

# Participating in <br> Group Meetings 

## O B J E C T I V E S

After reading this chapter you should be able to:

- Analyze a situation and assign the decision to the appropriate decision maker(s).
- Describe the benefits a group may derive from the social facilitation process.
- Specify an agenda for a business meeting.
- Use parliamentary procedure in a business meeting.
- Specify the steps involved in using an agenda based upon reflective thinking.
- Construct a decision-making agenda that follows the ideal solution sequence.
- Suggest how a group might follow an agenda fashioned after the single question sequence.
- Tailor an agenda to a group's needs.
- Identify the four issues that vigilant interaction theory suggests are important for a group to address to produce quality solutions.
- Understand and use these techniques: brainstorming, focus group, nominal group, buzz groups, and quality circles.
- Tell how a group decision support system (GDSS) facilitates group process and describe the strengths and weaknesses of this system.
- Explain the implications for decision making by consensus, compromise, majority vote, the leader, and arbitration.

A steering committee for the annual financial pledge campaign for a local church was meeting to organize. Yuen, finance committee chair, is leading this group. Other members of the committee are Dan, Gail, Marta, and Calvin. Notice the interaction:

Yuen: I guess we are all here. Let's get started. It seems to me that our first task is to lay out a plan to get ourselves organized. We have to kick off the program by November 1 . Some of you worked on the campaign last year. Let's list the tasks that need to be accomplished.

Gail: We will need to recruit captains to lead groups to visit members.
Marta: I believe we also had co-captains. We'll need to recruit these people too.
Yuen: Right. And what else do we need to worry about?
Dan: We'll need to work up material describing the church's plans for its program.
Gail: And we need a budget and discussion about the areas in which we're expecting an increase.
Calvin: As I remember, we worked up some examples of ways of answering questions that people might have about the program. We'll need to get someone from programming to work on this right away.

You can tell by the direction that Yuen is leading this group that he has begun the process of organizing. He has asked group members to define what it is they have to do. We can imagine that Yuen will continue the process of defining the task and then set agendas for a series of meetings. This kind of planning is important if the group is to accomplish its goals in a timely manner. I had an opportunity to watch this group organize and carry out a successful financial campaign. Understanding how to set and follow an appropriate agenda was a key factor in the group's success.

This chapter begins by discussing individual versus group decision making. Then we consider several agendas. Each is useful under certain circumstances, so we explore how each agenda might be used and also adapted to meet a particular group's needs. Next, vigilant interaction theory suggests how groups can improve their work by careful attention to the decision-making process. Following this, five special discussion techniques are examined to help groups meet special problems. Included here is a discussion of technology as an aid to group process. Finally, decision-making methods are presented, along with the circumstances under which each is most likely to be useful.

## INDIVIDUAL OR GROUP DECISION MAKING?

Every problem requires a judgment about who should make a decision. Should the decision be turned over to an individual or to a group? This complex question does not have a simple answer. In fact, Victor H. Vroom and Arthur G. Jago (1988) developed an elaborate plan for making a judgment about who should make a decision. Here are some important questions to consider in making the judgment about who should wrestle with a problem. The discussion is based on Vroom and Jago's work as well as that of others.

1. Is one person in the group truly an expert?

The expert should probably make the decision.
2. Is there a severe time constraint on making a decision?

Turn the problem over to an individual who possesses the information and expertise to decide if there is a time constraint. Groups usually move more slowly than individuals do. If the problem is given to a group, a leader can help the group move more quickly by imposing structure and time limits.
3. Is the problem complex?

A complex problem usually requires a variety of views and expertise. A group is more likely to have the knowledge and expertise. Turn the problem over to the group, provided there is no time constraint. If the problem is simple and noncontroversial, turn it over to an individual who has the expertise to decide.
4. Is it important that the group accept the decision?

If the problem is straightforward and the group is likely to accept the decision, turn the problem over to an individual. If the group has to live with the decision and/or must implement it, and especially if the issue is controversial, turn the problem over to a group that has the knowledge and expertise to make a decision.

## Social Facilitation

If the decision is made to turn over a task to a group, the process may benefit from social facilitation. Social facilitation is the effect that comes to a group's effort because members are working in the presence of each other. This effect is thought to come because the presence of others creates a situation where social evaluation can take place. The social evaluation motivates members to work harder than they would as individuals to find the best possible solution (Kameda, 1996).

Although other research findings indicate both positive and negative effects on performance and learning from the presence of others, considerable evidence suggests that working in cooperative, interdependent work groups-teams-enhances student learning and individual performance (Blau, 1980; Johnson, 1980; Johnson et al., 1981; Schmitt, 1981). In addition, research by Deutsch (1990) indicates that cooperative, as opposed to competitive, groups facilitate performance.

The key to achieving the benefits of social facilitation appears to be gaining skill in working together, having a cooperative spirit, and being interdependent. Suggestions throughout the remainder of this book will help you achieve these aims.

## AGENDAS FOR GROUP MEETINGS

## An Agenda for a Business Meeting

Tradition has set an agenda for a business meeting that you may want to adopt if you are to lead a formal meeting. People are generally aware of this structure and feel comfortable with it. The agenda includes categories of business, and the content varies from meeting to meeting. Following are the typical categories of business in their traditional order:

1. Meeting called to order.
2. Minutes of previous meeting distributed or read.
3. Minutes of previous meeting approved or corrected.
4. Standing committee reports.
5. Special committee reports.
6. Old business considered (business postponed or in process from previous meetings).
7. New business considered (business not previously discussed).
8. Announcements by members or officers.
9. Adjournment.

Formal business meetings often use parliamentary rules to regulate the discussion. You will find a complete description of these rules in the most recent edition of Roberts Rules of Order. The rules require members to be recognized and to make proposals in the form of a motion-a formal proposal. The proposal must receive the endorsement-a "second"-of another member, who indicates by the action support for the proposal. Debate of the merits of the proposal is then permitted, with the chairperson formally recognizing speakers. This discussion may continue until all have spoken as much as they wish, or it may be curtailed by a vote of the membership. Members may also set aside an issue for later consideration by voting to "table" it, that is, to end the discussion. They may take the proposal from the table and consider it at some future meeting.

Table 3.1 on pages $72-73$ presents a list of parliamentary motions for you to use in formal business meetings. You will find it helpful to refer to the table until you are familiar with its use. Remember that these rules are written for the convenience of the group. Do not let adherence to them interfere with the group's business. If everyone agrees to do a particular thing, you can do it without slavishly following parliamentary rules.

## An Agenda Based on Reflective Thinking

Suppose that you are enrolled in Professor John Dewey's philosophy class at your college or university. He is interested in how people think when they solve problems. So he asks you and several others to describe how you solve problems.

Professor Dewey collects all your statements about problem solving and analyzes them for common characteristics. He is asking two questions:

1. Are there common ways students think when they solve problems?
2. If so, what would a problem-solving agenda look like if it were based on these common techniques?

Dewey (1910) finds enough similarities to be quite confident that he is onto something. He decides that the similarities are so significant that he will write a book, How We Think, to let others know of his discovery. This is what a professor named John Dewey did.

Dewey believed that thinking reflectively obligates a person to adopt an attitude. The person must begin the process with a desire for "active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusions to which it tends" (Dewey, 1910, p. 6). Dewey is suggesting that the person must be committed to "active, persistent and careful consideration" of beliefs. Also, the person must carry this commitment to an examination of the "support" and "conclusions." All the while, group members must remain flexible in applying the decision-making process, by modifying the agenda, to suit its purposes.

Below is a decision-making sequence generated from the ideas of John Dewey (1910). Two other "standard agendas," the ideal solution sequence and the single question sequence, follow it. The use of a standard agenda has the advantage of a systematic and usually thorough analysis of the problem and solutions. Some caution is advised. Jarboe (1996) found that, although a standard agenda is ideal, some groups have difficulty following the steps and therefore find it impractical. Your group may need to gain some practice so that a standard agenda will work for you.

