As data sets have become larger and demand for data scientists to analyze data has become greater, using the computer in the classroom to teach appropriate statistical techniques has grown more popular. As such, there is a greater need for future statisticians to learn statistical computing tools. Students are learning to use the computer to conduct statistical analysis earlier in their educations. As with any technology, this may affect how a student learns the concepts in their field. Through a qualitative study of written work completed by students in a second course in statistics, this empirical research study begins to define the relationship that exists between a student’s ability to think statistically while utilizing statistical computing benefits.