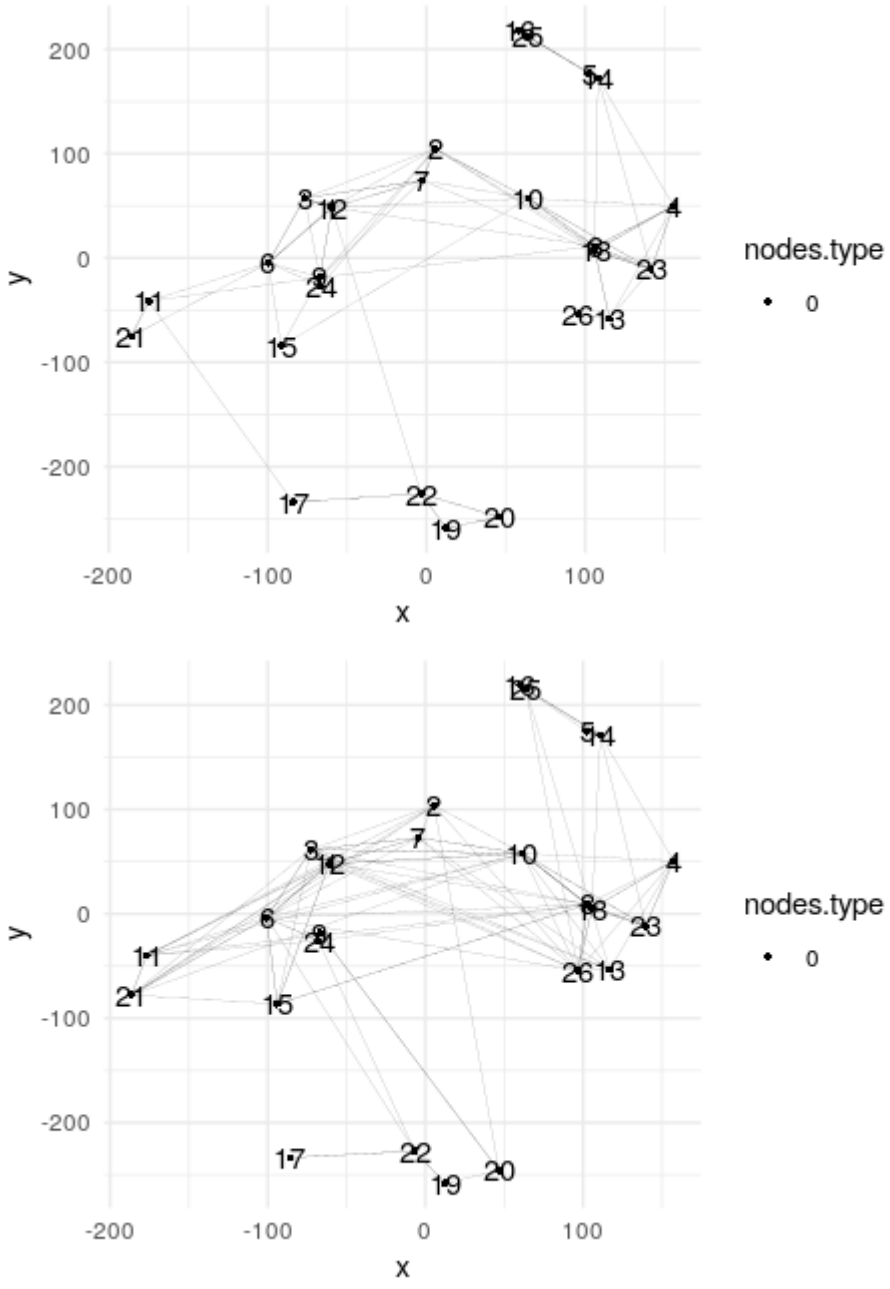
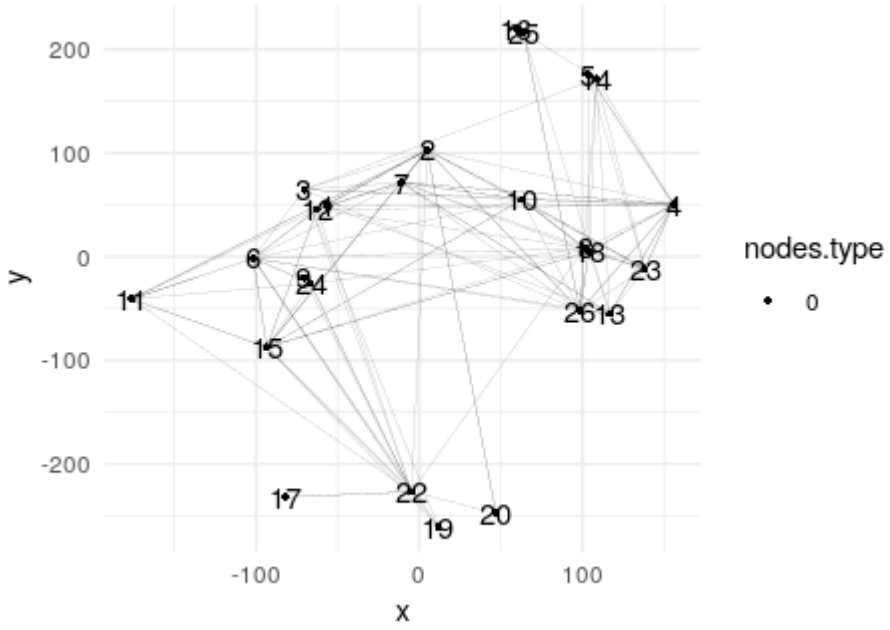
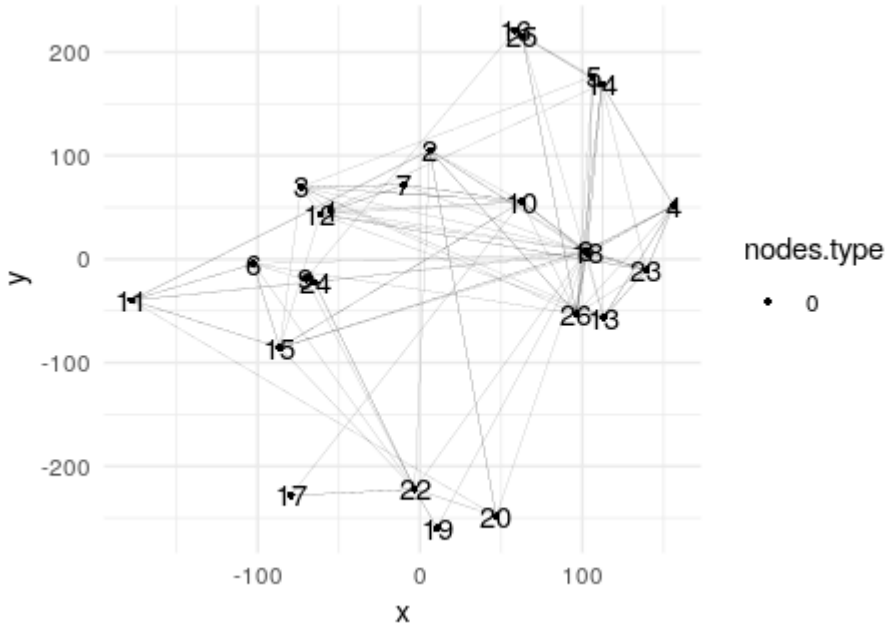
1. simulation results from classroom data







2. Poisson regression type for count data
From Dan's paper about weighted edges,

$$\log(\mu) = \eta,$$

$$y \sim Poisson(\mu)$$

where η is defined as before.
Derived likelihood function would be the product of each single link:

$$-\mu + y\eta - \log(\Gamma(y+1))$$

3. Partial set of links

For undirected network, we only need to consider link between node i and j where $i \leq j$. Similarly, when we are only interested in a subset of link types (e.g. when we are not interested in word-word link), we do not include other types of links in the likelihood.