

Abstract Submitted
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Longitudinal Visualizations of Testing Data SARAH STEPHENS,
University of Texas at Austin — Due to the substantial amount of standardized testing data collected, there is a need for accurate and coherent data visualization to determine longitudinal patterns in the data and the effectiveness of academic policy changes. Specifically, we would like to develop new methods to analyze the data set collected by the Texas Education Research Center. Building on the visualization techniques of Bendinelli, et al. ¹, we have developed a new visualization method, “modified streamlines”, that minimizes the effects of regression to the mean and can accurately predict student outcomes with only three years of data. The ability to anticipate the future performance of a group of students in just a few years will allow policy makers to infer the long-term outcomes of new policies in a reasonable time-frame.

⁰Bendinelli, Anthony J., Michael Marder. Visualization of Longitudinal Student Data. Phys. Rev. ST Phys. Educ. Res. 8, 020119 (2012).

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