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Visualizations of Illinois Educational Data CACEY STEVENS, The James Franck Institute and Department of Physics, University of Chicago, MICHAEL MARDER, Department of Physics, The University of Texas at Austin, SIDNEY NAGEL, The James Franck Institute and Department of Physics, University of Chicago — We examine data from scores on standardized exams taken by students in the state of Illinois. In order to analyze the factors affecting school performance in mathematics, we represent the data through visualizations, an approach commonly used to identify patterns in studies of physical systems. Exam scores for different schools are shown to depend on program type, location, and poverty concentration. For most schools in Illinois, test scores decline linearly with increased poverty concentration. However schools in Chicago show deviations from the linear trend. For any given poverty level, schools in Chicago perform better than those in other communities of Illinois. We also compare different school types, such as neighborhood, magnet, and charter programs, at each grade level. The city's selective enrollment programs show notably superior achievement at the high school level. This is less pronounced at earlier grades.

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