

Counselling & Learning Support

North Vancouver Campus

Student Success Workshops

VISUAL STUDY TOOLS



CREATING VISUAL STUDY TOOLS

While many students take and study from notes, they typically take notes in a linear style using only one color and using only words and no images. In contrast, visual note-taking methods offer you an opportunity to organize, rearrange, and record information in creative ways. Visual note-taking methods incorporate the use of colors, pictures, symbols, and graphic formats that utilize visual memory skills. Combining words and images enables students to use their whole brain when learning and remembering rather than just the left-side of the brain which is used when taking traditional linear note styles notes.

The three common types of visual note-taking methods that will be discussed below are:

1. Visual Mappings - also known as mind maps or concept maps
2. Hierarchies
3. Comparison Contrast Charts

Visual Mappings

Any information that can be recorded in a linear fashion can be made into a visual mapping as an alternative. For example, you can make a visual mapping of:

- A paragraph or a group of paragraphs under one heading.
- A topic or a subject presented in several chapters and lectures.
- Your lecture notes for review purposes.
- Information to review for a test.
- Each chapter you have covered.
- Ideas brainstormed for a paper or a speech

How to Create Visual Mappings

Once you have decided what you wish to map, decide what size paper you are going to need. For example, if you know that your mapping will include many details, you may want to work on legal-size paper (eight-and-a-half by fourteen inches) or drawing paper that is even larger. If your mapping is on a smaller topic, notebook-size paper is sufficient. Four basic steps are involved in creating visual mappings.

1. **Write the topic in the center of your paper.** The topic can be the title of a chapter, the name of a lecture, or the subject you wish to map. To make the centre of the map visual distinct, place a border around it. The border can be a box, a circle, or even a picture. If you are making a mapping of types of real estate investments, you may want the center pictures to be a house or a building. If you are making a mapping on memory, you may want the center picture to be a person's head (see figure 1).

2. **Add the main ideas.** Write the main ideas or the main headings evenly spaced around the topic. Connect the main ideas to the topic using lines. For a visual mapping of a chapter, use the main headings found in the chapter. For a visual mapping of a subject, show the main categories of information related to the subject. Do not use any more than seven main idea categories as this will overload short-term memory (see figure 1).

Borders: To make the main ideas or categories stand out, place a border or shape around each one. You may want to use a different shape than you used for the topic. Pictures can be used instead of geometric shapes or pictures can be placed inside shapes.

Colour: Some people's memories are strengthened with the use of color. Experiment with colors by shading in the main ideas. Use different colors for each level of information.

Numbering: If there is a definite sequence to the information, such as steps that must be learned in order, you may want to add numbers to the lines that extend from the topic or inside the borders.

3. **Add major details to support the main ideas.** Now place the major supporting details around each main idea. Write only key words that serve as "triggers" for you to recite in full sentences. Avoid the tendency to write long phrases or full sentences as your mapping will become too cluttered. Draw lines from these key words to the main ideas they support (see figure 1).

Be selective. Include only as many major details as you need to help you remember the important information. You do not need to have the same number of details for each main idea. It is up to you to determine how many details will help your memory.

