

## **How to Build a Concept Map\***

1. Identify a focus question that addresses the problem, issues or knowledge domain you wish to map. Guided by this question, identify the concepts that are pertinent to the question and list these. You may find it helpful to list the concepts on Post-It notes so they can be moved around. You may also use a computer program. Concept labels should be one word, and at most two or three words.
2. Rank order the concepts by placing the broadest and most, inclusive concept. It is helpful to reflect on your focus question to help decide the ranking of concepts. Sometimes this process leads to modification of the focus question or writing a new focus question.
3. Work down the list and add more concepts as needed.
4. Begin to build your map by placing the most inclusive, most general concept(s) at the top. Usually there will only be one, two or three more general concepts at the top of map.
5. Next, select the three or four sub-concepts to place under each general concept. Avoid placing more than three or four concepts under any other concept. If there seem to be more than that under a concept or sub-concept, it is usually possible to identify a suitable concept of intermediate inclusiveness, thus creating another level of hierarchy in your map.
6. Connect the concepts by lines. Label the lines with one or two linking words. The linking words should define the relationship between the two concepts so that it reads as a valid statement or proposition. The connection creates meaning. When you hierarchically link together a large number of related ideas, you can see the structure of meaning for a given structure domain.
7. Rework the structure of your map, which may include adding, subtracting, or changing concepts. You may need to do this reworking several times, and in fact this process can go on indefinitely as you gain new knowledge or new insights. This is where Post-Its are helpful, or better still, computer programs.
8. Look for cross-links between concepts in different sections of the map and label these lines. Cross-links can often help to see new, creative relationships in the knowledge domain.
9. Specific examples of concepts can be attached to the concept labels (e.g., Golden Retriever is a specific example of a dog breed).
10. Concept maps could be made in many different forms for the same set of concepts. There is no one way to draw a concept map. As your understanding of relationships between concepts changes, so will your maps.

\*From "**Learning, Creating, and Using Knowledge-** Concept Maps as Facilitative Tools in Schools and Corporations, by Joseph D. Novak, Lawrence Erlbaum Associates, Publishers, 1998