## Network Visualization

For this assignment, I choose a dataset of a primary school contact network which represents face-to-face proximity between students and teachers during one day at a French primary school in October 2009. The nodes are either students labeled with Grade level (1-5) and Class (A or B), or teachers. Edges represent face-to-face contacts throughout a single day. In the graph I have displayed the nodes sized by their eigenvector centrality values, and colored different classes near each other with complimentary colors (as often as possible).

As shown in the data quite clearly, face-to-face contact occurs most frequently among members of the same grade and class. Another notable feature of the graph is that the majority of members of classes 4B and 2A have very little face-to-face interaction with any other classes, and they are thus shown near to the edges of the graph. Another interesting feature is that there are a few classes which seem have some members that are much more social compared to the rest of their class -- such as 3B -- and these social members appear separated from the rest of their class, appear near to the center of the graph, and have the highest eigenvector centrality size. Another interesting feature is that class 1A has members with low eigenvector centrality (as shown by node size) but the same members are connected to people in quite a few other classes so that the entire class appears in the center of the graph -- whereas members of class 2B with low eigenvector centrality have very few connections outside of their class.

http://www.sociopatterns.org/datasets/primary-school-cumulative-networks/