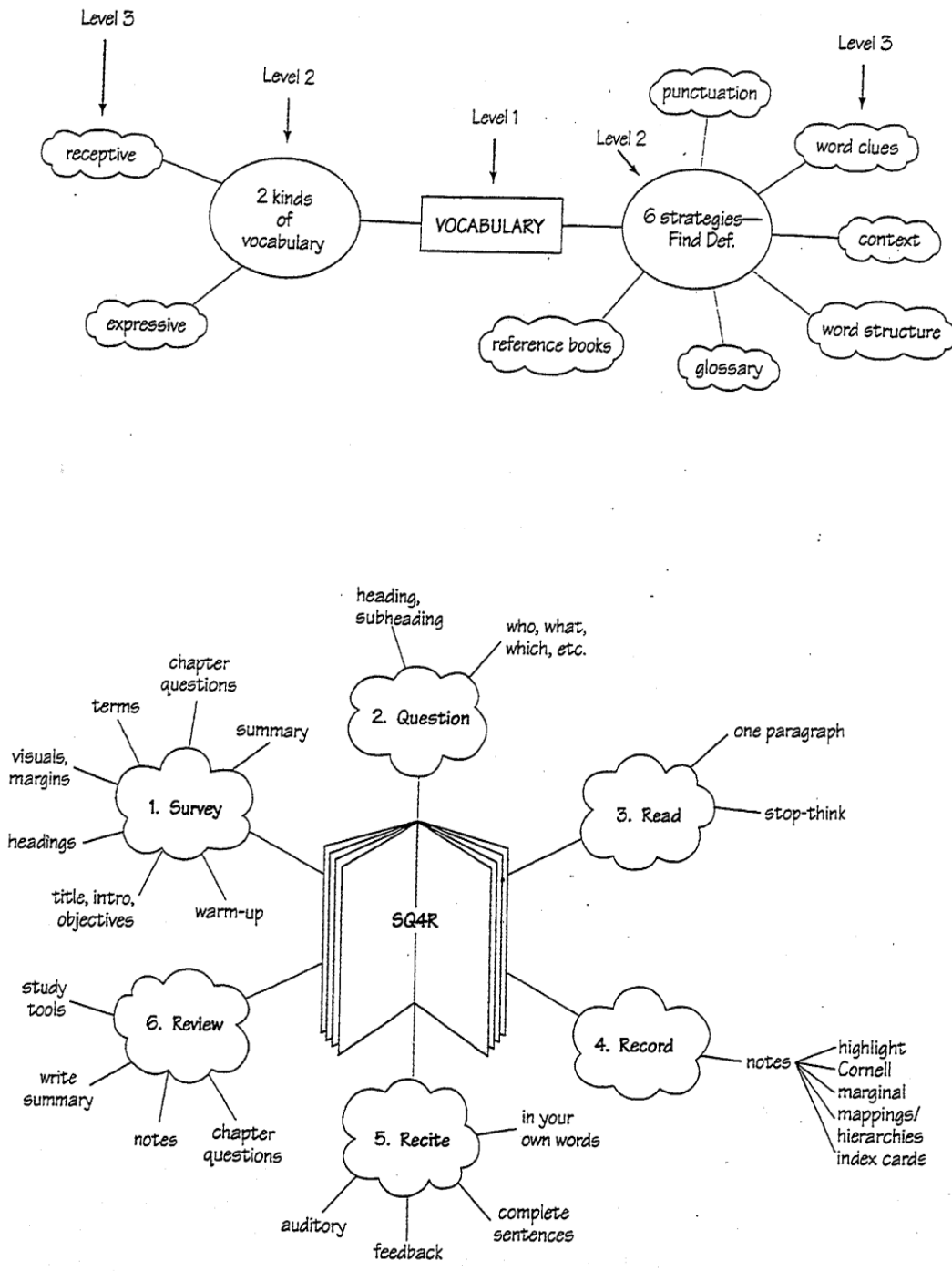
Write horizontally. Try to make your mapping easy to read by keeping all your writing horizontal. Avoid writing at a slant, sideways or upside down.

Decide on borders. If the mapping details stand out clearly without borders (as shown in the SQ4R mapping), do not include any. If you are color coding levels of information, you may also want to enclose these major details within a border.

Personalize with Pictures. Pictures help imprint the information in your visual memory. Many times it is easier to recall pictures than it is words, so include pictures where appropriate.

4. **Add any necessary minor details.** If you need some minor details, use the same guidelines and for major details. If you find that you need one or more levels of information beyond the minor details, such as many be the case with a long chapter, consider reorganizing the information into several different topics and creating several mappings. You may find that narrowing or limiting the topic of a mapping will be more beneficial for visualizing and studying (see figure 1).

Figure 1



How to study from Visual Mappings

Visual mapping are powerful and work effectively because they are based on memory principles that boost your ability to learn new information. The information in mappings is organized logically, shows relationships, and helps you associate one idea with another. Concentration and interest increase as you work to present information creatively. As you recite, review receive feedback, and visualize, the process of learning is enhanced.

