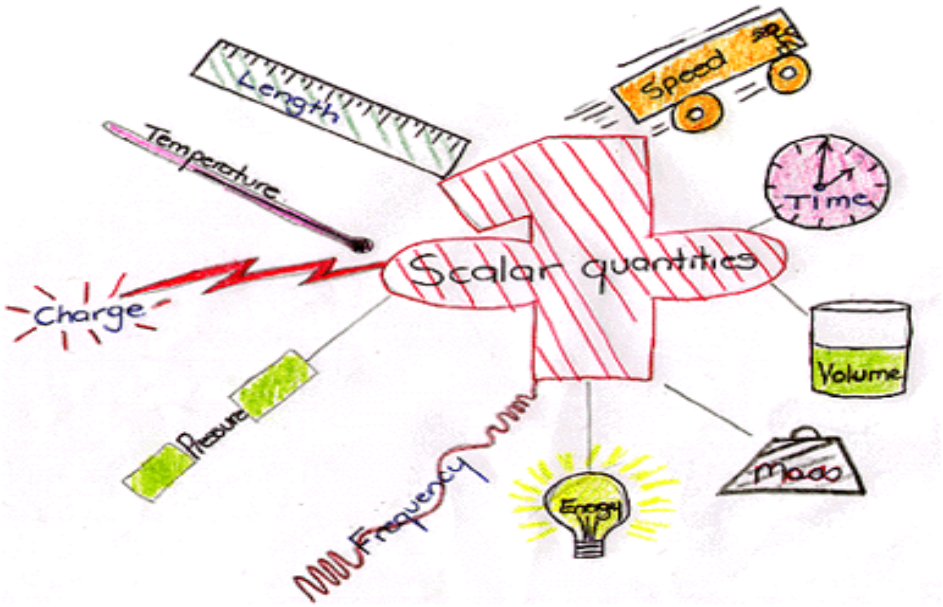
**Helps review and suits repeated reviews**
The mind map allows you to revisit information to be learned as you review. It is in repeated reviewing that you can identify what you have and have not yet learned before you take a test when you can still do something about it. Some students find it hard to consult a mind map during a lecture so they take standard notes in the lecture but construct a mind map afterwards when they rewrite and reorganize their lecture notes.

**Better recall**
By having all of the information covered in a session incorporated into a single mind map, many students find this an aid to remembering what was covered in lectures and textbooks.

**Prompts questions**
You mind map should raise some questions about the information you have received. You can bring up these questions in class or in study groups.

**Helps exam preparation**
Imagine how useful it would be if you had a set of mind maps for each of your lectures! These mind maps would show you the areas where you had difficulty and include the follow-up information you added in order to clear these problems up. You would also be able to construct a mind map of the entire subject prior to the exam and this would help you identify the key themes and likely exam questions.

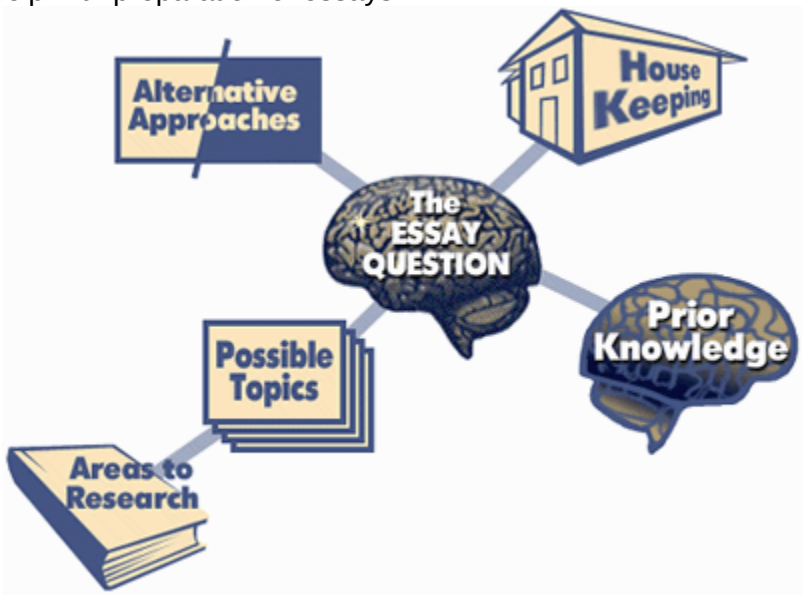
## Sample Mind Map from a Lecture




The mind map above was produced from standard lecture notes so that a student could clarify the key points of the lecture. The mind map was produced in the first review after the lecture and was added to throughout the semester. It was then used for exam preparation.

## Essay Preparation

Mind maps can help you in the early stages of your essay by summarizing your research and providing you with a picture of all aspects of the question. You can then move from your non-linear mind map to a more structured essay plan. Look at the various parts of the mind map below to discover more about how mind maps can help with preparation of essays.



**Housekeeping**
It is often useful to list in "housekeeping" details such as:

- grading criteria and weight
- due date
- timeline for completion of each stage of the essay
- any other requirements

**Prior knowledge**
You should always put down on your mind map all that you already know about the essay question. This knowledge may have come from personal experience, lectures, readings or other sources. You may be surprised as to how this part of the mind map branches out in lots of directions and generates even more ideas!

**Possible topics to be covered**
Most essays will involve the possibility of tackling a number of topics within the question. Put all of these possible topics down. You may not have the time or length of essay to tackle all of them but getting them down and looking for connections, relevance, and priorities is a good start. It will help you narrow down your topic into a more manageable task.

**Areas to research**
The areas to research will be suggested by the possible topics and from here your mind map may lead you on to various sources of information you will need to pursue. Often you will have to choose carefully which areas will be the most productive and relevant to research.

**Alternative approaches**
One of the powerful things about mind mapping is that it is a tool which encourages creative thinking and often creative solutions to problems. Always look at alternative ways of approaching essay questions and always be prepared to be a critical researcher and writer who is prepared to go outside the normal boundaries!

**Human beings tend to become better at that which they practice.**

**What if you practiced making mind maps?**

# Mental Manipulation: The Key to Remembering

If you haven't been mentally manipulating what it is you have to learn and remember, and then you don't remember when it comes to test and quiz time, stand up and take a bow … you are normal!

For information to be learned and remembered, it is ***ESSENTIAL*** that information be mentally manipulated. In a way, mental manipulation means *repeatedly* getting the hands and fingers of your mind on material to be learned and then do something with that material.

**You get better at that which you practice, if you practice not doing things that increase learning and recall, you get better at that, also. (And that is risky in college!)**

## 1. Practice by Self-Testing

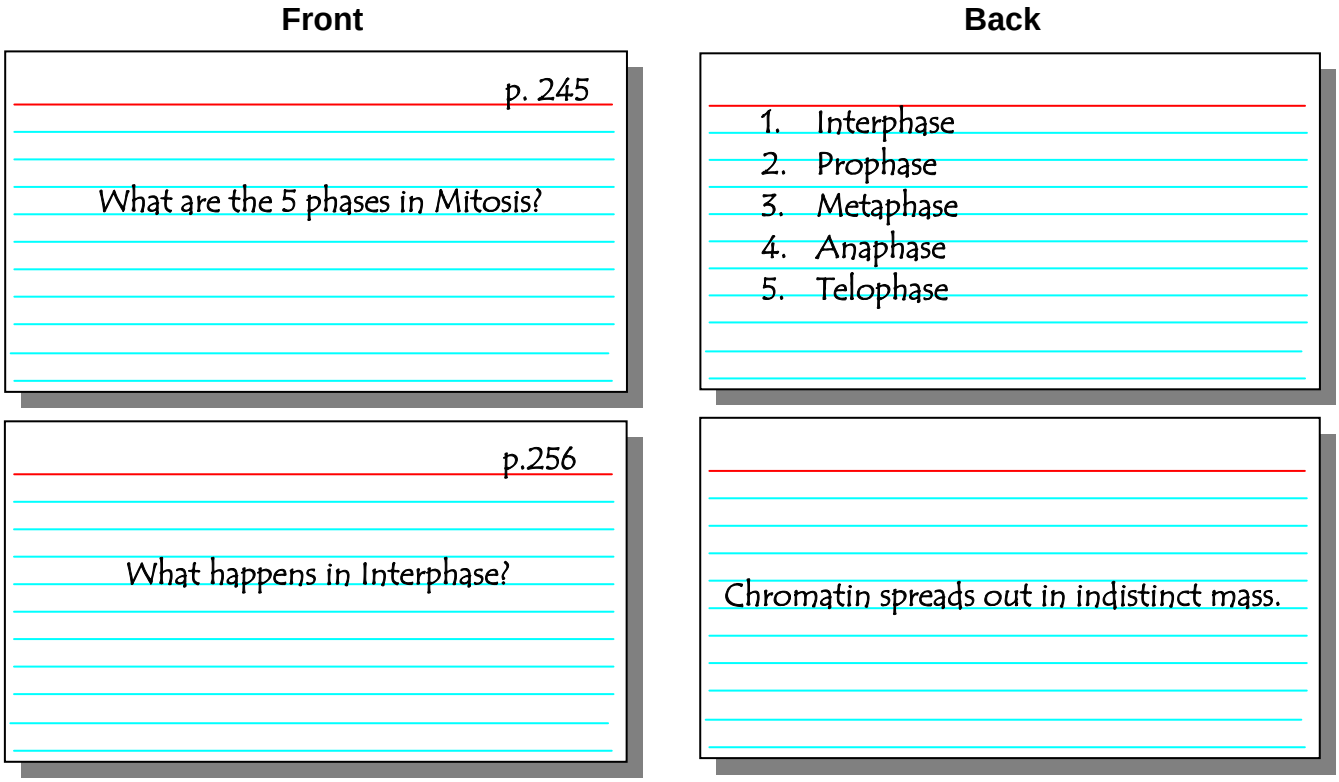
If you want to learn and remember material in the shortest time possible, use the techniques for mental manipulation below as you study. One way to begin is to set up your notes so that you can test yourself on the material to be learned. A way to set up your notes to make self-testing easier involves the use of questions and answers on notecards.

### How to formulate questions

Take a main idea and make a question out of it ***based on the type of details*** you are given with that main idea in textbooks and lectures.

| Types of details | Possible questions or statements to make from details |
|---|---|
| DEFINITIONS | **Details consisting of definitions answer the question of "What is….. Make questions that require a presentation of what is such as:**<br><br>"What is the definition of…..?"<br>"What is……?" |
| LISTS:<br>Characteristics<br>Parts<br>Sections<br>Summaries<br>Causes<br>Effects<br>Steps<br>Stages<br>Phases<br>Processes<br>Elements<br>Summaries | **Details consisting of lists answer the question of "What are……" Make questions or statements that require a presentation of what are such as:**<br><br>"What are the characteristics of……?"<br>"What are the sections in……?"<br>"Outline the causes and effects of……?"<br>"What are the {steps, stages, or phases} in ……?" |
| APPLICATION:<br>Analyzing<br>Summarizing<br>Describing<br>Predicting<br>Translating<br>Criticizing<br>Justify | **Details consisting of application of knowledge answer the question of "What is happening…… Make questions or statements that require a presentation of what is happening such as:**<br><br>"What is happening when……?"<br>"Summarize the actions you see in …..<br>"Describe what happens when……?"<br>"Translate this statement according to …..<br>"Criticize the performance of…..?"<br>"An example of this is…… |
| HOW SOMETHING WORKS | **Details consisting of how something works respond to the statement of "Describe how _____ works" Make statements or questions that require presenting a how something works such as:**<br><br>"Describe how _____ works when……"<br>"What are the {steps, stages, phases, etc.} in…..?"<br>"What are the essential roles of each character as……?" |
| **2 OR MORE SETS OF INFORMATION** | **Details consisting of 2 or more sets of information respond to the statements of "Compare….." and "Contrast….." and "Connect….." Make statements that require presenting similarities, differences, and relationships such as:**<br><br>"Compare the……"<br>"Contrast the……"<br>"Compare and contrast……"<br>"Make connections between……"<br>"What is the relationship of…… to …….?" |
| **SOLUTIONS TO PROBLEMS** | **Details consisting of solutions to problems respond to questions of "What are the steps in …..?" Make questions that require presenting solutions step by step such as:**<br><br>"What are the steps in solving _____ type problem?"<br>"What are the steps to solve {list the problem here}?"<br>"What are the steps for solving gas law problems?" |

Sample Notecards with questions and answers:




**It is important for learning and recall to make questions match the details.**

Once notes are rewritten and better organized, here is what you do to speed your learning. Notecards are used in the description below:

1. Look at a question and then *recite aloud and without looking*, as much of the detail as you can. If you are looking at a problem, work the solution out on scrap paper.
2. Next, turn the card over to check for completeness and accuracy of your recitation or solution on scrap paper.
3. If your recitation or solution was correct, put that card in the "I know this" pile.
4. If your recitation or solution was incorrect or incomplete, read the answer out loud or correct your solution, then turn the card over and read the question or problem, again. Recite the answer aloud or write it out again, without looking, and then check. Do this as many times as you have to get the answer correct and then place that card in the "I don't know this, yet" pile. Don't move on to the next notecard until the present one is recited or written correctly.
5. Review your "I don't know this, yet" pile every day or at least every other day to speed your learning and remembering. Go over your "I know this" pile every 2 or 3 days to prevent forgetting.

## 2. The Difference Between Recognition and Recall

Remembering is divided into two basic types: recognition and recall. Each requires a different type of practice to optimize learning and memory.

| You are *recognizing* something when……. | versus | You are *recalling* something when……. |
|---|---|---|
| You can spot information and pick it out of a set of similar pieces of information such as among options in multiple-choice questions.<br><br>You need to see all or most of the actual information in order to remember it | | You can produce larger amounts of information from memory from key words, mental cues, essay questions, speech outlines, or when needed in responses to conversational cues.<br><br>This kind of recall is impressive and portrays knowledge and intelligence. |

You must learn something before you can remember it or forget it and learning requires mental manipulation!

## 3. Ways to Mentally Manipulate Material

**Pay attention** in class and while reading textbooks.
**Take notes** in lectures and from textbooks.
**Use a neat & organized format for notes** that speeds, not impedes learning.
**Visually separate** main ideas from other main ideas and each main idea and its details from other main ideas and their details.
**Paraphrase** main ideas and details in your own words as much as possible
**Condense** lectures & textbook material into short phrases and abbreviations.
**Relate** something to learn to something similar that you already know.
**Discuss what you have learned** with a colleague or in a study group.
**Practice remembering** by looking only at main ideas or questions you made and recite answers aloud, without looking, as if you are lecturing a class.
**Have someone quiz you** or you quiz someone else.
**Include diagrams, charts, sketches, and pictures** in notes on material to be learned.
**Tutor someone** on the subject matter that you have to learn and remember.
**Practice recalling** what it is you need to remember when you are not in class.
**Make mnemonics** out of details.
**Explain to someone else** using as many of your own words as possible.
Go into an empty classroom, conduct a lecture from memory and use your notes to check your recall.

# Practicing Mnemonics

Using the items below, devise a mnemonic for remembering each piece of information. Use the 9 types of mnemonics as a guide.

1. 9 characteristics that facilitate learning – **Open-mindedness, self-awareness, tolerance, alert mind, energy, ability to set goals, willingness to take risks, self-discipline, and the capacity to value, accept, and undergo change.**

2. Order of the planets from the sun out - **Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune Pluto**

3. Going shopping – **Eggs, milk, onions, butter, cucumbers, lettuce, Tide**

4. Blooms 7 levels of thinking ability – **recall, translation, interpretation, application, analysis, synthesis, evaluation**

5. The royal houses on England – **Norman, Plantagenet, Lancaster, York, Tudor, Stuart, Hanover, Windsor**

6. Body's excretory organs – **Liver, kidneys, skin, lungs, intestines**

7. Reasons why reciting notes aloud increases memory **– Gets you involved, provides feedback on what you know, supplies motivation, uses many senses in learning, and promotes thinking.**

8. 6 types of machines **- lever, inclined plane, axle and wheel, jackscrew, pulley, & gear.**

9. 6 ways to purify water – **settling, filtration, coagulation, chlorination, aeration, boiling.**

10. Factors that affect water evaporation – **temperature, area exposed, wind, and humidity.**

11. How soil fertility is restored **– rotating crops, adding fertilizer, resting the soil, sweetening the soil, draining and irrigating, undoing damaged or polluted soil**.

12. Major features of sole proprietorship – **easy to start, can make decisions quickly, no bosses, profits are not shared, losses are not shared, and borrowing is limited**.

13. Four types of chemical reactions – **synthesis, decomposition, single-replacement, and double-replacement.**

14. Basic steps in the scientific method – **state the problem, gather the information on the problem, form hypothesis, experiment to test hypothesis, record data, analyze date, and draw conclusions.**

15. General properties of matter **– mass, weight, volume, and density.**

16. 5 parts of a deciduous forest – **upper stratum, lower tree stratum, shrub layer, ground layer, soil layer.**

17. Ocean zones – **Intertidal, near-shore, edge of continental shelf, perpetual darkness**

## *Section 6: Notetaking*

*Do Your Notes Speed or Impede Your Learning?*

*Five Methods of Notetaking*

*Notetaking Timesavers*

*How to Spot Main Ideas in Texts and Lectures*

*Speed Writing*

*Reading and Listening Clues*

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# Do Your Notes Impede Your Learning?

Below are note organization formats that students use to help them learn. These formats are arranged *from the most time consuming and least efficient to the most efficient in promoting learning*. Where does your current note organization format fit in this continuum? **Would you like to *know* if your note organization format promotes learning or actually impedes it?**

**Format 1: Re-reading**

Rereading is not really a notetaking format but illustrates a common method by which students attempt to learn. Look at the text below. On the left page is a sample of text from an Economics I class. On the right page the same material has been highlighted. No taking of notes is done here with this means for studying.

**Goals of Macroeconomy**

**The definition of macroeconomy is the economy of a whole society. There are five expectations in a macroeconomy. One, is full employment which means literally 100% employment of a labor force. Developed societies don't have full employment because of health problems, people changing jobs, and changing technology where some jobs become obsolete, but new ones open. A second expectation of a macro-economy is price stability. The problem here is that sharp increases in prices erode the purchasing power of money. A third expectation is economic growth where the goal is greater output of a wide range of goods and services of high quality. Fourth, environmental protection is an expectation because economic activity could have a negative effect on the environment. Finally, increased individual well-being is an expectation in macroeconomies.**

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**Format 2: Word for Word**

This format involves using notepaper to record information. Notes are recorded almost **word for word.** This style of notetaking is impossible for most students during a lecture and totally unnecessary from textbooks.

**Format 3: Main Ideas and Details**

Notes are organized with **some separation of main ideas** and **details**. Many unessential words and phrases are omitted without losing main ideas and related clarifying details.

**Goals of Macroeconomy**

**Definition of mocroeconomy is economy of a whole society. There are five expectations in a macroeconomy. One is full employment, which means 100% employment of labor force. Developed societies don't have full employment because of health problems, people changing jobs, and changing technology where some jobs become obsolete, but new ones open. A second expectation is price stability. The problem is that sharp increases in prices erode purchasing power of money. A third expectation is economic growth. Goal is greater output of a wide range of goods and services of high quality. Fourth, environmental protection is an expectation because economic activity could have a negative effect on environment. Finally, increased individual well-being is an expectation in macroeconomies.**

**Goals of Macroeconomy**

**Definition of mocroeconomy - economy of a whole society.**

**Five expectations in a macroeconomy.**

**Full employment - 100% employment of labor force. Developed societies don't have full employ. because of health probs., people change jobs, & changing technology-some jobs become obsolete & new ones open.**

**Price stability - problem is that sharp price increases erode purchasing power of money.**

**Expectation is economic growth - goal is greater output of a wide range of high quality goods and services.**

**Environmental protection - economic activity could negatively affect environment.**

**Increased individual well-being.**

## Format 4: Outline Format

This format **separates main ideas and details using numbers and letters**. This note organization format shows order and denotes relationships of main ideas to each other and main ideas to details.

**Goals of Macroeconomy**

**I. Mocroeconomy - economy of a whole society.**
**II. 5 expectations in a macroeconomy.**
- **A. Full employment- 100% employment of labor force. Developed societies don't have full employment because:**
  1. **of health problems,**
  2. **people changing jobs,**
  3. **with changing technology some jobs become obsolete but new ones open.**
- **B. Price stability - problem is that sharp price increases erode purchasing power of money.**
- **C. Economic growth - goal is great-er output of a wide range of high quality goods and services.**
- **D. Environmental protection - economic activity could negatively affect environment.**
- **E. Increased individual well-being.**

## Format 5: Cornel System

Notes are organized with **some separation of main ideas from details** in a manor that facilitates self-testing. This format makes it easy to discover what has and has not been learned before a test is taken when something can still be done about it.

To self-test, cover up the details on the right side of the line and by only looking at the main ideas on the left, recite aloud, from memory, as many of the details for that main idea as possible. Then check the details for completeness and accuracy.

**Goals of Macroeconomy**

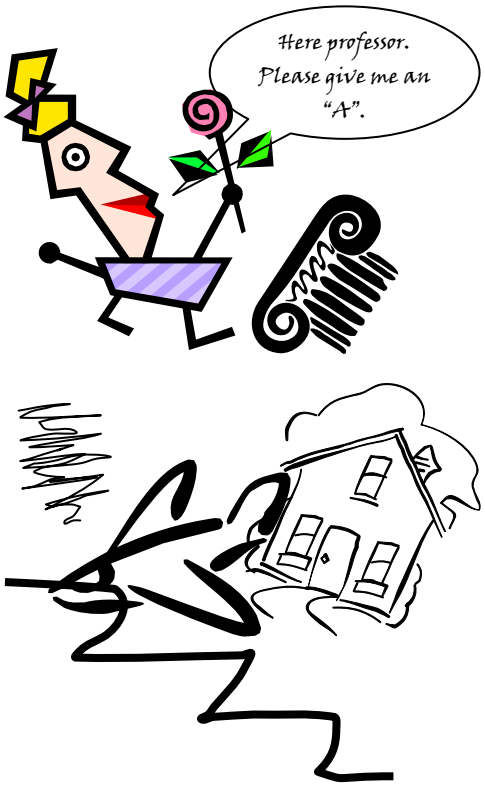
| | |
|---|---|
| **Macroeconomics** | **Economy of a whole society.** |
| **5 expectations in macroeconomy and meaning of each** | **Full employment- 100% of labor force employed.** |
| **3 reasons developed societies don't have full employment** | **health problems**<br>**people changing jobs**<br>**changing tech.=some jobs be come obsolete & new ones open** |
| | **Price stability - problem= sharp price increases erode purchasing power of money.**<br>**Economic growth-goal is greater output of a wide range of high quality goods and services.** |
| | **Environmental. Protection-econ. activity could negatively affect environ.** |
| | **Increased individual well-being.** |

**Format 6: Cornell System with Questions, Numbers, & Letters**

This format **shows the relative importance of each piece of information to other pieces of information, indicates order, and facilitates self-testing.** Making questions from main ideas also speeds learning and improves recall.

