

## THE NOMINAL GROUP TECHNIQUE

The Nominal Group Technique (NGT) is a method for structuring small group meetings that allows individual judgments to be effectively pooled and used in situations in which uncertainty or disagreement exists about the nature of a problem and possible solutions. The process has been used extensively in business and government and has proven especially beneficial in fostering citizen participation in program planning.

The technique is helpful in identifying problems, exploring solutions, and establishing priorities. It works particularly well in "stranger groups," in which it is important to neutralize differences in status and verbal dominance among group members.

NGT typically includes four steps:

- (1) ***Silent generation of ideas in writing (Brainstorming):*** Working silently and independently, participants jot down their responses to a stimulus question.
- (2) ***Round-robin recording of ideas:*** When called upon, each participant contributes a single idea that is recorded on a large flip-chart. Discussion of the ideas is not permitted. Completed sheets are taped to the wall so that they can be seen by the group. The group facilitator continues to call upon the participants until all ideas have been recorded or the group determines that they have produced a sufficient number of ideas.
- (3) ***Discussion of the list of ideas:*** The participants discuss each idea on the list so that they are clear about the meaning of the ideas.
- (4) ***Voting:*** The participants identify what each of them believes are the most important ideas, they rank-order their preferences (optional), the votes are recorded on the flip-chart, and the voting pattern is discussed.

There are three NGT essentials: (1) a carefully prepared question that evokes responses at the desired level of specificity; (2) a group of task-oriented participants with expertise in the topic; and (3) a group leader who understands the process and is willing to act as a process facilitator, not a substantive expert.

### Size of NGT Group

The ideal size of an NGT group is five to nine members. Larger groups can be handled by making minor changes in procedure, but any group larger than 12 or 13 should be divided into smaller subgroups of from 5-9 members.

### **Time Needed to Conduct NGT**

Adequate time must be allowed to conduct an effective Nominal Group Technique session. With a single group of five to nine members, a NGT session for a single question will take a minimum of 45 minutes to an hour to conduct. The time needed may be more if the group identifies a large number of ideas for consideration. The best idea is to allocate some more time in your schedule for each NGT question than you think you will need. This will help avoid having to pressure the group during the process. If the group does finish early, you can either finish early or give the participants a little longer break period between questions. (Additional time will also be necessary for each question if you use the ranking card method of voting.)

If a larger group of participants is divided into smaller subgroups for the session, more time must be allowed for the smaller groups to work through the process and then combine their results with those of the other subgroups. If multiple questions are asked at the same meeting, the NGT process for subsequent questions asked after the initial question will usually not take as long because the participants and the subgroup leaders will now be familiar and more comfortable with the process.

## PREMEETING PREPARATIONS

There are four essential preparations that have to be made before the meeting by the group facilitator:

- (1) ***Formulate the NGT question:*** The facilitator should pay careful attention to the phrasing of the question. It should be as *simple* as possible, but it should *elicit items at the desired level of specificity and abstraction*. NGT is a *single-question* technique. If additional questions are presented, they must be handled by repeating the NGT process for each question.
- (2) ***Assemble supplies,*** including a flip-chart (or easel with newsprint or large sheets of paper - butcher-type paper or newspaper end-rolls that can be taped to the wall), felt-tip pens that will not bleed through the paper, masking tape, and 3 x 5 index cards for each group or self-sticking colored dots if voting with dots. The NGT question can be typed at the top of a sheet of paper and duplicated for each member or put on a flipchart or projected onto a screen in large enough letters that the question can be seen by all the participants.
- (3) ***Prepare the meeting room:*** Wall surfaces should be suitable for taping up sheets from the flip-chart. The best table arrangement is an open "U," with the flip-chart located at the open end, but seating around a table is adequate for smaller groups.
- (4) ***Train inexperienced subgroup leaders:*** If subgroup leaders have never conducted an NGT session, you should, if possible, arrange a training session that simulates the process. For training purposes, good NGT questions are either the actual (or potential) question the group is planning to use or the general question, "What barriers do you anticipate in using NGT in your own committee?" If the actual question(s) is(are) used, the training session is an occasion to pilot test the phrasing of the NGT question(s). If training of subgroup leaders is not possible prior to the session and you don't have a large number of subgroups, you may be able to direct the activities of the subgroups from the front of the room. After the first question is handled, subsequent questions are usually easier for subgroups to handle without as much direction.

