Exercise 2

The Commons Dilemma



Instructions for The Commons Dilemma

- 1. Beginning with the next class period, each of you will be making a choice every week for the next eight weeks either to COOPERATE or to COMPETE. Thus, you will be making eight choices over the next eight weeks.
- 2. If you choose to COOPERATE, your score for that week will be 25 points lower than the score of those who COMPETE.
 - If you choose to COMPETE, your score for that week will be 25 points higher than the score of those who COOPERATE.
- 3. The formulas for determining your score for each given choice are shown below.
- 4. Your overall score for this exercise will be the average of your 6 highest individual choice scores. If you miss a class session in which the exercise takes place, your Commons Dilemma score for that session is zero.
- 5. At the conclusion of the 8 choices the end of the exercise you will be assigned a grade based on your overall score (see the grade scale below).
- 6. If you wish, you may substitute your overall score on the exercise for your answer to one of the questions on the final examination. In other words, you may choose not to answer one of the questions on the final exam, and use your Commons Dilemma grade instead.

Formulas used each time to compute individual Commons Dilemma scores:

Cooperators' score: 89 X # of cooperators

of participants

Competitors' score: cooperators' score + 25

Scale used at end of the exercise for determining your Commons Dilemma grade:

A+	96 and above	B-	70-74
A	90-95	C+	65-69
A-	85-89	С	60-64
B+	80-84	C-	55-59
В	75-79	F	0-54

Exercise 2

THE COMMONS DILEMMA*



Objectives

The Commons Dilemma is an N-Person Prisoner's Dilemma, in which individual rationality and collective rationality conflict. Competitors always fare better than cooperators, but as the number of competitors increases, everyone increasingly suffers. The exercise can influence a student's course grade, which makes it likely that students will take the Commons Dilemma seriously. As such, it provides a vivid illustration of the dynamics of competition and cooperation.

Changes from 6th Edition: No changes other than updating recommended reading assignments given below to match new editions of readings book and text.

RECOMMENDED READING ASSIGNMENTS TO ACCOMPANY THIS EXERCISE:

Reader:

- 1.1 (Three Approaches to Resolving Disputes)
- 1.2 (Selecting a Strategy)
- 3.5 (The High Cost of Low Trust)
- 3.10 (Can't Beat Them? Then Join a Coalition)
- 3.11 (Building and Maintaining Coalitions and Alliegiances)

Text: Chapters 1, 12, 13

Essentials: Chapters 1, 10

Operational Needs

Group Size This exercise can be run in a class of just about any size.

Time Required Allow 20-30 minutes on the day the exercise is introduced for students to read the instructions and ask questions. On subsequent days while the exercise is running, it takes only a few minutes for students to record and submit their "decision" (which can even be done outside of class). When results of the most recent decision are distributed each week, instructors may or may not elect to allocate a few minutes of class time to discussion. When the exercise is complete, a larger block of time (30-60 minutes) should be allocated to a full debrief of the exercise.

^{*} This version of the Commons Dilemma was developed by Michael Morris, and is based on a presentation made by Gary Throop at the 1990 Organizational Behavior Teaching Conference. Adapted and used with permission.

Special Materials Included here are samples of the written instructions provided to students at the start of the exercise, a sample scoring scheme, and an example of the decision form that students use to make their choices.

Physical Requirements No special requirements.

Advance Preparation

Instructors need to decide on a scoring scheme for the Commons Dilemma before the simulation begins. A sample scoring scheme is included here.

No advance preparation on the part of students is required. They are introduced to the exercise with a written sheet of instructions handed out during a class session that precedes the start of the simulation.

Operating Procedures

The operating version of the Commons Dilemma presented here is designed to span eight decision periods over a period of eight weeks. The structure of the exercise can be easily modified to fit a variety of other teaching calendars and situations.

- 1. The week before the exercise begins, the instructor distributes a version of the sheet called "Instructions" (a sample is included below) to students.
- 2. The instructor informs students that they are free to discuss the Commons Dilemma whenever they wish, in class or outside of class. The instructor also indicates that the only comments that the instructor will make about the Commons Dilemma during the eight weeks of the exercise will be to answer questions (or to correct misunderstandings) that arise concerning the rules and regulations governing the operation of the exercise. Thus, the instructor does not talk about what the Commons Dilemma "means" until the exercise has run its course. The students are always free to discuss what the exercise means.
- 3. Week 1 of the exercise: The instructor distributes a form used to make the cooperate-compete choice to each student (sample form included below). To "compete" in the Commons Dilemma simply means that the student is checking the blank next to "I will compete" on the form. To "cooperate" means that the student is checking the blank next to "I will cooperate" on the form. Students fill out the form, and the instructor collects the forms.

