Exploring Online Course Sociograms Using Cohesion Network Analysis

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Abstract

Massive Open Online Courses (MOOCs) have become an important platform for teaching and learning because of their ability to deliver educational accessibility across time and distance. Online learning environments have also provided new research opportunities to examine learning success at a large scale. One data tool that has been proven effective in exploring student success in on-line courses has been Cohesion Network Analysis (CNA), which offers the ability to analyze discourse structure in collaborative learning environments and facilitate the identification of learner interaction patterns. These patterns can be used to predict students' behaviors such as dropout rates and performance. The focus of the current paper is to identify sociograms (i.e., interaction graphs among participants) generated through CNA on course forum discussions and to identify temporal trends among students. Here, we introduce extended CNA visualizations available in the *ReaderBench* framework. These visualizations can be used to convey information about interactions between participants in online forums, as well as corresponding student clusters within specific timeframes.

Keywords

Cohesion Network Analysis Online courses Sociograms Participants
Clustering Interaction patterns

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