Dewey's agenda, the steps of which are highlighted by italic print, is illustrated below with an outline used by a housing authority to consider security in one of its buildings. Read through this illustration twice. First, scan the italicized sections. Then, go back and read the full text.
I. What is the nature of the problem?
A. What are the particulars of our problem? ${ }^{1}$

1. What is the problem?

There has been a 10 percent increase in crime in the Hillsdale Building. There were five burglaries, one rape, and two cases of vandalism in the past three months.
2. Do we understand the terms?

What is meant by burglary?
Breaking and entering the premises and taking possession of other's property.
3. What outcome is expected of our group?

Discussion of problem? Recommendation of possible solutions? A decision?
We are to analyze fully this problem, discuss solutions, make a decision, and present a plan for implementation.
B. What harm is present in the current situation?

1. What is the harm?

The pain and suffering of the individuals.
Loss of property valued at $\$ 4,500$.
Image of the housing authority as not providing safe living arrangements for the citizens of the county.
2. Who is affected?

The residents of the Hillsdale Building.
The employees of the housing authority who work in the building.
All the housing authority board members and employees, indirectly.

## TABLE 3.1 Precedence of Parliamentary Motions

When a main motion is before the meeting, any of the following motions, when appropriate, may be made. In the following table the motions are arranged from the strongest (1) to the weakest ( 0 ). A stronger motion takes precedence over any weaker motion and becomes the business of the meeting.

| Precedence Number | Interrupt Speaker? | Require <br> a <br> Second? | Debatable? | Vote Required? | Amendable? | Subject to Referral to Committee? | Subject to Postponement? | Subject to Reconsideration? |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Privileged motions: |  |  |  |  |  |  |  |  |
| 1 Fix time of next meeting | No | Yes | No | Majority | Yes ${ }^{\text {a }}$ | No | No | No |
| 2 Adjourn | No | Yes | No | Majority | No | No | No | No |
| 3 Recess | No | Yes | No | Majority | Yes | No | No | No |
| 4 Question of privilege | Yes | No | No | Chair | No | No | No | No |
| Incidental motions: |  |  |  |  |  |  |  |  |
| Incidental motions are of equal rank among themselves; they are considered in the order they are moved. |  |  |  |  |  |  |  |  |
| 5 Appeal decision of the chair | Yes | Yes | Yes | Majority | No | No | Yes | Yes |
| 5 Close nominations | No | Yes | No | Two-thirds | Yes ${ }^{\text {a }}$ | No | No | No |
| 5 Division of the house | Yes | No | No | None | No | No | No | No |
| 5 Object to consideration | Yes | No | No | Two-thirds | No | No | No | No |
| 5 Parliamentary inquiry | Yes | No | No | None | No | No | No | No |
| 5 Point of order | Yes | No | No | Chair | No | No | No | No |
| 5 Suspension of rules | No | Yes | No | Two-thirds | No | No | No | No |
| 5 Request for information (Will the speaker yield for a question?) | Yes | No | No | Chair or speaker | No | No | No | No |
| 5 Withdraw a motion | No | No | No | Majority | No | No | No | No |
| Subsidiary motions: |  |  |  |  |  |  |  |  |
| 6 Postpone temporarily (lay on the table) | No | Yes | No | Majority | No | No | No | No |


| 7 Vote immediately (previous question) | No | Yes | No | Two-thirds | No | No | No | No |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8 Limit or extend debate | No | Yes | No | Two-thirds | Yes | No | No | No ${ }^{\text {b }}$ |
| 9 Postpone to a specified time | No | Yes | Yes | Majority | Yes | No | No | $\mathrm{No}{ }^{\text {b }}$ |
| 10 Refer to committee | No | Yes | Yes | Majority | Yes | No | No | $\mathrm{No}^{\text {b }}$ |
| 11 Refer to the committee of the whole | No | Yes | Yes | Majority | Yes | No | No | No |
| 12 Amend an amendment | No | Yes | Yes | Majority | No | Yes | Yes | Yes |
| 13 Amend | No | Yes | Yes | Majority | Yes | Yes | Yes | Yes |
| 14 Postpone indefinitely | No | Yes | Yes | Majority | No | No | No | No |
| Main motions: |  |  |  |  |  |  |  |  |
| Main motions are of equal rank among themselves. They have zero precedence, since they may not be considered when any other motion is before the house. |  |  |  |  |  |  |  |  |
| 0 General main motion | No | Yes | Yes | Majority | Yes | Yes | Yes | Yes |
| 0 Reconsider | Yes | Yes | Yes | Majority | No | No | Yes ${ }^{\text {c }}$ | No |
| 0 Rescind | No | Yes | Yes | Two-thirds ${ }^{\text {d }}$ | Yes | Yes | Yes | Yes |
| 0 Resume consideration (take from table) | No | Yes | No | Majority | No | No | No | $\mathrm{No}{ }^{\text {b }}$ |
| 0 Set aside order of business | No | Yes | Yes | Two-thirds | Yes | No | No | Yes |

${ }^{\text {a }}$ Although the motion is not debatable, the amendment may be debated.
${ }^{\mathrm{b}}$ Motion may be renewed after a change in the parliamentary situation.
${ }^{\text {chay }}$ May be postponed to a specified time only.
${ }^{\text {a }}$ Only a majority is required if previous notice has been given.
Source: A. J. (1986) Freeley, Argumentation and debate: critical thinking for reasoned decision making, 6th ed. Boston: by Wadsworth, Inc. Reprinted by permission of the publisher.
3. How serious is the harm?

Crime is on the increase.
The loss and the personal injury involved are substantial.
4. How widespread is the harm?

People on nearly every floor have been victims or know victims.
Residents of other buildings have complained of an increase in security problems.
C. What seems to be causing the problem?

1. What factors seem to be causing the harm?

Vacant apartments seem to attract vandalism and crime.
Residents do not report suspicious people who hang around.
Residents often leave doors unlocked.
Many residents do not have telephones, so they have no good way to call for help.
2. What are the obstacles to successfully removing the causes of the harm? It may be difficult if not impossible to rent all the units in this building. Residents do not have funds to have telephones installed, and board policy prohibits payment for private installation.
II. What criteria should we set?
A. What important conditions-criteria-must an effective solution meet?

We cannot break existing board policy.
We cannot spend more than $\$ 5,000$, the amount allocated for this project.
We must not approve a plan that advantages particular residents of the complex over other residents.
We must be able to implement the plan in other buildings where security problems are beginning to surface.
B. Are some criteria more important than others? If so, rank-order them? Yes. We must treat all residents equally. We cannot go over the $\$ 5,000$ allocated. Board policy might be changed but only if absolutely necessary.
III. What alternatives might meet the causes of this problem and alleviate the harm?

1. Install an emergency alert system on each floor.
2. Increase outside lighting.
3. Replace locks on doors with double-bolt-type locks.
4. Install peepholes in doors.
5. Offer incentives for residents to move to empty apartments, closing off the top floor temporarily.
6. Organize a crime watch among the residents, offering cash rewards for making a report that results in apprehension and conviction of criminals.
7. Hire a private security system.
8. Attempt to get increased county police surveillance.
IV. What is the best solution for this problem?
A. Which of these or what combination of these solutions seems most likely to counter the causes of this problem?
Better locks and peepholes would help keep criminals out.
Elimination of empty apartments would allow for more people to be around to discover the crime.
A private professional security service would provide the most reliable protection.
Increased outside lighting would most certainly discourage crime.
B. Of the solutions that seem likely to be effective, which ones meet the criteria that were set?
Moving residents might not be fair. Some residents have lived in their apartments for fifteen years.
Cost is a factor. The funds will not allow for a private security company. Perhaps county police are an alternative.
Cost of the other items is probably within the $\$ 5,000$ limit.
C. Given solutions that are likely to counter the causes, and meet the criteria set, what seems to be the best solution?
All the solutions seem likely to work except moving people and the crime watch. Residents are unlikely to respond to an effort to organize. They haven't been known for community responsibility and pulling together.
V. What plans will we set in order to implement our solution?
A. What needs to be done?