If class time is lengthy involving a break (e.g., a one-meeting-per-week class), the instructor can use the break to calculate the results. After the break, the instructor announces the results, and invites comments from the class.

For a class without a break (e.g., one that meets two or three times per week), the instructor can calculate the results before the next class, announce them at the start of that subsequent class, and invite comments.

4. Prior to Week 2, the instructor types any comments that have been written on the forms, and

distributes copies of these comments to the class at the beginning of Week 2. The instructor also distributes forms for making the cooperate-compete choice in week 2, and collects those completed forms. Results are calculated and provided to students as they were in week 1.

- 5. Week 3 through Week 8 proceed in the fashion outlined above. The instructor may, at his or her discretion, choose to allocate class time for comments or discussion at each decision point.
- 6. At the end of the eight periods (choices) of the exercise, the instructor distributes a handout that lists the distribution of final, overall Commons Dilemma scores for the class as a whole (e.g., how many students received an A+, how many received an A, etc.). Students and the instructor then discuss what the Commons Dilemma teaches us about conflict and organizational dynamics. (See following section of teaching notes.)
- 7. On the final exam, students indicate (on an individual basis) whether they wish to substitute their Commons Dilemma score for one of the exam questions.

VARIATIONS:

There are several ways in which the exercise can be altered to satisfy the needs and desires of individual instructors and situations. These include, but are not limited to:

- The length of time (# of class periods or weeks) that the exercise lasts
- The point differential between competitors and cooperators
- The procedure for determining a student's overall score on the exercise
- The grading scale (illustrations provided here us a standard A-F letter grade system, but the exercise can easily be geared to any other system).
- The way in which one's overall score on the exercise contributes to one's grade in the course. One advantage of the "substitution option" is that, at the end of the exercise, students choose whether or not their overall Commons Dilemma score is going to contribute to their course grade. This usually enhances the perceived fairness of the exercise.

EXPLANATION OF THE FORMULA:

The Commons Dilemma formula (shown on the sample "Instructions" sheet appended to this teaching note) is constructed so that 100% cooperation results in a letter grade of A- for all participants (a numerical score of 89). The 25 "bonus points" for competitors provide an incentive for individuals to defect from cooperation -- in other words, an incentive for competition – so that a higher grade (A or A+) might be achieved in that particular session. Of course, in true Commons Dilemma fashion, the formula guarantees that, as more individuals compete, everyone will increasingly suffer, even as the 25-point differential between competitors and cooperators is maintained.

A formula like this will work with any grading scheme; it is illustrated here with letter grades just as one example. In addition, instructors can manipulate the incentives for competition in the Commons Dilemma by choosing grading scales and point differentials that vary from the ones

presented here.

What to Expect

Students are sometimes confused when the instructor initially explains how the Commons Dilemma exercise operates. They may ask, "How does cooperation or competition actually take place in this exercise? What do we do that is competitive or cooperative?" The instructor should respond that "cooperating" in the Commons Dilemma simply means checking the box "I cooperate" on the decision sheet, and "competing" means checking "I compete" on the sheet. Once the exercise is under way, this confusion usually vanishes.

Students are also likely to ask at the beginning, "What is the *point* of this exercise? What are you trying to teach us?" The instructor should not answer this question until the Commons Dilemma has run its course.

If 100% of the class are making cooperative choices every session (this is more likely to occur in small classes), the week-to-week dynamics of the Commons Dilemma are generally positive and tranquil, with students expressing satisfaction, pride, and good will whenever the instructor announces the results. When cooperation is less than 100%, negative emotions and reactions are likely to surface among those who claim to be cooperators. If less than 100% cooperation persists over several sessions, these feelings and behaviors usually grow in intensity. Cutting remarks are made, vague threats may be offered ("Competitors, we're going to find out who you are!"), and the level of tension in the room increases whenever it is time to run the exercise. This is where the instructor's classroom management skills are tested, especially if the instructor is committed to not communicating the "meaning" of the exercise until it's all over. On rare occasions, a student may react to the tension and conflict by expressing a desire to cease participating in the Commons Dilemma. An option here is to allow these students to write "I abstain" on their decision sheets. For the purposes of scoring the exercise, these "abstainers" are treated as if they were absent from class on the day of the Commons Dilemma.

