

Key Elements of Concept Maps

1. Concept maps must have a firm grounding in assimilation learning theory and constructivism— that new knowledge is related to old knowledge and that learners actively construct knowledge by building on what they already know.

2. Concept maps have some degree of hierarchical organization. Generally concept maps are more general or abstract at the top and become more specific as one reads “down” the branches. Very specific details and examples are at the very bottom.

3. Links between concepts are meaningfully labeled so that propositions, or statements, can be read from one end of a branch to the other end the branch.

4. Concepts in a concept map need to be “concepts.” Concepts are not things such as images, thoughts, sentences, people, or events.

Best Practice Advice for Using Concept Maps in the Classroom

1. Give students a clear focus question to guide their maps. Do not give fundamentally vague or open-ended mapping assignments (especially for beginning mapping students) such as “Create a map for the word SPRING.” Better assignments are more specific but have room for students to elaborate such as “Describe the forces affecting a mass hanging on a spring.”

2. Give students good parameters in which to work. Be clear with your rules for such things as hierarchy, types and numbers of concepts, linking words, etc. Both you and your students will get the best results from mapping if you let students know what you expect from them!

3. Never ask students to memorize and replicate a given map—this works against the acquisition of meaningful learning. Students should use mapping as way to show you what they know, show how their learning is organized, and show how they have built their new learning on their previous knowledge.

4. Never forget that concept mapping is less about the structure of the map and more about communicating ideas in a different format. Correct, clear, and informative maps can take many, many forms!