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Abstract

Concept maps are graphical tools for organizing and representing knowledge. They include concepts, usually enclosed in circles or boxes of some type, and relationships between concepts indicated by a connecting line linking two concepts. Words on the line, referred to as linking words or linking phrases, specify the relationship between the two concepts. We define concept as a perceived regularity in events or objects, or records of events or objects, designated by a label. The label for most concepts is a word, although sometimes we use symbols such as + or %, and sometimes more than one word is used. Propositions are statements about some object or event in the universe, either naturally occurring or constructed. Propositions contain two or more concepts connected using linking words or phrases to form a meaningful statement. Sometimes these are called semantic units, or units of meaning. Figure 1 shows an example of a concept map that describes the structure of concept maps and illustrates the above characteristics.

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Assignments using concept maps are probably best constructed to work toward accomplishment of learning outcomes at the critical thinking cognitive levels. Here are a few examples of action verbs from the relevant levels of Bloom's cognitive domains: · Applying: Construct, Illustrate, Investigate, Relate · Analyzing: Analyze, Deduce, Distinguish, Prioritize, Summarize · Evaluating: Determine, Explain, Interpret. Kent State Online – http://www.kent.edu/onlineteaching. Page | 3. The theory underlying concept maps and how to construction and use them. Pensacola, FL: Institute for Human and Machine Cognition. Retrieved from http://cmap.ihmc.us/docs/theory-of-concept-maps. · Benefits of Concept Maps o This short article describes the benefits of using concept maps.