**Goals of Macroeconomy**

| | |
|---|---|
| **Macroeconomics** | **Economy of a whole society.** |
| **5 expectations and meaning of each?** | **1. <u>Full employment-</u> 100% of labor force employed.** |
| **3 reasons developed societies don't have full employment?** | **a. health problems**<br>**b. people changing jobs**<br>**c changing tech.=some jobs be come obsolete & new ones open** |
| | **2. <u>Price stability</u> - problem= sharp price increases erode purchase power of money.** |
| | **3. <u>Economic growth</u>- goal is greater output of wide range of high quality goods and services** |



## Format 7: Notecard System

The Notecard Format separates main ideas from details which makes self-testing easier and the organization of main ideas and details simpler. **Place only one main idea and its details on each notecard.** Learners can then separate notecards in to 2 piles: the "*learned*" and the "*not yet learned*." This way they can quickly see what has and has not been learned before a test is taken, when something can still be done about it.

## Format 8: Notecard System with Questions, Abbreviations, Underlining, Numbers, and Sources

Here, notecards **are formatted with questions made from main ideas and answers made from related details**. Abbreviations are added to shorten notes. The lecture date or textbook page numbers make referring back to lecture notes or texts fast and easy, if necessary. Formulating questions and building answers to them speeds understanding and learning.

The details tell learners what kind of question can be made. For example below, the details contain expectations of a macroeconomy. Therefore, the possible test question is "What are 5 expectations of a macroeconomy?"

***Expectations in a macroeconomy***

**Lecture 2/14**

***What are 5 expectations in a macroecon?***

***Full employment-100% of labor force employed***
***Price stability-problem=sharp price increases erode purchasing power of money.***
***Economic growth-Goal=greater output of wide range of hi quality goods & services.***
***Environmental protection-econ. activity could negatively affect environ.***
***Increase individual welll-being***

1. ***Full employ.-100% of labor force employed***
2. ***Price stability - prob. =sharp price increases erode purch. power of $.***
3. ***Economic growth-Goal=greater output of wide range of hi qual. goods & services.***
4. ***Environ. protection-econ. activity could negatively affect environ.***
5. ***Increase indiv. well-being***

# The Most Efficient Note Organization Format

### Format 9: Notecard System with Questions, Abbreviations, Underlining, Numbers, and Sources and Mnemonics

The addition of a memory aid called a **mnemonic** speeds learning and recall even more. To make a phrase mnemonic, the first letter of each detail below is arranged to form a word in a phrase that aids in recall. A key word from the main idea is included in the mnemonic phrase to avoid confusion with other mnemonics.

### Format 10: Notecard System with Questions, Abbreviations, Underlining, Numbers, Visuals, and Sources

**Adding visuals such as sketches, charts, diagrams, graphs**, etc. speeds understanding and learning even more. Compare this notecard with the text on page 2.

**Lecture 2/14**

***What are 5 expectations in a macroecon?***

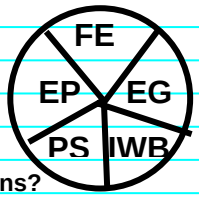
**Lecture 2/14**

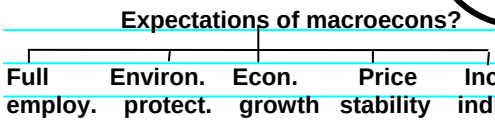
**5 expectations in a macroecon.?**

1. ***Full employment***
2. ***Price stability***
3. ***Economic growth***
4. ***Environmental protection***
5. ***Increased individual well-being***

***Expect a FEE for PJ***

**1. Full Employ.** **Expect a FEE for PI**
**2. Environ. protection**
**3. Econ. growth**
**4. Price stability**
**5. Incr.indiv.well being**



Great note-taking takes practice. You have to find a method that works for you, and that may change depending on the class that you're in (for example, a science class versus a humanities class). Here are 5 methods that are proven to be successful. Read over each one and decide if there's one that might work for you.

These styles are described in the format you would use to take notes in class. You might find that a comfortable method is a combination of 2 or more of the ones listed here, and that's fine.

Figure out what works for you and stick with it!

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## THE CORNELL METHOD

**Page #** **Today's Date**

| | |
|---|---|
| Layout of the page and where to write | You physically draw a line vertically down your paper, leaving 2.5 inches on the left and 6 inches on the right.<br>This allows you to take notes on the right-hand side of the page leaving space on the left to summarize the main point with a cue word or phase. |
| Organization of concepts | When the instructor moves to a new topic, skip a line.<br>It is also a great idea to use some organizational structure to your whole page.<br>• Use bullets!<br>✓ Use an indented system – kind of like outlining<br>• You can <u>underline</u> important words. |
| Filling in blanks. | If you aren't able to completely write down an idea before the instructor moves on to a new topic, *fill it in after class.* |
| Reviewing and Studying | After class, test your knowledge of course material by covering up the right side of the page, reading the cue words, and trying to remember as much information as possible. Then check to see if you remembered correctly. *Also write page and day summaries.* |
| Advantages | This is a simple and efficient way of recording and reviewing notes – it's easy for pulling out major concepts and ideas. It's simple and efficient. It saves time and effort because you "do-it-right-in-the-first-place." |

## THE OUTLINING METHOD

**Page #** **Today's Date**

Class Topic: How To Outline Notes

I. The first level is reserved for each new topic/idea and is very general.
   a. This concept must always apply to the level above it (I)
      i. This concept must always apply to the level above it (a)
      ii. This is a second supporting piece of information for the level above it (a) but is equal to the previous information (i)
      iii. This information is a sister to (i) and (ii)
   b. This concept applies to the level above it (I) and is a "sister" to (a)

II. You don't have to use Roman Numerals, Letters, and Numbers – try only indents, dashes, and bullets!

III. Outlining requires listening and writing in points in an organizational pattern based on space indentation
   a. Advantages to outlining
      i. It is well-organized
      ii. It records relationships and content
      iii. It reduces editing and is easy to review by turning the main points into questions
   b. Disadvantages to outlining
      i. It requires more thought during class for accurate organization.
      ii. It does not always show relationships by sequence.
      iii. It doesn't work well if the lecture is moving at a quick pace.

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## THE CHARTING METHOD

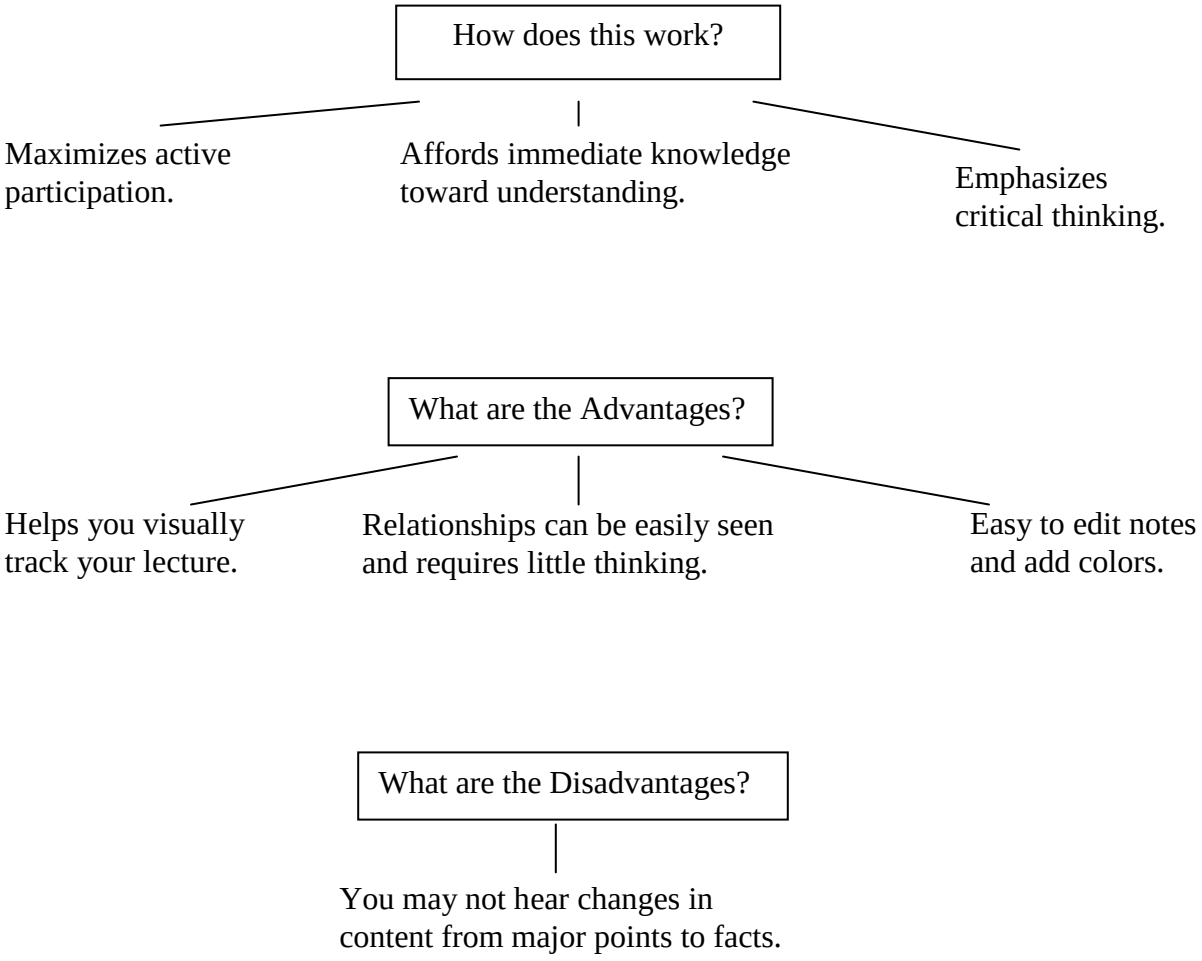
**Page #** **Today's Date**

| How? | Advantages | Disadvantages | When to Use it? |
|---|---|---|---|
| Set up your paper in columns and label appropriate headings. | Helps pull out the most relevant information. | Can be a hard system to learn to use. | If you'll be tested on facts and relationships. |
| The headings could be categories covered in the lecture. | Also reduces the amount of writing necessary. | You need to know the content that will be covered during the lecture before it begins. | If content is heavy and presented quickly – such as a history course with dates, people, events, etc. |
| Insert information (words, phrases, main ideas, etc) into the appropriate category. | Provides easy review for memorizing facts and studying comparisons and relationships. | | If you want to get an overview of the whole course on one big paper. |

## THE MAPPING METHOD

**Page #** **Today's Date**

A GRAPHIC REPRESENTATION OF A CONCEPT




## THE SENTENCE METHOD

**Page #** **Today's Date**

1. Write every new thought, fact, or topic on a separate line as you progress, numbering each sentence.
2. Advantages: it's more organized than writing paragraphs and still records most of the information.
3. Disadvantages: it's hard to determine major/minor points and it's hard to edit and review with clean-up.
4. It's a good method when there's lots of information and you don't know how the ideas fit together.

You can make some connections as you go (for more information, refer to #2).

Developed from http://www.sas.calpoly.edu/asc/ssl/notetaking.systems.html

# Notetaking Time-Savers

**Name** _____ **Class days/times** _____ _____

Keeping up with a lecture while taking notes in class is difficult to impossible for learners who try to write down *every word*. Notetaking is more effective if learners practice a few simple Time Savers designed to make taking notes faster and easier.

To help you refine condensing and abbreviation skills, complete the exercise below. It may be slow at first but you will pick up speed as you practice.

## Time Saver #1: Don't Try to Record Every Word

"Today we are going to talk about Behavioral Learning Theories of which there are three. In general, Behavioral Theorists focus on observable behavior. One theory of learning based on behavior is Pavlovian Conditioning or Classical Conditioning. This involves a reflexive response associated with a new stimulus. For example, a reflexive response of a dog when he sees food is to salivate. In Classical Pavlovian Conditioning, we can teach a dog to salivate when a bell rings, a new stimulus, by teaching a dog to associate a ringing bell with food.

Another Behavioral Learning Theory is Observational Learning. This occurs when behavior is imitated by another. This behavior is easily seen in children as they imitate parental behavior whether it is desired behavior or not. For example, if children hear parents swear in a moment of anger, it is not unusual to hear children add those words to their burgeoning vocabulary.

A third Behavioral Learning Theory is called Operant Conditioning. This involves taking a voluntary response, desired behavior, and strengthen it using reinforcements. Potty training a child as an example. Parents will praise a child, offer candy or other rewards to encourage repeated toilet use."

Learners can keep up with a lecture by eliminating unnecessary words. Below is an example of how the above lecture could be condensed, organized, and recorded:

*3 Behav. Lrng theories*

1. *Pavlovian/Classical - assoc. Reflexive resp. w/ new stim.*
   *Ex - dog salivates when hears bell = assoc. W/food*
2. *Observational - imitate others we see.*
   *Ex. - dad swears and son picks it up.*
3. *Operant - volun. Resp.(desired behav.) strengthen w/ rein.*
   *Ex - toilet training*

It is easier and faster to write 50 words using abbreviations and short phrases than it is to write 196 whole words in complete sentences. Learners also have more time to listen and focus on understanding lectures

## Time Saver #2: Record Words as They Sound Using as Few Letters as Possible

Record the words below **as they sound**. Omit unneeded vowels and consonants. Then, find 10 words from a course you are taking and abbreviate them below **as they sound**.

Course name _____

| Word | Abbreviation | Your Word | Abbreviation |
|---|---|---|---|
| **1. ready** | | | |
| **2. enough** | | | |
| **3. because** | | | |
| **4. height** | | | |
| **5. weigh** | | | |
| **6. essay** | | | |
| **7. through** | | | |
| **8. compound** | | | |
| **9. freeze** | | | |
| **10. solvent** | | | |

# Time Saver #3: Use Common Shorter Forms

Record the words below using common shorter forms used by college students. Then, find 10 commonly used words from a course you are taking now and record those words below **a common shorter form**. If you cannot find a commonly used shorter form, create an abbreviation using Time Saver #1.

Course name_____

| Word | Abbreviation | Your Word | Abbreviation |
|---|---|---|---|
| **1. difference** | | | |
| **2. telephone** | | | |
| **3. principles** | | | |
| **4. deoxyribonucleic acid** | | | |
| **5. between** | | | |
| **6. system** | | | |
| **7. automobile** | | | |
| **8. double** | | | |
| **9. condition** | | | |
| **10. Dihydrogen-oxide** | | | |
| **11. research** | | | |
| **12. general** | | | |
| **13. example** | | | |
| **14. hydrogen** | | | |

# Time Saver #4: Substitute Letters or Numbers for Syllables

Record the words listed below using letters or numbers in place of syllables instead of writing out the whole word. Then, find 10 commonly used words from a course you are taking now and record those words below using **numbers or letters in place of syllables**.

Course name_____

| Word | Abbreviation | Your Word | Abbreviation |
|---|---|---|---|
| **1. before** | | | |
| **2. forget** | | | |
| **3. carbonate** | | | |
| **4. create** | | | |
| **5. Enthalpy** | | | |
| **6. equate** | | | |
| **7. saturate** | | | |
| **8. benign** | | | |
| **9. foreign** | | | |
| **10. infatuate** | | | |
| **11. wonderful** | | | |
| **12. estimate** | | | |
| **13. reinforce** | | | |
| **14. fortunate** | | | |
| **15. Threonine** | | | |

# Time Saver #5: Use Standard Abbriviations

Record the words listed below using abbreviations considered standard in business/ industry/education instead of writing out the whole word. Then, fill in abbreviations for 10 commonly used words below from a course you are taking now **using standard abbreviations**.

Course name_____

| Word | Abbreviation | Your Word | Abbreviation |
|---|---|---|---|
| **1. pound** | | | |
| **2. department** | | | |
| **3. balance** | | | |
| **4. information** | | | |
| **5. including** | | | |
| **6. paid** | | | |
| **7. with or without** | | | |
| **8. English** | | | |
| **9. amount** | | | |
| **10. company** | | | |
| **11. reaction** | | | |
| **12. corporation** | | | |
| **13. experience** | | | |
| **14. reproduction** | | | |
| **15. gallons per minute** | | | |

# Time Saver #6: Use Common Symbols to Replace Words

Below, use common symbols to save time and effort in notetaking instead of writing out whole words. Then, find 10 commonly used words from a course you are taking now and record the symbols (existing symbols or your own) below for **using this rule.**

Course name_____

| Word | Abbreviation | Your Word | Abbreviation |
|---|---|---|---|
| **1. dollars, money, cost, price** | | | |
| **2. paragraph** | | | |
| **3. per cent** | | | |
| **4. per year** | | | |
| **5. always, ever, infinity** | | | |
| **6. oxygen** | | | |
| **7. water** | | | |
| **8. number** | | | |
| **9. with** | | | |
| **10. better** | | | |
| **11. worse** | | | |
| **12. thousand** | | | |
| **13. hundred** | | | |
| **14. and** | | | |
| **15. angle, right angle** | | | |

# Time Saver #7: Use the First Letter or First Few Letters Only

For specialized terms repeated frequently in lectures and textbooks, spell them out the 1st time you record it. Thereafter, use only the abbreviation to save time. Then, fill in abbreviations for the 10 commonly used words below in your major or for a course you are taking now **using this rule**.

Course name_____

| Word | Abbreviation | Your Word | Abbreviation |
|---|---|---|---|
| **1. notetaking** | | | |
| **2. capitalism** | | | |
| **3. metamorphic rocks** | | | |
| **4. digestion** | | | |
| **5. Behaviorism** | | | |
| **6. Catabolic Activator Protein** | | | |
| **7. Krebs Cycle** | | | |
| **8. mitosis** | | | |
| **9. government** | | | |
| **10. legislature** | | | |

# Time Saver #8: Take or Re-Write Notes Using as Few Words as Possible

Many words add little or nothing to notes if included. These words can be safely eliminated without losing the meaning of ideas when re-writing and reorganizing notes. To help you understand this, follow the directions for the 3 sentences below:

a. **Cross out as many words as possible** in each sentence below without losing the meaning.
b. Next, **cross out any remaining words for which abbreviations can be used** and write an abbreviation above the word.
c. Finally, **re-write your new condensed sentence** and **write the total number of words** you now have.

1) "Write each of your class reports clearly, legibly and very concisely using only complete sentences and your best correct grammar to express your ideas." (24 words)

Condensed version_____ #of Words _____

2) "In the introduction to your class speech, the goal to keep in mind and strive for is to seek to win the good will, attention and interest of your listening audience." (31 words)

Condensed version_____
#of Words _____

3) "At the same time, the newly arrived religion of Christianity wisely encouraged adjustment to the lofty ideas and long established institutions of Rome." (23 words)

Condensed version_____
#of Words _____

Record 3 sentences from one of your textbooks. Below each of these sentences, rewrite it using abbreviations and necessary words **only**.

Textbook Name _____ Course _____

1. _____

_____

2. _____

_____

3. _____

_____

Many students fear they will forget the meaning of abbreviations they use. While this is an understandable fear, it rarely happens. One reason is that the context surrounding each abbreviation gives clues to its meaning.

To reduce the fear of forgetting, decipher the following sentences made almost totally from of someone else's **unfamiliar** abbreviations. If you can translate most or all of these abbreviations, there is little reason to fear that you will forget your own.

E pd t rgstrar $1m 4 hs clses.

_____

T lnng towr wz blt @ a bd ∠2 us 4 mkng ptza.

_____

F i tld u 1x, I tld u a C xs, Fri. s qz day.

_____

During WW II, the GNP ↑ 3X over t previous C yrs.

_____

US corps ↑ $ by ½ drng t recessn despite t 4cst.

_____

Use the **8 Notetaking Time Savers** as you take notes from textbooks and lectures. As you use abbreviations more and more, you will spend less and less time writing notes and more time listening or reading for important ideas. Since abbreviations condense notes, there will be less written material to learn and remember.

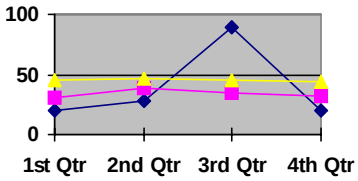
Notes are personal in that only ***you*** need to understand them. Better students set up notetaking systems to improve their grades and if someone else can benefit by reading them, that's fine but *incidental*. Composing notes so everyone else can understand them wastes time and requires unnecessary effort.

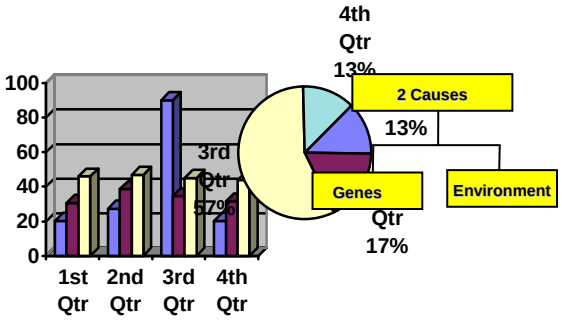
# How to Spot Main Ideas in Texts & Lectures

To organize complete and accurate notes from textbooks and lectures, a learner must recognize the clues to main ideas and details. Once main ideas have been identified, notes can be organized in a manner that promotes, not hinders learning.

## IN TEXTBOOKS

- **Bold print** - **Darwin's Natural Selection**
- ***Italics*** - The use of form is *vital* in dance.
- **Chapter title** - **SUPPLY AND DEMAND**
- **Sub-headings** - **Organic Compounds**
- **Numbered items** -
  1. Environment
  2. Attitudes
  3. Resources
- **Graphs, Charts, Diagrams -**




- Colored or highlighted words and phrases
- **Lettered items** - A. Time B. Location C. Event
- **Numbered items** -
  1. Read directions carefully.
  2. Read each question before answering.
  3. Do the easiest questions first.
- **Chapter summaries** -

**SUMMARY**

*The 3 study systems in this chapter are SQ3R, OK5R, and SUPER SIX. These are all variations of the original 3R system. The Cornell and Note-card systems are two methods for efficiently organizing notes.*

- **Chapter questions** - 6. Consider the owning and operational costs of the family car. What are the implicit and explicit costs?

- **Listing or outline of the main ideas in the chapter** - I. Piaget's Theory
  - A. Four Stages
    1. Sensorimotor
    2. Preoperational
    3. Concrete Operations
    4. Formal Operations

## IN LECTURES

- **Topics to be covered that are listed on the chalkboard**
- **Main ideas and details placed on the chalkboard**
- **Verbal listing of topics to be covered**
- **Clue words** such as: *"First..... "Next....."Furthermore..... "The first step.... "Last..... "Then..... "More importantly....."In contrast..... "Another .....*
- **Information that is repeated**
- **Gestures such as pointing, especially at ideas on the chalkboard**
- **Concepts in lecture AND in the textbook**
- **Instructor may tell you something is important**
- **Raising or lowering of voice pitch/loudness**
- **Instructor speaks faster or slower**
- **Topics covered in handouts**
- **The amount of time spent on an idea or concept: more time means more importance**
- **Ideas covered on overhead projections**
- **Questions an instructor asks in class**

# Speed Writing in Lectures

Keeping up with fast talking instructors is a universal challenge for college students. Below are 8 strategies to speed notetaking in class and increase chances of getting valuable lecture information in notes. As you practice using these 8 strategies for speed writing, the pace at which you record notes will increase and you will have more time to listen.

