Can we use statistical matching processes to identify high performing schools that could serve as mentors for their lower performing counterparts?

Project Summary

Due to changes in the Every Student Succeeds Act (ESSA), the Kentucky Department of Education (KDE) is required to identify the bottom five percent of schools for Comprehensive Support and Improvement Status (CSI) based on the state’s accountability system. KDE provides intensive support to these schools, including diagnostic reviews, on-site support from KDE staff, and distance monitoring. As KDE works to become more efficient with its resources, new methods of providing support to schools will be required. KDE is working to develop tools that would identify high performing schools with statistically similar populations who could serve as mentor schools to lower performing schools. These schools face similar problems and may be able to share effective solutions.

What are we doing?

KDE is working with interested CSI schools to compare data points to identify mentor schools. KDE is experimenting with a variety of statistical matching constructs, including methods of propensity score matching, to pair up schools.

What have we learned already?

We have learned that statistical matching techniques can be used to quickly identify schools with differing academic performance but statistically similar populations. We have also learned that different matching algorithms produce different lists of matched schools.

What comes next?

KDE is working to determine which matching methods are most beneficial for Kentucky’s CSI schools. Additionally, we will continue to experiment with different data points to create the most meaningful matches possible. We will be working with CSI schools to apply these data techniques and hope to refine our work in the coming years.