The overall goals of this paper are (1) to introduce an alternative method of teaching using modern technology, the Reverse-Traditional/Hands-On (RT/HO) method; and (2) to show that students do learn a very important and widely used subject, statistics, as early as in high school. The RT/HO method incorporates the state-of-the-art technology into the teaching style that will bring up the solution of a problem with possible terminology. Then, the terms are defined and the steps to reach the solution are explained. Thus, terms are defined when they are needed in conjunction with the solution in hand. This method will reduce the amount of abstraction in most mathematically related subjects. The method has been applied in a summer program, Benedict Precollege Statistics (BP STAT), for high school students on ten different subjects of learning in mathematics and statistics and was repeated for a second year. Two computer software packages, Matlab for mathematics and graphs, and MINITAB for statistical analysis, were used. The results show that the method is effective, students learn a great deal, and they pay attention at all times. (Received September 12, 2000)