Fallout Shelter Exercise: Seeking Consensus

PURPOSES:
1. To illustrate the process groups go through in reaching consensus.
2. To illustrate the principle that, many times, groups arrive at a better solution to a problem than individuals.
3. To become aware of difficulties involved in establishing priorities.

ESTIMATED TIME REQUIRED: Approximately one (1) hour.
10 minutes – Individual reading/rating
30 minutes – Group rating of items
15 minutes – Group assignment of which crew carries which items
10 minutes – Debrief

MATERIALS NEEDED:
1. Pencils
2. Individual Case/Worksheets (one per participant)
3. Group Case/Worksheets (one per group)
4. Answer sheets containing rationale for scoring
5. Direction sheets for scoring

PROCEDURE—EXERCISE:
1. Groups will be made of between five (5) and seven (7) participants. (Several groups may be directed simultaneously.)
2. Participants should be seated around a square or round table. (The dynamics of a group seated at a rectangular table are such that it gives too much control to persons seated at the ends.)
3. Each participant is given a copy of the Fallout Shelter Case Study and rank order the items listed from 1-15 (10 minutes).
4. After individuals have completed the exercise, each group will be handed a group worksheet.
   a. Individuals are not to change any answers on their individual sheets as a result of the group discussion.
   b. A member of the group is to record group consensus on this sheet.
   c. The participants will have thirty (30) minutes in which to complete the group worksheet.
   d. If time allows, groups should agree on which member of the crew will carry each of the items (15 minutes).
5. After groups have completed the group worksheet, each participant is given a copy of the direction sheet for scoring. (This phase of the experience should take seven (7) to ten (10) minutes.) 
   a. Participants are to score their individual worksheets.
   b. Participants will then give their score to the recorder, who will compute the average of the individual scores.
   c. The recorder will then score the group worksheet.

6. The group will compute the average score for individuals with the group score and discuss the implications of the experience. (This phase of the experience should take seven (7) to ten (10) minutes.)

7. Results are posted according to the chart below.

<table>
<thead>
<tr>
<th></th>
<th>Group 1</th>
<th>Group 2</th>
<th>Group 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Consensus Score</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(from the group worksheet)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Average Score</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(of individual worksheets)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Range of Individual Scores</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(lowest to highest)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**PROCEDURE—PROCESSING:**

1. As a class, discuss the results.
   a. What were the outcomes of consensus-seeking?
   b. What was your experience in negotiating agreement?
   c. What process was used to reach a consensus?
   d. Which performed better: group or individual?
INSTRUCTIONS:

The possibility of a nuclear war has been announced and the alert signal has been sounded. You and the members of your group have access to a small basement fallout shelter. When the attack warning is announced, you must immediately go to the shelter. In the meantime, you must decide what to take with you to help you survive during and after the attack.

You are outside the immediate blast areas. The greatest danger facing you is from radioactive fallout.

In order to help your decision-making, rank the following fifteen (15) items in order of your importance to your survival in the shelter.

Place the number “1” by the most important item, the number “2” next to the second most important item, and so on, through number “15,” the least important.

You have ten to fifteen (10-15) minutes to complete this phase of the exercise.

- One large and one small garbage can with lids
- Broom
- Containers of water
- Blankets
- Canned heat stove
- Matches and candles
- Canned and dried foods
- Liquid chlorine bleach
- Vaporizing liquid fire extinguisher
- Flashlight and batteries
- Battery-powered radio
- Soap and towels
- First-aid kit with iodine and medicines
- Cooking and eating utensils
- Geiger counter
Fallout Shelter Exercise  
Group Worksheet

INSTRUCTIONS:

This is an exercise in group decision-making. Your group is to employ the method of Group Consensus in reaching its decision. This means that the prediction for each of the fifteen (15) decision items must be agreed upon by each group member before it becomes part of the group decision. Consensus is difficult to reach. Therefore, not every ranking will meet with everyone’s complete approval. Try, as a group, to make each ranking with which all group members can at least partially agree.

Here are some guides to use in reaching consensus:
1. Avoid arguing for your own individual judgments. Approach the task on the basis of logic.
2. Avoid changing your mind only in order to reach agreement and avoid conflict. Support only solutions with which you are able to agree somewhat, at least.
3. Avoid “conflict-reducing” techniques such as majority vote, averaging, or trading in reaching your decision.
4. View differences of opinion as helpful, rather than as a hindrance to decision-making.

_____ One large and one small garbage can with lids
_____ Broom
_____ Containers of water
_____ Blankets
_____ Canned heat stove
_____ Matches and candles
_____ Canned and dried foods
_____ Liquid chlorine bleach
_____ Vaporizing liquid fire extinguisher
_____ Flashlight and batteries
_____ Battery-powered radio
_____ Soap and towels
_____ First-aid kit with iodine and medicines
_____ Cooking and eating utensils
_____ Geiger counter

This exercise is based on information in Protection in the Nuclear Age. (Washington DC: Department of Defense, Defense Civil Protection Agency, Feb. 1977).
INSTRUCTIONS:
The group recorder will assume the responsibility for directing the scoring.
Individuals will:

1. Score the net difference between their answers on the individual worksheet and the correct answers. For example, if the answer was 9 and the correct answer was 12, the net difference is 3 (12 - 9 = 3). Three (3) becomes the score for that particular item.

2. Total these scores for an individual score.

3. Next, total all the individual scores and divide by the number of participants to arrive at the average individual score. Record that score in the “Average Score” box. Also record the range of individual answers in the “Range of Individual Scores” box.

4. Repeat the process of scoring the net differences between the group worksheet answers and the correct answers.

5. Total these scores for a group score. Record that score in the “Consensus Score” box.

6. Compare the average individual score with the group score.

<table>
<thead>
<tr>
<th>Rating</th>
<th>Group Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consensus Score</td>
<td>(from the group worksheet)</td>
</tr>
<tr>
<td>Average Score</td>
<td>(of individual worksheets)</td>
</tr>
<tr>
<td>Range of Individual Scores</td>
<td>(lowest to highest)</td>
</tr>
</tbody>
</table>

Ratings:

- 0-19 Excellent
- 20-29 Good
- 30-39 Average
- 40-49 Fair
- 50 or more Poor