Science, Technology, Engineering and Math (STEM) Lesson Plan

The Influence of Science and Technology in Sports

Quick summary: Students will engage in an interactive lesson that investigates how the use of science and technology has enhanced sport performance as well as everyday physical activities.

How long will it take: Two 45 minute classes

What do I need: Computer with internet access

How does it work:
Divide class into groups of 3 or 4. Students will research sports performance or physical activity topics that have been positively enhanced by science and/or technology. Students will answer research questions and write a report. Report will be turned into the teacher and/or presented to the class during subsequent lessons.

Suggested list of research topics:
1. Running shoes
2. Competitive uniforms or swimwear
3. Sports biomechanics
4. Nutrition
5. Mental visualization
6. Training equipment (e.g. weight-lifting equipment, cardiovascular machines)
7. Physical activity and health
8. Sports medicine
9. Sports equipment (e.g. bikes, tennis racquets, football helmets, basketball goals)
10. Prosthetic limbs (Para-Olympics)
11. Heart rate monitors

List of research questions for topic of study:
1. Explain why you selected your topic of study
2. Describe the science or technology advances made over time
3. How has science or technology positively changed the sport or activity?
4. How have the improvements affected participation in everyday physical activities?
5. Brainstorm additional science or technology modifications that could be made in the future to impact your selected topic
6. Based on the ideas that you have brainstormed—how could your selected topic be improved?
7. Include additional important information on your topic of study