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Tsai, Chin-Chung and Yu-Ju Chou. **The Role of “Core” and “Anchored” Concepts in Knowledge Recall: A Study of Knowledge Organization of Learning Thermal Physics.** *Knowledge Organization*, 32(4). 143-158. 40 refs.

ABSTRACT: This study is an investigation of whether learners’ knowledge is organized around a “core” concept within a knowledge domain, which is strongly linked to other secondary concepts, called “anchored concepts.” In other words, the “core” concept and “anchored” concept are mutually supportive of one another. These two concepts can be linked with other concepts to produce more extended and robust knowledge structures in memory. This study used a flow map method to identify learner’s “core” and “anchored” concepts derived from the treat-

ment instruction about thermal physics. The results showed that with the assistance of “core” concept, profitably mediated by the “anchored” concept, learners could recall more extended knowledge, with greater richness and with higher connection than in the absence of this organizing information (Experiment 1). However, the difference between the provision of a group core concept and an individual core concept did not reach any significance level in the recall task two-month later (Experiment 2). When the recall task was carried out six months later, the group “anchored” concept showed the essential assistance to the recall of knowledge (Experiment 3). This study has provided potential insights not only about the functional mechanisms of learners’ knowledge construction but also for classification research.