

# Concept Mapping

**"Concept-Mapping" is a creative tool for assisting and enhancing many of the types of thinking and learning that we can experience.** It is challenging and sometimes very frustrating to learn how to use this tool. The learning can be fun and the benefits substantial. Give it a go and notice the changes.

## Uses Of Mapping

### Working on a Speech

Mapping is a particularly powerful tool to use during the all the stages of preparing and organizing a speech, even before you write the first rough outline draft. When you start out exploring material that may be useful for your speech, you can summarize your personal ideas, ideas from personal brainstorming, brainstorming with others and readings to help discover fruitful areas of research. Finding a suitable thesis is a process of exploration and approximation, and later on, insight. You may want to look for something that you find interesting and somehow problematical, with implications beyond itself that you can explore.

It is often difficult to find a powerful thesis for a speech; hence, there is an inevitable, often unpleasant, and occasionally lengthy, period of confusion. During this period, to progress toward a resolution, it is necessary to know where you stand:

- what you know;
- what your specific questions are;
- what your own opinions or interpretations of the mapping material are;
- whether own opinions are applicable or should be questioned.

Remember, try not to refer to notes or other source material when you are doing your Map. Ask questions such as those listed above

Organizing the material is another common problem that people have when they are preparing speeches. Mapping will allow you to see the major categories/ main ideas of your speech, but will not impose an order on them. This will allow you to place your ideas in a sequence most applicable to your purposes.

The directions for HOW TO CREATE A CONCEPT MAP are found on page 2.

**To start a Map, write the main idea in the centre of the page (e.g., landscape view) -- it may be a word, a phrase, or a couple of juxtaposed ideas, for example -- then place related ideas on branches that radiate from this central idea.**

### **Basics for Concept Mapping Process**

- Print in capitals, for ease of reading. This will also encourage you to keep the points brief.
- Use unlined paper, since the presence of lines on paper may hinder the non-linear process of Mapping. If you must use lined paper, turn it so the lines are vertical.
- Use paper with no previous writing on it.
- Connect all words or phrases or lists with lines, to the centre or to other "branches." When you get a new idea, start again with a new "spoke" from the centre.
- Go quickly, without pausing -- try to keep up with the flow of ideas. Do not stop to decide where something should go (i.e. to order or organize material) -- just get it down. Ordering and analyzing are "linear" activities and will disrupt the Mapping process.
- Write down everything you can think of without judging or editing -- these activities will also disrupt the Mapping process.
- If you come to a standstill, look over what you have done to see if you have left anything out.
- You may want to use color-coding, to group sections of the Map.

### **Some Organizational Patterns That May Appear in a Concept-Map**

- *Branches.* An idea may branch many times to include both closely and distantly related ideas.
- *Arrows.* You may want to use arrows to join ideas from different branches.
- *Groupings.* 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.

**Here are some questions that can help the mapping process and using the "completed" map.**

- How do the parts of the map fit together?
- Does it all make sense? why, or why not?
- Is there anything missing, unclear, or problematic about the map?

– How does it fit with other course material? How does it fit with your personal experience? Are there parts that do not fit? Why not?

– What are the implications of the map?

– Could there be other ways of looking at it?

– Is the material true in all cases?

– How far does its usefulness extend?

– What more do you need to find out?

Of course, not all of these questions will apply to every Map; however, the more closely you look at the map you are making, the more questions will come to you.

**Use this technique as often as you like, particularly when you are stuck, and as you become familiar with it, you will find it more and more useful and flexible.**

### **Advantages Of Mapping**

Mapping may be seen as a type of brainstorming. Both Mapping and brainstorming may be used to encourage the generation of new material, such as different interpretations and viewpoints. However, Mapping relies less on intentionally random input, whereas, during brainstorming, one may try to think up wild, zany, off-the-wall ideas and connections.

Brainstorming attempts to encourage highly divergent "lateral" thinking, whereas Mapping, by its structure, provides opportunity for convergent thinking, fitting ideas together, as well as thinking up new ideas, since it requires all ideas to be connected to the centre, and possibly to one another.

