

Lesson 5: Egg-streme Sports

Category: Skills Identification and Career Exploration

Employability Skills

- a) Teamwork & Working in Diverse Environments
- b) Problem Solving & Critical Thinking
- c) Flexibility & Adaptability

Instructional Direction

Students will break into groups of 4–6 in order to complete this project. Depending on the desired final product output, this project may have components spread out over multiple class periods or can be delivered in as short as 60 minutes.

Scenario – Eddie the egg and dozens of his friends are passionate about base jumping, but they don't like to be constrained by wearing a parachute...which tends to make landing a problem. Several friends have scrambled their brains in the process. Your company is going to capitalize on this new sport by building a structure to place on the floor where Eddie and his friends can land safely. You will build a prototype competing with several other companies for Eddie's business. In order to win you need to not only build a working structure but have good advertising, promotional materials, and a solid business structure.

Construction – each group must use 6 inches of tape, 4 straws, and 2 pieces of newspaper to build a structure that can sit on the ground without assistance.

Organization Structure – because this is a start-up company, funding is limited and thus, staff must be limited; each group must determine what five critical positions they will hire for and defend why they chose those positions. They then need to develop a mission statement to guide their new business.

Marketing – each group must come up with a name for the company, a name for their product, an advertising slogan, and either a marketing poster or commercial. The marketing strategy must align with the mission statement of the company.

Sales – each group must complete a SWOT analysis; based upon this analysis as well as time spent in construction, materials used, salaries of employees, competitor prices, and product demand, they must determine how much they will charge for their structure and who will be in their target audience.

Competition – each group will present on their organizational structure, mission statement, SWOT analysis results, and then share their poster or commercial that includes a slogan and the price they have determined to sell their product at. After each business has gotten the opportunity to pitch their company, the prototype structures will be tested. Structures should be placed on the ground in the designated area, one member from each team, should bring their customer and stand beside their structure. When instructed, each customer should be dropped from waist level into the structure. Each "survivor" will then be dropped from slightly higher. This process will continue until only one "survivor" remains.

Judging – the winner will be determined based not only on the egg surviving the drops, but also on how well the group structures their company and presents their information. As time allows, teachers are encouraged to create and explain a scoring rubric defining how each component will be evaluated and weighted.

Learning Outcome(s)

Students will be able to identify occupations needed to form a successful company, apply engineering and mathematical principals to build a structure, use effective communication tools to create company marketing materials, and introduce business acumen to make decisions about the organizational structure and operation of a company.

Resources Needed

Newspaper, tape, straws, eggs, paper towels, trash can, markers, materials used for "marketing the company," High-Skill, High-Growth list, cleaning materials

Modification and Extensions

- Students research other extreme sports and prepare presentations on other products they might develop to support these sports and how adding these product lines would impact their original business structure.