To study from a visual mapping follow the steps below:

1. Look intently (stare) at your visual mapping until you think you have a mental picture of the topic and connected main ideas in your memory. This is the central core of the map. Visualize the shapes of the borders and the labels inside, the positions of the main ideas on the page, and the colours and images used.
2. Look away from the map and practice visualizing, reciting, and drawing the topic and each main idea. Check your accuracy.
3. Once you have the core of the map visualized, take one main idea at a time and practice visualizing, reciting and drawing the related major and minor details. Keeping practicing until you can recall each main idea and its related details without referring back to the map.
4. Once you can reproduce the map either as a drawing or as a visual image, use ongoing review to keep it alive in memory.

Hierarchies

Hierarchies are forms of visual mapping that arrange information in levels of importance from the top down. If visualizing mappings with lines extending in all directions is difficult or overwhelming for you, you may prefer the more organized structure of hierarchies. However, due to their structure, hierarchies typically allow you to record less information on them than visual mappings.

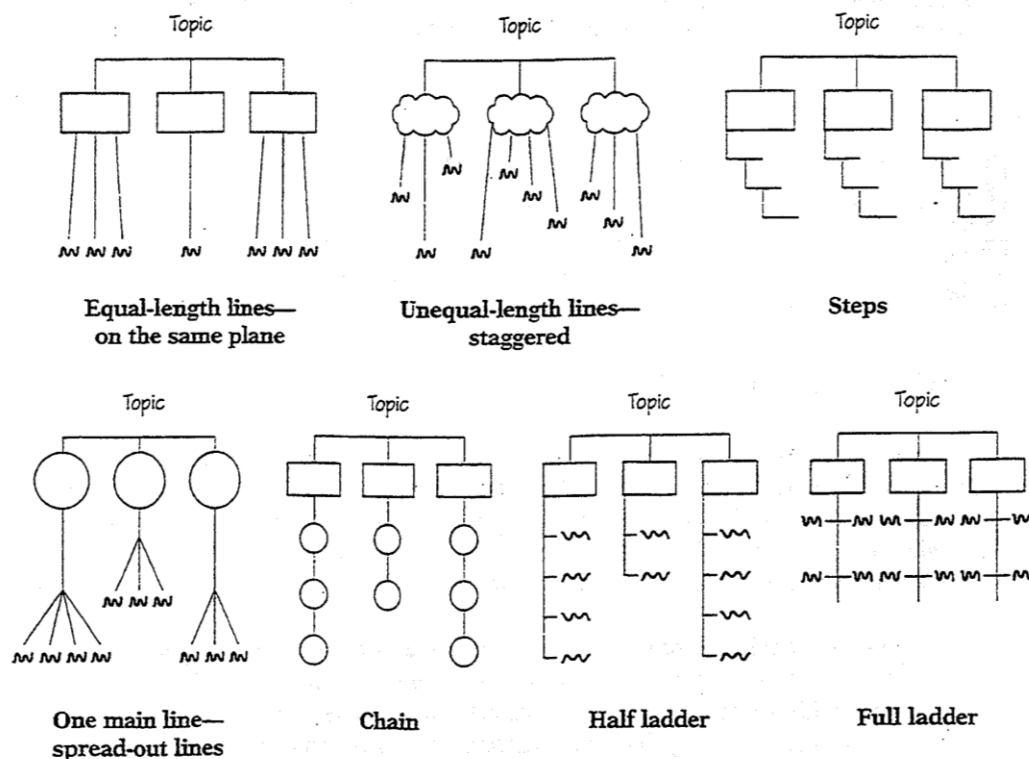
How to Create Hierarchies

The steps for creating hierarchies are similar to the steps for creating visual mapping. The same levels of information are used: topic, main idea, major details, and minor details (see figure 2).

