Concept Mapping

A concept map is a special form of a web diagram for exploring knowledge and gathering and sharing information. Concept mapping is the strategy employed to develop a concept map. A concept map consists of nodes or cells that contain a concept, item or question and links. The links are labeled and denote direction with an arrow symbol. The labeled links explain the relationship between the nodes. The arrow describes the direction of the relationship and reads like a sentence.

1. Kinds of Concept Maps - There are four major categories of concept maps. These are distinguished by their different format for representing information. Examples of the various types of concept maps are presented on the following pages. Click over each in order to open a special window that contains several images. After viewing them, click over the upper left corner of the special window to close it.

2. Four Major Categories of Concept Maps:
   a. SPIDER CONCEPT MAP - The "spider" concept map is organized by placing the central theme or unifying factor in the center of the map. Outwardly radiating sub-themes surround the center of the map.
   b. HIERARCHY CONCEPT MAP - The hierarchy concept map presents information in a descending order of importance. The most important information is placed on the top. Distinguishing factors determine the placement of the information.
   c. FLOWCHART CONCEPT MAP - The flowchart concept map organizes information in a linear format.
   d. SYSTEMS CONCEPT MAP - The systems concept map organizes information in a format which is similar to a flowchart with the addition of 'INPUTS' and 'OUTPUTS'.

3. Special Concept Maps include the following format types:
   a. PICTURE LANDSCAPE CONCEPT MAP - These maps present information in a landscape format.
   b. MULTIDIMENSIONAL / 3-D CONCEPT MAP - These describe the flow or state of information or resources which are too complicated for a simple two-dimensional map.
   c. MANDALA / MANDALA CONCEPT MAP - Information is presented within a format of interlocking geometric shapes. A "telescoping" factor creates compelling visual effects which focus the attention and thought processes of the viewer.

4. Uses:
   • Develop an understanding of a body of knowledge.
   • Explore new information and relationships.
   • Access prior knowledge.
   • Gather new knowledge and information.
   • Share knowledge and information generated.
   • Design structures or processes such as written documents, constructions, web sites, web search, multimedia presentations.
   • Problem solve options.

5. Critical Questions you must answer to do a concept map:
   a. What is the central word, concept, research question or problem around which to build the map?
   b. What are the concepts, items, descriptive words or telling questions that you can associate with the concept, topic, research question or problem?

6. Suggestions you should use when making your concept map:
   • Use a top down approach, working from general to specific or use a free association approach by brainstorming nodes and then develop links and relationships.
   • Use different colors and shapes for nodes & links to identify different types of information.
   • Use different colored nodes to identify prior and new information.
   • Use a cloud node to identify a question.
   • Gather information to a question in the question node.
Types of Concept Maps

Concept Maps are graphic organizers!

- SPIDER Concept Maps
- HIERARCHY
- VISUAL LANDSCAPE
- FLOWCHART - ALGORITHM Concept Maps
- SYSTEMS Concept Maps
- MANDALA
- 3-Dimensional Maps