

PROJECT MANAGEMENT

LEADER'S GUIDE

BY
SHARON BURKE

A CRISP APPROACH VIDEO/BOOK PROGRAM

**CRISP PUBLICATIONS, INC.
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PROJECT MANAGEMENT

Sharon Burke

Based on the book
Project Management
by Marion E. Haynes

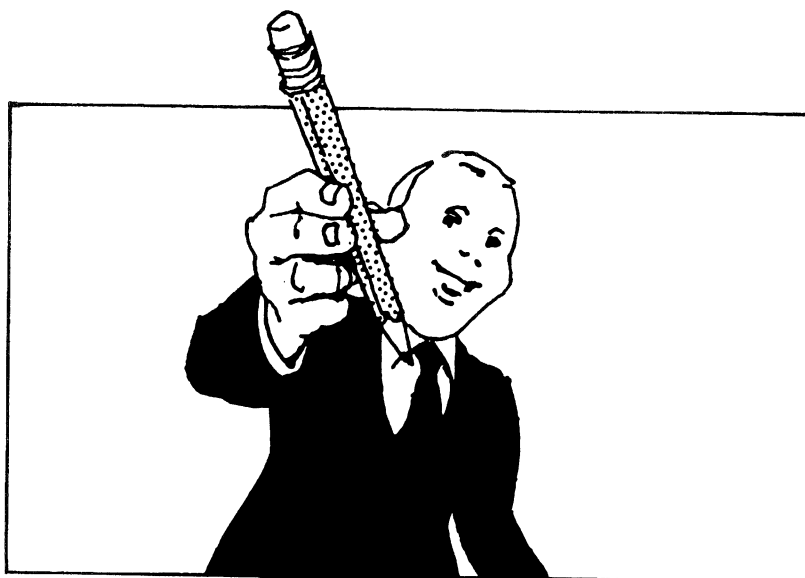
A CRISP APPROACH VIDEO/BOOK PROGRAM

The video tape, participant's workbook, and this Leader's Guide comprise the complete Video/Book Program. For best results, each participant should have a book. We urge you to keep a supply of books on hand for each program you conduct. The video tape and Leader's Guide, however, are not sold separately.

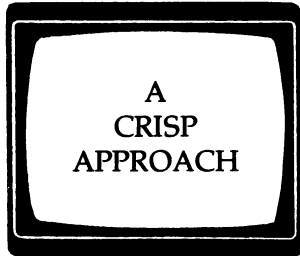
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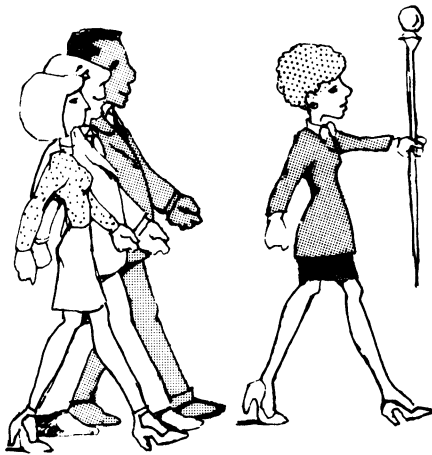


A CRISP APPROACH...



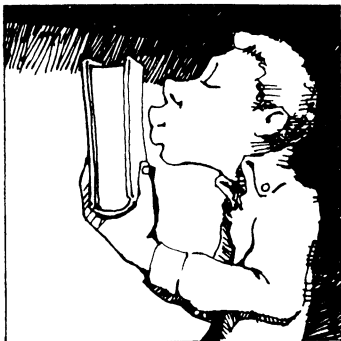
Lets Video Be Video...

Crisp videos dramatize the real-world applications of the books on which they are based. Videos are agenda-setters and ice-breakers, not hour-long sermons on stage sets. And, because all their content is backed up in the accompanying book, participants can relax and let video do what it does best... introduce, inspire, and motivate discussion.



Lets Leaders Be Leaders...