## OPENING STATEMENT

The opening statement is important because it can set the tone for the whole meeting. It should include at least three elements:

- (1) The importance of the task and the unique contributions of each group member should be noted.
- (2) The group should be informed of the session's overall goal and how the NGT results will be used.

- (3) The four basic steps of NGT should be briefly summarized.

When a large group is to be divided, it is best to present the opening statement at a plenary session before each subgroup begins its work. That way everyone will be operating under the same procedures.

## CONDUCTING THE NGT PROCESS

### Step 1: Silent Generation of Ideas in Writing (Brainstorming)

Distribute the question on individual sheets of paper or display it before the group. Read the question aloud to the group and ask members to respond to it by writing their ideas in **short** phrases or **brief** sentences. Remind them that, because you will not be collecting their lists, good penmanship is unimportant.

Ask members to work silently and independently. If you are a subgroup leader, demonstrate good behavior by doing your own silent writing. Immediately, but diplomatically, stop disruptive behavior, such as talking.

Some members may ask about the meaning of the NGT question. You may illustrate the degree of abstraction desired or call upon one of the members of the group to do so, but do not lead the group in any direction. Tell persistent questioners to respond to the NGT question in whatever way is most meaningful to them.

Allow four to eight minutes for this step. In a large group, a shorter period of silent writing will appropriately limit the number of items the members produce.

### Step 2: Round-Robin Recording of Ideas

Explain that the objective of this step is to map the group's thinking. As you go around the table, each member is to present orally one idea from his or her own list in a short phrase or brief sentence **without discussion, elaboration, or justification**. You will continue to go around the table until all ideas have been presented and recorded on the group's flipchart.

Explain that each member is to decide whether his or her item duplicates one already presented. A member may pass at any time, but may reenter the process later in his or her turn. Continue to call on members who have passed. Encourage members to "hitchhike" on others' ideas and to add new items, even though these items may not have been written down during Step 1.

The leader, or an assistant, should record items on flip-chart sheets legibly and as rapidly as possible, numbering items in sequence and recording them in the members' own words. If possible, avoid condensing and abbreviating. It is very important that the participants know that they have produced the items and that the list belongs to them, not you. Ask long-winded participants to come up with simpler wording. If this causes delay, tell the person you will return for a shorter phrase and move on to the next member.

If participants will be voting to rank ideas by using dots or marks that will be placed directly on the flip-chart sheets, make sure to provide space around each item on the flip-chart sheets to give room for voting. Don't try to crowd too many ideas on a flip-chart sheet. This can result in difficulty for participants in reading the items and can hinder the voting process. If voting is being done directly on the flip-chart sheets, it is also a good idea to draw a line between each item on the flip-chart sheet to clearly delineate each item's area for the voting procedure.

Assign each item on the flip-chart sheets a unique identifying number and write that number to the left of the item. This will be helpful in the next step when participants want to ask questions for clarification of items. You can either number the items on each flip-chart sheet when it is filled or number all of the items once all of the flipchart sheets are up on the wall. If there are more than one assistant helping to write the ideas, then one assistant can be numbering a completed flip-chart sheet while another is recording additional ideas on another flip-chart.

After you fill a sheet with numbered items, tape it to the wall where it will be visible to everyone. If you have someone to assist you, you can tape up the sheets while he or she continues recording the round-robin ideas. Another option that can expedite the process is to ask one of the group members to assist you by taping sheets to the wall.