### Use Symbols to Replace Words

## Examples:

| Symbol | Word that is replaced | Symbol | Word that is replaced |
|---|---|---|---|
| = | equal | > | greater than, more than |
| ≠ | does not equal | < | less than |
| & or + | and | $ | dollars, money, value, cost |
| w/ | with | vs | versus, against, opposed |
| w/o | without | ↑ | increasing, improving, rising |
| * | important | ↓ | decreasing, worsening, falling |
| ** | very important | c | hundred |
| # | number | m or k | thousand |

### Use Abbreviations instead of Whole Words

## Examples:

| Abbreviation | Word that is replaced | Abbreviation | Word that is replaced |
|---|---|---|---|
| eg | for example | psych | psychology |
| mx | maximum | cond | condition |
| mn | minimum | exp | experience |
| dept | department | subj | subject |
| ed | education | glycolysis | gly |
| id | identify | micro | microbiology |

### Use first Syllables instead of Whole words

## Examples:

| First Syllable | Word that is replaced | First Syllable | Word that is replaced |
|---|---|---|---|
| pol | politics | sys | system |
| bio | biology | env | environment |
| eng | engineering | org | organism |
| carc | carcinogenic | rela | relationship |
| comp | comparison, compare | chem | chemical |

### Using First Letters instead of Whole words

This is especially useful when a main idea or key word is repeated many times during a lecture.

## Examples:

| First Letter | Word that is replaced |
|---|---|
| M | metamorphosis |
| C | capitalism |
| D | determinism |
| G | government |
| D | democracy |

### Omit Vowels From Words

## Examples:

| Voweless Word | Word that is replaced | Voweless Word | Word that is replaced |
|---|---|---|---|
| bkgnd | background | cnsnt | constant |
| estmt | estimate | isltn | isolation |
| rdng | reading | frdm | freedom |
| prprd | prepared | lrn | learn |
| prblm | problem | smmry | summary |

### Use a "g" Instead on "ing" or "n" Instead of "tion"

## Examples:

| Word Ending | Word that is replaced | Word Ending | Word that is replaced |
|---|---|---|---|
| distractn | distraction | natn | nation |
| orderg | ordering | compromisg | compromising |
| maintaing | maintaining | regulatg | regulating |
| bldg | building | conventn | convention |
| consitutn | constitution | segregatn | segregation |

## Use Numbers and Letters to Replace Syllables

## Examples:

| Shortened Word | Word that is replaced | Shortened Word | Word that is replaced |
|---|---|---|---|
| cooper8 | cooperate | oper8 | operate |
| methio9 | methionine | 4est | forest |
| cre8 | create | nfatu8 | infatuate |
| 42n8 | fortunate | 2way | two-way |
| 4n | foreign | cson | season |
| b4 | before | n2ition | intuition |

## Condense by Recording only Key Words

## Example lecture:

**Today we are going to talk about Behavioral Learning Theories of which there are three. In general, Behavioral Theorists focus on observable behavior. One theory of learning based on behavior is Pavlovian Conditioning or Classical Conditioning. This involves a reflexive response associated with a new stimulus. For example, a reflexive response of a dog when he sees food is to salivate. In Classical Pavlovian Conditioning, we can teach a dog to salivate when a bell rings, a new stimulus, by teaching a dog to associate a ringing bell with food.**

**Another Behavioral Learning Theory is Observational Learning. This occurs when behavior is imitated by another. This behavior is easily seen in children as they imitate parental behavior whether it is desired behavior or not. For example, if children hear parents swear in a moment of anger, it is not unusual to hear children add those words to their burgeoning vocabulary.**

**A third Behavioral Learning Theory is called Operant Conditioning. This involves taking a voluntary response, desired behavior, and strengthen**

## Example of this lecture condensed in notes:

*3 Behav. Lrng theories*

1. *Pavlovian/Classical - assoc. Reflexive resp. w/ new stim.*
   *Ex - dog salivates when hears bell = assoc. W/food*
2. *Observational - imitate others we see.*
   *Ex. - dad swears and son picks it up.*
3. *Operant - volun. resp.(desired behav.) strengthen w/ rein.*
   *Ex - toilet training*

You get better at that which you practice. If you practice not doing these things, you will get better at that, also.

# Reading and Listening Clues

Many words and phrases provide clues to important ideas in college reading and listening. Recognizing these clues will increase your ability to spot main points in lectures and textbooks.

## Additive Words and Phrases

Additive words and phrases communicate that **more of the same is coming** of equal importance.

**also** **besides** **furthermore** **moreover** **another** **and** **further** **in addition**

## Alternative Words and Phrases

These words & phrases indicate **choices or differences** or that there aren't choices or differences.

**either** **or** **neither** **nor** **otherwise** **the difference** **similarly** **other than**

## Repetitive Words and Phrases

Repetitive words and phrases **emphasize ideas** that are so important that they are repeated directly or paraphrased.

**again** **in other words** **that is (i.e.)** **To repeat**

Cause and Effect Words and Phrases

Cause and effect words and phrases **indicate of relationships between events or ideas**.

| | | | | | |
|---|---|---|---|---|---|
| **accordingly** | **because** | **consequently** | **since** | **so** | **thus** |
| for this reason | then | as a result | therefore | The outcome is | |

## Contrast/Change words and Phrases

These words and phrases **suggest similar or opposing circumstances.**

| | | | | | |
|---|---|---|---|---|---|
| **but** | **in spite of** | **notwithstanding** | **conversely** | **still** | **despite** |
| **in contrast** | **instead of** | **though** | **however** | **whereas** | **even though** |
| **rather than** | **yet** | **nevertheless** | **regardless** | | **similarly** |

## Qualifying Words and Phrases

Qualifying words and phrases **modify the conditions which affect important ideas or situations**. There are two kinds: *absolutes* and *sometimes* words. Absolutes mean 100% of the time and sometimes words mean undefined portions or numbers of times.

***Absolute*** **words and phrases:**

| | | | | |
|---|---|---|---|---|
| **no** | **all** | **never** | **always** | **only** |
| **ever** | **none** | **no one** | **forever** | **every time** |

***Sometimes*** **words and phrases:**

| | | | | |
|---|---|---|---|---|
| **few** | **many** | **occasionally** | **some** | **most** |
| somewhat | sometimes | usually | nearly always | |

## Emphasis Words and Phrases

These clues indicate a **degree of importance** of ideas and events in relation to each other.

| | | | | |
|---|---|---|---|---|
| **above all** | **less important** | **most important** | **key idea** | **more importantly** |
| **the crux** | **main point** | **less so** | **a central fact** | **of significance** |

## Time and Order Words and Phrases

Time and order words and phrases **indicate specific organization patterns of ideas**. Many times, order is crucial to an accurate understanding of ideas or events.

| | | | | | | |
|---|---|---|---|---|---|---|
| **finally** | **second** | **then** | **next** | **last** | **afterwards** | **before formerly** |
| **later** | **now** | **finally** | **meanwhile** | **ultimately** | **presently** | **previously** |

## Summarizing Phrases

Summarizing phrases **indicate important ideas will be reviewed**.

| | | | | |
|---|---|---|---|---|
| **in brief** | **to sum up** | **for these reasons** | **to review** | **in conclusion** |

## *Section 7: Textbooks*

*Textbook Reading Skills*

*Identifying Problems that Lead to Slow Reading*

*Super Square*

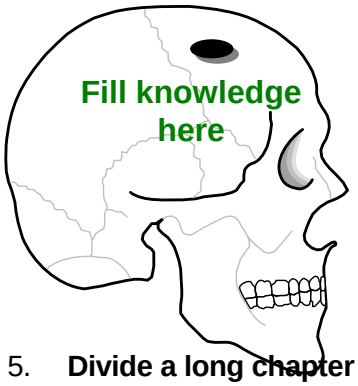
*How to Survey a Chapter*

*Why SQ3R Works*

# Textbook Reading Skills

## Things to do before reading:

1. **Make specific times to read assignments** for each course. Mentally commit yourself to these time periods to read about these subjects. This makes concentration easier.




2. **Recall what you already know** about the topic to be read.

3. **Bring an open mind to what you read**. You don't have to agree in order to understand what an author says.

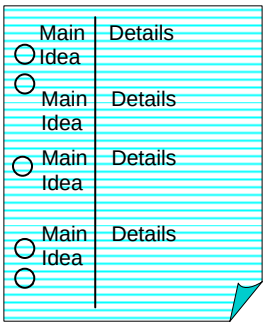
4. **Intentionally state a reason to read** (e.g. "I want to find out about .....") **or create questions** out of titles, subheadings, italicized words, etc. and read to find the answers. Concentration and memory improve when there is a specific purpose for reading beyond the fact that something has been assigned.

5. **Divide a long chapter or assignment into pieces.** It is easier to concentrate if you focus on one piece at a time instead of trying to digest a large amount of material at once.

6. **Take 1-2 *minutes* to skim through a chapter before reading** to see how it is structured and where the author is going to take you. Look at the title, introduction, subheadings, and summary.

## Things to do WHILE reading:

1. **Read only when you are able to concentrate**. Monitor yourself by putting a check mark on a piece of paper whenever concentration wanders. This will help return your mind to the reading assignment. If you cannot concentrate, do something else for 5 or 10 minutes or study a different subject for awhile.




2. **As you read, take notes from the text.** Condense ideas using abbreviations, symbols, short phrases, and sketches. Avoid complete sentences.

3. **Use a specific format for organizing notes** from textbooks. The Cornell System for organizing notes involves drawing a line 1/3 from the left margin of notebook paper. Main ideas are recorded on the left side and details recorded on the right side.

4. Another convenient note format is to **make a question from a main idea and place it on one side of a notecard**. Read to answer the question and put the answer on the other side. This reduces forgetting of what was just read and provides a fast and easy way to organize note for later learning.

5. When you make notes, **use your own words** to record ideas. This will aid in learning and in later recall on tests.

6. **Change reading speed** according to the difficulty of the material and the purpose for reading. No single reading speed is effective for *all* types of reading material. Textbook reading should be done fairly slowly and deliberately compared to reading newspaper articles or novels. If you take good notes, you should not have to read a textbook chapter more than once.

6. **Read and study in locations free of visual and auditory distractions**.

7. When concentration or understanding what is read is a problem in textbooks, **read aloud** as if explaining it to someone else.

## Things to do AFTER reading:

1. In your spare time, **think about what you read**. Discuss information to be learned with others such as in a study group.

2. **Relate what you read to class lectures**.

3. **Look at main ideas or questions and recite aloud or write details and answers without looking**, as if you are taking a test. If you can recall answers completely and accurately from memory, you know that you know the material. If you cannot, you know immediately where you need to concentrate your study efforts.

What you do before and after reading is as important as what you do during reading when learning from textbooks. The ultimate objective of all textbook reading should be to understand what is read and assimilate it into your store of knowledge. That is, the information has become a personal possession. When this happens, the information has been learned.

# Identifying Problems that lead to Slow Reading

This handout is designed to help identify and eliminate problems leading to slow reading. To get the most out of this exercise, take a sheet of paper and draw a line vertically down the middle. As common causes 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 can take to increase it. Whatever you discover, it's a good idea to discuss your results with a staff member at 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 better memory. Also, 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).

## How Fast Should I Read?

The average person reads at about 250 words per minute (wpm). Some of the faster readers can cover 500 to 600 wpm with comprehension. Good reading is a combination of reading speed and comprehension 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 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 *OR* 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 easy ways to mentally manipulate what it is you have to learn and remember.

## Problem number 1 - POOR CONCENTRATION

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:

**Daydreaming.** 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 more.

**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.**

**Can't remember what is read.** 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.

**Lack of interest in reading.** 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.

1) **Relate reading to what you'll be doing on a full time job** upon graduation from college.

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

3) **Choose to be positive** and see assignments as opportunities to learn something new, a chance to expand knowledge and broaden horizons, and acquire information to be stored for later use. 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.

4) **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.

5) **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.

## Problem Number 2 - UNDERDEVELOPED VOCABULARY

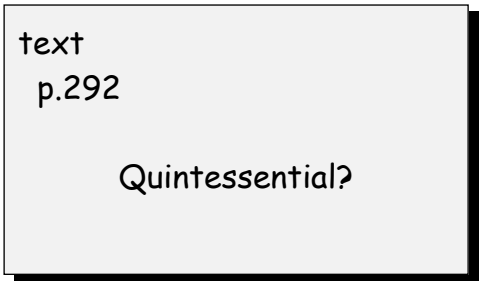
A second cause of slow reading involves a vocabulary in need of further development. A large part of a college requires learning new terminology with which to grasp new ideas and concepts.

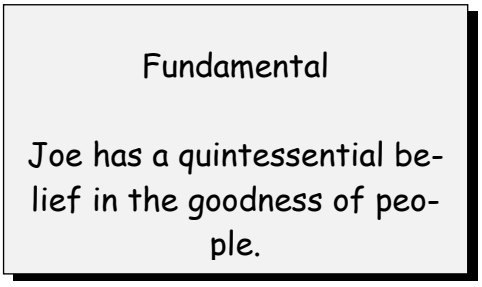
**Without new terminology, understanding new ideas and concepts in college courses is difficult for most and impossible for the rest.**

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 that are characteristic of a vocabulary in need of development and some remedies which successful college students use to make learning new vocabulary easier.

**Difficult to learn 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. 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 sure of the best 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.

**It is hard to understand my classes.** 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.

## Problem number 3 - POOR READING TECHNIQUES

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 suggestions you can implement to overcome them.

**To become good at anything, you must practice. Reading is no exception.**

**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.

**Takes too long to read my assignments.** **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.

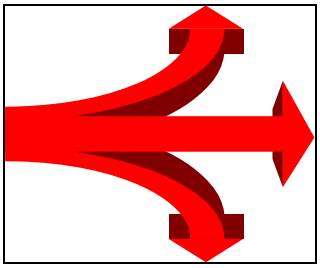
**Can't find main points and important details.** **The May I Introduce Technique** is one way to spot main ideas and important details. Virtually *every* author uses cue words, phrases, and location in the text to attract attention and introduce important ideas and facts. Textbooks, being instructional 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...** | **One important...** |
| **This means...** | **Several factors...** |
| **For example...** | **Clearly...** |
| **Next...** | **Another development..** |
| **Finally...** | **Still another point..** |
| **The first thing...** | **An important reason..** |
| **An illustration...** | **In other words...** |
| **Note that...** | **The evidence shows...** |
| **Furthermore...** | **In contrast...** |

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... Indented material...

Numbers...1, 2, 3.

Letters - A,B,C Summaries...

Hilighted phrases...

**Material inset in highlighted boxes**

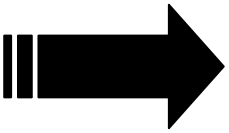
Terms in margins...

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. On the next page, 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 specific 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. |
| Easy textbooks, newspapers, stories, 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

## Read – Read - Read

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

## Problem number 4 - NEVER DEVELOPED A SYSTEM FOR READING A TEXTBOOK

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:

**Survey Question Read Recite Review**

***Surveying*** 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.

***Question*** 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 sub-headings 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 up on exams and quizzes.

***Read*** 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.

***Recite*** is the third R in SQ3R.

**REPEATED RECITATION**
**is *the* most important step**
**to combat forgetting**

For example, when using notecards to learn, recitation consists of saying questions aloud and reciting as much of the answer as possible **OUT LOUD** without looking. Then, look at the answer and check for accuracy of recall. If the answer is recited correctly on the first try from memory, place that notecard in an ***"I know it"*** pile. If an answer is not recited completely and accurately from memory, read the correct answer aloud. 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. 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 isn't. Recitation in this manner is an excellent way to self-test on important material and a quick way to

**discover what has and has not been learned**
**BEFORE TAKING A TEST**
**when something can still be done about it.**

***Review*** 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.

## Problem Number 5 - THE BLANK MIND SYNDROME.

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.**
5. **If incorrect, read the answer aloud 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.**

# Super Square Textbook Study System

**SUPER SQUARE** is a textbook study system developed by super college students who earn excellent grades. They devised this system for the specific purpose of helping other students maximize grades in the minimum of amount of time. **SUPER SQUARE** is a compilation of only the fastest and most efficient textbook study skills.

**SUPER SQUARE** is based on the idea of studying as little as is necessary to get an "A" and yet learn the material. This is why only the least time consuming steps are included. By mastering the **SUPER SQUARE** textbook study system and making it a habit, any student can save time studying and get the most out of textbooks.

Mental manipulation of material to be learned is necessary for information to transfer from short-term toward long-term memory. Simply reading over words and ideas do not require mental manipulation therefore does little to facilitate learning or recall.

The **SUPER SQUARE** textbook study system is an easy-to-follow series of steps on how to mentally manipulate material thus, increasing the ability to learn, understand, and remember.
The ***S-Q-U-A-R-E*** in **SUPER SQUARE** stands for:

| | |
|---|---|
| **S = *Survey*** | **Skim over a chapter *before* reading it** |
| **Q = *Question*** | **Formulate and record questions out of main ideas before and/or while reading** |
| **U = *Understand*** | **Use the 5 keys to understanding textbooks** |
| **A = *Answer*** | **Read for details to answer your questions** |
| **R = *Recite*** | **Read a question, say answers *aloud* without looking, and then check answers for accuracy** |
| **E = *Evaluate*** | **Regularly self-test your knowledge and learning by looking at questions, reciting answers aloud, and then checking for accuracy. This also reduces forgetting.** |

Each step is an important link in a chain of skills for improving grades, maximizing learning/understanding, and reducing study time. Omit one of the steps and the system will weaken, reducing the chances of earning the results you desire.

## Step 1. Survey by skimming before reading

Surveying is done by spending **2 to 3 minutes identifying and previewing main ideas** in a chapter *BEFORE* reading begins. Reading for understanding isn't done, in this step.

Survey by quickly scanning over **clues to main ideas** such as:

| | | |
|---|---|---|
| **Chapter outlines**<br>**Headings & Sub-headings**<br>**Paragraphs' 1st/last sentences** | **Bold and italicized print**<br>**Marginal notes**<br>**Diagrams, charts, pictures** | **Summaries & conclusions**<br>**End of chapter questions**<br>**Number or lettered items**<br>**Lists of key terms** |

Surveying helps students spot main ideas in chapters. This prepares the mind for what is to come, improves understanding, and increases recall of what has been read. Surveying begins mental manipulation of the material that is crucial for understanding and learning.

## Step 2. Question by formulating & recording questions before or while reading.

Students who earn higher grades find that making questions from main points leads to more organized notes and faster learning. It is a matter of personal style whether to make questions before or during reading.

This 2nd step in **SUPER SQUARE** involves **actively seeking out important points** in textbooks for questions. This way, instead of stroking words with your eyes, you create a purpose for reading which is to actively *read to answer questions*. The result is easier concentration and better memory for what was just read. The act of questioning greatly reduces the **Blank Mind Syndrome -** reading and not remembering what was just read.

Make questions from main ideas. To help form questions similar to potential test questions, use old tests, end-of-chapter questions, questions the instructor asks in class, students who have had the course, and instructor's review sheets.

The best clue to the type of question that can be made for a test is to examine the nature of the details under *each* main idea. If the details include 5 steps, then your questions should go something like this: "What are the 5 steps in .....?" If the details include 7 characteristics, a question could be, "What are the 7 characteristics of .....?" If the details contain 3 causes and 3 effects of an event, a questions could be, "What are 3 causes and 3 effects of .....?"

### The nature of the details dictate the format of a question

Most examinations contain questions. When students make questions from main ideas, many of these questions appear on exams. This is so because instructors skim through textbooks and lectures looking for clues to main ideas (like those listed under survey) and turn them into questions to place on exams. In step 2, you are doing this ahead of time and learning the answers *before an exam is taken*.

## Step 3. Understand by using the 5 keys to Unlocking Textbooks

**Understanding what is read is absolutely essential for academic success** in college. Simply reading over assignments isn't enough for most students to get an adequate understanding of ideas for sufficient recall at test time. Help is needed to check the accuracy and completeness of a learner's understanding. This help begins with the realization that *students are not tested on what has been read but on what has been understood, learned, and remembered.*

***#1 Slower reading speed increases understanding.*** Textbooks require slower reading speeds than do novels, journals, or newspapers. If text material is difficult, it is better to reread it several times by emphasizing ***each word*** aloud or in your mind.

***#2 Find meanings of vague or unknown terms.*** Do this ***before*** reading further when a word or term isn't understood the ***1st time*** it is encountered. It only takes a few unknown words before understanding a chapter becomes difficult to impossible. Look for definitions in the text, glossaries, and at the end of chapters.

***#3 Use a proven textbook study system.*** There are many systems for getting the most from your textbook in the minimum amount of time such as SQ3R, OK5R, and SUPER SQUARE. If you can follow directions, you can begin getting more from your textbooks immediately and save time.

***#4 Form a study group.*** An exchange of perceptions and opinions on important ideas and details adds to understanding. For most students, discussing and hearing material discussed helps fill in notes, speeds learning, and promotes later recall.

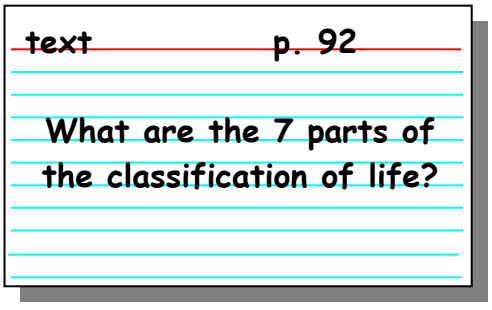
***#5 Discuss unclear material with the instructor.*** Have specific questions ready when you meet with instructors. This conveys interest and effort and makes it easier for instructors to help because they can more quickly see what it is you don't understand. When material is unclear and you have done your best to understand, take specific questions to the instructor. This also communicates interest, effort and clarifies what isn't understood.

## Step 4. Answer by recording answers to questions.

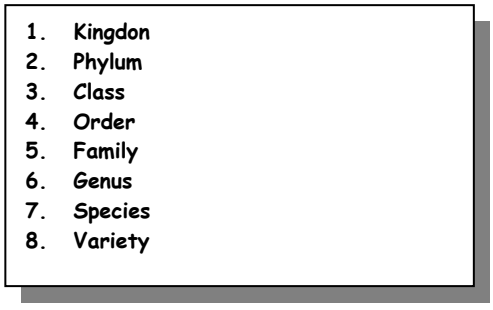
After understanding the main ideas, clarifying details, and explanations, it is important for organization and later self-testing to record these details and explanations in the form of answers to questions. Reading to answer questions increases concentration because reading is done to find specific information. As previously stated, the ability to remember is increased because the reader *is interacting with the material to be learned*. This activity is far superior for memory and concentration than stroking the words with one's eyes simply because the material was assigned. Seeking out answers to specific questions is an effective means for interacting with material to be learned that also promotes learning and recall.

