Fishing for the Future

(makeup version)

Objective:

Students will model several seasons of a fishery and explore how technology, population growth, and sustainable practices impact fish catch and fisheries management. Students will experience Tragedy of the Commons as it relates to fisheries management.

What We Did in Class:

Students engaged in a competition to capture fish (m&m's) from a common ocean using fishing rods (straws). Those who caught the most fish were rewarded with better fishing technology, making it easier for them in the next round. For most groups, the number of fish declined dramatically. For some, the ocean was completely depleted of fish. This demonstrated the Tragedy of the Commons: The depletion or degradation of a potentially renewable resource to which people have free and unmanaged access.



Analysis Questions:

- 1. In the description of the lab given above, why do you think the ocean for most students was depleted?
- 2. From the description of the lab, how do you think the depletion of fish could have been avoided?

Watch the video located at https://youtu.be/CxC161GvMPc and answer the following questions.

- 3. How many fish should each villager catch per day to maximize food?
- 4. What happens if even one villager takes more than the ideal amount?
- 5. The concept of Tragedy of the Commons was first discussed around which topic?
- 6. Discuss short term versus long term goals and consequences for individuals and the group.
- 7. Give three examples of Tragedy of the Commons other than fishing.
- 8. How might Tragedy of the Commons impact your life?
- 9. Interpret the quote "What's good for all of us is good for each of us".
- 10. What have you learned from this makeup lab?