Turn the plan over to the executive director for action.
B. In what order?

Ask the director to begin lock installation immediately.
Contact the county police department and ask how it can provide increased patrolling of the Hillsdale Building.
Contract to upgrade the lighting.
C. By whom?

The executive director will carry out these plans and report back to us within thirty days.
VI. How will we evaluate the effect of our solution?
A. What observable evidence will we monitor to evaluate the effect of our solution? We will collect crime reports and residents' complaints.
B. Who will be responsible for follow-up evaluation?

The executive director.
Several scholars provide variations on this scheme for decision making to adapt it to particular group and situational needs. We will explore two of these next. The first, the ideal solution sequence, is appropriate when the views of various segments of an organization need to be considered. The second, the single question sequence, is useful when a group is beginning its decision process without knowing what issues might be involved.

## Ideal Solution Sequence

Sometimes we encounter a problem that we know can be solved by a variety of solutions. Often various groups are affected by the decision directly, so each group has its own "ideal" solution. Carl Larson (1969) offers the ideal solution sequence to take these factors into account. This plan asks the group to take into account the various ideal solutions the involved parties (groups) might favor.

It is easy to imagine an organization with a problem that can be solved by a variety of solutions. Consider this special committee that the vice president of a university appointed to consider a change in the between-term break in December. Follow this outline of how the group used the ideal solution sequence to take into account the views of various groups within the organization.

Larson lists these four questions in the ideal solution sequence:
I. Does everyone agree on the nature of the problem? (This involves stating the problem and understanding the nature of the problem. It can be developed as the first step outlined earlier.)
II. What would be the ideal solution from the point of view of all interested persons or groups involved?
III. Which conditions within the situation could be changed to achieve the ideal solution? (Here is where the group members consider proposals for change. They are concerned with finding the solution that will deal most effectively with the problem. They also might discover obstacles that cannot be changed. With these in mind, they attempt to find the best possible solution.)
I. We have been called together to recommend when to take the December break. Do we all agree that is our goal? (Here the problem would be analyzed as the first step in the reflective thinking pattern or Brilhart-Jochem pattern.)
II. The students want more time to work prior to December 25. They would like to be out at least two weeks prior to the twenty-fifth. The people in the registrar's office and other administrative personnel want to have more time after December 25. The faculty senate has passed a resolution urging this committee not to split the term. Faculty members do not want to come back after the break and still have a term to complete. The ideal solution from the view of all parties would be to complete the term before December 25, returning for the new term on January 2.
III. No, a two-week break before December 25 would not allow time to cover the course material. Could we start the term earlier so that it could end two weeks before December 25? Yes, I think so.
IV. Of the solutions available to us, which one best approximates the ideal solution? (Groups often approach this task by trying to incorporate elements of the various groups' solutions into an ideal solution.)
IV. We could extend the term break so that students would be able to work for two weeks prior to December 25. The extended break would give administrative personnel time with their families. It would not break up the term.

## Single Question Sequence

In research he conducted on group problem solving, Carl Larson (1969) found that the single question sequence, like the ideal solution sequence, produced more choices of best alternatives than did Dewey's reflective thinking pattern. The single question sequence was formulated to help groups identify issues that flow from a problem. Once they have identified the issues, they are asked to resolve them-phrased in the form of subquestions-and then to identify the best solution to the major question. Here is how a governing board used this sequence to decide how many programs it could offer in the coming year. They began with the single question, "How many programs can we provide . . .?" The questions that led the governing board, which was deciding about adding new programs, through this procedure are these:
I. What is the single question whose answer gives the group all it needs to accomplish its purpose?
II. Which subquestions must be answered before we can answer the single question?
III. Do we have sufficient information to answer the subquestions confidently?
A. If yes, answer them.
B. If no, continue below.
IV. What are the most reasonable answers to the subquestions? (Notice that the language here asks for the "most reasonable." Circumstances might prevent some issues from being fully resolved, and therefore the group must accept the most reasonable answer.)
V. Assuming that our answers to the subquestions are correct, what is the best solution to the problem?
I. How many programs can we provide with the 10 percent increase over our current budget?
II. What programs should be instituted? How much will each cost? What cost will we incur for personnel and equipment? What is the anticipated participation in these programs?
III. The answer is no. We continue with IV, below.
IV. We cannot agree on which programs to initiate next year. We did agree to poll the membership and go with some of their suggestions. The average cost of each program last year was $\$ 11,000$. The miscellaneous costs associated with each program were $\$ 2,450$. The receipts from membership fees increased 12 percent.
V. Assuming that these figures hold, we should be able to fund two new programs at an estimated cost of $\$ 27,000$.

From here the group might move to deciding how to implement its decision.

## Vigilant Interaction Theory

"Be cautious in your decision making" is the advice of Randy Hirokawa. He believes that decision quality rests with the agenda and its application. Vigilant interaction theory, or functional theory, is based on the idea that the quality of group performance is directly influenced by the quality of the group interaction (Hirokawa, 1996; Hirokawa \& Rost, 1992). Vigilant interaction theory is based on the work of Dennis Gouran (1986) that linked critical thinking and communication to high-quality inferences. Randy Hirokawa found higher-quality outcomes in groups he studied when they were vigilant (that is, thorough and careful) than in groups that weren't vigilant.

Four issues are important to vigilant interaction theory (Hirokawa \& Rost, 1992):

1. Examining the problem Is there something about the current state of affairs that requires improvement and change?
2. Clarifying objectives What do we want to achieve or accomplish in deciding what to do about the problem?
3. Developing available choices What choices are available to us?
4. Examining potential consequences What are the positive and negative aspects of these choices?

Notice that this approach to decision making is very similar to that presented in the agenda based on reflective thinking. Hirokawa found that productive groups usually take up these issues in an organized sequence, though the sequence may vary from group to group. He also concluded that the biggest error groups made when they reached a faulty solution was the omission of one or more of these steps (Hirokawa, 1983; Poole \& Doelger, 1986).

This research argues for careful attention to the group's problem-solving process as it works through the problem. Groups need to remain vigilant in following decisionmaking procedures. What being careful means in practice can be discovered by considering further research by Randy Hirokawa (1985). Vigilant decision making requires retrospective questioning after the decision is made and asking, "What if we implemented our decision? How would it play out?" It also means that the group must thoroughly and accurately understand the problem, consider a variety of acceptable alternatives, and evaluate each alternative carefully. Careful evaluation means considering both positive and negative consequences associated with each alternative. Thus the importance of critical thinking cannot be overestimated.

## Adapting the Agenda to the Group's Needs

Selecting an agenda is only a starting place for a group. A wise group leader may modify an agenda to fit the group's needs. Brilhart, Galanes, and Adams (2001) present a useful scheme for modifying agendas according to problem characteristics. They suggest tailoring the agenda for a particular problem characteristic by adjusting the problem-solving emphasis and agenda steps. These suggestions are presented in Table 3.2.

