

The Tragedy of the Commons

Background: In 1968, environmentalists coined a term or concept called the Tragedy of the Commons. The tragedy being the notion that any resource that is open to everyone – such as the air or parts of the ocean – will eventually be destroyed because everyone can use the resource but no one is responsible for preserving it. When people are not compelled to preserve resources for the welfare for future generations, the Tragedy of the Commons occurs.

Objective: At tables of four, students will go through an activity that will help them better understand the Tragedy of the Commons. The follow-up questions and the discussion will let students talk about the issues and help them to come to solutions for the societal dilemma.

Methods

1. Each one of you represents the head of a family that is starving. In order for your family to survive, you must catch enough fish for them to eat. The only food source is a small local lake (the dish) which can hold up to 16 fish.

Once a year you will get a chance to fish and each time you fish you may take 0, 1, 2, 3, or 4 fish from the lake. It is your choice how many fish you take, however, if you only take one fish, your family will starve. If you take more than 2 fish, you can sell them for a profit. The fish in your lake will reproduce once a year. Keep the fish that you “catch” in front of you. (You will be able to eat them later)

2. At the end of each year the teacher must go around to each table and add more fish to the lake when they reproduce. They simply double each year. If any family has starved then they obviously cannot fish the next year.
3. Students are not allowed to talk or communicate while fishing
4. Students will fish for 5 years and make sure that they fill in the Data Table for 1st game after each round. You should probably control each round telling them when to start and stop. The activity works better when you control each round.
5. After the first game have students answer questions 1 and 2 in the discussion questions.
6. The students have still been unable to talk to each other during fishing so now you begin game #2. Reminding them not to communicate with each other.

7. When you are done have the students answer the discussion questions.
8. I usually then have a class discussion focusing on the questions. You can also extend this to have students look at how the U.S and other countries use common resources.

Student Data Sheets

FISH DATA TABLE

1st game

NAME OF LAKE: _____

	Number of fish in the lake [after reproduction]	Number of fish caught per person	Number of fish caught per year [by everyone]
YEAR ONE			
YEAR TWO			
YEAR THREE			
YEAR FOUR			
YEAR FIVE			
TOTAL			

FISH DATA TABLE
2nd game

NAME OF LAKE: _____

	Number of fish in the lake [after reproduction]	Number of fish caught per person	Number of fish caught per year [by everyone]
YEAR ONE			
YEAR TWO			
YEAR THREE			
YEAR FOUR			
YEAR FIVE			
TOTAL			

Tragedy of the Commons Discussion Questions

1. Did anyone in your group take too many fish? How did that make you feel? Did everyone try to take as many as possible? Why or Why not? Does society reward those with the "most"?
2. Did anyone sacrifice the # of fish, for the good of the community? Why or why not? Does society ever reward that type of person?
3. In Game two... how did your strategy change, if at all? Does it make a difference to know what the rewards are?
4. Is it possible to maximize the number of fish caught/person **AND** the number of fish remaining in the pond **at the same time**? Why or Why not?

5. Think of a **local commons** that you are familiar with. [parking lots, dorm social rooms, bathrooms, bookstalls, etc.] Do similar situations arise? Explain. HOW might those problems be solved?

6. What are some **natural resources** that are **common** resources?

7. What are the **global commons**? Are these being used wisely? Why or why not?

8. What can people do to use these resources most wisely?