Paradoxically, the results of brainstorming usually appear on paper as lists or grids -- both unavoidably linear structures: top to bottom, left to right. Mapping is less constrictive -- no idea takes precedence arbitrarily (e.g., by being at the "top" of the list).

Here are some advantages of Mapping, which will become more apparent to you after you have practiced this technique a few times:

- It clearly defines the central idea, by positioning it in the centre of the page.
- It allows you to indicate clearly the relative importance of each idea.
- It allows you to figure out the links among the key ideas more easily. This is particularly important for creative work such as essay writing.
- It allows you to see all your basic information on one page.

- As a result of the above, and because each Map will look different, it makes recall and review more efficient.
- It allows you to add in new information without messy scratching out or squeezing in.
- It makes it easier for you to see information in different ways, from different viewpoints, because it does not lock it into specific positions.
- It allows you to see complex relationships among ideas, such as self-perpetuating systems with feedback loops, rather than forcing you to fit non-linear relationships to linear formats, before you have finished thinking about them.
- It allows you to see on the map contradictions, paradoxes, and gaps in the material -- or in your own interpretation of it -- more easily, and in this way provides a foundation for questioning, which in turn encourages discovery and creativity.

## **Other Uses for Mind Mapping Tool**

### **Summarizing Readings**

Summarizing is important for at least two reasons:

1. it aids memory, and;
2. it encourages high-level, critical thinking, which is so important in university work.

Use Mapping in the following ways, to summarize an article, or a chapter in a book:

1. Read the introduction and conclusion of the article, and skim it, looking at sub-headings, graphs, and diagrams.
2. Read the article in one sitting. For longer material, "chunk" it -- into chapters, for example -- and follow this procedure for each chunk.
3. Go back over the article until you are quite familiar with its content. (This is assuming that it will be useful and relevant to your work -- one would not wish to spend this amount of work on peripheral material).
4. Do a Map as described above, from memory. Do not refer to the article or lecture notes while you are doing the Map if you do, you will disrupt the process.
5. Look over what you have done. It should be apparent if you do not understand, or have forgotten, anything. Refer back to the source material to fill in the gaps, but only after you have tried to recall it without looking.
6. Up to this point, the Map is made up of information derived from what you have read. If you want to add your own comments, you can differentiate them by using a different colored pen -- or you could make a whole new Map. This is useful if you want to go more deeply into the material -- to help to remember or apply it, or to work on an essay. (See the section on "Working on an Essay," below.)

## **Summarizing Lectures**

Some people use Mapping to take lecture notes. If you find that this works for you, by all means do it: however, if it does not work, you can certainly take lecture notes as you normally would, and summarize them later (as soon as possible after the lecture) in the way described above. Be sure to do this first from memory -- then check it over for accuracy. If possible, give yourself adequate time to do this -- the more time you spend, the better your retention will be. However, even a brief summary will have very beneficial effects for your memory, and your overall understanding of the material -- its salient points and how they fit together.

## **Making Notes in a Seminar or Workshop**

A seminar differs from a lecture in that it lays more emphasis on process: in a more-or-less open-ended discussion among all members of the group, there is a less linear progression of ideas than there is in a lecture. A Map can be useful for keeping track of the flow of ideas in such a context, and for tying them together and commenting on them.

## **Reviewing for an Exam**

Mapping can be a productive way to study for an exam, particularly if the emphasis of the course is on understanding and applying abstract, theoretical material, rather than on simply reproducing memorized information. Doing a Map of the course content can point out the most important concepts and principles, and allow you to see the ways in which they fit together. This may also help you to see your weak areas, and help you to focus your studying. See the Questions that can help the mapping process above.

## **Creative Writing**

While you are working on an essay, you may experience a particularly important insight as you are Mapping: of course, you cannot predict what this "creative spark" will be about or when it will occur--however, if you are serious about writing or thinking, you should become familiar with the process that precedes insight. One very effective way to do this is to use Mapping for creative writing. An excellent book on the use of this technique for such literary (and even "therapeutic") purposes is *Writing the Natural Way*, by Gabriele Lusser Rico, who refers to her version of Mapping as "Clustering."