The Crisp Leader's Guide encourages flexibility. It helps facilitators develop programs to meet their specific needs. The key is allowing leaders to lead. Spend one hour or two days. Assign books for pre-program reading, pass them out the day of the session, or present them at the conclusion of the discussion. *A Crisp Approach* gives you the power to design a program based on your needs, budget, and/or schedule.



Lets Participants Participate...

Thanks to the individualized, self-study format of program workbooks, participants are encouraged to interact and apply concepts that have been viewed and discussed. Crisp books become a personal reference that can be used again and again on the job. Because the books parallel the video, it is easier to recall key points presented during the program.

...TO QUALITY TRAINING



THE CRISP VIDEO/BOOK PROGRAM APPROACH TO TRAINING IS FAST PACED, FLEXIBLE, AND FRIENDLY

The *Crisp Approach* takes advantage of what videos and books do best by integrating them in a carefully designed program.

WHAT MAKES A *CRISP APPROACH* UNIQUE?

- 1. FIRST YOU WATCH AND LISTEN—** to an upbeat, 25-minute video featuring real people at work. The video sets the agenda and the mood.
- 2. NEXT YOU DISCUSS KEY CONCEPTS—** using a comprehensive, yet friendly Leader's Guide that allows a facilitator to conduct positive, energetic group discussions.
- 3. FINALLY, YOU READ AND APPLY CONCEPTS THAT HAVE BEEN VIEWED AND DISCUSSED—** in your individual self-study workbook. The book covers the program material in a positive, organized, and readable way.

For more ideas and specific programming suggestions, see pages 4-6.

SUGGESTIONS FOR USE

The Crisp Video/Book Program has been designed to be used in several ways:

- 1. Formal Workshops and Seminars.** The FIFTY-MINUTE SERIES book is ideal assigned reading before a formal training session. With the basics in hand, more time can be spent on concept extensions and specific applications. The book is also effective when used as part of a workshop or seminar. Training gets off to a crisp start as the video grabs the audience's attention and stimulates interest. Discussion of cases and exercises from the book is more lively and informed following a viewing of the video.
- 2. Remote Location Training.** Because the Crisp Approach Video/Book Program is self-contained (with video, Leader's Guide, and self-study books), training can be regulated regardless of the number of remote locations (i.e., branch offices). Those responsible for training can regulate the quality of a program in a cost-effective way and still provide a standardized program throughout an organization. The program can be sent to those not able to attend "home office" training sessions.
- 3. Individual Study.** Because all materials in the Crisp Approach Video/Book Program are self-instructional, all that is needed is a quiet place, a VCR and monitor, some time, and a pencil. The 25-minute video tape, activities, and exercises in the book provide a step-by-step program for effective self-improvement.
- 4. Other Possibilities.** There are other possibilities that depend on the needs or objectives of the user. You are invited to find new uses that will provide benefits for your specific program and to share them with us.

