To: Candice Bauer

../../../../initials.pngFrom: Willis Allstead (9-3)

Date: September 29, 2017

Subject: SLO #2 – Experiment Design

Willis is an avid snowboarder. During the 2016-2017 snowboarding season, he decided he required a better snowboard for free-riding. Free-riding means snowboarding or skiing on ungroomed terrain. Since the ski resort he frequented had a scheduled demo day, Willis decided to try out three popular snowboards in order to find the one he would purchase. The three boards he would try were the Burton Flight Attendant board, the K2 Cool Bean board, and the Burton Tricky Pony board. The variables Willis would be testing were how stable each board was on uneasy terrain, how each board faired in deep powder, and sharply each board could turn. Willis had conducted a pilot test the prior year during a separate demo day at the same resort, but he ended up not buying a board at that time.

Willis hypothesized that the Burton Flight Attendant would outperform the others when it came to free-riding because of its shape and flexibility. The results of the experiment he would perform are not generalizable for several reasons, including how different ski resorts have different paths with varying amounts of snow depending on the weather at any given time, and the fact that every person has a different body shape and stance. The experiment Willis performed controlled for weather and snow amount because each snowboard was tested on the same day with no noticeable weather change. In testing the Cool Bean board, Willis rated it lowly in uneasy terrain, low in deep powder, and high in the sharpness of its turns. He rated the Tricky Pony board high in uneasy terrain, low in deep powder and acceptable in the sharpness of its turns. Finally, he rated the Burton Flight Attendant board high in both stability in uneasy terrain and how it faired in deep powder. He rated it acceptable in the sharpness of its turns. He expected a smaller turn radius at higher speed with the shape of the board. Given these results, Willis chose the Burton Flight Attendant as the best board out of the three.