

A CLASSROOM ACTIVITY DEMONSTRATING COMPETITION AND COOPERATION

PURPOSE

- (1) To demonstrate how competitive assumptions and motives and poor communication can interfere with problem solving when cooperation is desirable, (2) To apply to relations within families and organizations and to international conflict and the nuclear arms race.

PREPARATION

1. Have each student number from 1 to 20 on paper in order to keep track of money earned.
2. Copy the chart (from the bottom half of the attachment to these instructions) onto the chalkboard,
3. Hand out to each student one green and one white index card.

chart on backside

INSTRUCTIONS TO BE READ TO CLASS

You are about to participate in a simulation situation where we will pretend that real money is involved. Act as though real money were involved. The amount of money you will receive on each trial will depend in part on which card you raise up when I say "now." It will also depend in part on which color cards others hold up. After each trial I will write on the board the numbers of people raising white and green and the values for white and green. The values for white and green depend on the numbers of people raising white and green. People who raise one color, always the same color, will get more money than those who raise the other color. However, the more of you who hold up the color with the higher value, the lower the values will be for both colors. You are not allowed to talk or ask questions. After each trial, write down the amount of money you have earned, depending on whether you raised white or green. Try to make as much money for yourself as possible. [Repeat the instructions a second time, but do not answer questions.]

AFTER TRIAL TEN

After the tenth trial, announce that communication will be allowed for the remaining trials. If students wish to speak to the group, they should speak up so all can hear. Before beginning each trial, ask "does anyone else wish to address the group." Remind students to "act as though real money were involved."

CONCLUSION

Usually, nearly all students raise green by trials 13 or 14. The simulation may be ended at that point.

1. Allow class discussion. Why were most raising white on trials 8-10?
2. Point out that a student made one dollar more by raising green than white, regardless of what other students did. For each person who raised white, the values for both colors were reduced by three dollars. Thus, getting two dollars more than others resulted in getting one dollar less for oneself (for raising white rather than green).
3. Communications after trial ten usually give evidence of competitive thinking. Competitive thinking can blind a person to cooperative problem solving possibilities.
4. During trials 1-10, most students assumed that "getting more than others means getting the most for myself." That competitive assumption is true for many situations in our society, but it was false in this situation. What are some real life situations where "trying to get more than others" is not a good idea? Point out how competitiveness can be good or bad depending on the situation and one's values. Apply to athletic teams, family relationships, management and labor, the nuclear arms race, etc.
5. Raising the green card was cooperative in that it increased the values for everyone. Why did cooperation increase after trial ten? For situations where people need each other's help to get what they want, improving communication usually increases cooperation. Why is that so and why is that important?

Source: This simulation was adapted for classroom use by Linden Nelson (Psychology and Human Development, Cal Poly, San Luis Obispo, CA 93407) from: Kelley, H.H. and Grzelak, J. (1972). Conflict between individual and common interest in an N-person relationship. Journal of Personality and Social Psychology, 21 (2), 190-197.

See charts on following page (click on page if needed to activate it)

NUMBER WHO RAISE GREEN

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Dollars for White	1	4	7	10	13	16	19	22	25	28	31	34	37	40	43	46	49	52	55	58	61	64
Dollars for Green	0	2	5	8	11	14	17	20	23	26	29	32	35	38	41	44	47	50	53	56	59	62

	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43
Dollars for White	67	70	73	76	79	82	85	88	91	94	97	100	103	106	109	112	115	118	121	124	127	130
Dollars for Green	65	68	71	74	77	80	83	86	89	92	95	98	101	104	107	110	113	116	119	122	125	128

CHART (ON BOARD)

TRIAL	# White	Dollars for White	# Green	Dollars for Green
1				
2				
3				
and so on to 20				