Using Computerized Concept Mapping to Teach Social Studies Content

What is the evidence base?

- This is a research-based practice for **students with disabilities** based on one methodologically sound group study with random assignment across 20 students with disabilities, one methodologically sound group study without random assignment across 18 students with disabilities and one methodologically sound single-subject study across three students with disabilities.

- This is a research-based practice for **students with learning disabilities** based on one methodologically sound group study with random assignment across 12 participants with learning disabilities and one methodologically sound group study without random assignment across 12 participants with learning disabilities.

- This is a research-based practice for **students with emotional disorders** based on one methodologically sound group study with random assignment across eight participants with emotional disorders, one methodologically sound group study without random assignment across six participants with emotional disorders, and one methodologically single-subject study across three participants with emotional disabilities.

Where is the best place to find out how to do this practice?

The best place to find out how to implement computerized concept mapping is through the following research to practice lesson plan starter:

- Using Computerized Concept Mapping to Teach Social Studies

With who was it implemented?

- Disability Category
  - **Learning Disability (2 studies, n=24)**
  - **Emotional Disorders (3 studies, n=17)**
  - Students without Disabilities (2 studies, n=55)
- Ages
  - 9th graders (n=3)
  - 10th graders (n=38)
- Males (n=50), Females (n=46)
- Ethnicity

- Caucasian (n=63)
- African-American (n=9)
- Asian (n=11)
- Hispanic (n=10)
- Not reported (n=3)

What is the practice?

Computerized Concept Mapping has been defined as using computer software to "facilitate the recall and reading comprehension of social studies declarative knowledge of students with and without disabilities" (Boon, Fore, Blankenship, & Chalk, 2007, p.47). Other related terms may include, Technology-Based Cognitive Organizers, or Computer-Based Cognitive Mapping. Computerized Concept Mapping always includes the use of computer software to organize information from a textbook, outline notes using visual displays the students construct themselves.

- Computerized Concept Mapping has been implemented using Inspiration software (http://www.inspiration.com/Inspiration) to teach comprehension of a social studies text book (Blankenship, Ayres, Langone, 2005; Boon, Burke, Fore, Hagan-Burke, 2006; Boon, Burke, Fore, & Spencer, 2006).

Where has it been implemented?

- General education classroom (2 studies)
- Self-Contained classroom (1 study)

How does this practice relate to Common Core Standards?

- ELA (Reading Informational Text, Grade 9-10)
  - CCSS.ELA-LITERACY.RI.9-10.2- Determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.
  - CCSS.ELA-LITERACY.RI.9-10.5- Analyze in detail how an author's ideas or claims are developed and refined by particular sentences, paragraphs, or larger portions of a text (e.g., a section or chapter).

How does this practice relate to the Common Career Technical Core?

- Visual Arts Career Pathway (AR-VIS)
  - Analyze and create two-and three-dimensional visual art forms using various media.

References used to establish this evidence base:

Blankenship, T. L., Ayres, K. M., & Langone, J. (2005). Effects of computer-based cognitive mapping on reading comprehension for students with emotional behavior disorders. *Journal of Special Education Technology, 20,* 15-23.

Boon, R. T., Burke, M. D., Fore, C. III, & Hagan-Burke, S. (2006). Improving student content knowledge in inclusive social studies classrooms using technology-based cognitive organizers: A systematic replication. *Learning Disabilities: A Contemporary Journal, 4*, 1-17.

Boon, R. T., Burke, M. D., Fore, C. III, & Spencer, V. G. (2007). The impact of cognitive organizers and technology-based practices on student success in secondary social studies classrooms. *Journal of Special Education Technology, 21,* 5-15.

Boon, R. T., Fore, C., Blankenship, T., & Chalk, J. (2007). Technology-based practices in social studies instruction for students with high-incidence disabilities: A review of the literature. *Journal of Special Education Technology, 22,* 4, 41-56.

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