TWO WAYS TO TEACH AN ELEMENTARY STATISTICS COURSE: THE WORKSHOP APPROACH VS. THE TRADITIONAL APPROACH. WHICH ONE IS THE WINNER?

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This paper compares the effectiveness of two different approaches in teaching an elementary statistics course, one being the workshop approach and the other being the traditional approach. In the workshop approach, classes were held in a computer classroom and students learned statistics by participating in class activities witch lead them to explore the concepts and ideas of the statistical techniques. The computer software package MINITAB was used in almost every class. Students virtually learned the materials on their own with minimum guidance from their instructor. In the traditional approach, materials were taught in a traditional classroom. Prior to requiring students to solve problems, concepts and techniques were presented and explained, and examples were usually given. The workshop approach was adopted in the Fall 1996 semester in four sections of an elementary statistics course and the traditional approach was used in the Spring 1997 semester in four sections of the same course. Comparisons are based on the scores of the exam problems which are identical in the two approaches. Students' reactions to these approaches are also measured. Reasons for the discrepancies are examined.