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The Statistics On Statistics

It seems you can hear at least one statistic within two minutes of commercials. It seems most people would agree, "Statistics can prove anything." Is that statement true? To find out, I analyzed Jefferson county 2006 C-SAP scores. The county divided scores into areas, which I used. I computed different statistics for the areas and chose ones that appeared to have different implications. I then surveyed the public to see if the statistics gave them differing impressions. When I compared Conifer to Options, 67% felt Conifer clearly performed better when presented with average proficient/advanced scores for the schools; while 63% felt that Options schools clearly performed better when presented with the percent of schools that had at least 80% proficient/advanced. 69% of the people felt the Charter schools clearly performed better when presented with the percent of students in the area scoring proficient/advanced, while 67% felt Lakewood clearly performed better when presented with scores adjusted to account for the number of students eligible for free/reduced lunches. Using a Binomial Hypothesis test, I showed that there were contradictory opinions to a 0.05 level of significance. However, I discovered no statistic that would make the Evergreen area look bad, or the Interventions schools look good; hence, I disproved the saying for some situations. I showed that some statistics can "prove anything," while others cannot. You can change the appearance of many data sets by choosing your statistics. Therefore, it is always good to see all of the statistics before making a decision.