## TABLE 3.2 Problem Characteristics Matched to Agenda Steps

| Problem | Problem-Solving Emphasis | Agenda Steps |
| :--- | :--- | :--- |
| 1. Intrinsic interest in problem is <br> high. | 1. A period of ventilation before <br> systematic problem solving. | 1. A problem-solving agenda with <br> which the group is familiar. |
| 2. Difficulty of problem is high. | 2. Detailed problem mapping with <br> many subquestions. | 2. Problem mapping, as presented in <br> single question format. Ideation, <br> step III of the reflective thinking <br> format, with brainstorming. |
| 3. Multiple solutions to problem <br> are possible. | 3. Brainstorming or nominal group <br> process. | 3. Include a criteria step, as in step II <br> of the reflective thinking format. |
| 4. Cooperative requirements for |  |  |
| solving the problem are high. | 4. A criteria step, creating and <br> ranking explicit standards. | 4. Include a criteria step, as in <br> step II of the reflective thinking <br> format. |
| 5. High level of acceptance of the <br> solution is required. | 5. Focus on concern of persons <br> affected when evaluating <br> solutions. | 5. Include step II of the ideal <br> solution format. |
| 6. High level of technical quality is <br> required for a decision. | 6. Focus on evaluating ideas, <br> critical thinking; perhaps invite <br> outside experts to testify. | 6. A reflective thinking sequence <br> may be most suitable. |
| 7. Members are responsible for one <br> or a few of the stages of problem <br> solving. | 7. Shorten agenda to include only <br> the required steps. | 7. Emphasize the steps of any <br> sequence that will allow the group <br> to meet its charge. |

Source: Adapted from Brilhart \& Galanes (1982); Brilhart, Galanes, \& Adams (2001).

In addition to the special needs that might be presented by the characteristics of the task at hand, you should consider the nature of your particular group. Ask these two important questions about the group to help you decide on your agenda: "How long have members been working together?" "Do they have experience in working with this kind of task?"

Groups that have been working together for a long time very often develop a particular way of working with problems. If their agenda works and if it allows reasonable consideration of problems, then it may be a mistake to impose an unfamiliar agenda.

But how do you know if an agenda allows reasonable consideration of the problems? There are two tests to apply. First, do the decisions the group implements seem to work? Do the decisions alleviate the harm? Are the people who are affected by the decisions satisfied? Second, does the group have difficulty coming to decisions? Some problems are difficult and very controversial. We expect groups to engage in considerable conflict about their ideas in these cases. But if the group has difficulty with decision making on a regular basis, then the difficulty may be a function of the agenda.

Perhaps the problem needs a more careful analysis. Sometimes too few solutions are considered. At other times the group's membership is so diverse that it needs to recognize and consider the ideal solutions for the different subgroups-step II of the ideal solution sequence. Decision-making difficulty can be a function of failure to discuss cri-teria-especially if the problem involves values. A group might modify its agenda to take one of these problems into account.

## Using the Agenda Effectively

Five important rules will help your group make more efficient use of an agenda.
Do not keep the agenda secret. Some leaders bring their agenda to the group's meeting and expect the members to make good use of it. This procedure does not allow group members to prepare adequately. As you can imagine, informed preparation is usually better than uninformed preparation. Publish the agenda several days before the meeting and make it clear that the group will be given a chance to modify it.

Tailor the agenda to the specific problem. You should formulate specific questions for the agenda in terms of the problem. Notice that specific questions have been formulated for each agenda presented above. These questions help to focus the group's attention in a way that would not be possible if the agenda were published with the more general questions.

Ask the members at the start of the meeting if they wish to modify the agenda. Permit group members to change the agenda if they wish. When they seem satisfied, get verbal agreement. This step constitutes public agreement of the agenda as a rough statement of the group's goals.

Post an abbreviated form of the agenda where the group can see it. This agenda helps keep the group oriented, and it serves to remind the group of its progress.

Use the agenda to go back and check on the quality of the process and discussion. Did the group conduct a careful analysis of the problem? Does the solution seem to eliminate the causes? Does the solution meet the criteria? Does the group's plan allow for careful monitoring of the implementation of the decision? Has the group considered contingencies to be put in place if necessary?

## DISCUSSION TECHNIQUES

Professionals who have been consultants to business and other organizations have developed a number of group techniques designed to fulfill certain functions (Seibold, 1979). Brainstorming, focus groups, and buzz groups have as their aim generating information and ideas. Further, the buzz group addresses the problem of increasing member participation in the idea-generation process. Other techniques, nominal group process and Delphi, are decision-making processes formulated to overcome certain situational
problems. Finally, the quality circle is a technique designed to include lower-level participants in an organization in the decision-making process.

## Brainstorming

Brainstorming is a procedure in which ideas are posed and recorded without discussion or critique. It is used to foster creativity. The underlying assumption is that criticism of ideas causes members to be more cautious about suggestions and also interrupts creative idea generation. Therefore, members are required to hold their criticism until all ideas have been heard and recorded. Further, members are encouraged to present all ideas that occur to them and to hitchhike on each other's ideas. (Hitchhiking means that a member uses an idea of another member to stimulate his or her imagination, thereby creating an idea that is a variation of the original.) A further assumption is that a large number of ideas will include several good ones.

Alex Osborn (1959), co-owner of an advertising agency, first discussed this procedure in his book Applied Imagination. Osborn sought a way to help his staff become more creative in developing marketing strategies. The assumptions about generating ideas and creativity yielded four rules to guide a group toward this goal:

1. All evaluation and criticism of ideas is forbidden.
2. Wild and offbeat ideas are encouraged.
3. Quantity, not quality, of ideas is the goal.
4. New combinations of ideas are sought.

Brainstorming can be used in a variety of ways in a decision-making task. For example, a group might use this technique to answer any of these questions:

Where can we find information?
What kind of information do we need to solve the problem?
Which solutions might we consider?
Which criteria are important to us?
What are the various ways we might implement our decision?
As you can see, a group can use brainstorming at many points. The usual point for its use is in generating solutions. Of course, brainstorming is only the first step. The ideas must be judged as useful, combined, and then refined.

Groups that are using brainstorming may have problems. One problem comes from the tendency for people to support their own ideas. A person who presents an idea may want to elaborate on it. Someone who thinks that her idea is better wants to tell why. So a group using brainstorming needs a leader to gently enforce the rules.

Groups also may get stalled after they have a list of several items. Encouragement is needed. The leader might say, "Can we think of three more ideas?" Sometimes it helps
the group to get started again if the leader reads the list. The leader might say, "As I read this list, try to think of ideas we have missed."

Another problem is the tendency for some members to stifle the flow of ideas through their nonverbal communication. For example, a member may frown with disapproval at an idea. The frown may discourage the contributor's willingness to provide ideas. The leader may need to caution members about this tendency and perhaps invoke some prearranged signal if these nonverbal messages emerge.

Research has demonstrated that someone who is external to the group is most effective in the role of facilitator of a brainstorming session (Offner, Kramer, \& Winter, 1996). In many circumstances, this arrangement will not be practical. If the leader understands the process, is committed to the brainstorming rules, and gives the group opportunity to practice, this disadvantage of not having an external facilitator can be mitigated.

## Focus Groups

A focus group meets to share its ideas about and experiences with a particular idea, product, or problem through relatively unstructured interaction. Generally, the group does not have decision-making authority; it meets to provide information and opinion. Focus groups are especially useful when seeking information about how a group of consumers is receiving something. Soda, cigarette, and movie companies, for example, rely heavily on focus groups to improve products. A facilitator, who is often not a member of the organization sponsoring the data collection, prepares a list of questions about the product or service and competitive products or services. Members are generally paid and are part of the larger group of consumers. (Of course, since the group is not usually more than eight to ten people, a focus group is not a representative group in the statistical sense.) The facilitator introduces the topic and then poses the first question. For example, a facilitator working for a drug abuse treatment center talked briefly of the need for quality services in the area and then posed the question, "What do you see as essential components of a quality drug treatment program?" The facilitator encourages participants to respond and probes their answers for clarification. The interaction is tape-recorded for transcription and analysis.

Focus group meetings are not restricted to marketing research. Groups of employees or students or congregational members could be called together to share their experi-ence with the organization or even to consider a specific problem the organization faces.