1. **Write the topic on the top line of the paper.** Put a box or border around the topic in order to make it visually distinct.
2. **Write the main ideas in a line, underneath the topic.** Connect each main idea to the topic by drawing a line from the topic to the main idea. Determine the number of main ideas to be placed under the topic. Space the main ideas evenly on the paper to avoid a cluttered or crowded look. Always write horizontally and try adding color coding and various shapes or pictures to strengthen the visual image.

3. **Under each main idea, branch downward again and add the major details.** Because there may be a number of major supporting details, you will need to consider how you will place the details on the paper. To avoid a cluttered or crowded look, the details can be staggered or arranged in a variety of layouts (see figure 2).
4. **Add minor details under the major details if needed.** Minor details can be added by branching downward or outward from the major details. To avoid making the hierarchy too cluttered include only essential key words that you feel you need to help you remember the information.

Figure 2.



How to Study from Hierarchies

As with visual mappings, hierarchies need to be visualized, recited, and reviewed to work as effective study tools. Because the study techniques are the same as those used with visual mappings, follow and adapt the guidelines in this handout on studying visual mappings for studying your hierarchies.

Comparison Charts

Another type of visual study tool is a comparison chart. Comparison charts (also known as matrixes, grids, or tables) are designed to organize a large amount of information into a format that is visual and easy to use to compare and contrast information. Comparison charts are organized with columns and rows. The category or characteristics that are being compared or contrasted are placed at the top of each column. The subjects that are being compared or contrasted are placed at the beginning of each row. Whenever you are working with several related subjects that have specific characteristics, this form of visual note-taking is useful. See figure 3 for an example of a comparison chart.

Figure 3

Categories → Subjects ↓	Column 1	Column 2	Column 3
Subject A			
Subject B			
Subject C			

How to Create Comparison Charts

In a comparison chart, columns run up and down, and rows run across the page. Important information about each subject is written inside the boxes (cells). The number of columns and rows is determined by the amount of information being covered. The following steps show how to organize information for matrixes. If you use a computer, matrixes can be made through “table” commands.

1. **Identify the subjects to be compared and label the rows.** Comparison charts are designed to compare or contrast information for two or more subjects, so begin by identifying the number of subjects. Many times the number of subjects (topics) is given in the printed text information. Once you have identified the number of subjects, you can begin to make the rows for your comparison chart. If you have two subjects, your chart will have only two rows. Write the names of the subjects on the rows.
2. **Identify the categories to be compared and label the columns.** Identifying categories requires you to think carefully about the information you have read. What categories of information were discussed for all or most of the subjects? You can almost always use a general category titled “Characteristics,” but more specific categories are more useful. The number of categories you select determines the number of columns in your comparison chart. Create a name or title for each category and label the top of each column accordingly.
3. **Complete the chart by writing key words in each cell.** Complete one column at a time by providing essential details for each subject that is listed down the side of the chart, or complete all the boxes in one row at a time. With this method, all the essential details about one subject are given before you work with the details of the other subjects.

How to Study from Comparison Charts

Before studying from a comparison chart you need to ask yourself “what do I need to know?” In some cases you may need to know about patterns or trends in the material. In other cases you may need to know the details within each cell of the chart. Once you have identified the information you need to know, you can then decide on the most appropriate method of studying. If you are expected to know the specific information inside the cells of the chart, use the following steps to learn the information:

1. Name and visualize the topic, the subjects in the rows, and the categories across the top of the comparison chart.
2. Recite the information in the cells by moving across the rows or down the columns
3. Re-draw the chart from memory by first labeling the rows and columns and then filling in the key words in each cell.

While visual note-taking methods are an effective way for many people to learn and remember material, you must decide for yourself when and where to use these techniques to maximize your learning. Your decision to use these tools may be determined by your learning style, the material you are working with, or the amount of time you have available for studying.

For more information or help with making and using visual study tools, please make an appointment with the Learning Specialist at the North Vancouver campus by calling 604.984.1744.

Adapted from: Wong, L. (2003). *Essential Study Skills: Chapter 11*. New York: Houghton Mifflin Company.