EDLD 651: Introduction to Educational Data Science

Final Project: Outline

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Section 1: Description of the Data

This research project will be conducted using High School and Middle School level data from the Civil Rights Data Collection (CRDC), 2017-2018 data set. The CRDC contains multiple datasets that cover a range of topics. From the overall dataset, we are focusing on frequency data reported in the following areas:

- 1. School Support (count of enrolled novice teachers, sworn LEO)
- 2. Harassment and Bullying (count of incidents of students by subgroup)
- 3. Referrals & Arrests (count of referrals and arrests of students by subgroup)
- 4. Expulsions (count of expulsions of students by subgroup)
- 5. Enrollment (count of enrolled students by subgroup)
- 6. School characteristics (Supplementary data on reporting schools and districts)

Section 2: Discussion of Preparatory Work

2.1 Dividing Responsibility

2.2 Research Questions

- 1. Relationship of Concentration of novice teachers and rate of exclusionary discipline (i.e., suspensions, expulsions) in high school students Merly Vary by student subgroups? (i.e. race, disability) Vary district? Vary by state?
- 2. Relationship of security guard density and harassment and bullying or referrals + arrests (or restraint & seclusion)? Cassie Should we see if there is any correlation between corporal punishment and security guard presence? Might vary by student characteristic (e.g., students with disabilities, gender, grade level, or race) Number of transfers out of schools with guards might be at an increased level

(Still considering) Discipline concentration by school level?

For now, we can use all data regardless of level, and we will determine whether this is feasible in following meetings.

2.3 Getting to know the Data

As a first step, we have divided the 6 data set Dividing the role of each team member Coordinator: Manuel Project Manager 1. Merly (#1 Research question: Relationship of Concentration of novice teachers and rate of exclusionary discipline for Middle and High School Students) Project Manager 2. Cassie (#2 Research question: Relationship of security guard density and harassment and bullying or referrals + arrests? Operation Manager, Scrum Master: Errol Quality assurance Manager: Havisha Download and conduct basic data cleaning. Each person is responsible to do a basic data cleaning: check for the missing data, duplicate, variable names, skim the data, create descriptive statistics for the dataset (mean, Correlation, SD, percentage, histogram, etc). Once we get to know the data, we will try to link each dataset according to our variables of interest (RQ 1 and 2).