A convenient way to record questions and answers is by using notecards. One question is recorded on one side of a notecard and its answer recorded on the other side.

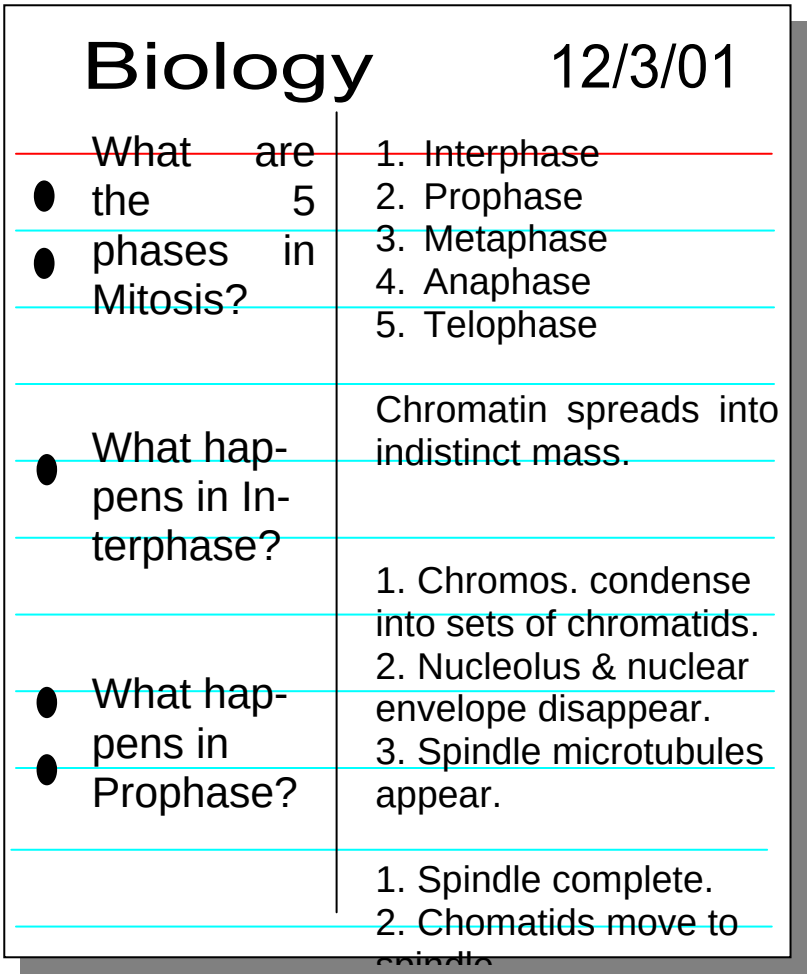
**Question on front**




**Answer on back**



A variation on the notecard format is called the Cornell System. It involves drawing a vertical line about 2 1/2 inches from the left edge of a sheet of notebook paper. Questions are recorded to the left of the line and answers to the right. Answers should be covered up when reciting then used to check for accuracy of recall.




One benefit of reciting answers ***ALOUD*** is that it improves organization on written exams. Students rarely have to pause on how to structure an answer because it has already been done during recitation. Organization of answers is learned along with facts.

## Step 5. Recite questions & answers aloud repeatedly

Each time a learner recites, information moves form short-term memory toward long-term memory. The more often a learner recites, information moves farther toward long-term memory.

### RECITING QUESTIONS AND ANSWERS ALOUD IS YOUR *NUMBER #1 WEAPON* AGAINST FORGETTING

Reciting involves looking at a question and reciting ALOUD as much of the answer as is possible from memory. Then, check the answer for completeness and accuracy. This way, there can be no doubt if information is learned or not. Either it can be stated correctly ALOUD from memory, or it cannot. Recite as many times as necessary to recall answers correctly without looking.

# Step 6. Evaluate by self-testing & reciting regularly

When students evaluate by self-testing, students can discover.....

**WHAT HAS BEEN LEARNED AND WHAT HAS NOT YET BEEN LEARNED BEFORE AN EXAM *IS TAKEN* WHEN YOU CAN STILL DO SOMETHING ABOUT IT.**

The number of times questions and answers must be recited in order to remember on exams varies from person to person. For some, it may be 3 to 4 times to get an "A". For others, it may be 8 to 10 times to get an "A". Each student needs to discover how many recitations are needed to earn the desired grade. There is no correlation between the number of times one must recite to earn an "A" and intelligence. Rapidity in learning has more to do assimilation (absorption) speed than intelligence and it varies among human beings for many reasons that are not always clear.

Self test as many times as necessary in order to recall each answer completely and accurately without looking. Regular self-testing will keep potential test material fresh in the mind. It is vital because it's a foolproof way to ***determine what can be recalled and what cannot be recalled before a test when something can still be done about it***.

Unfortunately, many students don't realize what it is they haven't learned until an exam is returned. Not much can be done about the grade then except to complain about the instructor or place blame for poor performance on someone or something else. Students, who choose not to self-test, choose to be out of control when it comes to determining grades.

Students who self-test choose to be in control because they are aware of what has been learned and what remains to be learned at a point when they have time to do something about it. Students who see choices have more opportunities for controlling their own academic lives.

As time passes, it is normal to forget material that isn't reviewed regularly. That's why regular recitation and evaluation are important. People get better at that which is rehearsed. If students rehearse by looking at questions and recalling answers from memory, they get better at it. After all, isn't that what happens on quizzes, tests or final exams?

# How to Survey a chapter

Surveying a chapter should take no more than 1 to 2 minutes and is best done *before* reading begins. Surveying prepares the mind to receive information and makes reading easier and faster.

1. Chapter title _____

2. List 2 questions the title suggests to you. (a.) _____

   (b.) _____

3. Skim the 1st paragraph, scan each heading, subheading, bold print, and skim the summary questions. What is the chapter about?

4. What do you already know about the subject?

5. Which clues to main points does the chapter contain?

   __Bold print
   __Italicized words
   __Graphs, charts, pictures, etc.
   __Quizzes
   __Key ideas/questions in margin
   __Other _____
   __Summary
   __Numbered/lettered/bulleted lists
   __Outline of topics to be covered
   __Questions at the end of chapter
   __Color-coded paragraphs, tinted insets

6. How long will it take you to read this chapter? _____

7. If you don't have time to read the chapter in one sitting, where can you divide it? (page #'s) _____

8. List <u>at least</u> 4 questions to answer as you read the chapter. Use the back for more questions.

   (a.)_____ (b.) _____

   (c.) _____ (d.) _____

# Why SQ3R Works

Many reading and learning skills classes in college include a systematized textbook processing system in their syllabi such as SQ3R, OK5R, SUPER SQUARE, and PQRST. The best known is **SQ3R which stands for survey, question, read, recite, and review.** If you know how and why these study systems work, you are more likely to use one of them in your reading and studying.

As a human being, you inherently strive to "make sense" out of the world to reduce uncertainty concerning the nature of your world. To do this you:

**(1) take in information through your sensory organs;**
**(2) process that information via your memory systems;**
**(3) structure and categorize the information in the most meaningful manner possible, i.e., so that interrelationships with other structures or categories are immediately apparent to you;**
**(4) store information so it will be available for recall and future use.**

You are constantly exposed to much more information than your brain can possibly process. Therefore, the rate at which new input from the environment can be injected into your memory system is limited by the rate at which the human brain can filter and process information. Each component of these study systems is designed to facilitate the processing of incoming information so that you can deal with more of it and deal with it more effectively.

## The Steps in SQ3R

### 1. Survey

**What it does** - Surveying material to be read prepares your mental processing system to receive information to be learned. Surveying provides the basic knowledge required to organize and assimilate (learn) incoming information from reading assignments and notes.

**Why do it** - If your mental processing system "knows" what to expect in advance, it can understand and store information in a much more efficient manner than if the new information is injected into the system with no forewarning.

### 2. Question

**What it does** - This organizes new information and begins attaching it to already existing knowledge. This attachment is an important component of learning.

**Why do it** - Self-generated questions help increase concentration, reduce the phenomenon of forgetting what was just read, and increase learning speed and recall.

## 3. Read

**What it does** - In effective reading, you evaluate and choose the information you need to fill in answers created by the questions you formulated earlier.

**Why do it** - If you are not actively involved in learning, it is normal for you to have more problems with concentration and the information you do receive may not be stored properly for longer term recall.

## 4. Recite

The recitation component of SQ3R is the ***most important*** step in SQ3R and any effective study system. ***If recitation is skipped, this system and any other study system will not work very well.***

**What it does** - If you know that you are going to have to recite answers from memory, you will be **more likely to read actively**. As you read and study notes, you evaluate and select what it is to be recited. Thus, maximum concentration is placed upon the most relevant information in reading assignments and notes that increases learning and recall.

**Why do it** - A human's memory contains an immediate memory, and short-term memory, and a long-term memory (Kintsch l970, Miller and Johnson-Laird l976). Items must be stored in long-term memory to be available for later recall whether for exams or on the job. Information must be held in the short-term memory about 5 seconds to move that information from short-term toward long-term memory (Simon l969). ***When you recite, information is held in short-term memory about 5 seconds and moves from short-term memory toward long-term memory*****. This is what makes SQ3R work.**

## 5. Review

Memory research indicates that it is normal for most forgetting to take place shortly after the learning task is completed (Travers l977).

**What review does** - Immediate review interferes with the *normal forgetting process* and results in more complete retention.

**Why review?** - Repeated review of material to be learned is essential to learning because it moves information from short-term memory toward long-term memory. Without repeated review, information fades from short-term memory rather quickly.

In summary, study systems like SQ3R strengthen your mental information processing system and forces more efficiency and productivity in learning tasks. This translates into getting more out of the time invested in studying and helps avoid statements like, " I studied for 8 hours for this test and got a terrible grade."

## *Section 8: Test Prep*

*Test Taking Skills Diagnostic*

*Power Studying Handout*

*5 Types of Studying*

*10 Test Preparation Hints*

# Test Taking Skills Diagnostic Inventory

Many students do not know if their test taking skills raise or lower their test scores. This diagnostic is designed to help students compare current test taking skills with those of "A" students. The # 1 most important test taking technique is to ***know your subject matter well***. Therefore, many students do not realize that most of the test taking skills take place way before an actual test.

Place the appropriate number in the box that most closely represents what you normally do for tests.

| Test Preparation (before a test) | | Never = 1 | Infrequently = 2 | Usually = 3 | Frequently = 4 | Always = 5 |
|---|---|---|---|---|---|---|
| 1. | I find out as much as I can about upcoming tests. | | | | | |
| 2. | I formulate possible test questions out of main ideas using detail as a guide. | | | | | |
| 3. | I know how many times I have to review my notes so that I KNOW that I know them. | | | | | |
| 4. | I self-test to discover what I have and have not learned before I take a test when I can still do something about it. | | | | | |
| 5. | I make summary sheets of key points. | | | | | |
| 6. | I set up my lecture and text notes in a question and answer or problem and solution format. | | | | | |
| 7. | I use as many of my own words as possible in my notes. | | | | | |
| 8. | I use mnemonics to help with recall. | | | | | |
| 9. | I use numbers in my notes to indicate | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | steps, stages, phases, characteristics, etc. | | | | | |
| 10. | I avoid cramming a day or two before a test. | | | | | |
| 11. | I get plenty of rest the night before a test. | | | | | |
| 12. | I study with one or more students for tests. | | | | | |
| 13. | I arrive early to the classroom on the day of the test. | | | | | |

| TEST TAKING (during a test) | | Never = 1 | Infrequently = 2 | Usually = 3 | Frequently = 4 | Always = 5 |
|---|---|---|---|---|---|---|
| 14. | I read the directions before I begin answering questions. | | | | | |
| 15. | I read over all the questions before beginning a test. | | | | | |
| 16. | I estimate how much time I can spend on each question before I begin. | | | | | |
| 17. | I underline or circle key words in questions. | | | | | |
| 18. | I go back and check all of my answers before I turn in my test. | | | | | |
| 19. | I only change answers if I am ***absolutely certain*** that my first answer was wrong. | | | | | |
| 20. | I begin by answering the easiest questions and questions that carry the most points first. | | | | | |
| 21. | I have specific strategies to use when I have to guess. | | | | | |
| 22. | I know how to quickly and clearly construct an essay question. | | | | | |

SCORING

| Add the totals for each response category and record that total. | Never = 1 Total | Infrequently = 2 Total | Usually = 3 Total | Frequently = 4 Total | Always = 5 Total | Total Overall Score |
|---|---|---|---|---|---|---|
| | | | | | | |

Test taking efficiency score:

22-44 Need to make major changes in your test taking strategies.
45-66 Some changes would likely increase future test scores.
67-88 Only a few or minor changes are needed to earn higher grades on tests.
89-110 Your have very good test taking strategies.

Please answer the following questions:

What changes do you see that you need to make?

What are your most productive test taking strategies so far?

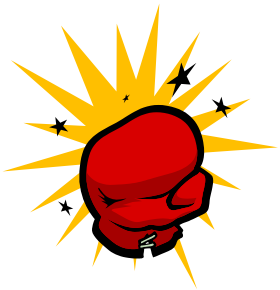
What are your least productive test taking strategies?

If you would like to refine the strategies on taking tests, contact the Student Academic Resource Center at 407-823-5130 for an appointment to meet with a learning skills specialist.

University of Central Florida

**Student Academic Resource Center**

***"Success Starts at SARC"***



# POWer Studying

**POW is going to stand for 3 key elements related to surviving exams**

- being **Prepared**
- being **Organized**
- having a **Willingness to Succeed**

**PREPARATION - Preparation Time vs. Study Time**:

**Proactive preparation is the key to effective studying.**

- The night before a test, **you should not** be organizing your class notes, recopying your class notes, reading chapters in the textbook for the first time, creating study guides, trying to determine what is going to be on the test, and worrying about the impact of the test on your overall grade.
- What your focus **should be** the night before a test are one of two things: one, working on final comprehension of the course material and two, developing creative memory techniques which will enhance your ability to remember the course material.
- College students indicate they feel the need to study 5 to 8 hours to all night for an exam. The actual amount of time needed to study for any exam, including a final exams, is about 2 ½ - 3 hours.
- Again, if you have prepared properly to study, 2 – 3 hours is actually plenty of time for final comprehension and memorization of course material.

**What is on the test?** – Effective Communication with Your Professors

Schedule a one-on-one appointment with each of your professors and ask the following questions:

- "If you had to give me a letter grade right now, what would it be?" You are inquiring about your professor's grading scale and how he/she perceives your work to date.
- "What number grade will I need to achieve on the final exam to raise my current letter grade one letter grade higher?" You are determining your goal for the exam and your study plan for the exam.
- Prepare ahead of time a list of course concepts which could be potential test questions. Ask your professor, "If I study these concepts, will I be on the right track towards success on the next test?" You are discussing your plan of action for studying for this exam. Ask your professor's opinion about your strategy.
- Last question to ask, "What will be the structure of exam?" You are determining the time frame you will have for each section and each question. Determine if the exam is multiple choice, true/false, short answer or essay and ask what is the point value of each section and question.

**Things to do while you are studying**

- Find a place where you can talk out loud
- Have all necessary materials present in front of you to assist you in your studies (notes, textbook, scrap paper, highlighters, pens, pencils, index cards, something to play with, food, etc)
- Be active with your studying – use color pens, write things down, use index cards, talk out loud
- Concentrate on memorization strategies – challenge your memory from the first look to the last glance

- It is OK to feel like daydreaming. Get up and move around but don't surround yourself with temptations which could take you away from your studies for long periods of time (TV, phone, friends, and eating places).
- Keep your goal sheet in front of you
- Word to the wise. Do not involve yourself in a study group the night before the exam. You should be by yourself with your study materials and your own thoughts.

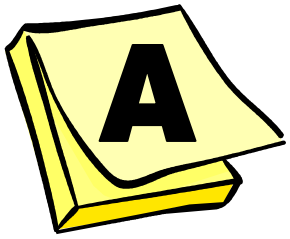
## ORGANIZATION – Writing It All Down

- Have one folder with all materials necessary for each final exam.
- The more you write down the less you have to remember. This leaves more memory room in your brain for course material.
- Get away from referring to the look of your notes in your notebook. They are too familiar. Recreate material you need for the final on note cards, study sheets, etc. Use color and mnemonic devices to increase memory.
- When you are studying, the only things you need are your *highlighted chapter notes, revised class notes, study sheet of things to remember, scrap paper, and a pen.*

## WILLINGNESS – A Will to Succeed

### Set a Goal & Write It Down

- Many college students stress out regarding the impact a particular grade will have on their overall grade in the course.
- Determine what number grade is needed to improve your overall grade one letter grade and what number grade would cause your overall grade to go down a letter grade. As stated earlier, you should have this conversation with the person who will be recording your final grade, your professor!
- On a large sheet of paper, write down the letter grade you want to receive and/or the number grade needed on the exam for ultimate success in your course. Post this sheet of paper in room where you can see it 24 hours a day. Create a small version of this goal sheet to have in front of you when you study.


Studying is the process of making the material in your courses yours; studying is the process of learning. Make the effort to internalize this knowledge, if you don't it remains "out there" and not your possession. Prepare, Organize, and have Willingness to Succeed - studying becomes easy as a breeze not hard like a war!


| | |
|---|---|
| Office Location | 113, 114, 115 Howard Phillips Hall |
| Office Phone | 407-823-5130 |
| Office Fax | 407-823-2051 |
| Office Email | sarc@mail.ucf.edu |
| Office Web-Site | http://www.sarc.sdes.ucf.edu |
| Office Hours: | Monday-Friday 8:00 am – 5:00 pm |

# 5 Types of Studying

Many learners don't realize that there are ***5 Types of Studying*** necessary for academic success. As a result, learners do not use their full potential to learn and earn higher grades. Using the 5 types has the advantage of keeping studying time to a minimum to earn whatever grades for which one chooses to work. The ***5 Types of Studying*** are most effective when used regularly from the day of the 1st assignment or lecture in each class.

If lack of knowledge about the subject matter has held your test and final course grades down, maybe it's because you haven't been using ***All 5 Types of Studying*** in your learning.

## 1. Studying to Gather Information

The purpose is to **formulate a complete and accurate set of textbook and lecture notes**. This requires a means to determine if notes are complete and accurate. Some ways to do this are:

a. **Identify the information to be learned** in classes and text books using the clues to main ideas and details that are given in lectures and textbooks.

b. **Organize, condense, and record** information in a format that promotes learning such as using notecards, the Cornell System, or outlines. Many other formats inhibit learning.

c. **Verify the completeness and accuracy of your notes**. Simply thinking, assuming, feeling, or believing notes are complete and accurate doesn't make them so.

## 2. Studying to Learn Information

The purpose is to **move information from short-term memory into long-term memory**. This requires a means for repeated recitation of material to be learned. Some ways to do this are:

a. **Make times in your schedule** to do repeated recitations of your notes.
b. **Look at a main idea with the details hidden from view**.
c. **Recite aloud**, as if lecturing a class, all the details you can remember, without looking.

d. **Look at the details to check** for accuracy and completeness of your recall.

e. **If your recitation was incorrect or incomplete**, read the details aloud to yourself and repeat steps a - d until you can recite the details correctly from memory. Once you can recite the details completely and accurately from memory, place that card in the "not yet learned" pile and move on to the next notecard. **If you recited completely and accurately** on the 1st try, put that card in the "I know this" pile and review these cards 2 or 3 times per week to prevent forgetting.

f. **Recite material in the "not yet learned" pile, at least, every other day** until details can be recalled completely and accurately on the 1st try.

How many total recitations needed to learn information varies with each learner. Some may need 3-4 times while others need 6-10. This is normal and has no correlation with intelligence.

## 3. Studying to Check for Learning

The purpose is to **identify what has and has not yet been learned before a test is taken when something can still be done about it.** This requires a means for self-testing. One way to do self-test is to recite 2 to 3 times weekly on your own or in a studying group. Go over material you "**believe**" has been learned as follows:

a. **Look only at a main point** and cover the details.

b. Recite ***aloud*** the relevant details without looking, as if lecturing a class.

c. Look at the details to **check for accuracy** and completeness of the recitation.

d. If all the details are **recited correctly on the 1st try**, you know immediately that the **material has been learned**.

e. If the details are **recited incorrectly or incompletely on the 1st try**, you know immediately that the **material has *not* been learned**. In this case, go to step "e" in ***Studying to Learn.***

## 4. Studying to Refresh

The purpose is to **prevent forgetting**. This requires a means **for regular recitation of material already learned**. Two ways to do this are:

1. **Make** regular times in your schedule to review material already learned. This combats the *Fading Effect*. Fading occurs when knowledge is not used or repeated often enough to prevent normal deterioration of the memory of that knowledge.
2. **Regularly review** material already learned at least 2 or 3 times per week individually or in a study group.

## 5. Studying to Improve Learning Skills

This is the most neglected and overlooked type of studying. The purpose is to **identify learning skills that worked** so they can be repeated and **identify learning skills that didn't work well** so that they can be modified or replaced. This requires analysis of returned tests. Unless this analysis is done, grade raising studying skills may remain a mystery and grade limiting studying skills will likely be repeated. Four ways to improve learning skills are:

1. **Use each quiz and test as feedback** on your the learning skills. Grades are feedback on how effective the learning skills were that you used for a particular quiz or test.

2. **Evaluate the effectiveness of your learning skills** by identifying: (1) answers that were totally or mostly correct and determine which learning skills were used to learn this information, (2) answers that were totally incorrect or where you lost points and determine which learning skills or lack of them led to a loss of points.

3. **Modify/replace learning skills that resulted in lost points**.

4. **Use the resources that improve learning skills** like:

- find an "A" learner and do what s/he does,
- consult learning skills books,
- attend learning skills classes and workshops,
- get advice from instructors and learning skills counselors.
-

## A Word About Cramming

Cramming as a primary means for learning rarely attains desired grades and **nearly guarantees performance below potential in college.**

**A few people are fast learners** and have the ability to cram and recall facts fairly well. This is so because some faster learners don't require an understanding of facts and ideas in order to remember them. Consequently, facts and ideas can be memorized quickly and repeated back in a short period of time. The drawback here is that fast learning often limits understanding and the ability to apply, analyze, synthesize, and evaluate ideas.

**Most people learn more slowly** than these faster learners. This can be an advantage because slower learners often require an understanding of facts or ideas in order to learn and remember them. Because understanding is essential for these slower learners, they are better able to apply, analyze, synthesize, and evaluate facts and ideas. Slower learners often out-perform faster learners when it comes to remembering information weeks, months, or years later.

