Curriculum Units by Fellows of the Yale-New Haven Teachers Institute
2008 Volume VI: Depicting and Analyzing Data: Enriching Science and Math Curricula through Graphical Displays and Mapping

Graphics Creation and Statistical Interpretation: Relating Local Economics and the Global Environment

Guide for Curriculum Unit 08.06.07
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This unit is designed for New Haven high-school mathematics students in grades 9-12. The unit addresses the main concepts of the New Haven Public Schools' Probability and Statistics curriculum, and portions of it may be applied to an Advanced Placement curriculum. The mathematical content of study includes descriptive statistics, data representation and graphical interpretation.

Study of the mathematical content is presented in the context of economics and the environment, both at the local scale and the larger scale. Economics is a reality for any citizen, and environmentalism is becoming a part of mainstream American life. Incorporation of economics and environmental study is achieved through focusing student inquiry into the relevant area of economics, such as household budgets, energy and food costs, and the necessary area of the environment, such as climate, weather and food production. All data sets used rely on some aspect of resource or service that affects daily life in one way or another. By studying these phenomena through applying statistics, students should gain a better appreciation for their standard of living, and be provoked to make informed decisions as consumers.

(Recommended for Probability and Statistics, grades 9-12)