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TO THE LEADER

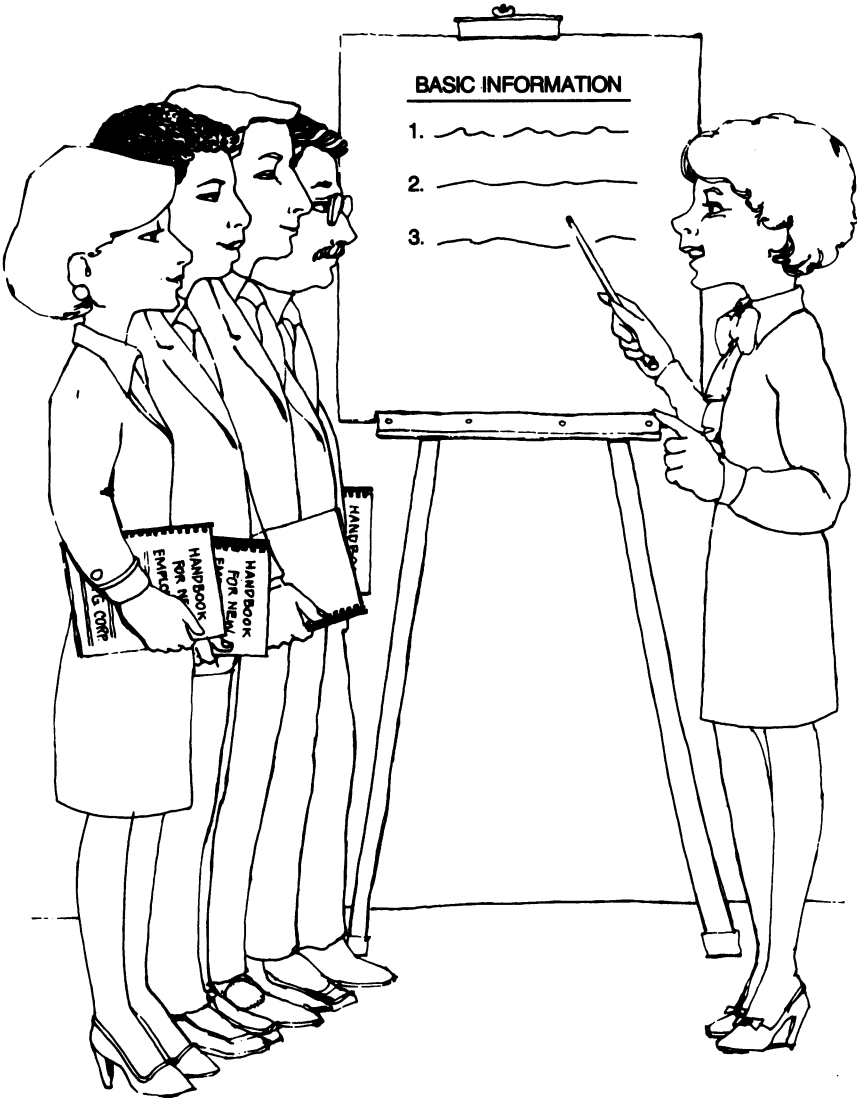
Everyone manages projects from time to time. For example, a student manages a project as part of a class requirement. The do-it-yourselfer manages a project to fix or build something around the house. The host or hostess manages a social affair. These people can capitalize on the same theory of project management that engineers, superintendents, and contractors use. The principles are the same.

Project Management is designed to help participants carry out their projects successfully. It does not presume any prior knowledge of managerial or technical subjects. The program leads you logically through the life of a project.

Questionnaires, checklists, and exercises in the accompanying book emphasize the material presented. Successful project management is within everyone's grasp. All they need to do is to apply the ideas presented in this program. You can help them get started!

PART I

BASIC INFORMATION FOR LEADERS



PROGRAM LOGISTICS

Who Should Conduct the Program?

This Video/Book Program is designed so anyone can deliver a quality program effectively.

Responsibility for training generally rests with one of the following:

Within an Organization:

Training and Development
Human Resources/Personnel
Employee Relations

or

An Outside Consultant

working with an organization's personnel

or

A Manager or Teacher

who finds the material of value and interest

or

An Individual

desiring self-improvement

Qualifications of the Program Leader

Anyone with an interest in presenting material in an organized and effective way can be successful.

Certain general requirements are desirable, however. It is helpful if the leader is knowledgeable about the concerns of participants, understands how adults learn best, and is comfortable working with groups of various sizes. Good presentation skills* and a positive attitude help.

*The book *Training Managers to Train* and Video/Book Program, *Effective Presentation Skills* are excellent works that support program leaders.

