

PLAY: Public Goods Game



SUMMARY

The objective of this activity is to demonstrate the Public Goods Dilemma and concept of “free riders” by seeing what happens when students are faced with a decision to either benefit themselves or benefit the group.

WHY IT'S FUN

Cooperative strategy game where students are tempted to hoard earning for themselves

MATERIALS & PREP

- [Tracking Sheet](#) - print 1 copy per student
- 2-3 decks of playing cards (depending on class size)

Part I: Prepare the Game

- A. Print one copy of the *Tracking Sheet* per student
- B. [optional] Prepare the playing cards by grouping them by number. It will be easier to hand out and collect cards if you have all four aces together, all four twos together, etc.

Part II: Play the Game

- A. Ask students to form a circle.
- B. Distribute 4 playing cards with the same number to each student. For example, one student will receive the Ace of hearts, Ace of diamonds, Ace of clubs, and Ace of spades.
 - a. Note: Alternatively, you could give each student any two red cards and any two black cards. However, giving students the same number may help avoid confusion when returning the cards after each round.
- C. Distribute one *Tracking Sheet* to each student.
- D. Explain the directions to students.
 - a. The game will last a total of four rounds.
 - b. During each round, students will give the teacher 2 of their cards **face down** so no one can see what cards they chose. Red and black cards will have different values.
 - c. After the teacher has collected all of the cards, everyone will calculate their individual earnings and update their *Tracking Sheet*.

Round 1

- A. Explain to students that during this round there is **no talking** allowed.
- B. Explain that each student will need to pick 2 cards to give the teacher. The cards will

determine their earnings according to the following values:

- a. For every red card kept by an individual, that person earns \$4
 - b. For every red card given to the teacher, each person in the entire class earns \$1
 - c. Black cards have no effect on earnings
- C. Give students 1 minute to decide which 2 cards they will give the teacher.
- D. After time is up, go around the circle and collect each student's cards, placing them face down on the pile.
- E. After each student's cards have been collected, count how many red cards were in the pile and announce the number to the students.
- F. Instruct students to complete the information for Round 1 on their *Tracking Sheet* using the values:
- a. For every red card kept by an individual, that person earns \$4
 - b. For every red card given to the teacher, each person in the entire class earns \$1
 - c. Black cards have no effect on earnings
- G. Go through the circle in reverse order, returning to each student the cards they gave the teacher in that round.

Round 2

- A. Once again, explain to students that during this round there is **no talking** allowed.
- B. Repeat steps C-G from Round 1.

Round 3

- A. For this round, explain that talking is allowed. Encourage students to discuss the game and/or strategize however they would like.
- B. Give students 2 minutes to communicate and decide which cards they will give the teacher.
- C. Repeat steps C-G from Round 1.

Round 4

- A. Once again, explain that talking is allowed and encourage students to discuss the game and/or strategize however they would like.
- B. Give students 2 minutes to communicate and decide which cards they will give the teacher.
- C. Repeat steps C-G from Round 1.
- D. Collect all of the cards from the students.
- E. Facilitate a class discussion using some or all of the questions below.

Possible Discussion Questions in Summary:

1. What was your general strategy?
2. For those who chose to contribute one or more red cards, why did you make that decision?
3. For those who chose to keep their red cards, why did you make that decision?
4. How do you think people's decision-making might have changed if the incentive for keeping red cards was lowered? What if it was raised?
5. What are some real-life examples you can think of where people have the option to be free riders or contributors and would benefit in either case?
 - a. *Hint: An example doesn't have to involve money, but could also involve things like time invested by group members, volunteers, etc.*
6. How did the rounds where communication was allowed impact the game? What kind of pressures existed in those rounds that didn't exist in previous rounds?

7. If a person chose to keep their red cards, do you think that automatically means they don't care about the welfare of others? Explain why or why not.
8. What is your biggest takeaway from playing this game?

❖ **Teacher Tip:** Questions #2 and #3 illustrate the **Public Goods Dilemma**: Do you maximize your individual earnings by not contributing but still benefiting from the contributions of others (acting as a **free rider**), or by contributing to the whole group and hoping for participation from others?