Online Social Structures and Perceived Attitudes towards Thinking and Learning

In this study we explore the use of the Attitudes Towards Thinking and Learning Survey (ATTLS) as a means for evaluating student's attitudes towards thinking and learning in e-Learning environments. More specifically, prior to taking part in a virtual Computer Aided Language Learning (CALL) course, the students were asked to complete an ATTLS. The ATTLS is an instrument used to measure the extent to which a person is a 'connected knower' (CK) or a 'separate knower' (SK). People with higher CK scores tend to find learning more enjoyable, and are often more cooperative, congenial and more willing to build on the ideas of others, while those with higher SK scores tend to take a more critical and argumentative stance to learning. Furthermore, and during the duration of the course, we also analyzed the students' discussion board interactions using a method called Social Network Analysis (SNA). SNA is the mapping and measuring of relationships and flows between people, groups, organizations, computers or other information/knowledge processing entities.

The results show that the students' ratings in the ATTLS were predictive of their participation in the e-Learning environment. More specifically, the students identified by the ATTLS as the 'connected knowers' were the same individuals that the SNA results found to be more central in the discussions.

The approach provided in this paper can be a useful methodology for educators and maintainers of e-Learning courses as it allows predictions of the students' participation but also insights about the dynamics of their community, enabling them to develop strategies for making more students connected knowers, especially since ATTLS surveys are administered prior to any online interaction of the actors. Future research directions could include the comparison of the SNA results with other forms of standardized questionnaires (e.g. the Constructivist Online Learning Environment Survey - COLLES).