## Nominal Group Technique and Delphi

Sometimes more alternatives and higher-quality decisions can be achieved through a technique that is not actually group discussion. Nominal group technique (NGT) is a procedure for generating ideas and making decisions in which members work silentlybut in one another's presence-to generate ideas. They then pool their ideas, clarify them, rank-order them, and also may move to a discussion and a decision.

This procedure has been labeled "nominal group" because it is not necessary for the members to engage in verbal interaction. In fact, in a version of this technique called

## Focus on Research

## Enhancing the Brainstorming Process

Brainstorming is a highly recommended technique for idea generation. What have researchers found that might help us better understand its effectiveness and use? Studies conducted in 1959 and 1960 found positive effects of using brainstorming when compared with individuals generating ideas. Critics have suggested that the difference can be attributed to groups being given the special rules developed by Osborn and individuals being given no special instructions. Other researchers (Lamm and Trommsdorff, 1973; Mullen and Johnson, 1989) have found that the difference disappears when individuals are better informed about the need for creativity and the purpose of the study. Further study suggests some special conditions that enhance the usefulness of brainstorming:

1. Train members to follow the four rules set by Osborn (Bouchard, 1972).
2. Stop talking periodically to allow members to think silently (Ruback, Dabbs, and Harper, 1984).
3. Record all ideas in full view of participants (Osborn, 1957; Rickards, 1974).
4. Take turns if the quantity of ideas is low (Osborn, 1957; Rickards, 1974).
T. J. Bouchard (1972). Training, motivation, and personality as determinants of effectiveness of brainstorming groups and individuals. Journal of Applied Psychology, 56, 324-331.
H. Lamm and G. Trommsdorff (1973). Group versus individual performances on tasks requiring ideational proficiency (brainstorming): A review. European Journal of Social Psychology, 3, 361-388.
B. Mullen and C. Johnson (1989). Productivity loss in brainstorming groups: A meta-analytic integration and a different solution to the riddle. Unpublished manuscript, Syracuse University, New York.
A. F. Osborn (1957). Applied imagination. New York: Scribner's.
T. Rickards (1974). Problem solving through creative analysis. London: Halsted.
R. B. Ruback, J. M. Dabbs Jr., and C. H. Harper (1984). The process of brainstorming: An analysis with individual and group vocal parameters. Journal of Personality and Social Psychology, 47, 558-567.

Delphi, participants generate a decision without ever meeting face to face. Delphi requires that the process be conducted by postal mail or electronic mail. Participants mail a list of ideas and then rank-order a master list that was generated from this original list. A decision is reached by noting which ideas are most favored.

NGT is especially useful when a group has members who may be reluctant to suggest ideas because they are concerned about being criticized or about creating conflict. NGT overcomes these problems. Some scholars suggest this technique can even produce better performance than techniques involving group discussion (Kanekar \& Rosenbaum, 1972). Here is how André Delbecq describes the procedure (Delbecq, Van de Ven, \& Gustafson, 1986, pp. 7-16):
I. Silent generation of ideas in writing The first step in NGT is to have the group members write key ideas silently and independently.
II. Round-robin recording of ideas The second step of NGT is to record ideas of members on a flip chart visible to the group. Round-robin recording means going around the table and asking for one idea from one member at a time. The leader writes the idea of a member on the flip chart and then asks for one idea from the next member.
III. Serial discussion for clarification The third step of NGT is to discuss each idea in turn. Serial discussion means taking each idea listed on the flip chart in order and discussing it for a short time. The leader points to item 1, reads it out loud, and asks the group if there are any questions, statements of clarification, or statements of agreement or disagreement. . . [The leader should] not allow discussion to: (1) unduly focus on any particular idea; or (2) degenerate into argumentation. [Note: The idea here is not to interact about disagreement, but to present the reasons for agreement or disagreement without engaging in a clash with other members.]
IV. Preliminary vote on item importance The average NGT meeting will generate over twelve items in each group during its idea-generation phase. Through serial discussion, group members will come to understand the meaning of the item, the logic behind the item, and argument for and against the importance of individual items. In some manner, however, the group must aggregate the judgments of individual members in order to determine the relative importance of individual items. [One method of doing this is to have group members rank-order their choices in terms of acceptability. These can then be tabulated and the results tallied. An idea may clearly emerge from this process. If no idea emerges, the group can then engage in discussion and attempt to achieve an agreement.]

NGT has the clear advantage of minimizing status differences and ensuring relatively equal participation of all group members. It also may be a time-saver. Susan Jarboe's (1988) research suggests that NGT also decreases the tension and hostility a group might experience in its decision making. But Delbecq and his colleagues suggest it is best used in meetings concerned with judgmental decision making. These are meetings that involve creative decision making.

The type of questions that such groups would consider are "What should be done about employee absenteeism?" "What policies should be established to provide for efficient and profitable auditorium management?" "What activities should be planned for the fraternity?" "What marketing plan should we adopt for this new sport shoe?"

Delbecq makes the point that the technique is not suited to routine meetings. For Delbecq, the routine meeting is a "situation where members of the group agree upon the desired goal, and the technologies exist to achieve this goal. In such a meeting the focus is on coordination and information exchange, and the meeting is 'leader centered'" (Delbecq, Van de Ven, \& Gustafson, 1986, p. 4). (These meetings are also called programmed decision situations, since no real decision making is taking place.) So a meeting to report on production quotas and to set new goals would not be suited to Delbecq's nominal group technique.

## Buzz Groups

The buzz group was created by J. Donald Phillips (1948). It is useful when a large group is meeting and its leaders wish to ensure as much individual participation as possible. The large group is divided into subgroups of six persons. Each group discusses the same question for a specific length of time and reports its conclusions to the large group's leader. The leader collects the results and displays them for the membership. The technique is useful for identifying issues or problems, posing a list of solutions or ideas, and

The technique involves six steps:

1. The chairperson of the group presents a carefully formulated question to the group. The question must be concise and limited in scope so that the groups will be able to manage it in a brief period.
2. Divide the large group into smaller groups of six members. These groups are provided tables if possible. If this is not possible, they must be given enough space to have some privacy. (Usually a large auditorium is used if available.)
3. Appoint a spokesperson for each group. This person will chair the meeting and report the results to the larger group. The leader should understand the rules: (a) All ideas are to be recorded, and (b) the group is to rank-order them according to the most preferred. Provide cards for recording ideas.
4. Ask the group members to follow this procedure: Propose ideas for five minutes; then devote one minute to deleting duplicates and ideas the group does not want to pass on; then rank-order the remaining ideas.
5. Notify the groups when five minutes have elapsed. Give the groups an extra minute to finish their listing; then ask them to evaluate and rank-order.
6. Ask each spokesperson to read his or her group's first suggestion in a round-robin fashion. The suggestions can be listed on a chalkboard or overhead projector for all to see. Of course, duplicates will not be read. Instead, the spokesperson should read the next item on his or her list.

The conclusions from this process can be evaluated by some appropriate subgroup of the membership, such as the group's executive committee or an ad hoc committee.

This technique can be used in a variety of contexts. Political, social, and fraternal groups can wisely use it to get their members involved in decision making. It helps overcome some of the problems associated with too large a group engaging in decision making.

## Quality Circles

A popular strategy for managing work problems is to involve workers in making decisions that affect them. One type of group that does this is the quality circle. A quality circle ( QC ) is a group of workers from the same work area who voluntarily and regularly meet to solve quality problems associated with their job. We know people are often more willing to do their jobs and to make an effort to change their performance when their opinions are taken into account. One effective way of taking subordinates into account is to ask them to consider problems and help make decisions. Direct involvement allows individuals to agree and to make a public commitment to a decision.