# 10 Test Preparation Hints

1. **Prepare for exams from the first day assignments are made.**

2. **Recite notes aloud from memory.** As the number of recitations increase, information is moved from short-term memory toward long-term memory where it must go to be stored and recalled when needed. One way to recite is to look at a main idea and recite the details aloud without looking. Then, check the details to see how much was recalled correctly. Read aloud any incorrectly recited material and go through this process repeatedly until it is recited correctly from memory, then move on to the next idea.

3. **Review notes on a regular basis,** for example, every other day. This improves memory, reduces test anxiety, and allows time between reviews for the information to consolidate (gell) in the mind. Spacing out reviews also results in better recall at test time. It is ***normal*** to forget on tests when notes are reviewed only once or twice.

4. **Re-write notes after each lecture.** Condense main ideas and clarifying details into a more organized format that promotes and speeds learning. For example, turn main ideas into questions and details into answers. Put one question on the front of the notecard and its answer on the back. Do the same as you take notes from textbooks.

5. **Self-test using a study system that includes a step to reveal how much has been learned and not yet learned before a test is taken, when something can still be done about it.**

6. **Use the instructor's clues to ideas that are likely to appear on exams.** Did the instructor narrow down potential testable material? What clues were given about what may appear on the test? Were sample test questions or review sheets provided? How much time was devoted to each topic? What questions did the instructor ask in class? What did the instructor repeat?

7. **Check to see if old tests from previous semesters are available** for review. This will provide a clue on how test questions may be constructed and the *types* of information instructors believe is important for you to learn.

8. **Utilize study groups.** If there are no study groups, start them. Study groups provide opportunities to check the completeness and accuracy of notes with others and to quiz each other. Research shows that study group members typically earn higher grades than non-study group students.

9. **Use all 5 types of studying** to increase chances of academic success.

   **Type 1.** **<u>Studying to gather information.</u>** Its purpose is **to formulate complete and accurate sets of lecture and textbook notes**. This type of studying requires **a means for verifying if notes are complete and accurate**.
   Some ways to do this are to clear up "confusing" material with instructors, com-

pare you notes with an "A" student's, compare notes in a study group, and refine your ability to spot main ideas in textbooks and lectures.

**Type 2.** **Studying to learn.** Its purpose is to **move information from short-term memory** toward long-term memory. This requires **repeated recitation** of material **to be learned**. One way to do this is to read a main idea and recite aloud all the details you can recall, without looking. Then, check the details for accuracy. Do this as many times as it takes to recite all the details accurately from memory before moving on to the next main idea.

**Type 3.** **Studying to check for learning**. Its purpose is to reveal what has and has not yet been learned before a test is taken when something can still be done about it. This type of studying requires a system for self-testing to determine how well the material has been learned and what remains to be learned **before a test is taken.** One way to do this is to take the material you believe has been learned, read a main idea aloud and recite aloud all the details you can recall without looking, then check. The best time to discover that you haven't learned something is not during a test.

**Type 4.** **Studying to refresh.** Its purpose is to **prevent forgetting**. This type of studying requires **regular reviews** of material already learned. One way to do this is to have a calendar book and make time in your schedule to review the material you have learned.

**Type 5.** **Study to improve learning skills.** It has 2 purposes***: (1) identify which skills for learning worked, so they may be repeated,*** and ***(2) identity which skills did not work well, so they may be modified and not repeated***. This requires **analyses of returned tests and quizzes**. Unless this is done, grade- raising learning skills are more likely to remain a mystery and grade limiting learning skills are more likely to be repeated.

**3 steps for studying to improve learning skills when exams are returned are:**

**Step 1.** **Identify answers that were correct** and determine how you studied to get these answers correct.

**Step 2.** **Identify answers that were all or partially incorrect** and determine how you studied or didn't study that led to a loss of points.

**Step 3.** **Modify or replace learning skills that resulted in lost points**. To do this, use the resources to improve and refine your learning skills such as do what A students do, do what is suggested in a learning skills book, take a learning skills class, attend learning skills workshops, meet with learning skills counselors, visit with instructors, or utilize resources in your campus learning center.

**10. Cramming doesn't work** for most students because *it limits learning which in turn limits grades*. Start studying to gather information early. Spend ***most of your time*** studying to learn and studying to check for learning. Study to refresh every 2 or 3 days.

# Common Test Taking Errors

There are several errors that college students commonly make that lower test scores. Examine the list below to see which errors may be lowering your test scores. On the back of this page, see what "A" students do to avoid these errors.

1. Did not follow the directions
2. Didn't calculate how much time to spend on each question to have time to do all of them.
3. Did not read questions carefully.
4. Did not go back and check over answers.
5. Accidentally marked the wrong item or box.
6. Changed an answer from correct to incorrect after.
7. Remembered going over the material but could not recall it.
8. Did not understand a question and didn't get clarification from the instructor.
9. Wrote lots of words but didn't answer the question.
10. An answer was disorganized.
11. Hard writing was illegible.
12. Made careless errors.
13. Did not support points with evidence, facts, statistics, research or proof.
14. Did not know the subject matter well.

**Correct:**
**The number 1 test-taking technique is KNOWING THE MATERIAL WELL.**

## What can you do about each error?

1. **Did not follow the directions for the test.** Always read test directions before beginning to answer questions. Instructors may change directions from test to test and sometimes they include omitters. Omitters are directions that say something like "*only do the 1st five questions*" or "*only to the even numbered questions*".

2. **Didn't calculate how much time to spend on each question to have time to do all of them.** Divide the number of questions into the number of minutes you have to take the test. Be sure to allow more time for essay answers and problem solving.

3. **Did not read questions carefully enough.** Circle and underline key words in test questions and use them as a check to see if you answered all parts of the question. This also reduces the chances of you reading more into the question than is there.

4. **Did not go back and check over answers.** Always leave time toward the end of a test to read over answers to check for careless mistakes. Overall, students who do this earn higher grades.

5. **Accidentally marked the wrong item or box.** Ditto.

6. **Changed an answer from correct to incorrect after reconsideration.** Research shows that students who change test answers earn higher grades overall than students who don't change test answers. Do not change answers unless you are *positively certain* you have recorded the wrong answer. First impressions are more often correct than second guesses.

7. **Remembered going over the material but could not recall it.** This is a sure sign that you did not review the material enough times. Set up your notes to make repeated and frequent reviews fast and easy.

8. **Did not understand a question and didn't get clarification from the instructor.** I shouldn't have to tell you what to do about this one. Ask the instructor or test proctor for clarification. All they can do is clarify things for you or shoot you. Problem solved.

9. **Wrote lots of words but didn't answer the question.** Same solution as #3. But if you have to guess, write something as closely related to the question as you can and then pray a lot.

10. **An answer was disorganized.** This has a direct connection with how you studied the material. If notes or studying of them was disorganized, it is normal for test answers to be likewise.

11. **Handwriting was illegible.** Print.

12. ***Made careless errors.*** See the remedies for #3, #4 and #7.

13. **Did not support my points with evidence, facts, statistics, research, or proof.** You will answer test questions pretty much the way you practice learning the answers. If you review material before a test and do not include evidence, facts, statistics, research, or proof, are you surprised that a test answer will lack these important elements? You are normal.

14. Gee. I wonder what you can do about this? Take good lecture and textbook notes. Review these notes 3 to 4 times per week. Join a study group. Get tutored on unclear material. Ask your instructor questions. Answer the questions at the end of a chapter. Go to review and Supplemental Instruction sessions. Sound like work? So is making hamburgers if you flunk out of college. Which job will help you reach your goals the quickest? Learning is work but work that can pay off big!

# Clues to Writing Better Essay Answers

When taking essay tests, look for clues given in test questions or statements that direct how to select and compose a correct answer. These clues are called direction words.

# 4 Types of Direction words in Essay Questions

**1. Subject Words** **tell you which subject(s) you are to write about**? (circle them or put an SW above them). Examples of **Subject Words** are psychosis, Krebs Cycle, reaction, percent composition, mitosis.

*Sample test item:* List the 5 phases in ***SW*** **mitosis** and describe what happens in each phase?

2. **Aspect words** **narrow down what aspect of the subject(s) you are to write about** or they indicate what you are to find in solving problems (underline or put an NW above them). **Aspect Words** also tell you the quantity or quality your answer should be in for math, physics and chemistry problems. Examples of **Aspect Words** are techniques, traits, phases, grams, moles.

*Sample test item:* List the five ***AW*** **phases** SW in mitosis and describe what happens in each ***AW*** **phase**?

3. **Presentation words** **tell you how to present the subject(s)** you are writing about? (box them or put a PW above them). Examples of **Presentation Words** are describe, list, define, analyze, examples.

*Sample test item:* ***PW*** **List** AW the five phases SW in mitosis and ***PW*** **describe what happens** AW in each phase?

**4. Qualifying words** **limit the scope of your answer.** (star them or put a QW above them**).** Examples of **Qualifying Words** are all, six, only, 3, each.

*Sample test item:* PW ****QW*** List the **five** AW phases SW in mitosis and describe what happens PW in PW **each** PW phase? ****QW*** AW

## Follow Directions

Of equal importance to using **Directions Words** in taking a essay tests is to ***follow the directions***. One reason many learners lose points on essay tests is that they do not read test directions or choose not to follow them. After all the hard work a learner does, it is a shame when points are lost not because directions were not followed.

## Use A Simple Format for Organizating Essay Answer

One clear and easy to present an essay answer involves following these 2 easy steps:

**Step 1.** **In the first sentence, tell the reader what you are going to write about with a repeat of a portion of the question or statement.** For example:

**Test item:** What are 5 reasons for not disbanding the United Nations?
**1st Sentence:** ***The United Nations should not be disbanded for five reasons.***

**Step 2.** **Identify *each point* you are presenting.** For example: ***One reason the U. N. should not be disbanded is.....***

**1. What are 5 reasons for not disbanding the United Nations?**

**The United Nations should not be abandon for five reasons. One reason the U. N. should not be disbanded is .....
..... A second reason the United Nations should not be abandon is
..... A third reason is .....
..... Moreover, the U. N. should be kept together because
..... Finally, we should avoid disbanding the U. N.
.....**

Writing essay answers in this format may be somewhat monotonous but it's clear, precise, and uncreative. Many instructors prefer this style because they can see quickly if the facts they seek are included and presented clearly. It is unwise to make the grader painstakingly wade through a thick syrup of verbiage in search of important facts.

The smart writer of essay answers clearly and crisply presents exactly what questions ask or what statements require and avoids blurring answers with unnecessary information commonly referred to as "BS." "BS" suggests to many instructors that the learner does not *know* the answer and is gushing with words in hopes of getting something correct.

# Answering Essay Questions Made Easier

Instructors frequently remark that ***a major reason that students don't receive higher grades on essay exams is because they do not follow directions*** even when these directions are included in the question. These instructors add that many students don't seem to know how to recognize words in questions that give directions on how to construct an essay answer and what to include.

A list of important words in essay questions is given below to help students answer essay questions with the kinds of responses that instructors seek. These words are called **KEY WORDS**.

One suggestion many students have found helpful is to mark all the **KEY WORDS** in all test directions and questions before beginning to answers. This makes it easier to organize an answer, know what to say, and know when enough has been written. If there is ever doubt about the clarity of a test question, ask the professor for clarification ***before*** beginning your answer.

## KEY WORDS

**Analyze** Explain, **step by step** or **point by point** while writing. Pay attention to **who, what, where, when, why**, and **how** in the answer. Include **strengths, weaknesses, pros and cons, research for and against**.

**Compare** Stress **similarities** and **differences** between objects, concepts, or ideas. (For example: "Compare Operant and Classical Conditioning)

**Contrast** Emphasize the **dissimilarities, differences**, or **unique** and **distinguishing characteristics** in the response.

**Define** Clearly **state the meaning, list qualities, traits**, or **characteristics**.

**Describe** Include **traits, characteristics,** or **retell a story** including those facts that **summarize the essential features**.

**Discuss** Present **significant characteristics, pros and cons, pertinent research**, and the significance of each**. Develop the arguments for and against** or **analyze the advantages, disadvantages,** or **problems**.

**Evaluate** Emphasize **positive and negative aspects**. Include **opinions** and support these with some kind of **proof, information,** or **examples**. Normally, instructors don't like unsupported opinions from college students.

**Examples** **Use brief stories, analogies, relevant events, or similar instances** to support general statements and main ideas.

| | |
|---|---|
| **Explain** | Give **reasons** or **justifications** for something, or present **causes, rationalizations**, or **how or why** something occurred. |
| **Interpret** | Cover **existing understandings** of a topic. Paraphrase, translate, condense, simplify, and/or diagnose as you write. |
| **Justify** | Present **rationale, reasons** for conclusions, recommendations, or results. Use **proof, research, examples**, or **quotes** to support justifications. |
| **List** | Record topics in **numerical, developmental**, **or chronological order**. Many times a brief description or explanation is expected but the questions will usually request it if desired. If in doubt, ask your instructor. |
| **Outline** | Present your answer in terms of **major points followed by clarifying details** or facts. No elaboration is *usually* necessary. It is wise to find out if your instructors wishes for you to outline by listing only main and subordinate points in short numbered phrases or if they want you to use the narrative format with complete sentences and paragraphs. |
| **Prove** | Include **factual evidence, research, logic**, and/or **scientific proof** that substantiates a case, a specific position, or a set of hypotheses |
| **Relate** | Clearly point out **connections** or **relationships** between 2 or more ideas. |
| **Review** | **Mention important ideas, major points**, **and/or list topics** from lecture or the textbook. Sometimes review means critically evaluate and/or give your opinion. |
| **Summarize** | **List major ideas, concepts, and consequences** in a short paragraph or a sentence. Could also mean present a brief abstract of main ideas, compose a concise resume covering only the highlights and relevant details. Little elaboration is necessary. |
| **Trace** | Discuss **according to a pattern** such as chronological order, according to a definite sequence, or by presenting phases or stages in order. |

The 4 most important points to remember in answering essay questions are to:

1. Read Questions Carefully.
2. Mark All Key Words In Questions *Before* Answering.
3. Do What The Questions Ask Or What The Statements Say.
4. If Uncertain About A Question, Check With The Instructor *Before* Answering.

A helpful tip for taking exams in general is to look at the exam as an opportunity to succeed and not as an opportunity to fail. Being positive will help with recall whether there has been sufficient study or not. Negative attitudes will not only make vague material difficult to remember they will reduce chances of recalling ideas and facts that were learned.

A final point is that ***the number 1 technique*** **for taking any test is to be prepared and know the facts cold**. There is no substitute for knowing the material.

# Multiple Choice Test Tips

One way to improve scores on multiple choice exams is to do what "A" students do. Below are 9 tips for earning better scores from students who earn high grades. Keep in mind that the number ONE test-taking tip is to know your subject well.

1. **Evaluate each possible answer in relation to the question or statement** and **NOT** in relation to other answers unless choosing the best answer among several correct ones.

2. If the correct answer isn't obvious, **read the question along with each answer**. It's easier to spot a match this way.

3. **Analyze questions and code answers**. For example, mark obviously *incorrect* answers with a "**-**" or "**no**" and possibly *correct* answers with a "**+**" or "**poss**" and then choose among the "+" or "poss" options.

4. If the correct answer to a question is not known, code the question to be considered later (possibly with a large **?** in the margin) and **skip the question for now**. Look for clues to this answer in later questions and answers. Jot these clues in the margin to use when reconsidering skipped questions.

5. **Before turning in an exam, reread *each* question and answer**. Unless you are ***ABSOLUTELY CERTAIN*** an answer is wrong, ***DO NOT CHANGE IT***. First impressions are more often right than wrong.

6. If you have to guess, **avoid choosing options you never heard of** or **options with absolutes in them** such as always, never, only, none, ever, etc.

7. **Circle "Key Words**". "Key words" reveal the subject of a question and what to look for in an answer. Example - **Which is a false statement about the nucleolus?**

   The "Key Word" **false** tells you to look for a *wrong* answer while the word **nucleolus** tells you the subject to which the false statement relates.

8. Budget time for each question. **Divide the number of minutes available for taking an exam by the number of questions plus one**. This way you'll know approximately how much time to spend on each question and leave time to re-check answers. Allow more time for essay answers.

9. The number one test taking technique is to ***KNOW YOUR FACTS COLD***. There is no substitute for knowing your subject well when taking a test. All the test taking techniques in the world won't help much if you don't know your material.

# Overcoming Test Anxiety

Test anxiety in college students is a fairly common and ***never fatal***. In fact, a small amount of anxiety may be beneficial because it sharpens the senses and the mind. In large excess though, test anxiety may be overwhelming and cause discomforting physical symptoms.

The good news is that there are many strategies that students may use to combat test anxiety. Like tools, they don't work unless they are used and used properly.

## What is Test Anxiety?

Test anxiety, to a large degree, is related to test preparation. The more certain you are that you ***know*** the material the less you experience test anxiety. ***Beware……,*** there is a huge difference between ***thinking*** you know material and knowing that you know the material that could appear on a test. You can use the list of techniques below before and during a test to combat test anxiety.

Anxiety often stems from a fear of losing control or of being out of control. With test anxiety, there is a direct correlation between knowing and understanding the material that could appear on an exam and resulting anxiety. As knowledge and understanding increase, test anxiety commonly decreases.

## Test Preparation: Before a Test

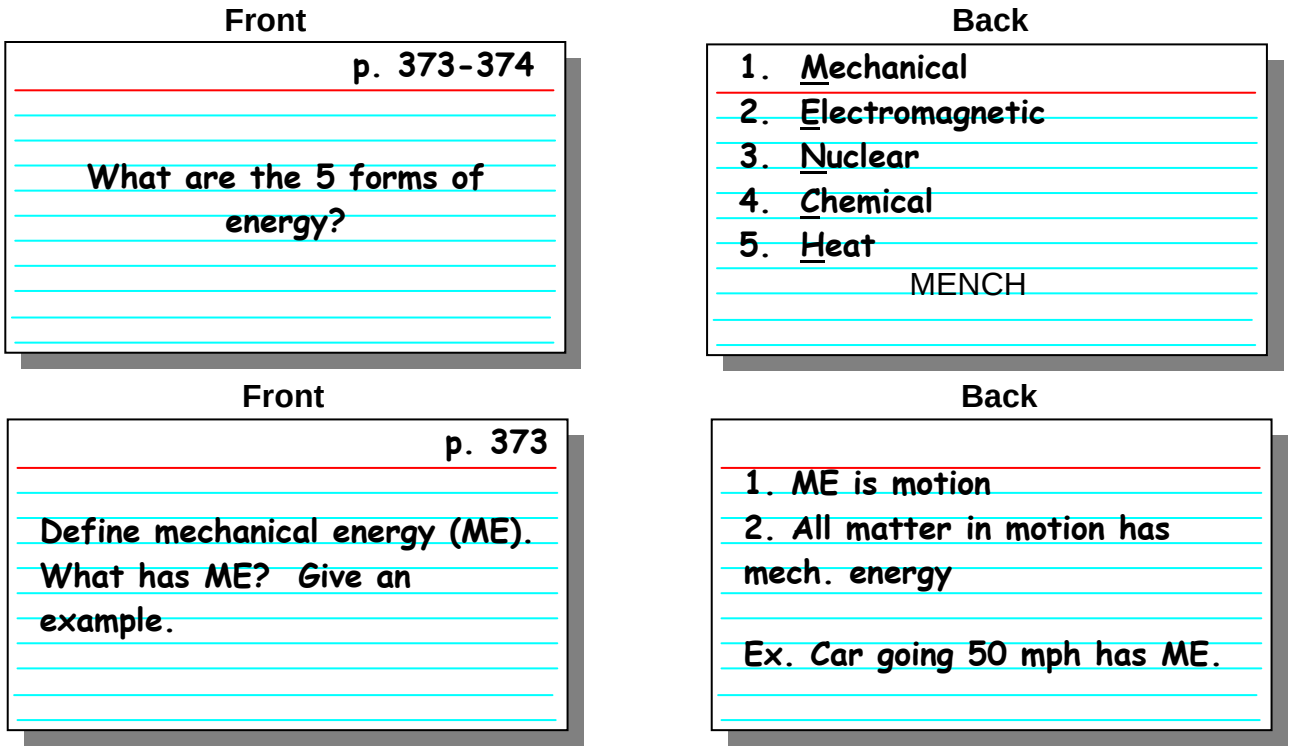
1. ***Set up and follow a study schedule*** and begin studying from the day of the 1st assignment. A large part of the anxiety experienced by students is due to the fact that they don't make enough time to prepare for a test. Once a realistic schedule is set up for study time, some of this anxiety is relieved. You can bring back the anxiety with a *thud* if you don't stick to your schedule.

2. ***Self-test to discover what has and has not yet been learned before taking a test when something can still be done about it***. One way to self-test is to make questions from main ideas and answers from the details and put them on notecards. Do this for lecture and text notes. Include 1 main idea and its details per notecard.

   Rehearse the very activity you will have to do when taking a test. Look at a question and practice recalling the answer aloud, from memory, or write it down. Next, turn the card over and check for

accuracy and completeness. Do this for each question as many times as it takes for you to recall answers completely, accurately and correctly from memory, then move on to the next notecard.

Students become better at that which they practice. If students practice ***not*** looking at questions and recalling answers from memory, they get better at that, also.




Include problems that the instructor worked in class and concepts the instructor covered on notecards. In textbooks, use bold print, the chapter outline, objectives, or end-of-chapter questions for making possible test questions on notecards.

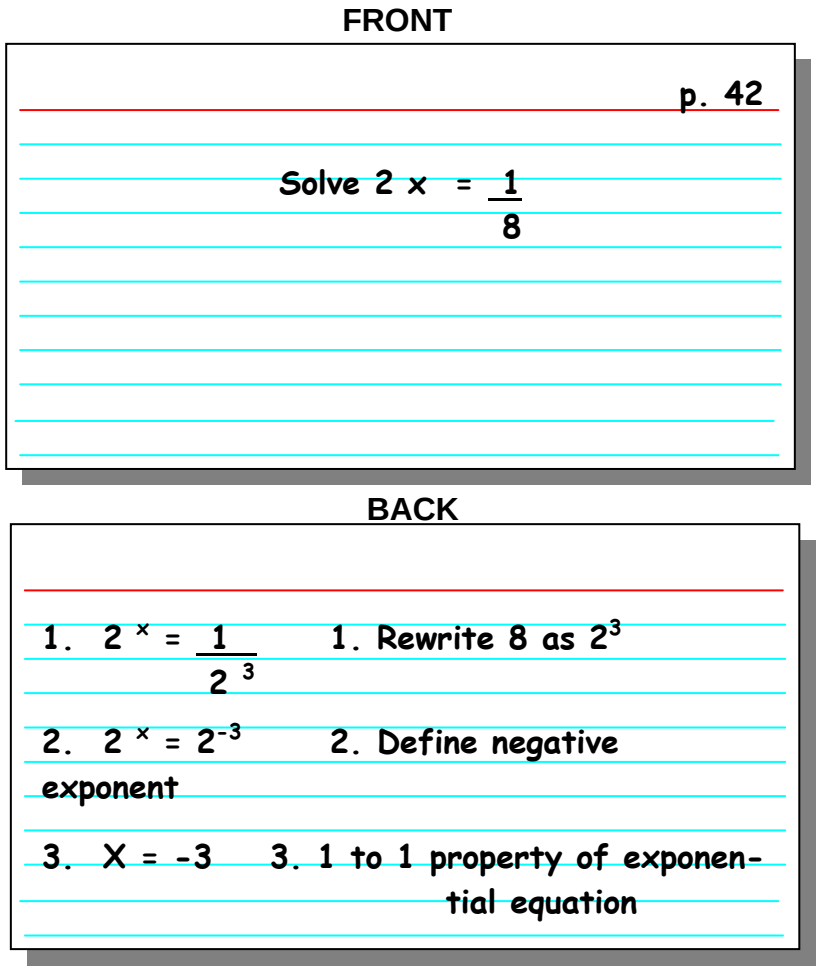
3. ***Ask the instructor*** what *types* of questions will be on an exam; (multiple-choice, true-false, essay, etc.) and how many questions there might be. If a review sheet or sample test is provided by the instructor, rely on that more than anything else in preparing for an exam. Exams from previous semesters are also excellent tools for exam preparation. They can tell you how questions may be formatted and the depth of details you need to learn.