Students are typically very interested in how previous classes have performed on the Commons Dilemma. Consider sharing these results (if you have them) with the class during the debriefing. Students often want the instructor to reveal the identities of the competitors. We never do this. However, it is not unusual for at least some of the competitors to voluntarily admit that they have competed. Frequently, these "confessions" do not occur until the debriefing.

Debriefing the Exercise

The Commons Dilemma is a powerful exercise that can generate strong emotions among students. For example, cooperators will often feel "betrayed" by competitors, and attribute various character deficiencies to the latter. Instructors who are not comfortable with, or skilled in, dealing with such matters in the classroom should think twice (or more than twice) before using it. On the other hand, this is an extremely "rich" exercise in terms of what can be learned from it. Some instructors may prefer to address these "lessons" as the exercise unfolds over the course of the term.

In the version presented here, the instructor waits until the exercise is over before discussing its theoretical/conceptual significance. This latter approach, it might be argued, allows the group

dynamics of the Commons Dilemma to evolve in a more "natural" fashion; students do not receive cues from the instructor as to how they should behave when tackling the challenges posed by the exercise. Thus, the responsibility for navigating the Common Dilemma "journey" falls squarely on the shoulders of the students.

When debriefing the Commons Dilemma exercise, instructors can raise a variety of questions relevant to negotiation and organizational dynamics. (Be sure to allow enough time for debriefing – it is possible to consume as much as 60 or more minutes, especially if a significant amount of competition and conflict occurred.)

Some useful areas to explore in debriefing the exercise include:

Perception and Attribution

- What attributions did cooperators make concerning the motivations of the competitors? To what extent did these attributions focus on internal factors rather than external ones?
- Can the results of the exercise simply be attributed to "human nature"? (Students often claim this is the case. One way of addressing this issue is for the instructor to share the Commons Dilemma outcomes generated by previous classes, especially classes where the distribution of overall scores differs significantly from those produced by the current group of students.)

Motivation

- To what extent were the "rewards" available from this exercise (e.g., reduced workload on the final exam; a good but not highest possible grade on an exam question) not valued equally by all members of the class? What effect would unequal valuing have on students' choices in the exercise?
- How might individual differences in need for affiliation, need for achievement, and need for power manifest themselves in this exercise?

Group Dynamics

- To what extent did the class pass through conventional stages of group development as it tackled the Commons Dilemma over the period of eight weeks?
- To what extent did shared goals and norms evolve? Did certain individuals assume task and/or maintenance roles? How successful was the group in analyzing the nature of the problem represented by the Commons Dilemma?

Leadership

• Did a leader emerge during the exercise? What types of behaviors did he or she exhibit? Were there unsuccessful attempts at leadership? What factors appeared to distinguish successful leadership attempts from unsuccessful ones?

Conflict, Conflict Management, and Negotiation

- When competition occurred in the exercise, how did it affect class dynamics? How did individuals react? What emotions were aroused? What happened to the level of trust between students? How did competition influence individuals' willingness to take risks and make themselves vulnerable?
- What strategies did students use in attempting to increase the level of cooperation in the exercise? To what extent were coercive strategies employed (e.g., threats)? What strategies, if any, were successful? Why were they successful? To what extent was there evidence of apathy, withdrawal, and avoidance?

Communication

• How effectively did students communicate during the Commons Dilemma? What were the main barriers to communication that were observed?

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THE COMMONS DILEMMA EXERCISE

SAMPLE OUTCOMES FOR A CLASS OF 20 STUDENTS

(using formula on previous page)

	<u>Distribution</u>	<u>Score</u>	<u>Grade</u>
# Cooperating:	20	89.0	A-
# Competing:	0		-
	19	84.6	B+
	1	109.6	A+
	18	80.1	B+
	2	105.1	A+
	17	75.7	B
	3	100.7	A+
		for 16 through 4 coope	rators omitted
	3	13.4	F
	17	38.4	F
		30.4	ľ
	2	8.9	F
	18	33.9	F
	2	8.9	F