Concept Mapping

Concept mapping is a tool that educators can use to help students recognize main ideas, identify relationships among ideas, and extract larger themes. It involves graphically representing concepts by mapping out relationships between them, a process comparable to how the mind operates (e.g., Novak, 2008). Importantly, concept mapping often leads to novel insights. The following are three ways you can use concept mapping to help students achieve course learning objectives.

- Provide teams of students with a list of key terms that they can use to create a concept map. Students position the terms within circles, connecting the circles with links and labeling each link with a word or short statement that describes their relationships. You can vary this activity by providing groups of students with an incomplete concept map (e.g., a fill-in-the-blank form, rather than a blank sheet of paper), which already includes some of the terms or labels, and have them complete it.

- Assign students a research project that begins with a concept mapping activity in which students assimilate information about a topic. This activity helps students see gaps in the literature and develop research questions that they can then investigate.

- Assess learning by having students construct a concept map before and after covering a course section. You can also use concept mapping as a quick check-in activity to assess the kinds of connections students are making. This technique helps you identify sections that are difficult for students, allowing you to determine how best to review or clarify concepts.

Resources

Hay, D., Kinchin, I., & Lygo-Baker, S. (2008). Making learning visible: The role of concept mapping in higher education. *Studies in Higher Education*,*33*(3), 295–311.

Ian M. Kinchin (2014). Concept Mapping as a Learning Tool in Higher Education: A Critical Analysis of Recent Reviews, *The Journal of Continuing Higher Education*, *62*, 39-49.

Novak, J. D., & Cañas, A. J. (2008). The theory underlying concept maps and how to construct and use them. *Florida Institute for Human and Machine Cognition Pensacola Fl, www. ihmc. us. [http://cmap.ihmc.us/Publications/ResearchPapers/TheoryCmaps/Theory UnderlyingConceptMaps. htm]*, *284*, 16.

For more information or to discuss how you might incorporate these ideas into your courses, contact the Reinert Center at cttl@slu.edu.