With a large group, the length of the list can be controlled in several ways. For example, you can announce in advance that you will solicit items around the table only two or three times. Or, when a sufficient number of items have been generated, say that you will go around the table only once more and they should give you the best item remaining on their sheets.

### **Step 3: Discussion of the Listed Ideas**

**Explain that the purpose of this step is to clarify the ideas presented.** Read each item aloud in sequence and invite comments. Members may note their agreement or disagreement, but arguments are unnecessary as each person will vote independently in Step 4. Do not waste time on conflict. As soon as the logic of an idea is clear, cut off discussion. The meaning of most items will be obvious to the group and little or no discussion will be necessary.

Announce in advance the number of minutes to be devoted to this step. The usual rule of thumb is to allot two minutes times the number of items. If time is short, allow only the number of minutes until adjournment, minus fifteen minutes for the voting in Step 4.

Encourage viewing the list as group property. Anyone can clarify or comment on any item. If someone asks about the meaning of one of the items, it is productive to encourage someone other than the contributor of the participant item to clarify what it means to him or her. The group leader can model good behavior at an appropriate point with a comment such as, "Well, to me this item means..."

Within reason, new items can be added and small editorial changes made. Duplicate items may also be combined. **However, the leader should resist attempts to combine many items into broader categories.** Some group members may seek to achieve consensus by this means, and the precision of the original items may be lost.

If a larger group has been divided into a number of smaller subgroups, now is the time to consolidate the lists of the subgroups onto one central list. This can be done by going in a round-robin procedure from one group to another asking them to present one item from their list. Ask groups to not give items that are obvious duplicates of those from other groups; this will reduce the number of items and save time. When this process has been completed, ask if there is any need for clarification of items or if any duplications can be removed. Don't take too long in this process. When the list has been completed and discussion of items completed, move on to the voting step.

#### **Step 4: Voting**

##### *Dots*

There are several ways by which the participants can express their rating for the items included on the final list. One of the simplest methods is to provide each participant with a set of self-sticking dots, usually five dots, and ask each participant to, quickly and without talking, place a dot next to the five phrases or statements that they feel are the most important on the list. Using dots is an easy and quick way for participants to express their preferences. The use of dots also gives participants an opportunity to get up and move around while voting, which is usually much appreciated.

When voting is completed, tally the number of votes (dots) each item received and place that number next to the item on the flip chart sheet. (Using a different color marker for the vote total will make it easier to see the vote totals.) Briefly review the results of the voting and identify the items receiving the highest number of votes.

##### *Ranking Cards*

Ranking of items is also a simple and usually effective voting technique. Sometimes ratings are used, with each of the seven most important items on a list rated on a one-to-seven-scale. Ranking is usually preferable, however, because it can be quickly tallied and the results easily interpreted.

Each participant should receive five 3 x 5 cards (seven cards if the list is long). Ask members to select the five most important items and write one in the center of each card. They should write the item's sequence number in the upper left corner. Tell them not to be concerned with penmanship; the only purpose for writing the item on the card is so that they will not have to refer back to the sheets on the wall when they rank-order their five cards.

Ranking Card

<b>ITEM #</b>
<b>ITEM (as written on list)</b>
<b>RANK (5-1)</b> <u>      </u> <u>      </u> <u>      </u>

Give the group a time limit (four or five minutes) for selecting its priority items and do a countdown (e.g., "You have two minutes left"). Request that the group members work silently, and that they wait until everyone is finished before rank-ordering the cards. Everyone will rank-order their choices together.

When everyone has completed the set of five (or seven) cards, announce that the rank-ordering will begin. Go through the following instructions without delay, using this general wording. (If seven ranking cards are used, use the following instructions starting with seven instead of five.)

“Spread the cards out in front of you so that you can see all five at once. Decide which card is more important than all the others. Write a 5 in the lower right-hand corner and underline it three times. Turn the card over.