4. **Rework all of the problems** assigned for homework and any others that apply to the material. The more problems you work *and the more often you work them*, the more skill and confidence you acquire.

   Write out all the steps for solving each type of problem in math, chemistry, and physics; *do not do this work in your head and assume you know the solution*. This puts you at a distinct psychological disadvantage when you take an exam that only serves to increase your stress factor. Set up a system where you ***know for sure*** that you ***know*** the steps for solving each type of problem that could appear on an exam.

   One *easy way* to do this is to use notecards. Place a problem on 1 side of a notecard and the solution, step-by-step, on the other. Each day, practice solving the problems. For example, look at a problem, and do the solution before turning the card over and checking. Separate the notecards into 2 piles: One pile for the solutions you got correct and one pile where you still make mistakes or don't

remember the solution. It is a good idea to practice daily notecards in the 'I don't know this, yet" pile. Go over the ones you know every 3 or 4 days to prevent forgetting. This will also reduce careless mistakes, allow you to finish the test faster, bolster your confidence, and combat text anxiety.




5. ***Do not cram***. In most cases, this leads only to confusion of concepts and raises anxiety. Eight to 10 hours of study is much more beneficial when it is spread out over a week or even several days rather than doing it in one sitting. It is a known fact that the brain needs time to absorb new material. So take frequent breaks and schedule your study time evenly over many days or weeks.

6. ***Eat well and sensibly***. Your body is an engine that must have proper vitamins and minerals to think, concentrate, learn, and recall properly. To emphasize the effect of nutrition on learning, we can use an analogy. Ask a mechanic what would happen if you filled your car's gas tank with Kool-Aid instead of gas and then you tried to drive away.

7. ***Get a reasonable amount of nighttime sleep***. Too little sleep negatively affects learning and recall.

# Mental Preparation

1. ***Choose a positive attitude***. Anytime fears come rushing in, regularly visualize yourself taking the exam, doing well, and seeing an A on the paper. Make a list of affirmations - i.e., "I'm doing well in math," "I can learn this material," "I enjoy math, "etc. Even if you do not initially believe what you are saying to yourself, it sends a message to your subconscious that, in turn, affects your belief system. It is your belief system that controls your behavior.

2. ***If you start to panic……..*** Go with the fear and imagine the worst. Go through the whole scenario for not passing the test, failing the course, dropping out of school not getting a job, and ending up pushing a shopping cart down Skid Row. That will help you get your fears in perspective. Practice deep breathing and visualize the opposite such as getting an A on the test, passing the course, getting your degree, etc. Remember that *no test is the difference between life and death or successful and unsuccessful people*. This exam cannot lead to mass destruction of the western world.

# On Test Day

1. **Arrive at the exam room at least 10 minutes early**. Get settled, relaxed and focus on deep breathing. Don't think about the material.

2. **Read the whole exam over before beginning** and figure out how much time you need to allot for each problem. If you spend more than your allotted time on one problem, leave it and go on. If there is time at the end, you can always go back.

3. **Visualize yourself at home** or at the library doing your homework. This will help you create a more relaxed atmosphere, thus allowing that part of your brain needed for complex thinking to function.

# Taking the Test

1. **Do all the problems and questions that you are totally sure of first**. This will increase your confidence level and start the information flowing. A result is often encouragement to try those problems you are not so sure of.

2. **Always go with your first instincts** in solving a problem or writing an answer. Don't second-guess yourself unless you are ***absolutely certain*** you have the wrong answer. If in doubt, leave it. Have confidence in your preparation and ability to do well.

3. **Answer the questions and problems with the *most points* first**. Do problems and questions with fewer points per item later.

4. **Work at a reasonable pace and work carefully**. Divide the time allotted for the test by the number of problems. This will give you a rough estimate of how much time you should spend on each answer.

5. **Think positively.** Tell yourself over and over that “you can do it, that you have studied, that you are smart.“ Remember positive comments from teachers and friends. At the very least think, "*I am doing the best I can do and that is all I can do*."

6. **Focus** on breathing deeply and regularly.

7. **If your mind begins racing or you start to panic**, say to yourself, "***Stop***!" This can reduce or stop the racing. Breathe deeply. Visualize yourself in a calm peaceful place like a summer meadow or a forest or by a stream keep on breathing deeply. Take a *few minutes* to do this with your eyes closed. Then tell yourself you can only do your best and that is all you can do. Then go back to the test knowing you can only do what you can do and no more.

If test anxiety persists in spite of your efforts to control it, see a counselor in your college counseling center. They help students with test anxiety all the time.

# Use your Brain to Cut Stress

Here is what the experts say about relieving stress in general. To begin, you need to understand which brain hemisphere is stressed.

**If you feel depressed or emotionally overwrought, your stress is in the right hemisphere--the creative, emotional, holistic side**. What to do: Switch to your matter-of-fact left hemisphere by doing math, writing facts, or organizing something. The emotional right brain will calm down.

**If you feel time-stressed and overburdened, the left hemisphere is involved.** Switch to your right brain by singing, playing a sport, or doing something creative.

## *Section 10: Vocabulary*

*Why Develop Vocabulary in College*

*Understanding Roots*

*Understanding Prefixes*

*Understanding Suffixes*

*Jargon and Abbreviations*

*Classroom Etiquette*

# Why develop Vocabulary

In Plato's Dialogs we read: "What is greater than the word that persuades judges in courts, or senators in council, or citizens of the assembly, or at any other political meeting? If you have the power of uttering this word, you will have the physician your slave, and the trainer your slave, and the money-maker of whom you talk will be found to gather treasures, not for himself, but for you who are able to speak and to persuade the multitude."

What is greater than the word?

No matter what field a person goes into, if he/she commands the word, .... has a good fluent grasp of the language and can speak it well or write it well, the odds are about 90 to 1 that person will do quite well all the years of his/her life.

That's one of the reasons why the study of language is the most important subject a person can undertake. No matter what field he/she may ultimately branch off into, medicine, law, engineering, business, agriculture, letters, government, the clergy, the military, labor, it doesn't really make any difference; a good understanding of the ability to use the language is, as Plato knew, of incalculable benefit to a man or woman.

I've noticed that students tend to hate to study English. That's a pity. And it's also completely unnecessary. The study of English can be an interesting, exciting and enormously rewarding experience. It's the largest, most flexible, most interesting, and most widely used language on earth. It contains in excess of 6,000,000 words and can be a fascinating lifetime study. One studies English for the same reason a person studies anything else, golf, for example, or medicine, or physics .... so that one may learn more about it and become proficient in its use. We don't undertake the study of language so that we can learn a lot of big words, or so that we can impress or confuse others. In fact, the proper use of the language in communicating with others is to use words that are quickly and easily understood; the right words for the right things or situations, or events, or conditions.

There is a word in English for everything or anything you can think of. A book could be written about any word in the language and many have been written about such words as love, war, hatred, greed, jealousy, ignorance, and death. That's because words are much more than words: they're concepts. One word can cover an entire field of human emotion or enterprise...

....we take words for granted, but we shouldn't. We should constantly be aware of them. I must dive into my dictionary 20 or so times a day to find the right meaning of a word, or the right word for the meaning I'm trying to express.

*If you have the power of the word, you can have anything else your heart desires. And the power of the word is available to anyone. It can be studied for nothing.*

# Understanding Roots

| Root | Meaning | Example | Definition |
|---|---|---|---|
| -ag, act | act, drive | reactuate | bring to action again |
| -ann, enn | year | biennial | twice per year |
| -cap, capit, cip | head | decapitate | remove one's head |
| -ce(e)d, ces(s) | go, move, yield | concession | yield to |
| -cap, capt, cept | seize, take | perception | seize understanding |
| -claus, clos | shut, close | foreclosure | to close on |
| -cur(r), curs | to run | precursor | runs, comes before |
| -dic, dict | say, tell | contradiction | to say against |
| -duc, duct | take, lead, draw | conducive | leading to |
| -fac, fect, fic | to make, to do | effective | to make happen |
| -fer | bear, carry | transferred | carry across |
| -fin | end, limit | finale | concluding melody |
| -fort(i) | strong | fortify | strengthen |
| -fund, fus | to pour | transfuse | pour or pass across |
| -jac(t), ject | throw, cast | projectile | object cast forward |
| -man, manu | hand | manage | handle |
| -pel, puls | to drive | propulsion | to drive forward |
| -pend, pens | hang, weigh | impending | hanging over |
| -port, porta | carry | transportation | carry across |
| -temp, tempor | time | contemporary | of the time |
| -tend, tent, ten | stretch, strain | contentious | argumentative |
| -vert, vers | turn | avert | to turn aside, avoid |
| -viv, vid, vic | to live | revival | to live again, make new |

Expand your vocabulary by memorizing one root per day. Make a conscious attempt to use words with this root several times during that day.

# Understanding Prefixes

| Prefix | Meaning | Example | Definition |
|---|---|---|---|
| a- | not | amoral | not moral |
| ab- | away from | abduct | take away from |
| ad- | to, toward | advance | move toward |
| ambi- | both | ambidextrous | good with both hands |
| amor- | love | amorous | loving |
| amphi- | both | amphibian | live on land and sea |
| annu- | year | annually | yearly |
| ante- | before | antedate | date before |
| anti- | against | antifreeze | against freezing |
| anthro- | human being | anthropology | study of humans |
| aqua- | water | aquarium | water tank |
| arch- | chief | archbishop | chief bishop |
| astro- | star | astronaut | star traveler |
| audio- | sound/hearing | audio tape | tape of sound |
| auto- | self | autocrat | rule by ones self |
| bene- | well, good | benefactor | receiver of good |
| biblio- | book | bibliophile | book lover |
| bio- | life | biology | study of life |
| cardio- | heart | cardiac | related to heart |
| centi- | hundred | centimeter | 100th of a meter |
| circum- | around | circumvent | get around (pass) |
| co-, con-, com- | together | co-author | author together |
| chron- | time | chronological | in order by time |
| de- | down, away | decline | sink, waste away |
| demos- | people | democracy | state of the people |
| contra- | against | contradict | speak against |
| chromo- | color | chromatic | relates to color |
| derma- | skin | epidermis | outer skin |
| dia- | through | diameter | through middle |
| dis- | not, apart | dislike | not like |
| ego- | self | egocentric | self-centered |
| e, ex- | out, from, formerly | exclude<br>ex-wife | keep out<br>former wife |
| extra- | outside, beyond | extramarital | outside marriage |
| geo- | earth | geography | study of the earth |
| graph- | write | biography | writing on one's life |
| gress- | walk, go | regress | walk over again |
| hetero- | different | heterosexual | different sexes |
| heir- | order by rank | hierarchy | ranking by authority |
| homo- | same | homosexual | same sex |
| hydra, hydro- | water | hydrant | water outlet |
| hyper- | excessive | hyperactive | excessively active |
| hypo- | less, under | hypodermal | under the skin |
| in, il, un- | not | illegal | not legal |
| inter- | between, among | interstate | between states |
| intra- | within | intrastate | within the state |

| Prefix | Meaning | Example | Definition |
|---|---|---|---|
| junct- | join | junction | point of meeting |
| mal- | bad | malpractice | bad practice |
| mania- | craze | pyromania | fire craze |
| mega- | million, large | megatons | million tons |
| meter, metry- | measure | thermometer | heat measure |
| micro- | small | microdots | small dots |
| mis- | wrong | mistake | error |
| mit, miss- | send | transmit | send across |
| mono- | one | monoplane | one winged plane |
| mort- | death | mortician | one dealing with death |
| multi- | many | multistage | many stages |
| neo- | new | Neo-Nazi | new nazi |
| non- | not | non-racial | non racial |
| ology- | study of | biology | study of life |
| ortho- | straight | orthodox | straight, right view |
| pan- | all, across | Pan-American | across America |
| path- | feelings | pathology | study of emotions |
| ped- | foot | pedestrian | going on foot |
| phobia- | fear | hydrophobia | fear of water |
| phon- | sound | phonograph | sound writer |
| photo- | light | photograph | light writer (picture) |
| polis- | city | Indianapolis | Indian city |
| poly- | many | polypeptide | many peptides |
| port- | carry | transport | carry across |
| post- | after | post-war | after the war |
| pre- | before | pre-dated | dated before |
| pro- | in favor of | pro-choice | favoring choice |
| psych- | mind | psychology | study of the mind |
| pseudo- | false | pseudonym | false name |
| pyre- | fire | pyrometer | heat measuring device |
| retro- | backward | retro-rocket | backward firing rocket |
| script- | write | scriptures | writings |
| scope- | watch, look at | telescope | look at afar device |
| sub- | under | submarine | under water |
| super- | over, better | superwoman | better woman |
| sym- | with, together | symphony | sound together |
| tele- | far | teleport | carry far |
| therm- | heat | thermometer | heat meter |
| theo- | God | theology | study of God |
| tract- | draw | detract | draw away |
| trans- | across | transmit | send across |
| ultra- | excessive | ultrafine | very fine |
| un- | not | unhappy | not happy |
| under- | below | undershirt | shirt worn beneath |
| vis, vid- | see | video | to see |
| zo- | animal | zoology | study of animals |

Expand your vocabulary by memorizing one prefix per day. Make a conscious attempt to use words with this prefix several times during that day.

# Understanding Suffixes

| Suffix | Meaning | Example | Definition |
|---|---|---|---|
| -able, ible | able, suitable | visible | able to be seen |
| -acy | quality, state | democracy | state of the people |
| -age | state, place | breakage | state of breaking |
| -al | pertain to | rental | pertaining to rent |
| -ance, ence | quality, state | attendance | quality of attending |
| -ant | quality/person | servant | person who serves |
| -arium, orium | place for | auditorium | place for sound |
| -ary | pertain to | pulmonary | pertaining to lungs |
| -ate | cause to be | activate | cause to be active |
| -ation, ition | action/state | discoloration | state of the color |
| -dom | state of being | freedom | state of being free |
| -er | perform | action talker | one who performs talk |
| -esque | in like manner | picturesque | like a picture |
| -ess | female | lioness | female lion |
| -ferous | bearing, full | conifer | bearing cones |
| -ful | abounding in | colorful | abounding in color |
| -hood | state, quality | brotherhood | brotherly state |
| -ic | pertain to | acidic | pertain to acid |
| -ify, fy | make, cause | magnify | make larger |
| -ile | similar to | juvenile | youth like |
| -ish | like, inclined | childish | child like |
| -ism | doctrine of | conservatism | conservative doctrine |
| -itis | inflammation | appendicitis | inflamed appendix |
| -ive | have nature of | destructive | has a distorting nature |
| -ize | make, practice | memorize | practice remembering |
| -ism | doctrine of | conservatism | conservative doctrine |
| -less | without | pitiless | without pity |
| -let | diminutive | piglet | small, young pig |
| -ling | diminutive | duckling | small, young duck |
| -ment | quality, state | attainment | quality of attaining |
| -mony | condition of | testimony | condition of testament |
| -ness | state of being | happiness | state of being happy |
| -or | person, thing | generator | thing that generates |
| -ous, ose | full of | porous | full of pores |
| -ory | tend to be | illusory | tend toward illusion |
| -osis | condition, state of | hypnosis | state of trance |
| | | psychosis | condition of the mind |
| -ster | one who | gangster | one of a gang |
| -tude | quality/degree | altitude | degree of height |

# Email Netiquette – How to Communicate Effectively with College Professors

*"It only takes 4 seconds to make an impression.*
*Be remembered for your style of communication not your username."*

College students need to make a good impression to their professors in the classroom, when completing homework assignments, in presenting class projects, and performing on exams. Impressions are also being formed by professors when receiving an e-mail message from a student in their class. College students must remember this is not your high school friend from home you are sending a message to; it is the person who will be recording a final grade at the end of the semester. Excellent grammar and sentence structure, appropriate word choice, and sensible organization of one's e-mail must be taken into consideration each and every time prior to hitting the send button.

Suggestions for sending a professional e-mail that will be read and responded to:

## Appropriate Username

- Creativity can and should be appreciated but what if one of your professors took attendance by reciting usernames and you had to raise your hand in front of other students in the class. Would you not acknowledge your presence in class and take the absence or could you say with pride "here".
- Would you feel comfortable saying your username out loud in front of your mother, father, grandmother, etc. without being embarrassed or having a sense of shamefulness?
- Don't be remembered for your username - be remembered for the message you sent.
- Example - initials jlw@ or something unique but tasteful like ucfgrad20010@

## Subject Line - First and Last Name plus Course Name

- Identify yourself as a student in your professor's class as oppose to a list serve response, fellow professors, or a UCF announcement. Example - Jake Allison - SLS 1501
- Professors who teach 4 classes, serve on committees, and who conduct research receive an average of 60 emails each day.

## Greetings/Acknowledgements - Start the E-mail with a Sense of Respect

- Review course syllabus to determine prefix for professor's name. If their name is given on the syllabus as Dan Jones and you unable to determine what prefix to use, to be safe, use Dr. Jones.
- No matter how easy going you might perceive your professor to be, never start a message with "Hey teach! What's up?"
- A more appropriate start to an e-mail message could be something as simple but meaningful as "Hope your day is going well. Great class on Monday."

## The Message Itself – Be Specific and Present it in an Organized Manner

- Get to the point, the purpose of your e-mail. Attempt to avoid long stories and presenting of scenarios or situations you find need paragraphs to explain. Sometimes it is better to talk to your professor in person then via e-mail.
- Example "I need to clarify an aspect of the assignment due next week. Would you prefer the paper double spaced or single spaced?"
- If you must turn in a homework assignment via an actual e-mail message, present material in an organized manner using spacing and breaks if necessary. You want your homework to be organized and presented in a visually pleasing way for easy of reading.

## Concluding the Message - End with Appreciation

- Examples "Thank you for your time and I look forward to hearing from you soon." or "I appreciate you taking the time to consider my request."
- Avoid using the latest trends in signing off – LOL, TTFN, Peace, etc. Just thank you will work every time.
- Finally, rewrite both first and last name, the course name and schedule such as, Jake Allison, SLS 1501, Monday & Wednesday 11:00 am – 12:15 pm.

*Final Two Suggestions: Read the Message Out Loud & Hit Spell Check before Sending*

| WORD | DEFINITION |
|---|---|
| **Addendum (pl. addenda)** | Any short piece of material added to a text or other written work, usually after publication. |
| **Appendix (pl. appendices)** | Additional information, the detail of which is not essential to answer the question, appended (added) after the end of an assignment. The appendix may be in text, tables, graphs or any other format and is not part of any word count. Appendices are often marked A, B, C etc or numbered. |
| **Assignment** | An 'umbrella' term used to mean any piece of work a student is required to do as part of his/her course of study. This may take the form of an essay, report, case study, experiment, presentation or any other. Assignments usually count towards the final mark of a course of study, though not always. |
| **Bibliography** | A list of all the sources of information a student has cited in the text of his/her work, together with all other sources of information used but not necessarily cited or referred to in any other way and which the student has read or part read. The bibliography appears at the end of a piece of a work and is arranged in alphabetical order by author surname. See also: **List of references** and **References.** |
| **Case study** | Describes and investigates a situation (for example, a patient being treated in hospital), analyses that situation in the light of relevant theories and literature, identifies any problems, suggests possible solutions and/or makes recommendations. |
| **Citation** | American terminology for **quotation (q.v.)** |
| **Compensatable fail** | If the mark for an assignment falls just below that required for a pass, the student may ask for the work to be 'compensated' and awarded a pass nevertheless. Thus, for example, if the pass mark is 40, any mark between 35 and 39 can be regarded as a compensatable fail. However, this does not apply in all cases. Students have a right to ask for 'compensation' but *not* an automatic right to be awarded this. Full details can be found in the University of Hull Online Student Handbook (available on: http://student.hull.ac.uk/handbook |
| **Condonement** | A **neologism** meaning, in the context of the award of marks or grades at honours or final year level only, the disregarding of up to 20 credits by an **examination board** so that the degree may nevertheless be awarded. |
| **Copy editing** | The process of modifying a piece of text so that it conforms to a particular 'house style' or so that it contains (or does not as the case may be) information regarded as important by an editor. |
| **Course work** | A written **essay** and other work which is part of the ongoing study students do for their courses. Course work can also form part of the assessment for a course. |
| **Dissertation** | An extended piece of writing, usually on a topic chosen by a student and based on that student's own research. Undergraduate students are often asked to write a dissertation (usually between 10,000 and 20,000 words) in their final year, as are postgraduate students at Masters level (usually a minimum of 20,000 words). |
| **Empirical research** | Research which is based on trial, experiment and/or experience. From the Greek *en* = in and *peira* = a trial. |

| WORD | DEFINITION |
|---|---|
| **Erratum (pl. errata)** | A short item, often inserted in loose-leaf format in a printed work, correcting a factual or other error in the publication. |
| **Essay** | A piece of continuous writing on a specific topic. Traditionally, essays do not have sub-titles, though some departments may accept these; check if you are unsure. |
| **Examination board** | A board of examiners, comprising members of staff from the relevant awarding department, which meets at the conclusion of a module or other course of study to decide which candidates/students should be passed or failed and at what level, if any. There is usually an internal board followed by an external board which has the addition of one or more **external examiners.** |
| **External examiner** | A member of staff, usually very experienced, from a higher education institution who visits another institution for a number of days to verify that the correct standards are being applied for the award of qualifications in a particular course or programme. External examiners, who may be one or more in number depending on the size of the department visited, are usually re-appointed on a three- or four-year rotation system. It is an essential moderation process for the country as a whole in order to maintain academic standards. |
| **Field trip** | Study which is an integral part of a **module,** but which is undertaken at a location away from the University campus so that students can study places or phenomena in their natural setting. Geography students, for example, go on field trips to study the natural and man-made landscape. |
| **Footnote** | Any form of additional information, not regarded as essential in the text, usually in much smaller font, inserted at the foot of the same page. The footnotes are usually numbered in rising numerical order, either page by page or consecutively throughout the work. This can easily be done using the 'Insert, Reference, Footnote' commands in Word. References may also be made by way of footnotes (see **MHRA & Vancouver referencing systems).** |
| **Formative assessment** | An assessment of work which aims to evaluate and give guidance for improvement or further work. In contrast to **summative assessment,** therefore, its purpose is positive, supportive and **pedagogic,** rather than uniquely judgemental or final. |
| **Group work** | A task, presentation or project undertaken by a group of students, rather than by an individual student. |
| **'Harvard' referencing system** | An 'author/date' referencing system, recommended by many departments in this university and a system in common use today. Full details with examples of in-text and list references can be found at www.hull.ac.uk/lib/infoskills/collect.html |
| **Impact factor** | A method often used in scientific work to indicate the popularity and quality of authors or articles in **journals** based on the number of times these are cited in other publications. |
| **Independent learning** | Taking responsibility for your own study and learning, instead of others telling you exactly what to do and when to do it. |

