

[Keynote Jennifer Cromley](#)

Abstract:

Many education researchers are familiar with social network analysis of children in classrooms, teachers in school districts, and so on. The same network analysis techniques can be applied to individuals' knowledge structures (e.g., from think-aloud protocols or written responses), eye tracking scanpaths, navigation captured in logfiles, and other during-learning process data. I report on the added value of these network metrics with one think-aloud and one think-aloud-and-eye-tracking dataset, beyond the strategy use or count of gazes in AOIs that are typically used to predict learning outcomes. Considerations for analyzing different types of knowledge/attitudes (e.g., individuals verbalizing both positive and negative attitudes) will be discussed, as well as options for analyzing multiple data streams. Similarities and differences will be discussed in the context of small published literatures applying network analysis to either individual knowledge structures or scanpath/navigation data. Free resources for learning these techniques will be shared.