Which is the least important of the four remaining cards? Write a 1 in the lower right corner and underline it three times. Turn the card over.

Select the most important of the three remaining cards. Write a 4 in the lower right corner and underline it three times. Turn the card over.

Select the least important of the two cards that are left. Write a 2 in the lower right corner and underline it three times.

Write a 3 in the lower right corner of the last card and underline it three times.”

Collect the cards and record the vote on the flip-chart in front of the group. You can prepare a tally sheet like the following while the group is making their voting decisions.

<b>VOTE TALLY SHEET</b>	
1.	13.
2.	14.
3.	15.
4.	16.
5.	17.
6.	18.
7.	19.
8.	20.
9.	21.
10.	22.
11.	23.
12.	24.



If someone is assisting you, ask them (or one of the members of the group) to read off the votes to you: "Item number 13 got a three." The reason for having them underline their ranking three times is so that you can tell the difference between the number of the item and how they ranked the item. Tally rankings alongside the columns of item numbers.

The example below show how a group of six members voted on a list of 24 items.

<b>VOTE TALLY SHEET</b>	
1. 2,1,1,1	13. 3,3
2.	14. 4
3. 5,4,5,5,3,4	15.
4. 3,2	16.
5. 5	17. 4,3,3,1
6.	18. 2
7. 5	19. 1
8.	20.
9. 2	21. 4
10. 1	22.
11. 2	23.
12. 5,4,2	24.

## *Variations on Voting Methods*

Using Ranking Cards Like Dots - If you feel that physically voting with dots in front of others might make some participants uneasy or bias the voting in some way, you can use voting cards (e.g., someone might feel pressured to put his dots on certain items if the items were presented by another participant who was a supervisor or a close friend). In this case, instead of dots, give each individual a 3”X 5” index card. Ask participants to write the number and name of five (or seven, if you are allowing seven votes) items from the list that they think are the most important. Collect the cards and tally the votes for each item on the sheets like you did using the dots method. Discuss the voting results. This method will require more time to allow for the tallying of votes from the cards.

A Variation on Dot Voting - If a numerical ranking is desired for each item other than the total number of dots, the possible values (1-5) can be written on each set of dots and the voters can identify their most important item by placing the 5 dot next to that item, the 4 dot next to the next most important item, and so forth. (If this method is used, you should tally the votes using the same listing method described in the “*Ranking Cards*” section. As with the use of ranking cards, you will need to allow additional time for tallying results if you number the dots 1-5.) Using this method makes tallying votes quicker and easier, but it does introduce the possible problem of biased voting since everyone votes in front of other participants.

Whichever voting method is used, when the votes have been tallied, lead a brief discussion of the voting pattern. The number of votes an item gets is likely to be the most important indication of its relative priority. Resist the temptation to play numerical games, such as adding the rankings together to arrive at a consolidated score. In the above example, adding the scores would obscure the different patterns of support for items 1 and 5; that four different members of the group thought that item 1 was one of their five most important items.

If time permits, the group can further clarify the items and vote again. Keep the discussion brief, and caution people not to change their minds frivolously.

## CONCLUSION AND FOLLOW-UP

When the discussion of the voting is finished for the last NGT question, conclude the session by thanking the participants for their participation and their ideas. Reiterate the importance of their ideas and contributions and how the results will be used. Indicate that a summary of the results from the NGT session will be sent to them.

If the NGT session was conducted for your program, follow up on the NGT session with a personal thank-you letter to each participant, including a summary of the results from the session. If you facilitated the session for someone else or another program, have that individual write the follow-up letter thanking the participants and including the session summary.

A summary of the results from the NGT session can be a list of all of the ideas generated for each NGT question shown in order based on the results of the voting process.

Adapted from Delbecq, A.L., Van de Ven, A.H. and Gustafson, D.H. *Group Techniques for Program Planning: A Guide to Nominal Group and Delphi Processes*. Glenview, IL: Scott, Foresman & Company, 1975.

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