

## APPENDIX 2C

### GROUP PROCESS TECHNIQUES

Brainstorming

Nominal Group Technique

Multiple Voting

Rank Ordering

Decision Matrix

Materials provided by  
Navy Medical Quality Institute  
Naval School of Health Sciences  
Bethesda, Maryland.



## BRAINSTORMING

**Definition:** A group process technique to encourage creative thinking and to elicit ideas.

**Purpose:** To generate a large number of ideas and promote team cohesiveness. It helps avoid unnecessary conflict and facilitates good decision-making.

**Guidelines:**

- Generate as many ideas as possible.
- Avoid criticism or compliments.
- Encourage far-out, creative ideas.
- Do not censor thinking.
- Build on the ideas of others.
- Record all ideas.
- Allow members to pass on any turn to let ideas incubate.

**How to conduct a brainstorming session:**

1. Review brainstorming guidelines and steps.
2. Review subject to be addressed and record on a turnchart.
3. Take turns throwing out ideas, one at a time, in clockwise fashion.
4. Record all ideas on a turnchart.
5. Continue until all ideas are recorded.
6. Clarify and consolidate ideas as recorded.
7. Agree on evaluation criteria and apply them.

**Tips:**

- If possible, inform participants of the topic prior to session.
- Make sure each participant fully understands the issues.
- Do not exceed 30 to 45 minutes to avoid fatigue.

## **NOMINAL GROUP TECHNIQUE**

**Definition:** A group process technique to encourage creative thinking and to generate ideas.

**Purpose:** To generate a large number of ideas from all members of a team in a short period of time.

### **How to conduct a nominal group session:**

1. Review nominal group steps.
2. Individually list ideas, generally taking 3 to 5 minutes.
3. Take turns presenting one idea at a time.
4. Record all ideas on turnchart.
5. Allow members to pass when all their ideas are recorded.
6. Allow time for any new ideas to be generated.
7. Clarify ideas.
8. Rank ideas by multiple voting or rank ordering.

**Tip:** It is important to require individuals to spend time developing their own list of ideas.

## MULTIPLE VOTING

**Definition:** A technique using team member voting to reduce a large number of ideas to a list of priorities.

**Purpose:** To help a team rank order and prioritize a large list to a manageable number of ideas or issues.

### **How to conduct multiple voting:**

1. Identify each idea on the list with a letter of the alphabet or a number.
2. Take a quarter to a third of the total number and use that figure as the number of votes each member gets.
3. Members vote individually, on paper, for the specified numbers of ideas.
4. Members take turns giving their votes to the group.
5. The votes are recorded and tabulated on a turnchart.
6. The team decides if there is a clear choice or if several ideas should receive further consideration.

**Note:** The use of multiple voting cannot be used as a substitute for data gathering or discussion.

## RANK ORDERING

**Definition:** A group technique involving the ranking of a small number of ideas to establish a priority.

**Purpose:** To help a team decide among a relatively small number of ideas.

**How to conduct rank ordering:**

1. Identify each idea on the list with a letter.
2. Members individually rank all of the ideas on paper.
3. Members individually number ranked ideas, with one being the most important.
4. Members take turns giving their rank ordering of the ideas.
5. The numbers corresponding to the rank order are recorded by each item and are tabulated on the turnchart.
6. The idea with the smallest number is the top choice of the group.
7. The team decides if there is a clear choice or if more than one idea should receive further consideration.

**Note:** Rank ordering can be used in conjunction with multiple voting; it should be used only with 10 or fewer items.

## DECISION MATRIX

**Definition:** Tool which allows team members to rank various options on several different criteria.

**Purpose:** To facilitate structured decision making.

### How to construct and use matrices:

1. Clearly define the options, problems, and processes.
2. Clearly define the criteria for evaluating the options, problems or processes.
3. List the criteria across the top of the matrix.
4. List the options, problems, processes down the left side of the matrix.
5. Analyze each option, problem, process in relation to each criterion. This can be done by asking if the option, problem, process meets the criteria; or you can weigh how well the criteria is met (high, low, medium).
6. Determine the overall score for each option, problem, process.

**Tip:** When the team selects criteria the members should agree on the operational definitions of each. For example, "high cost of living" could be defined in relation to the national average for housing costs and grocery prices.

