Abstract

The purpose of this research was to conduct an experiment where simulation was used as an instructional strategy and potential intervention for improved student posttest performance in an aeronautical science aerodynamics class. The experiment was conducted in two sections of a pilot aerodynamics course, where one section served as the control group, and the other section the treatment group. A quasi-experimental research design was used to examine the influence of simulation on posttest performance and motivation. ANCOVA was used to test for a difference in the means of the two groups, and the results indicated an improvement in posttest performance for the group that used simulation. The instructional materials motivation survey (IMMS) was used to examine post session motivation. An ANCOVA indicated that there was no difference in the means of the two groups, and results indicated that there was no influence of the use of simulation on motivation. A Pearson correlation was conducted on the data, and results indicated that there was no relationship between performance and motivation.