The quality circle is perhaps the clearest example of a participative management group. Quality circles evolved in Japanese firms through the efforts of an American
consultant, Joseph Juran, who advocated participative decision making as a method of achieving quality control. In 1961 the editors of the Japanese magazine Quality Control took up this idea. They believed that involving first-line supervisors in quality control would increase productivity. The result of their advocacy was a new publication called The Foreman and QC. Participative management groups became popular in Japan and, consequently, came to the attention of American business and industry (Hirokawa, 1982b). ${ }^{2}$ Firms such as Lockheed Corporation, J. C. Penney, Uniroyal, General Motors, Firestone, Chrysler, Ampex, R. J. Reynolds, and Bendix instituted quality circles.

How does the QC work? QC groups seek to improve production through employee problem solving. The supervisor delegates the authority to make decisions to a group of subordinates. Members of a department voluntarily discuss work problems and make decisions. The theory is that the employees are in the best position to know about some problems and that when they are involved in decision making, they will be more committed to the outcome. But workers usually need help if they are to be successful. You can provide that help regardless of your rank in an organization. You can help to build the appropriate climate and to direct and facilitate the effort.

The leader of a quality circle serves as a guide rather than as a supervisor who imposes a decision. Thus this person is in an unenviable position. After a group recommends action, the supervisor must either accept the idea or reject it and thereby demoralize the group. When the decision is implemented, it is the supervisor, not the employees, who must assume responsibility for the outcome. For this reason a supervisor should be careful in selecting the problems to turn over to a QC group.

Recognize also that QC groups may not work well in certain situations. If a supervisor asks subordinates who have a highly significant stake in the outcome of an issue to solve a problem, they may not be objective enough to reach a quality decision. Further, a person who is highly apprehensive about communicating or low on assertiveness is not likely to be a productive member. Also, a QC group may not be successful if no member is willing to engage in leadership. A manager can guide a group but also must rely on some group member for leadership. Otherwise, the manager may have to take too large a role and may run the risk of being perceived as manipulative. Finally, recognize that QC participants must have top-management support, a willingness of superiors to accept suggestions and criticisms from subordinates, and training in task and social decisionmaking skills (Smeltzer \& Watson, 1985).

How do you structure the meeting? We examined a good format for the quality circle decision-making activity in the preceding section. Perhaps you can see that the following agenda is similar.

1. Discover the problems. It seems clear that the group will have to discover the problems before it can spend time discussing them. Ask people to bring lists of things that keep them from doing their jobs well. Combine the lists on a flip chart and ask the group to rank-order the items.
2. Gather the relevant data. You and other group members need time to gather relevant information. Spend some time asking what information group members

## A Question of Ethics and Responsibility

## Leadership and the Quality Circle

$\square$If Bjork is leading a quality circle of employees from his department. This QC has been meeting regularly for about nine months. Relationships have been polite but tense at times when the issue was important. This group has completed a number of important tasks and has done so with success. Management sees this QC as a successful example of this technique.

The QC is considering solutions to an important safety issue. Ulf thinks the group is headed in the right direction, but he believes that management would prefer a different solution. Members have de-
bated hotly various solutions and are very much committed to the solution that seems to be emerging. Ulf has attempted to remain in the background-facilitating the interaction but not giving his opinion. He believes that this style of leadership is essential for a productive QC. He knows that the notion of a QC is that it is an employee group, not a management group. Members appreciate his style. He knows also that if he is to act, he must do so now. He also is not sure where he should place his loyalty and what he should do or say. Assume you are advising him. What would you recommend?
will need in order to make a quality decision. Ask for volunteers to bring the appropriate information.
3. Discover why a problem exists. Remember that many groups are too solution oriented. Try to get the group to discuss the causes of problems if you can. Point out the relationship between causes and solutions. The solution ought to remove the causes.
4. Brainstorm for solutions. Try to get all solutions the group might consider on the table before a group starts to compare the alternatives. The group needs to know all its options. Beyond that, brainstorming usually causes a group to consider many alternatives. Ask members to withhold comments until they have listed as many solutions as possible.
5. Make the decision. After alternatives have been recorded, evaluate each idea and compare it with the others. Which ideas do not remove the causes? Which can be eliminated? Which ideas might be combined to make a more comprehensive solution? What would happen if a particular decision were implemented? Is the proposed idea a practical one? These are all questions your group might consider in making a final decision.

The discussion procedures discussed in this section can make a difference in your discussion and decision process. They help coordinate member thinking and communication, provide ground rules members can and must follow, balance member participation, and reveal and manage conflicts (Jarboe, 1996; Poole, 1991).

## TECHNOLOGICAL AIDS TO GROUP INTERACTION

Technological advances in communication are a source of amazement to many people. The hardware and software range from the simple to the complex and from the expensive to the relatively inexpensive. Oper and Fersko-Weiss estimate that more than four hundred products are available to enhance group deliberations (Coleman, 1992). JohnsonLenz and Johnson-Lenz (1992) have coined the term "computer-mediated culture" to suggest technology and group processes can be bound together so each affects and alters the other. Aids are available to help members in both writing and deliberating tasks. Group-writing systems permit co-workers to simultaneously create and edit a document together. Here we will discuss two key technological group aids for deliberation: teleconferencing and group decision support.

## Teleconferencing

Face-to-face meetings are not always possible in organizations where members are located throughout the country and, in some cases, the world. This circumstance has made the electronically mediated meeting, the teleconference, a necessity. Depending on the technology used, these meetings might be audio or video conferences.

Several authors offer help for improvement of electronically mediated meetings (Johansen, Vallee, \& Spangler, 1979; Short, Williams, \& Christie, 1976). Larry Barker and his associates (1991, p. 210) suggest that "inexperienced audio conference participants often find themselves interrupting others, not knowing when to speak, failing to identify themselves, or nodding instead of responding verbally." (The many nonverbal cues we use to know these things are absent in the audio conference.) Beyond these, V. A. Ostendorf (1989) suggests that the most common problems encountered when participating in an audio conference are delay or confusion in beginning the meeting, unclear meeting goals, lack of group interaction, difficulty in identifying speakers, and problems in obtaining the floor.

You can overcome these problems by employing certain procedures and setting guidelines. Here are some suggestions:

Appoint a moderator/gatekeeper to facilitate the meeting.
Provide a written notice of the calling time, including time zone and date, along with calling instructions.

Include with your instructions the duration and purpose of the meeting.
Request that members identify themselves by name when they speak.
Video conferencing somewhat reduces a participant's ability to pick up nonverbal cues. Also, for some the prospect of being on camera is frightening. Some organizations have tried to overcome these problems by providing training for participants in conducting sessions, use of visuals, and actual on-camera experience.

Here are some guidelines to help you manage a teleconference:

Appoint a trained conference coordinator/moderator.
Make sure all participants are aware of the beginning and ending times.
Appoint a person at each site to facilitate participation.
Provide written documents for participants to brief them on the purpose of the meeting and any information they might need related to the topic.

Many organizations are making increased use of teleconferencing. Their use is likely to increase as travel costs and time constraints increase and technology improves.

## Group Decision Support Systems

Group decision support systems (GDSS) are computer hardware and software designed to enhance problem analysis and group decision making. These systems provide a structure for generating, storing, organizing, and evaluating information. Generally the program will move through a series of decision-making steps, for example, analyzing the problem, establishing criteria, generating solutions, making decisions, and creating an implementation plan. In actual use, however, members overlap, loop back, and leap forward as they work together in the decision task. So the decision-making structure provides a strategy as well as procedural guidelines, two important factors Broome and Fulbright (1995) found in successful groups.

Group decision support systems are sometimes called groupware, computer supported cooperative work (CSCW), electronic meeting systems (EMS), or group support systems (GSS). Each GDSS is structured to meet certain needs-some may focus on the idea-generation process, whereas others may include the entire decision-making process. GDSS are often used along with face-to-face meetings. Most groups will require some practice with the system if they are to use it to full advantage.

