

LEARNING STYLES AND STRATEGIES

Visual Learning Strategies

While in the classroom, students who are visual learners benefit from instructors who use the whiteboard or overhead projector to list the important points of a lecture, or who provide an outline to follow along with during the lecture. These particular learners also benefit from information gathered from textbooks and class notes and prefer to study alone in a quiet room. Visual learners often view information through the “mind’s eye” (one’s ability to see things with the mind) when trying to remember something. If there is a strong preference for learning by **Visual** methods (seeing), use some or all of the following strategies to take in new information:

- Sit near the front of the classroom to eliminate visual obstructions
- Always **attend class and read text before class**
- Take detailed notes to remember important information and use notebooks for organization
- Lecturers who use gestures and picturesque language may be helpful
- Pictures, videos, posters, slides, and screen shots are all beneficial
- Use of textbooks with diagrams and pictures
- Images on phone, flow charts, graphs are helpful
- To aid recall, color code notes with various highlighters/markers/pens
- Review notes within 24 hours of actual class (and multiple times thereafter)
- Write out sentences and phrases that summarize key information obtained from your textbook, lecture, and notes
- Make flashcards of vocabulary words and concepts that need to be memorized; use highlighters to note key points on the cards. Limit the amount of information per card so the mind can take a mental "picture" of the information.
- When learning information presented in diagrams or illustrations, write out a more detailed explanation
- When learning mathematical or technical information, write out sentences and key phrases relating to your understanding of the material. When a problem involves a sequence of steps, write out in detail how to do each step.
- Make use of word processing; key information from your notes and textbook into a computer. Again, use screen shots for visual review or to paste into notes.
- Visual reminders of information that needs to be memorized are helpful before an exam. Sticky notes placed in key areas such as mirror, desk, tables, dashboard, etc.
- Spend time in a quiet setting where recall will be productive

Auditory Learning Strategies

When a student processes information by reading (aloud) and hearing, then the preferred method of learning is said to be auditory. Please review the following suggestions if there is a strong preference for learning by **auditory** methods:

- Always attend class
- Always **READ** text before the next class (this can also be done out loud because you need to hear the words as you read them to understand them well)
- Attend discussions and tutorials; start a small study group
- Make sure you are in a position to hear well in the classroom
- When reviewing notes, always review within 24 hours of class; notes can be read out loud for more meaning, understanding, and comprehension
- Recite, restate, and summarize key information and ideas to yourself
- Listen actively, carefully
- Discuss topics with friends, family, classmates, and instructors. In other words, explain and talk about what you are learning
- Use a recorder to record lecture and to also record yourself
- Remember the interesting examples, stories, jokes...rhymes can even be made
- Describe the overheads, pictures and other visuals to someone who was not there
- Leave spaces in notes for later recall and 'filling in'

Convert your "notes" into learnable information:

- Your notes may be poor because you prefer to listen; you will need to expand your notes by talking with others and collecting notes from the textbook
- Record summarized notes and listen to them
- Ask others to 'hear' your understanding of a topic
- Read your summarized notes aloud
- Take screen shots and pictures of valuable information and add to notes; review notes repeatedly

To perform well on assignments or when testing:

- Imagine talking with the instructor about possible exam questions
- Listen to your voice as you read your notes out loud
- Spend time in quiet places recalling the new information and ideas
- Practice writing answers to questions which may possibly be on the exam
- Speak answers aloud or inside your head
- Discussion during study groups will allow for listening and recitation

Kinesthetic Study Strategies (Active Learner)

Active or kinesthetic learners need to experience knowledge through actions either by “doing” or getting personally involved with the learning process. Sometimes these learners prefer a faster paced learning experience with instructors that keep things moving at a fast pace within the classroom. Hands-on activities are very beneficial to these students along with a lab setting where physically active learning is done. Class demonstrations and field work outside of the classroom are also components to successful learning.

Review the following list of suggestions if active learning is your strength:

- Stay focused during class time by sitting near the front of the room
- Always **READ** text before attending class
- Actively take notes throughout the class period
- When going over notes previously taken in class, use colored markers to highlight various points
- Jot down key words and draw pictures or charts
- Key notes into a computer for a more active way of memorization; this also reinforces learning
- Take pictures of important information within textbook with phone and study frequently; screen shots can also be added to notes on computer
- Study in short blocks of time; for instance, 30 to 45 minutes and then a 3 to 5 minute break (depending on level of distraction)
- When studying notes, walk back and forth with textbook, notes, or flashcards in hand and read the information out loud
- When reading text or lengthy material, scan outline, pictures, headings and pay close attention to the first and last paragraphs to try and gain a good understanding of the information
- All or part of your senses - sight, touch, taste, smell, hearing ... should be involved when learning
- Find a comfortable position to study; music may help keep student on task
- Interesting field trips
- Try to incorporate multimedia as much as possible (computer, video camera, phone/camera, presentation software)
- Lecturers who give real-life examples
- Hands-on approaches (computer usage or lab projects)
- Trial and error may involve finding just a few active learning solutions that work for you
- Collections (rock, plants, shells, trees, grasses...)
- Historical sites or exhibits, samples, photographs... all are helpful

Convert lecture “notes” into a learnable material:

- Your lecture notes may not be as detailed because topics did not seem relevant; meet with a classmate to compare notes
- Remembering the "real" things that happened will be the easiest
- Notes containing examples are important along with case studies, applications, and anything abstract
- Discuss notes with another kinesthetic person, classmate or family member
- Use pictures, photographs, and screen shots that illustrate an idea
- Refer back to lab manual when possible
- Recall the experiments, field trip, exhibits, etc ... convert these into your notes
- Write practice answers, paragraphs, or brief comments about pertinent information

To perform well on assignments or when testing, Active Learners might use the following strategies:

- Role play the exam situation in a private area
- To learn a sequence of steps, make 3'x 5' flashcards for each step. Arrange the cards on a table top to represent the correct sequence. Put words, symbols, or pictures on flashcards -- anything that helps the student remember the information. Use highlighter pens in contrasting colors to emphasize important points. Limit the amount of information per card to aid recall. Practice putting the cards in order until the sequence becomes automatic.
- Make use of the computer to reinforce learning through the sense of touch. Using word processing software, copy essential information from your notes and textbook. Use images, graphics, charts, tables, spreadsheets, or presentation software to further organize material that must be learned.

Multimodal Learning Strategies

In order to learn in a more efficient way, students need to become familiar with various methods of studying, learning, and remembering new information. If a student has multiple learning styles or preferences (and most of us do), then we are able to tap into a variety of learning modes which will enhance our ability to retain information. These multiple preferences can be varied. For example, a student may have two strong preferences such as Visual and Auditory or Auditory and Kinesthetic. Some individuals have no particular strong preferences and are a combination of all three—Visual, Auditory, and Kinesthetic.

If the student does have multiple learning styles (multimodal), the advantages gained through multiple learning strategies include the ability to learn more quickly and at a deeper level so that recall at a later date will be more successful. Using various modes of learning also improves attention span. Familiarizing yourself with various learning styles will only enhance your ability to study more effectively. For example, when comprehension of reading material has not been successful, a visual representation can often assist the student in comprehending the material. Or, if listening to a lecture has not allowed the student to gain complete understanding of a concept, viewing a presentation on the same topic or attending a group study session could result in a more positive learning experience.

Multimodal Learning Strategies are a step in the right direction for most learners allowing the student to be more aware of learning preferences which may result in a stronger desire to learn new material. Combining learning modes can also result in a more balanced approach to studying and learning which leads to greater understanding, comprehension, and retention.