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Turn and Burn

The purpose of this experiment is to determine how the shape of a wind turbine blade affects the efficiency of the power output. This information would be beneficial to the world because many companies use wind turbines as an alternative energy resource. With the information gained from this experiment, those individuals can use the data to help decide what blade shape to use on the turbines. Out of the three different blades, the rectangle shape blade will produced more amps than the triangle and hexagon shaped blades. The experimental procedures were relatively simple. First, all of the blades were cut using scissors. Next, the blades were screwed on to the fan. After testing the first blades they were removed and the next shape of blades were screwed on. After testing those blades, the last set of blades were screwed on and tested. The data showed that the triangle shaped blade, the rectangle shaped blade, and the hexagon shaped blade all had the same average energy output of 0.316 on low speed. On high speed, the rectangle and hexagon shaped blades had average energy outputs of 0.390 amps on high speed. The triangle shaped blade had an average energy output of 0.406 amps on high speed. In conclusion, the results of the experiment rejected the hypothesis. There is nothing that could've been done to improve the experiment. One thing learned from this experiment was that the more surface area a wind turbine blade has the more energy it will produce.