GDSS meetings take place in a special computer-equipped room. The one we are familiar with is arranged in a $U$ shape with the facilitator at the top of the $U$. The room also is equipped with a projection system and screen located where all members can view it. Once their ideas are typed into the system, they can be projected on the screen for face-to-face discussion.

Research on GDSS suggests it is an effective tool. Olaniran (1994) found that computer-mediated groups produced more ideas than those meeting face-to-face. In addition, groups took longer to get to consensus than did groups not using this technology. Decision quality was highest when the GDSS groups also participated in face-to-face discussion. Jessup and Valacich (1993) concluded that computer-supported decision making is as good or better than more traditional approaches. One thing GDSS does well is to keep members on the track. Also, members of large groups like the process because it seemed to equalize participation and actually reduced the time they thought they would normally spend in a group completing the task. Poole and his associates (Poole \& Holmes, 1995; Poole et al., 1993) report similar advantages to GDSS groups. They also note that GDSS seems to focus members' attention more on the decision-making procedures and improve the group's organization of the process.

Some problems with the use of GDSS can be avoided. For example, training can reduce poor initial performance. Hollingshead and colleagues (1993) discovered that poor initial performance seems to be related to unfamiliarity with the equipment and that it disappears over time. However, groups observed by Poole et al. (1993) did not demonstrate improved critical thinking. The researchers attributed this condition to the fact that these groups did not use a facilitator. A facilitator can be helpful in a number of ways, including helping the members select the right technology and feel comfortable with that technology.

As this technology matures, we can expect more and more organizations to invest in it. Keep in mind these are support systems, and, therefore, knowledge you gain from studying groups and group processes will enhance your group's deliberations. Group decision support systems are not meant to replace more traditional face-to-face decision making.

## METHODS OF DECIDING

The output of the process of decision making is often affected by the way the group comes to its decision. Member satisfaction, willingness to work toward carrying out the decision, and even the quality of the decision may be affected by how members decide. You need to understand the possible outcomes of the various kinds of decision making. Five methods of deciding are considered here.

## Consensus

Consensus literally means all group members agree. In decision making, however, we usually mean that all members genuinely agree that a decision is acceptable. Groups often aim at achieving this kind of consensus. ${ }^{3}$ An important reason for doing this is that groups often have a part in implementing their own suggestions. If one or two members are opposed, implementation may be more difficult.

Consensus does not mean that members are completely in favor of something. As you might imagine, such a position is difficult to achieve, particularly if the members are personally involved in the situation. Imagine, for example, an office manager calling her workers together to decide on the allocation of a new computer. Tracy's involvement in the situation is quite understandable. As the senior department member, he is inclined to argue for the new computer because of his seniority. Sally believes just as strongly that she should receive a new computer. She has the oldest machine. Others have their arguments, too. In this case consensus is unlikely unless the group has a strong need for consensus. Such a need can lead to a norm-a standard for behaving-in this case, to agree (Gera, 1985). This group is likely to have to move to some other method of deciding, perhaps to compromise.

## Compromise

Compromise decisions are those in which the people involved give up some of what they hoped for so that the group can come to a decision. Compromise represents the "best
solution" the group can achieve given the diversity of opinion. In the case of deciding about the computer, Tracy may agree to wait for a year. But again, if Tracy thinks that he really needs a new computer, he may be unhappy with a compromise. Others, such as Sally, also may be displeased. If the implementation of your group's decision requires participation of all its members, the compromise may have created a problem-Sally and others may not help. When compromise is necessary, the group's leadership needs to be aware of possible difficulties.

## Majority Vote

Majority vote differs from compromise in that the majority will prevails. Most citizens of a democracy are quite willing to abide by what the majority decides. But if we put it in terms of the decision about the computer, the difficulty with this method of deciding becomes clear. Suppose the group has seven members. Four members vote to allocate the computer on the basis of seniority, and three members vote to give it on the basis of need. Sally believes that she is being held back by an old piece of machinery. How does she react? She says, "I've lost a big one. I have a knot in my stomach. And I'm really angry." Majority vote is a win-lose situation. The majority has "forced" its decision on the rest of the group. Sally and perhaps others are very unhappy.

In ongoing groups that make use of majority vote, different segments may win at different times. This makes losing somewhat easier. Most of us feel better about the situation if we get what we want some of the time. In contrast, if a segment of an ongoing group loses most of the time, cohesiveness and group morale may suffer. Julia Wood (1984) noted that people become anxious to take a vote and achieve closure on an issue. She concludes that the vote is often taken at the expense of group harmony and equal representation of differing points of view. Also, if the majority needs the minority to help implement the decision, the minority may be unwilling to help.

## Decision by the Leader

Sometimes by virtue of the leader's position, he or she can impose a decision on the group. In these cases it may appear that the group is being given the power to make the decision, but the leader has actually retained that power. Usually the decision is announced after the group has discussed the problem and some solutions. Sometimes, though, the leader may argue in a way that makes it clear that only one solution is acceptable. The leader might say, "Joe, that's an interesting idea. But I don't see how I could recommend that to the boss. Let's consider this other suggestion again." In still other cases, the leader may merely thank group members for their efforts and then dismiss them. She might say, "I appreciate your ideas and input. Thank you for your help. I'll write up a report and make a recommendation."

Group members' reaction to a decision by the leader depends on the circumstances. If members have been misled into thinking that they have the power to decide, they are likely to feel betrayed. If they know that they are only providing input, and if they believe that they are actually being listened to, then they may engage in worthwhile
discussion. If the group knows its interaction is only a show, the members may merely go through the motions of discussing the issue and resent the waste of their time.

Imagine again the group deciding about the computer. It reaches a decision, only to find that the computer has been pledged. Perhaps the office manager plays an active role in the group, objecting to every decision but the one she wants. The manager finally imposes a decision. The result is resentment and disillusionment.

## Arbitration

Sometimes groups are unable to make a decision and do not want to take a vote on the issue. They would prefer to have some disinterested third party make the decision, a process called arbitration. Generally this third party makes a decision that allows each faction of the group to win some issues while losing others. Labor-management negotiations are typically subject to decision by arbitration when the two sides think they have reached a stalemate and they want to settle the terms of their contract. Since group members are reluctant to give up some of what they wanted in a decision, this method of deciding also may create disappointment and lack of interest in implementing the decision.

Each of these methods has advantages and disadvantages. Probably the method with the most advantages is consensus. Beyond achieving consensus lie the other methods, each with its advantages and disadvantages. Be aware of the differences and the consequences of the method your group comes to use in making decisions. When groups have neither the time nor the ability to achieve consensus, pay careful attention to the implementation of the decision. Not all members may support it enthusiastically.

## S U M M A R Y

The first step in decision making is to decide whether a problem should be handled by an individual or a group. If one person is truly an expert and the group is clearly not or if there is a severe time constraint, then an individual may best make the decision. If the problem is complex or if it is important for the group to accept the decision, then a group should probably make the decision. Keep in mind that the decision might be enhanced by social facilitation of the group.

A second step is to decide which agenda will best suit the situation. John Dewey presents a five-step reflective thinking agenda. These five steps are (1) What is the nature of the problem? (2) What criteria should be set? (3) What alternatives might resolve the causes of this problem? (4) What is the best solution for this problem? (5) What plans will be set in order to implement the solution? We suggest a sixth step: (6) How will the effect of implementing the solution be evaluated?

The ideal solution sequence focuses on what a variety of identifiable groups might consider to be their ideal solutions. Its steps are (1) Are we all agreed on the nature of the problem? (2) What would be the ideal solution from the view of all interested groups? (3) What conditions within the problem could be changed so that the ideal solution might be achieved? (4) Of the solutions available, which one best approximates the ideal solution?