| WORD | DEFINITION |
|---|---|
| **Intercalation** | The interruption of a course of study for a term, semester, year (or exceptionally longer), by agreement with the department of the institution concerned, so as to continue study at a later date. |
| **Journal** | The original meaning of the word, 'daily' (from the French *jour* = day) has been altered to mean any academic publication which appears at regular intervals (weekly, monthly, quarterly, annually …) Academic journals are always peer-reviewed in order to try and ensure quality of content. See also **Periodical.** |
| **Learning outcome** | What the student should know, understand or be able to do after completion of a piece of work or module. |
| **Learning style** | A unique collection of individual skills and preferences that determine how a person perceives, gathers and processes information. No learning style is necessarily better than any other, because everyone's style is different. |
| **Lecture** | A talk given by a lecturer to a large group of students. Lectures outline the main aspects of a subject and students are usually able to ask questions during or after the lecture. |
| **List of references** | A list of all the sources of information a student has referred to directly or indirectly in a piece of work. The list appears at the end of the work and is arranged alphabetically by author surname or numerically, depending on the reference system used. See also: **Bibliography** and **References.** |
| **Literature review** | A systematic survey and critical assessment of what has been written in a topic area. It may include printed, electronic, published or unpublished sources of information. |
| **Manuscript** | From the Latin *manu* = by hand and *scribere* = to write, a piece of work in written form (originally handwritten, now typed or word-processed) submitted for publication but before going into final print. |
| **MHRA referencing system** | Modern Humanities Research Association. This referencing system is often recommended by Humanities departments and commonly uses footnotes for this purpose. Full details can be found at http://mhra.org.uk/ |
| **MLA referencing system** | Modern Language Association of America (MLA). This system was devised for arts and humanities studies in the USA and is often recommended by English and Humanities departments here. It is similar to 'Harvard' but shows the year of publication only in the reference list at the end. There are other differences. See for more details: http://owl.english.purdue.edu/owl/resource/557/01/ |
| **Module** | A distinct part or unit of a course of study. |
| **Neologism** | A new word or phrase invented to describe a particular concept. (From the Greek, *neo* = new and *logos* = word.) |
| **Open learning** | A self-study method whereby learners use a variety of media in their own time, with or without guidance from an adviser, to study a particular subject or aspect thereof. |

| WORD | DEFINITION |
|---|---|
| **Oral** | A meeting attended by a student and a small number of lecturers, at which the student answers questions by word of mouth about a piece of work he/she has written or presented. In modern foreign languages, an oral is a class or examination focussing on spoken skills. At postgraduate or doctorate level for example, the student would be asked questions about his/her **dissertation** or **thesis.** See also **viva.** |
| **Pedagogy** | The art and principles of teaching (adj. pedagogic). |
| **Peer review** | All academic **journals** or **periodicals** of any merit are peer-reviewed. Before an article submitted by an author is accepted, the editor, if he or she thinks it could be included in a future edition, will send the **manuscript** to two or more known experts in the field for their comments on its quality. Upon receipt of these reports, the editor will then decide whether or not the submitted article will be published in his/her journal and report back to the author concerned. This is the process of peer review. |
| **Periodical** | Any form of **journal** containing articles by different authors on a particular subject area and of an academic nature, which is published periodically, e.g. every month, bi-monthly, quarterly. |
| **Plagiarism** | Using the work, ideas or words of others in your own work without acknowledging their source. In other words, fraud: passing off the ideas and/ or words and/or any intellectual creation of others as your own. Plagiarism can also be unintentional, and the most effective way to avoid it is to use a recognised referencing system and adopt a proper note-taking technique. |
| **Portfolio** | A collection of short pieces of work, which together make up a detailed study of a subject area or act as evidence of the development of a set of skills. |
| **Practical** | A 'hands on' session where the theories that are taught within modules are applied to real situations. Practical sessions usually require some preparation. |
| **Problem-based learning** | A method of teaching and learning, sometimes in groups, using imaginary but plausible scenarios through which, with guidance from a tutor, students acquire the knowledge and skills needed to try and resolve the problem posed. |
| **Proof-reading (abbrev. proofing)** | The detailed checking of a text for errors of punctuation, grammar and syntax. (The term 'proof' comes from the printing industry, referring to the first print from a negative or press, which is then 'proofed' before going into full print production.) |
| **Quotation** | A short extract of the words or any other material from a work published in print, electronically or via any other means. Quotations must be clearly recognisable as such, for example through the use of single or double quotation marks or italics. Always follow the guidelines provided by your department. |
| **References** | The details of sources of information which a student has used in a piece of work (for example, a book, website or **journal** article), in a set format laid down by the student's department. See also: **List of references** and **Bibliography.** N.B. Notwithstanding anything written in this glossary, you should *always* follow the guidance on referencing set out in your departmental handbook(s). |

| WORD | DEFINITION |
|---|---|
| **Referral** | After marking, an item of (course) work, or more usually a **dissertation** or **thesis,** may be referred if it is considered not to reach the required standard for a pass. The referral is usually returned with suggestions as to how the work might be improved in order for it to be passed. Referral is normally only allowed once for any given piece of work. |
| **Report** | A formal, structured piece of writing that usually presents the findings of some research or an information gathering process. |
| **Research proposal** | Students are usually asked to prepare a research proposal for their **dissertation** or project. The proposal explains what the student intends to do, how it will be done, and why it is important. |
| **Semester** | A period of the academic year, originating in American campuses, where Summer Schools are common. A semester lasts for about 10 weeks, plus two or more weeks of examinations. |
| **Seminar** | A discussion session on a topic with a lecturer and a small group of students (usually up to about twenty). Seminars often follow a **lecture** and go into more detail on the topic. Students are usually asked to prepare for a seminar, for example by doing some reading on the topic. |
| **Summative assessment** | A form of assessment which summarises a student's quality of learning on the conclusion of a module or course of study or part thereof, usually in the form of an examination, and for which a mark or grade is given. See also **formative assessment.** |
| **Supervisor** | A member of staff appointed to supervise an individual student's period of study, dissertation or thesis. The supervisor will arrange regular or occasional meetings with the student so as to give advice and guidance. |
| **Term** | A period of about 10 - 12 weeks allocated to teaching and learning in a university, college or school. The academic year is traditionally split into three terms (Autumn, Spring & Summer), with one set of examinations at the end of the academic year, and a few universities still use this system. |
| **Thesis (pl. theses)** | A comparatively long piece of work in printed format, usually of about 80,000 words or more in length, summarising a period of research. In addition to summarising and/or analysing existing knowledge in a particular field, doctoral theses must also make a significant contribution to that knowledge for a PhD to be awarded. (There are some exceptions to this, however: in the biological and other sciences a thesis will often be a great deal shorter than 80,000 words. A student may spend an entire year producing a couple of graphs and a few pages of text. Laboratory-based PhD theses are often less than 50,000 words.) |
| **Transcript** | The written record of all the marks/grades given to a student throughout his or her course of study, along with any relevant comments. |
| **Trimester** | Roughly the equivalent of a **term,** or a period of three months (from the Latin *tri* = three and *mensis* = month). |
| **Tutorial** | A meeting and teaching session between a lecturer and a small group of students (of any number from 1 to about 15). |
| **Unfair means** | Any way in which a student or candidate in an examination gains an unfair advantage over his or her peers i.e. some form of cheating. **Plagiarism** is one of these means. |

| WORD | DEFINITION |
|---|---|
| **'Vancouver' referencing system** | This is a numbered system used mainly in academic medicine and named after the city in British Columbia, Canada, where the first informal meeting took place of editors of medical **journals** in an attempt to agree a common referencing system for their field of work. For more information go to www.le.ac.uk/li/sources/subject8/vancouver.html |
| **Viva** | An **oral** examination to verify the student's knowledge and understanding of a particular topic. Students who have recently completed a **thesis** are usually required to undergo a viva conducted by an **external examiner** before being awarded the degree or qualification. |
| **Workshop** | A practical, interactive teaching session with a lecturer and a small group of students (usually up to about twenty). The session is likely to include individual and group exercises and activities, as well as discussion. |

## *Section 11: Research Skills*

*What is Research?*

*Research Skills Check List*

# Research Skills Checklist

**Coming up with questions**

☐

What is it that you want or need to know?

What questions will help you get the answers you need?

**Observing**

☐

Have you seen all the details?

Have you missed something?

**Planning**

☐

How will you get the information you need?

Who can give you information?

Where can you get the information?

**Collecting Data**

☐

Which sources can you get your information from?

- Maps
- Surveys
- Direct observation
- Books
- Films
- People
- Museums
- Technology

**Recording Data**

☐

How will you record the information you collect?

- Drawing
- Tallying
- Note-taking
- Making charts
- Recording audio or video
- Writing statements

**Organizing Data**

☐

How will you sort out all the information you have?

What information will you use?

What information can be trusted?

How will you make it easily understood?

**Interpreting Data**

☐

What are your conclusions?

What is the most important information you have found?

How will you use your information?

**Presenting Data**

☐

How can you share what you have learned effectively?

What media will work for you this time?

## *Section 12: Web Search*

*How to evaluate a web site?*

*101 Google tips*

Google was founded by two Stanford University Ph.D. students, Larry Page and Sergey Brin. It is clean, crisp and uncluttered with few searching options. It indexes relatively few pages (90-100 million) but it returns the search results based on popularity, measured in links from other pages.

While Google may give you helpful leads on information, in many cases you'll need to access academic-quality, scholarly information using the library catalogues, article databases, and subject guides. Knowing how to effectively search the web and then critically evaluate the websites you find will help you quickly locate the most relevant information. In addition to Google, you may find Google Scholar and Google Books helpful for your research.


- Evaluating websites
- Web search tips
- Google Scholar


## Evaluating websites

If you want to cite websites in academic work, you will need to be more critical of the content than you might be for casual internet use. Remembering a short mnemonic can help: BAT (Bias, Authority, and Timeliness).

- **Bias:** What is the purpose of the site, who is the intended audience, and what motives does the author have for presenting this information?
- **Authority:** Who is responsible for creating, contributing to, or maintaining the site and from what knowledge, expertise, or experience does the author speak?
- **Timeliness:** How current is the information and when was the site last updated?

Just because it's on the internet, doesn't make it true - even if it looks professional. For example, check this out: Save the Pacific Northwest Tree Octopus!

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## Web search tips

Before searching in Google using plain language, consider crafting your search with specific techniques to retrieve more relevant results.

**AND** is implied in Google searches and therefore is not necessary.

- Separate searches for [environmental policy] and [environmental AND policy] will retrieve the same results

**Quotation marks (" ")** will limit your search to a specific phase.

- ["climate change"] will search for results with this exact phase. A search for [climate change] will search for results with instances of both the words climate and change, and retrieve such unrelated results as "The political climate has changed since the adoption of free trade."

**OR** helps you search using multiple words which express a similar concept. OR must be capitalized so Google understands this is a searching word, not a word to be searched.

- For example, [teenager OR adolescent OR youth]
- ["climate change" or "global warming"]

**Word order and word choice** are important.

- [Genetic engineering] and [engineering genetics] will retrieve different results

**Asterisks (*)** will retrieve words with multiple endings.

- Canad* will retrieve Canada, Canadian, and Canadians
- feminis* will retrieve feminism, feminisms, feminist, and feminists

**(~)** helps you to search for synonyms and can help you locate words with similar meanings.

- ~car will retrieve automobile, vehicle

**Set limits** to Google searches.

- intitle: retrieves search words which appear in the website's title field

  intitle:canad* "climate change"

- inurl: retrieves search words which appear in the websites's url

  inurl:shakespeare "elizabethan england"

- filetype: retrieves specific file types such as HTML, PDFs, MS Word (doc), Excel (xls), PowerPoint (ppt)

  filetype:pdf "organizational development" leadership

 Check out more Google search tips. Search techniques vary across different search engines

(including article databases and the library catalogue), so always consult their help page if you're not getting the results you expect.

## Google Scholar

Google Scholar searches peer-reviewed articles, books, reports, theses, preprints, abstracts, technical reports, conference papers and more. It may also return citations to sources even if the source itself is not available online, inlcuding references to books. Anyone can use it to search, but full-text content is not always available.

If the library has access to an article through a subscription database, you will see a "**Get this@UVic**" link if you're searching at UVic. Not on campus? Search from the Google Scholar link on the home page under the Articles Tab (you will need your Netlink ID to get full text). If you don't see a full-text link, look for it the library catalogue - we might have it in print. Learn more about Google Scholar.

**Item not @ UVic?** Like any other article database, if you can't get full text from Google Scholar, you can request an interlibrary loan to have a copy sent to you. Additionally, just like any other database, Google Scholar has unique content and is a great place to search, but it's only **one** place to search, and it doesn't have everything. Include it in your research plan but be sure to look in other places, too. The subject guides can help you get started.

101 Google Tips

Looking for the ultimate tips for Google searching? You've just found the only guide to Google you need. Let's get started:

1. The best way to begin searching harder with Google is by clicking the Advanced Search link.

2. This lets you search for exact phrases, "all these words", or one of the specified keywords by entering search terms into the appropriate box.

3. You can also define how many results you want on the page, what language and what file type you're looking for, all with menus.

4. Advanced Search lets you type in a Top Level Domain (like **.co.uk**) in the "Search within site of domain" box to restrict results.

5. And you can click the "Date, usage rights, numeric range and more" link to access more advanced features.

6. Save time – most of these advanced features are also available in Google's front page search box, as command line parameters.

7. Google's main search invisibly combines search terms with the Boolean construct "AND". When you enter **smoke fire** – it looks for smoke AND fire.

8. To make Google search for smoke or fire, just type **smoke OR fire**

9. Instead of OR you can type the | symbol, like this: **smoke | fire**

10. Boolean connectors like AND and OR are case sensitive. They must be upper case.

11. Search for a specific term, then one keyword OR another by grouping them with parentheses, like this: **water (smoke OR fire)**

12. To look for phrases, put them in quotes: **"there's no smoke without fire"**

13. Synonym search looks for words that mean similar things. Use the tilde symbol before your keyword, like this: **eggplant**

14. Exclude specific key words with the minus operator. **new pram -ebay** excludes all results from eBay.

15. Common words, like I, and, then and if are ignored by Google. These are called "stop words".

16. The plus operator makes sure stop words are included. Like: **fish +and chips**

17. If a stop word is included in a phrase between quote marks as a phrase, the word is searched for.

18. You can also ask Google to fill in a blank. Try: **Christopher Columbus discovered ***

19. Search for a numerical range using the numrange operator. For example, search for Sony TV between £300 and £500 with the string **Sony TV £300..£500**

20. Google recognises 13 main file types through advanced search, including all Microsoft Office Document types, Lotus, PostScript, Shockwave Flash and plain text files.

21. Search for any filetype directly using the modifier **filetype:[filetype extension]**. For example: **soccer filetype:pdf**

22. Exclude entire file types, using the same Boolean syntax we used to exclude key words earlier: **rugby -filetype:doc**

23, In fact, you can combine any Boolean search operators, as long as your syntax is correct. An example: **"sausage and mash" -onions filetype:doc**

24. Google has some very powerful, hidden search parameters, too. For example "intitle" only searches page titles. Try **intitle:herbs**

25. If you're looking for files rather than pages – give **index of** as the **intitle:** parameter. It helps you find web and FTP directories.

26. The modifier **inurl** only searches the web address of a page: give **inurl:spices** a go.

27. Find live webcams by searching for: **inurl:view/view.shtml**

28. The modifier **inanchor** is very specific, only finding results in text used in page links.

29. Want to know how many links there are to a site? Try **link:sitename** – for example **link:www.mozilla.org**

30. Similarly, you can find pages that Google thinks are related in content, using the **related:** modifier. Use it like this: **related:www.microsoft.com**

31. The modifier **info:site_name** returns information about the specified page.

32. Alternatively, do a normal search then click the "Similar Pages" link next to a result.

33. Specify a site to search with the **site:** modifier – like this: **search tips site:www.techradar.com**

34. The above tip works with directory sites like www.dmoz.org and dynamically generated sites.

35. Access Google Directory – a database of handpicked and rated sites – at directory.google.com

36. The Boolean operators **intitle** and **inurl** work in Google directory, as does OR.

37. Use the **site:** modifier when searching Google Images, at images.google.com. For example: **dvd recorder site:www.amazon.co.uk**

38. Similar, using "site:.com" will only return results from .com domains.

39. Google News (news.google.com) has its own Boolean parameters. For example "intext" pulls terms from the body of a story.

40. If you use the operator "source:" in Google News, you can pick specific archives. For example: **heather mills source:daily_mail**

41. Using the "location:" filter enables you to return news from a chosen country. **location:uk** for example.

42. Similarly, Google Blogsearch (blogsearch.google.com) has its own syntax. You can search for a blog title, for example, using **inblogtitle:<keyword>**

43. The general search engine can get very specific indeed. Try **movie:<name of film>** to look for movie reviews.

44. The modifier **film:** works just as well!

45. Enter **showtimes** and Google will prompt you for your postcode. Enter it and it'll tell you when and where local films are showing.

46. For a dedicated film search page, go to www.google.co.uk/movies

47. If you ticked "Remember this Location" when you searched for show times, the next time you can enter the name of a current film instead.

48. Google really likes movies. Try typing **director: The Dark Knight** into the main search box.

49. For cast lists, try **cast: name_of_film**

50. The modifier **music:** followed by a band, song or album returns music reviews.

51. Try searching for **weather London** – you'll get a full 4-day forecast.

52. There's also a built-in dictionary. Try **define:<word>** in the search box.

53. Google stores the content of old sites. You can search this cache direct with the syntax **keyword cache:site_url**

54. Alternatively, enter **cache:site_url** into Google's search box to be taken direct to the stored site.

55. No calculator handy? Use Google's built in features. Try typing **12*15** and hitting "Google Search".

56. Google's calculator converts measurements and understands natural language. Type in **14 stones in kilos**, for example.

57. It does currency conversion too. Try **200 pounds in euros**

58. If you know the currency code you can type **200 GBP in EUR** instead for more reliable results.

59. And temperature! Just type: **98 f to c** to convert Fahrenheit to Centigrade.

60. Want to know how clever Google really is? Type **2476 in roman numerals**, then hit "Google Search"...

61. You can personalise your Google experience by creating a Google account. Go to www.google.com/account/ then click "Create Account".

62. With a Google account there are lots more extras available. You'll get a free Gmail email account for one...

63. With your Google account, you can also personalise your front page. Click "iGoogle" to add blog and site feeds.

64. Click "Add a Tab" in iGoogle to add custom tabs. Google automatically populates them with suitable site suggestions.

65. iGoogle allows you to theme your page too. Click "Select Theme" to change the default look.

66. Some iGoogle themes change with time..."Sweet Dreams" is a theme that turns from day to night as you browse.

67. Click "More" under "Try something new" to access a full list of Google sites and new features.

68. "Custom Search" enables you to create a branded Google search for your own site.

69. An active, useful service missing from the list is "Personalised Search" – but you can access it via www.google.com/psearch when you're logged in.

70. This page lists searches you have recently made – and is divided into categories. Clicking "pause" stops Google from recording your history.

71. Click "Trends" to see the sites you visit most, the terms you enter most often and links you've clicked on!

72. Personalised Search also includes a bookmark facility – which enables you to save bookmarks online and access them from anywhere.

73. You can add bookmarks or access your bookmarks using the iGoogle Bookmarks gadget.

74. Did you know you can search within your returned results? Scroll down to the bottom of the search results page to find the link.

75. Search locally by appending your postcode to the end of query. For example **Indian food BA1 2BW** finds restaurants in Bath, with addresses and phone numbers!

76. Looking for a map? Just add **map** to the end of your query, like this: **Leeds map**

77. Google finds images just as easily and lists them at the top, when you add **image** to the end of your search.

78. Google Image Search recognises faces... add **&imgtype=face** to the end of the returned URL in the location bar, then hit enter to filter out pictures that aren't people.

79. Keeping an eye on stocks? Type **stocks:** followed by market ticker for the company and Google returns the data from Google Finance.

80. Enter the carrier and flight number in Google's main search box to return flight tracking information.

81. What time is it? Find out anywhere by typing **time** then the name of a place.

82. You may have noticed Google suggests alternate spellings for search terms – that's the built in spell checker!

83. You can invoke the spell checker directly by using **spell:** followed by your keyword.

84. Click "I'm Feeling Lucky" to be taken straight to the first page Google finds for your keyword.

85. Enter a statistics-based query like **population of Britain** into Google, and it will show you the answer at the top of its results.

86. If your search has none-English results, click "Translate this Page" to see it in English.

87. You can search foreign sites specifically by clicking "Language Tools", then choosing which countries sites to translate your query to.

88. Other features on the language tools page include a translator for blocks of text you can type or cut and paste.

89. There's also a box that you can enter a direct URL into, translating to the chosen language.

90. Near the language tools link, you'll see the "Search Preferences". This handy page is full of secret functionality.

91. You can specify which languages Google returns results in, ticking as many (or few) boxes as you like.

92. Google's Safe Search protects you from explicit sexual content. You can choose to filter results more stringently or switch it off completely.

93. Google's default of 10 results a page can be increased to up to 100 in Search Preferences, too.

94. You can also set Google to open your search results in a new window.

95. Want to see what others are searching for or improve your page rank? Go to www.google.com/zeitgeist

96. Another useful, experimental search can be found at www.google.com/trends – where you can find the hottest search terms.

97. To compare the performance of two or more terms, enter them into the trends search box separated by commas.

98. Fancy searching Google in Klingon? Go to www.google.com/intl/xx-klingon

99. Perhaps the Swedish chef from the muppets is your role model instead? Check www.google.com/intl/xx-bork

100. Type **answer to life, the universe and everything** into Google. You may be surprised by the result...

101. It will also tell you the **number of horns on a unicorn**

## *Section 13: Presentation Skills*

*How to prepare a presentation*

*4P's of a Successful Presentation*

# Presentations

*Authors: Cathy Dantec/Judy Jowers*

This leaflet contains information and activities that will help you to:

- Consider what a presentation is
- Decide what you need to consider before planning your presentation
- Think about how to prepare
- Deliver a successful presentation

**What do we mean by a presentation?**

The ability to give presentations is a highly valued skill in many occupations. Therefore, it's very common for students to be asked to give presentations at all levels. But what are the essential characteristics of a presentation and what does "presentation" mean to you?

