**In it for the long run: Teacher career paths and sorting among public schools**

How can teacher career paths be categorized into distinct types of career paths?(sequence analysis, mixture models)

How do teacher characteristics predict different types of career paths? E.g. high school GPA, gender, ethnicity, SES background, rural/urban location when graduating,

Do teachers sort into different types of schools depending on teacher and schools characteristcs?

Can we find a “dance of the lemons” type pattern?

How are “types” of teachers distributed across schools? Do marginalized schools for instance mostly employ teachers that start at marginalized schools or are these types of teachers a minority among marginalized schools?

Are some types of teacher career paths more prevalent in some time periods than in others? E.g. are teachers that switch between types of schools or perhaps in and out of teaching a “new” phenomenon, while teachers work for decades in the same school might be a thing of the past?

Do teachers with high VAM scores exhibit less attrition because they sort into attractive schools, i.e. they work in schools that you don’t want to leave?

Use LSTMs or RNNs to model teacher career paths

Plan for paper:

Research question: How do teacher characteristics predict different types of career paths?

Data: administrative data

Outcome: being employed at either public school in the lowest quartile, public school at the median, Public school in the upper quartile, private school or not being a teacher in a given year.

Predictors: Teacher high school GPA, teacher sex, teacher age, teacher year of graduation, ethnicity, SES background, rural/urban location when graduating.

Method:

sequence analysis to find sequences of teacher career paths

Cluster analysis to find different types of career paths

Regression to find out if teacher characteristics are predictive of belonging to a certain cluster of career paths