This project was funded by the Alabama State Department of Education to accomplish state-level activities described in the state’s Consolidation Application for funds under Titles II and V of the No Child Left Behind Act of 2001. The purpose of the state-level activities is to support high-quality and comprehensive educational programs that are designed to improve student academic achievement among all subgroups of students, but particularly among those who are at risk of failing to achieve proficiency on the state’s academic content and student achievement standards. This talk will share the authors’ experience in conducting this professional development project in which a course titled "Data Analysis and Statistics" was offered for elementary and middle school teachers from January 2004 through June 2004. The content and pedagogy developed in this project were also used by one of the authors of this paper as the core material in a course "Concepts of Elementary School Mathematics" taught at Frank Roosevelt American School in Lima, Peru in May 2004. The level of difficulty of duplicating this course based on this experience will also be discussed in this talk. (Received September 10, 2004)