Take two minutes to write down all that comes to mind when you think of the word "Presentation".

You may have written such words as "nervousness", "panic" or "fear". If these were your immediate reactions, by the end of this leaflet you should have more positive views. You probably also wrote something on the lines of: o*ral communication, to a particular audience on a specific subject in a given time.* This gives clues as to how you need to approach the task of giving a presentation.

**Initial Considerations**

There are several things you need to consider before you start the preparation for a presentation.

- How is the presentation going to be **assessed?**

The presentation may not be assessed at all but it is most likely that it will be. Your tutors should make quite clear to you the **criteria** upon which any assessment will be based, including **the weighting** of the criteria. If you feel unsure about them, don't hesitate to ask your tutor **before** you start planning and practising. It is probable that the following will be taken into account:

- Content
- Structure
- Delivery
- Appropriate use of visual aids
- Non-verbal communication
- Dealing with questions

- Who is the **audience** you are going to address?

Unless you know your audience, you cannot address them appropriately and communicate effectively. If you are speaking to fellow students you can assume certain shared background knowledge. If you are presenting material about a topic for which you personally have had to carry out a great deal of research then it is probably fair to assume, however, that the other students will not know much about the subject. In such a case you will have to ensure that you include all the information that's necessary for them to be able to follow your presentation. (Considering your audience may be of particular significance if you later give a presentation in a non-academic environment!)

- What is the **time limit** for your presentation?

The time limit is very important to bear in mind. In certain circumstances you may be given very little leeway to overrun so it is good to develop the habit of careful timing. In fact, you may well be penalised for overrunning. Also, there would be no point in carrying out enough research for a half-hour presentation when you only have 5 minutes! You only need to prepare what you can deliver at a reasonably slow pace in the time allowed.

- What is the overall **purpose** of your presentation?

Presentations can serve different **purposes.** They are very often to inform, but could be to persuade, to influence or promote. The aim will have a bearing on your general approach to the presentation.

- Is it a **single or joint** presentation involving others?

If you are preparing a presentation on your own you know that you are in control of all aspects of it. If you are working on a **joint presentation** you will have to consider:

- how exactly responsibilities will be divided
- the overall "shape" of the presentation
- the allocation of sections to those involved
- when, where and how frequently you will need to meet
- what action to take if someone does not "pull their weight" or is ill on the day

- Will **questions** be asked throughout or at the end?

If questions are to be at the end your entire presentation will need to "flow". On the other hand if you anticipate questions throughout you may want to bear in mind the points at which you expect questions and build in breaks.

- **Where** will it take place and **what equipment** will be available?

You may be giving the presentation in a small seminar room with no equipment whatsoever, not even an overhead projector. On the other hand, you may be able to use a computer with projection facilities and live web links.

Think back to a presentation that you considered successful. List the features that made it a success at the time and memorable. Then consider a less successful one. List the negative aspects. Are there any lessons to be learned from your lists?

**Preparing your Presentation**

Once you have thought about the assessment, audience, time limit, purpose etc. of your presentation, you can start to prepare the presentation itself.

Thinking back to the activity above, why is time spent on careful preparation time well spent? Make a list of some of the things that could "go wrong" when giving a presentation. e.g. missing out an important section or running out of material

Careful preparation makes the delivery of your presentation far less of an ordeal. If you have prepared carefully, you may even enjoy the delivery of it! It also means you are far less likely to find things

"going wrong". Look back at your list and decide what kind of preparation could prevent problems occurring.

The following ideas may be of assistance when preparing.

*Research*

- As with writing an essay, keep referring back to the title of your presentation, so you do not stray away from the subject as you prepare.
- It may help to start by brainstorming what you already know about the subject. Your research can then concentrate on filling in the gaps.
- Bear in mind the length of the presentation. There is no point in researching and preparing enough material for a 10 minute presentation when all that is required is a 5 minute one.

*Planning*

- You will need to restrict yourself to a few main points. The audience does not want to hear everything you know about a topic.
- Consider the order in which you are going to make your points. (Is it logical? Do your ideas flow from one to another?)

*Structure*

- Structure the presentation very clearly: *say what you're going to say (in the introduction), say it (main body) and say what you've said (conclusion).*
- Don't forget to introduce yourself, if you need to as well as outlining what you will cover.
- Break your presentation into sections, and use links or "signposts" between them. (Think about those listening who need to be reminded of the direction your presentation is taking. Listening demands a great deal of concentration so give your audience whatever help they require.)
- Prepare a brief summary of what you have said as a conclusion.

*Clarity*

- If necessary, repeat the main points to make them clear.
- Giving a few concrete examples adds clarity.
- Avoid long, complex sentences. Keep sentences relatively short so that they are easier for the audience to follow.

*Techniques*

- Use a handout or overhead projector transparency (OHT or acetate), indicating the main points you will cover. (Remember to use a large font for OHTs and keep them simple. Do check spelling carefully as any errors will be very obvious!) If you use OHTs you may feel more at ease knowing that the audience is not constantly focusing on you.
- Alternatively, you may be able to use PowerPoint for an electronic presentation.
- A poster, map or large diagram could be used for illustration and to add interest. (An obvious point - ensure it will be large enough to be seen by all the audience, even those at the back of the room.)
- You may find it helpful to use the "card technique". (Give a heading to each of the sections of your presentation. Write one heading plus a few key words on each postcard/ index-file card. Then number the cards in the order you want to introduce the points. These will give you confidence that you have something to say as well as a structure to what you say. Unlike <u>having full written notes in front of you, with cards you cannot be tempted to simply read!)</u>
- Divide your material into essential points and extra material you can use if there is time.

*Practise*

- PRACTISE your presentation, going slowly and timing yourself. Edit it down if it's too long.
- PRACTISE with other students and ask for their feedback.
- PRACTISE aloud so that you feel confident with all the pronunciation and your intonation. You could even record yourself and monitor your performance. (Do you sound interesting and

interested in the topic? Do you use a variety of linking words or the same ones again and again? Do any grammatical mistakes suddenly become obvious? Do you use a variety of grammatical structures so that your sentences do not all follow the same pattern?)

- The more you practise, the more confident you will feel!

**How to give a successful presentation**

Consider how you feel about giving a presentation. Write down the first thoughts that occur to you.

As suggested in the introduction, most people feel nervous when they have to speak to others. It is even claimed that public speaking ranks very highly in popular surveys of "dreaded activities"!

Before actually giving your presentation, you may like to consider ways of **reducing nervousness.** Most people do feel nervous before having to speak in front of others, especially if they are addressing others in a language other than their native one. The following can help:

*Before giving the presentation*

- **Prepare carefully** so you are confident about **what** you are going to say and **how** you are going to say it. By the time you have completed your research you are probably going to know more about the topic than the majority of the audience so let this be a source of reassurance to you.
- If you can you might want to practise in the actual **room** which will be used for your presentation so that it is a familiar setting.
- It may then help to **visualise yourself** in that room giving a successful presentation to reduce stress.
- Make a conscious effort to **relax-** e.g. breathing slowly and deeply, clenching then relaxing your muscles, taking some exercise an hour or two before the presentation, imagining yourself in a beautiful, safe place…whatever works for you!
- **Arrive early** so you don't have to worry about delays en route.
- **Check and double-check** that you have all your overheads/ handouts/ cards and that they are in the correct order.
- **Check and double-check** that any equipment you intend to use is working.
- Ensure you have **back-ups** if equipment should fail e.g. OHTs in case PowerPoint does not function
- Try to be the **first to arrive** rather than being confronted by a sea of faces. Consider it's **your space.** If you **smile** at the audience as they arrive they will think you are confident, even if you are not! Smiling can also help you to relax.

*When giving the presentation*

- Use a clock or your watch to **time yourself.** You might want to take off your watch and lay it on the desk in front of you so you can easily glance at it.
- If necessary, wait till everyone has settled and is quiet before you begin.
- Tell the audience whether you would like **questions** at the end or during your presentation.
- **Remember not to read!** (Use prepared cards, a poster or overhead to jog your memory if you need to.)
- Remind yourself to speak more **slowly** and **loudly** than you would usually.

- Look up. Make **eye contact** with your audience so everyone feels included.
- If you have prepared **visual aids -** charts, maps or OHTs - or **handouts,** don't forget to use them!
- Don't apologise for what you think are shortcomings. Act as if you were **quietly confident** even if you are not. Your audience (and tutor) will probably be convinced that you are!
- Try to **pause briefly** and take a breath after each point. This will allow the audience to absorb the point and will appear professional.
- If you are **handing over** to another speaker, tell the audience that this is the case and introduce them briefly.
- Prepare a good line to **end** with. If you are unsure how to round off, simply **smile** and say **"Thank you".**

*After you have given a presentation*

It is useful to **reflect** on your performance. Even if you feel it was "successful", there may be areas for future improvement. If you were disappointed with your performance, don't allow your disappointment to demotivate you. We all, to a certain extent, learn by our mistakes. By analysing your performance, you will probably find there were some positive elements and the weaker elements are where you can specifically target future improvements.

You might find it helpful to evaluate yourself on a scale of 1-5, answering questions such as the following:

- How good was my opening?
- Did I begin with a brief outline?
- Did I keep to my outline?
- Was my main argument clear?
- Did I link my points clearly and logically?
- Did I give examples to support my points?
- Did I sum up at the end?
- How good was my finish?
- Did I keep to the time allocated?
- How appropriate were my handouts / visual-aids?
- Did I make eye-contact with most of those present?
- Did everyone feel included?
- Did I answer questions well?
- What overall feedback, if any, did the audience/ tutor give me?

When you have given yourself a score, you can then decide the areas where you need to **improve in the future.** Consider **why** you gave yourself the score you did and this may help you with **how** to replicate a good score or how to make changes and improve the next time.

Imagine someone giving themselves a score of 1 for the question "How good was my finish?" What could be the reasons for this low score?

You might have come up with the following reasons:

- Not giving proper consideration in advance about how to finish – i.e. poor preparation
- Having to rush at the end because of time running out – i.e. insufficient practice
- "Waffling" at the end to fill out the time – i.e. insufficient preparation and practice
- Losing the final card, if using a card system –i.e. cards not numbered as a result of poor preparation or poor organisation so cards not checked properly
- Panic, resulting in the need to simply wind up as quickly as possible and "escape"… probably due to a lack of thorough preparation and practice

**Remember, we all learn through experience - our own and that of others. Good luck with your next presentation!**

# An action plan and checklist

The following checklist gives a summary of what has been covered in the rest of the leaflet and provides a practical action plan for you to use.

Tick the boxes as you go along to make sure you have forgotten nothing.

Use the DOs and DON'Ts to assess yourself after the presentation.

**"Tell them what you're going to tell them, tell them, and then tell them what you've told them"**

## A Preparing a presentation - a four step action plan

### Step 1. Check

- ☐ your time limit
- ☐ who your audience is
- ☐ the purpose/title of the presentation
- ☐ where you will be presenting
- ☐ what equipment is available
- ☐ the assessment (if any)

### Step 2. Research your topic

- ☐ done

### Step 3. Prepare

- ☐ your "script" (tick off the following points):
  - a few main points
  - a logical order
  - do not go off at a tangent
  - break the presentation into sections
  - a good introduction
  - use examples
  - use anecdotes
  - use rhetorical questions
  - use humour - but be careful
  - use bullet points on cards
  - avoid long, complex sentences -
  - summarise as a conclusion
- ☐ answers to questions you might be asked
- ☐ visual aids
- ☐ backup in case equipment fails
- ☐ handouts
- ☐ extra material in case you do not fill the time
- ☐ a list of what you need to take on the day

### Step 4. Practise

- ☐ aloud
- ☐ ask someone to listen and give feedback
- ☐ practise in the actual room if possible
- ☐ use equipment you will be using on the day
- ☐ time yourself
- ☐ videotape yourself if possible

## B. Giving a presentation

**DO**

- prepare carefully
- accept that nerves are normal
- use relaxation techniques e.g. breathe deeply
- arrive early
- check seating and lighting
- wait for quiet
- introduce yourself
- have a good beginning
- give an outline of what you are going to do
- speak slowly and project
- use pauses
- be enthusiastic
- make eye contact
- act confident
- smile
- use visual aids
- sum up at the end
- have a good ending
- invite questions
- keep to the time allocated

**DON'T**

- stand where you will obstruct your visual aids
- talk to your visual aids
- read from your script
- fiddle with things in your hands
- jiggle money in your pocket
- wring your hands nervously
- rock on your feet
- pace
- speak in a monotone
- apologise!

All web addresses in this leaflet were correct at the time of publication.

**The information in this leaflet can be made available in an alternative format on request. Telephone 01482 466199.**

# THE 4 Ps OF GIVING A GOOD PRESENTATION

## POSITIVE THINKING

- calm approach
- fear of public speaking?
- overcoming anxiety

## PREPARATION

- start early
- state your case
- develop your ideas
- know your audience
- the elevator presentation
- structure
- work in drafts

## PRACTICE

- rehearsal:
- on your own
- while being recorded
- with an audience

## PERFORMANCE

- your voice
- stay relaxed
- body language
- stay in control
- involve the audience
- if things go wrong...
- time limit
- coping with interruption
- don't apologize

*...and then, how to handle Questions*

**Step One**

# POSITIVE THINKING
## Overcoming your anxiety and fear

**Fear of public speaking**

Over 41% of people have some fear or anxiety dealing with speaking in front of groups. For some, fear of speaking in public is the number one fear of all fears. (The fear of dying is number 7!)

**'There are two types of speakers: those that are nervous and those that are liars'**
(Mark Twain. Although, he used bad grammar: it should have read, "… those who are nervous and those who are liars.")

**REMEMBER: anxiety is perfectly normal.**
A little nervousness is good - it shows you care about doing a good job, it can keep energy levels high - too much is bad – learn to be calm:

Remember the CALM approach

- Confront the problem positively
- Approach it as something that can and has to be dealt with
- Look for the steps that need to taken in order to deal with it
- Manage it by planning de-stress strategies

| | |
|---|---|
| C | I am frightened of giving my presentation |
| A | I need to acknowledge my fears and recognise that I am not alone. I can then work out how to tackle this fear |
| | What will make it less stressful? |
| L | I will as k for help – I will see my tutor |
| | I will research thoroughly |
| | I will prepare properly |
| M | I will speak to Geoff (or whoever) |
| | I will make time to research (be specific). |
| | I will learn about relaxation techniques, etc |

- To reduce fear, prepare properly and thoroughly. This can help to reduce your fear by about 75%.
- Proper breathing techniques can further reduce this fear by another 15%.
- Your mental state accounts for the remaining 10%. Think positively. Think assertively.

## Tips on overcoming speaking anxiety

**Know The Room** - become familiar with the place in which you will speak. Stand at the lectern, speak into the microphone. Walk around where the audience will be seated. Walk from where you will be seated to the place where you will be speaking.

**Visualize Yourself Speaking** - Imagine yourself walking confidently to the lectern as the audience applauds. Imagine yourself speaking, your voice loud, clear and assured. When you visualize yourself as successful, you will be successful.

**Can you think of any other good tips?**

**Step Two**

# Preparing a good presentation

✦ **Start early**

Think through what needs to be said. Collect material from unusual sources which may relate to the topic – sleep on these ideas. The end product will be more interesting and fully developed.

✦ **State your case**

Using big letters and a bold pen, write a clear statement of the issue/problem and its importance. Pin the statement on the wall above your desk.

✦ **Develop your ideas**

Develop the statement into one jargon-free sentence that will catch the attention of the audience. Next, identify the issues you plan to address – brainstorm, plan, etc.

✦ **Know your audience**

Think about them. What do they already know? Don't assume they will already be familiar with basic concepts – outline these briefly but clearly early in the talk to avoid confusion.

✦ **The 'elevator' presentation**

Try thinking that you have no more than two/three minutes in a moving elevator/lift to explain the essence of your presentation: this exercise forces you to be clear and concise.

✦ **You as a facilitator**

Try thinking of your presentation in terms of a problem for which you are offering a solution. Strip it to the essentials: What are your main arguments? What evidence can you offer? Attempt to identify problems or questions the audience may have and address them in the talk, before the audience has a chance to think of these things themselves.

✦ **Structuring**

- Arrange these issues in a logical order and sequence (this is flexible). This is easier if you use index cards and put one idea/issue on each card.
- Retention of information by the audience is reduced as a talk proceeds, so if you do want to make a series of points, organize them from the most to the least important. That way, the audience is more likely to remember the important points later. You may even find that the less important points become irrelevant to the focus of the talk as you practice.
- Use transition elements which will help your audience to follow the link from one issue to the next. These should be logical, and may be presented by posing a question, or explaining your own discovery of the link's existence.
- Use short sentences with simple constructions. Your 'message' will be made more clear and the sentence structure is more similar to conversational styles.

✦ **Work in drafts**

Run through the talk once at a very early stage (like producing a first draft). Go over it and re-think it. Discard non-essential elements. Be strict about including only what is essential information for the presentation, and removing *all* the non-essential tidbits.

**Step Three**

# Practice

**Know Your Material** - If you are not familiar with your material or are uncomfortable with it, your nervousness will increase. Practice your speech or presentation and revise it until you can present it with ease. Be prepared. Nothing will relax you more than to know you are properly prepared.

* * * * *

Remember: 'He or she who fails to prepare is preparing for failure so prepare, prepare, prepare'.

**Rehearsing:**

- Initially do it in private.
- Then use videotape and assess critically. It can be painful, but worth it.
- Then try the presentation out in front of friends. Ask for feedback, then *act on that information*.

TIP 1: Select those who know a little about your topic, and not those who know a lot. This will focus your attention on attempting to explain why you did what you did in simple terms, rather than encouraging attention to details only specialists care about.

TIP 2: Make sure you know exactly how you will begin. The first impression is vital – try to be interesting and compelling. You are trying to draw in the audience.

TIP 3: Ensure you have a prepared and memorable summary: this 'take home' message is what the audience will remember after you leave.

Step Four

# Performance

## Think about how you use your voice

- Speak with enthusiasm – if you don't sound interested your audience won't be.
- Be conscious of your articulation. Don't "mush" your words or syllables – slow down and practice hitting those consonants.
- Remember to use pauses to let points sink in.
- Avoid inaudibility - nothing is more frustrating than having to strain to hear speakers.

## Before you start

**TIP** If possible, greet some of the audience as they arrive and chat with them. It is easier to speak to a group of friends than to a group of strangers.

**TIP** Try to relax:

Sit comfortably with your back straight.

Breathe in slowly, hold your breath for 4 to 5 seconds, then slowly exhale.

To relax your facial muscles, open your mouth and eyes wide, then close them tightly.

# The Moment of Truth: Delivering the Presentation

1. **Relax.** Take several deep breaths as you are being introduced (but don't sigh!). Visualize your rehearsed opening statement; don't improvise at the last moment.

2. **Don't joke!** Beware of making jokes. The results can be disappointing, and may suggest an unprofessional attitude.

3. **Speak naturally.** Choose a natural, moderate rate of speech and use automatic gestures. Some people suggest about 100 words a minute.

4. **Don't fidget.** Monitor your behaviour, and avoid habitual behaviours (pacing, fumbling change in pocket, twirling hair).

5. **Avoid distractions.** Don't let any aids detract from your presentation. Make sure you don't distract the audience.

6. **If you go wrong.** If you lose your train of thought in mid-sentence then smile, say "excuse me" and start again. Remember: we all do it. People want you to succeed and are sympathetic. Keep smiling.

7. **Don't be over enthusiastic.** Enthusiasm for your topic is contagious, but don't overdo it - you'll alienate the audience.

8. **Involve the audience.** Converse with them, involve them in the process of the presentation by posing questions and making eye contact.

9. **Focus on the audience.** Pick one (or two) people easily visible to you, and "speak" to them. Remember to also observe others, but concentrate on just a few. This may or may not solve your "audiencophobia" but it will keep you in touch with your audience, and provide you with some feedback.

10. **Don't overrun.** Keep an eye on your time and don't run over your limit. Ever. An audience will always forgive you if you *under* run; they will never forgive you if you *over* run.

11. **Cope with interruptions.** Be prepared for interruptions (late arrivals, burnt out projector bulbs, fire drills, etc.).

12. **Stay in control.** If you must turn down the room lights, don't turn them off entirely or for longer than you need - remember to turn them back up!

13. **Don't apologize.** Don't apologize for any aspect of your presentation. This should be your very best effort; if you have to apologize, you haven't done your job properly. Remember that you are of equal value to the other people in the room; apologizing will make you appear subservient.

14. **Don't apologize for being nervous.** Most of the time, your nervousness won't show at all. If you don't say anything about it, nobody may notice. If you mention your nervousness or apologize for any problems you think you have with your speech, you'll only be calling attention to it. Had you remained silent, your listeners may not have noticed at all.

15. **Beware of ad-libbing when you are about to finish**. This will be unpracticed, and will be the last thing many of your audience will hear you say. End your talk with the insightful, firm summary statement you have prepared.

REMEMBER

**You need to realize that people want you to succeed** – All audiences want speakers to be interesting, stimulating, informative and entertaining. They want you to succeed - not fail. The only people who *might* want you to fail are struggling with *their own* insecurities, foe which you are not responsible.

*... and finally,*

# Handling Questions

The question period is often the part of the talk which influences the audience the most. This is the part of the presentation where your ability to interact with the audience will be evaluated. Preparation is important. Here are a few guidelines:

1. Always repeat each question so the entire audience knows what you've been asked.

2. Before you answer, take a moment to reflect on the question. By not rushing to give an answer, you show a degree of respect for the questioner, and you give yourself time to be sure you are answering the question that was actually asked. If you are unsure, restate the question or ask for a clarification.

3. Above all, wait for the questioner to finish asking the question before you begin your answer! The only exception is when it becomes necessary to break in on a vague, rambling question; this is your show, and you have only a limited time to make your presentation. It is essential, however, that you break in tactfully. Say something like "So, are you asking ....?" This will focus the question and give you a place to begin an answer. Remember that your ability to interact with an audience is also being evaluated.

4. If a question is asked during the talk, and it will clarify an ambiguity, answer it immediately.

5. Postpone questions aimed at resolving specific problems (or arcane knowledge) until the end of the talk, or private discussion. This is particularly important if the answer will distract either you or the audience away from the flow of your presentation.

6. Avoid prolonged discussions with one person, extended answers, and especially arguments.

7. If you can't answer a question, just say so. Don't apologize. You then may:

- offer to research an answer, then get back to the questioner later.
- suggest resources which would help the questioner to address the question themselves.
- ask for suggestions from the audience.