Subjects: Aerodynamics and Math

Grade Level: 5-12

Goals:
1. To demonstrate throwing differences among three weights of flying discs.
2. To illustrate the use of bar graphs.

Learning Objectives:
Students will:
• Examine three different flying discs and note the differences in weight.
• Record the distances that the discs were thrown and calculate an average.
• Use bar graphs to compare their throws to others in the database.
• Explore online TERMS and FACTS to better understand their results.

Purpose/Rationale:
To increase student interest in aerodynamics and math applications.

National Science Content Standards:
• Content Physical Science - Motions and Forces (Grades 5-12).

National Council of Teachers of Mathematics Standards:
• NM-ALG.6-8.3 and NM-ALG.9-12.3
  Use mathematical models to represent and understand quantitative relationships. (Grades 6-12)

Prior Teacher Preparation:
• Obtain flying discs. You may substitute different brand discs, but the weights should be the same as those listed in Materials.
• Locate a safe place to throw discs.
• Choose a measuring method (See FACTS: Measuring Distance).
• Arrange for use of computers.

Materials:
• 3 Classic Frisbees
• 3 ProClassic Frisbees
• 3 Ultimate Frisbees
• Measuring device
• Paper for recording distances
• Pencil
• Computers with Internet connection for accessing website
• Printers for printing student results
• Printer paper

Procedure:
See Instructions (Tab 1) and the Data Form (Tab 2).

Assessment:
• Students print one bar graph and submit it with an explanation of their performance.
• Students complete online Evaluation Form (Tab 4).

Self-evaluation:
Teachers/leaders reflect on the event and note ways to improve the experience.