Identifying Educational Innovation Through Semantic SNA

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In this paper we describe a project measuring educational innovativeness of students and teachers through their online social networking structure. We analyze the online social network of the collaborative learning platform educanet.ch, which has been developed by the Swiss educational ministry as a collaboration tool for K1-12 teachers and students. We measure the linking structure of the publicly accessible part of educanet, and compare it with the link structure of Swiss private schools. We notice a huge discrepancy between highly linked private schools, and the sparsely linked public educanet. In particular, links are only between schools, i.e. teachers, and not between students. There are for example no links from Facebook to educanet. One conclusion therefore is that students are not using educanet for collaboration.

In one subproject we focused on the density of the network as well as the density of the different language sub networks in trilingual Switzerland (German, French, Italian). We correlated networking structure of schools with their success rate in the ETH Swiss high school ranking, to evaluate if higher interconnection implied greater success and excellence within the network.

To find global educational innovations, we identified trends and trendsetters on the global educational forum TakingItGlobal through dynamic social network analysis, calculating the most central participants, and analyzing their interests and discussion topics.