## Focus on Research

## Crowding and Group Meetings

You will have many decisions to make as a planner of a public meeting. One decision to be made is location. Suppose you find yourself in a situation where you are forced to use space that is too small. You expect a crowd that will fill your assembly room to overcrowding. Will the crowded room enhance or detract from your program? Research on crowding can help you know what to expect.

The classic study of overcrowding was conducted by John B. Calhoun in 1962. He established a colony of rats in a quarter-acre pen. The rats were allowed to breed freely. They were given plenty of food and water and were protected from predators. The population of rats stabilized at about 150 . The rats mostly grouped in ten- to twelve-member groups.

Next, Calhoun built a pen that allowed him to control a feeding area so that sixty to eighty rats had to congregate in a smaller area during feeding times. This high-density situation he created caused a condition he described as a behavioral sink. The condition disrupted courting rituals, nest building, mating, territoriality, and more. Conditions deteriorated, and
members of the colony died off rapidly. It is obvious that crowding can have profound effects.

What effect does crowding have on people and their perception of an event? Jonathan Freedman's research suggests that high density will make a good situation even better and an unpleasant situation even more unpleasant. He crowded people into rooms where a speech was delivered. Freedman manipulated the situation so feedback in some groups was always positive and in others always negative. Density interacted with pleasantness so that the greatest pleasantness was in the high-density positive feedback situation; the greatest unpleasantness was in the highdensity negative feedback situation. So the effects of crowding appear to revolve around the expected nature of the activities being conducted in the space.
J. B. Calhoun (1962). Population density and social pathology. Scientific American, 206, 139-148.
J. L. Freedman (1975). Crowding and behavior. San Francisco: Freeman.
J. L. Freedman (1979). Reconciling apparent differences between responses of humans and other animals to crowding. Psychological Review, 86, 80-85.

The single question sequence offers an alternative agenda. It has as its focus the identification of issues that will lead to a decision about the major problem. The steps in this agenda are (1) What is the question whose answer is all the group needs to know in order to accomplish its purpose? (2) What subquestions must be answered before the single question can be answered? (3) Do we have sufficient information to answer the subquestions confidently? (4) What are the most reasonable answers to the subquestions? (5) Assuming that our answers to the subquestions are correct, what is the best solution to the problem?

A decision to use a particular agenda is based on certain characteristics of the task. If the task is difficult, the group may want a relatively complete agenda. If multiple solutions seem likely, the group may want to engage in some idea-generation technique. If high cooperation is needed to make a decision and carry it out, then the group should spend time in step 2 of the reflective thinking format. If the group is not very familiar with the problem, then it might choose to map the problem carefully by step 1 of the
single question sequence. If a high level of acceptance of a diversified group is needed, then step 2 of the ideal solution sequence might be important.

Vigilant interaction theory suggests that group decision making is enhanced by the group being thorough and careful (vigilant). Hirokawa recommends the following sequences of activities: examining the problem, clarifying objectives, developing available choices, and examining potential consequences.

A leader can make the most efficient use of an agenda by publishing it in advance, tailoring it to the specific problem, allowing the members to modify the agenda, posting an abbreviated version of the agenda where all can see it, and using the agenda to help group members check the quality of their decision.

Brainstorming, focus groups, nominal group technique, and Delphi are ideageneration techniques. Brainstorming, nominal group technique, and Delphi are ways of getting group participation by withholding criticism while members are listing ideas. Brainstorming is a group technique in that members interact. Nominal group technique and Delphi do not involve member interaction as the group generates ideas. A focus group meets to share ideas in response to questions posed by a facilitator. These questions seek to generate ideas about how people experience a particular idea, product, or problem.

Buzz groups are used to gain input from all the members of large groups. The group is broken into subgroups of six members, and each subgroup has six minutes to generate ideas. The leader of the large group gathers the ideas and presents them to the reassembled large group.

Quality circles are decision-making groups found in the workplace. They are composed of volunteers who deliberate about work problems and are led by a supervisor who acts as a facilitator.

Technology can enhance a group's deliberation. If the members cannot conveniently meet, then they might interact through a teleconference. If the members are part of a network, they might use their computers to interact through a group decision support system (GDSS). The group might use the GDSS in a specially equipped facility. Both teleconferences and GDSS sessions are most productive when the facilitator and members know how to use the technology.

Groups can make decisions through consensus, compromise, majority vote, decision by leader, or arbitration. Consensus means that all members find the decision acceptable. Compromise involves giving up some of what members want so that the group can agree. Majority vote suggests the decision is made on the basis of what most of the members want. Decision by the leader means that the leader listens to the group discussion and then imposes the decision he or she favors. Arbitration is a method of deciding in which a disinterested third party hears each position and makes a decision. Each method of deciding has its advantages and disadvantages and must be carefully considered.

## EXERCISES

1. View a videotaped problem-solving discussion. Analyze the structure of the group's problem solving. What were this group's strengths? What were its weaknesses? How could the members improve their problem solving?
2. Observe a classroom group making a decision about a problem. Write a critique to include these points:
a. The group's organizing effort.
b. The adequacy of the information shared.
c. The climate of the group.
d. The group decision making.
e. The adequacy of each member's contributions.
3. Form a group of five to seven class members. Prepare for and conduct a problem-solving discussion. Begin by selecting a problem that interests your group. Conduct research regarding the problem. Using one of the agendas presented in this chapter, prepare discussion notes. Finally, using your agenda, conduct the discussion in class with other class members serving as observers.
4. Form a group of five to seven class members. Practice brainstorming with the topic "the good things about student life." Upon completing the brainstorming, answer these questions:
a. How many ideas were you able to generate? Were you surprised by the number?
b. How did the brainstorming process work for you? Was it easy to avoid commenting on the suggestions offered? Were any of you able to hitchhike on the ideas of others? How would you suggest the group might avoid problems it encountered?
c. At what points in a problem-solving discussion would brainstorming be advantageous?
5. Plan a panel discussion on a topic of interest in your community. Specify who your panel members should be and why these people are qualified. Plan an agenda for this meeting and include the questions you would use. Submit a report and include a statement of the issue, names of panel members and their qualifications, and the leader's agenda for the discussion.

## RECOMMENDED WEBSITES

At http://www.mapnp.org/library/grp_skll/grp_dec./grp_dec.htm, Carter McNamara has assembled many links to sites about group decision making and problem solving. The site gives three categories of small group information: various perspectives, related library links, and on-line discussion groups.
The site http://www.hq.nasa.gov/office/hqlibrary/ppm/ppm17.htm is a bibliographical list provided by the NASA Headquarters Library Program/Project concerning small group decision making. The page also contains material on communication and interpersonal skills.
At http://www.unb.ca/web/enviro/cdm/cdmread1.htm is a very detailed handbook with six chapters on formal consensus decision making, including a discussion about conflict. There is even a handy glossary at the end of the site.

## RECOMMENDED READINGS

J. E. Baird Jr. (1982). Quality circles: Leader's manual. Prospect Heights, IL: Waveland.
C. E. Larson and F. M. J. LaFasto (1989). Teamwork: What must go right/what can go wrong. Newbury Park, CA: Sage.
A. F. Osborn (1993). Applied imagination, 3rd ed. New York: Scribner's.
S. Worchel, W. Wood, and J. A. Simpson, Eds. (1992). Group process and productivity. Newbury Park, CA: Sage.

## NOTES

1. Research suggests that the first step, understanding the outcome desired and analysis of the problem, is related to group problem-solving success (Hirokawa, 1983).
2. The essay by Hirokawa (1982b) provides an interesting contrast between Japanese and American styles. It is excellent background for understanding why the concept of quality circles has been so successful in Japan.
3. There is a demonstrable relationship between consensus and quality decisions. But apparently a third factor must be present-the group must approach its decision making systematically and in a rational manner (Hirokawa, 1982a).
