

The Teaching and Learning of Statistics: Traditional vs. Interactive Methods

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Abstract: The research goal for my program is to see if visual aides help students better understand concepts. My plan is to have two homogenous classes that will receive identical instruction save for the use of the Cyberstats visuals in one of the classes. Students in both classes will be assessed using the same tools and a simple statistical comparison between the two populations will enable me to discern differences in student grades. My gut instinct is that the students with the visual aides will score better on average. Students will be given an access code for the Cyberstats package and will be able to “play” with the interactive visual tools and develop an intuitive understanding for the concept at hand. For example, if students can actually see how a mis-typed data point affects the measure of center of a set of data, they might better understand why the median is resistant to this type of error, while the mean is not. This is the type of hands-on learning that I expect students to do with the use of Cyberstats..