MATERIALS AND SUPPLIES

For the Leader

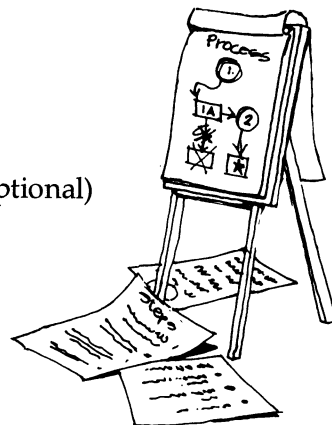


- VCR (1/2" VHS format) and monitor
- Remote control switch (optional but useful)
- Blackboard or whiteboard (optional) with chalk (or markers) and eraser
- Flipchart
- Microphone (optional)
- List of participants

For Each Participant



- Name tent card (in lieu of name tag) for each participant. Cards should be made of heavy paper stock with names printed in large letters (omit titles). Department affiliation is sometimes helpful.
- One copy of the FIFTY-MINUTE SERIES book for each participant
- Pen or pencil
- Notepad
- Ice water/refreshments (optional)



TIME REQUIREMENTS AND SUGGESTED PROCEDURES

Following are ways to use these program materials effectively:

PLAN A

1. SHOW THE VIDEO

The 25-minute presentation sets the agenda and engages interest in the subject matter.

2. DISTRIBUTE THE APPROPRIATE FIFTY-MINUTE BOOK

The accompanying FIFTY-MINUTE SERIES book reinforces ideas presented in the video and offers activities and exercises for self-improvement.

3. THEN, YOU HAVE SEVERAL OPTIONS, INCLUDING:

- a. Discuss and react to the video, then introduce selected exercises from the book, respond to the exercises, and discuss. *Time: one hour*
- b. Discuss and react to the video, give an overview of the book, then encourage trainees to work through the book themselves, either on-site or overnight. Reconvene and compare responses. *Time: two hours*
- c. Discuss and react to the video, then work selected exercises and compare responses. Discuss responses and set up group exercises. Ask trainees to work through the book completely, then reconvene to compare responses and review selected portions of the video for more comment. *Time: three hours*

PLAN B

1. DISTRIBUTE THE APPROPRIATE FIFTY-MINUTE BOOKS

The books are ideal as pre-assigned reading or may be passed out at the beginning of a training session. Briefly review the contents and format of books with participants. Start things off with a self-assessment or other exercise from the book.

2. SHOW THE VIDEO

Having read the book and/or completed a self-assessment exercise, participants will find that the video reinforces key concepts and stimulates discussion. As a trainer, you may find that having participants read the book ahead of time promotes a lively and better-informed exchange of ideas.

3. THEN, YOU HAVE SEVERAL OPTIONS, INCLUDING:

- a. Discuss and react to the video, then introduce selected exercises from the book, respond to the exercises, and discuss. *Time: one hour*
- b. Discuss and react to the video, then conduct selected discussions and do exercises from this Leader's Guide. *Time: two hours*
- c. Discuss and react to the video. Lead all discussions and exercises in this Leader's Guide. Add some role-playing or other exercises of your own appropriate for your organization. *Time: three hours*

PLAN A—SAMPLE ONE-HOUR PROGRAM

| Minutes | Activity |
|----------------|--|
| 3 minutes | Get acquainted and make introductions |
| 2 minutes | Introduce program objectives |
| 5 minutes | Distribute books and do a self-assessment exercise from book |
| 5 minutes | Discuss exercise |
| 1 minute | Introduce video |
| 25 minutes | View video |
| 5 minutes | Discuss and react to video |
| 10 minutes | Select discussions from Leader's Guide |
| 2 minutes | Summarize main points |
| 2 minutes | Thank participants and emphasize value of workbook |
| <hr/> <hr/> | |
| 60 minutes | |

PLAN A—SAMPLE TWO-HOUR PROGRAM

| Minutes | Activity |
|----------------|--|
| 5 minutes | Get acquainted and make introductions |
| 1 minute | Introduce program objectives |
| 5 minutes | Distribute books and do a self-assessment exercise from book |
| 5 minutes | Discuss exercise |
| 1 minute | Introduce video |
| 25 minutes | View video |
| 10 minutes | Discuss and react to video |
| 60 minutes | Select discussions from Leader's Guide and exercises from book |
| 3 minutes | Summarize main points |
| 5 minutes | Thank participants and emphasize value of workbook |
| <hr/> <hr/> | |
| 120 minutes | |

FACILITIES

| | |
|-------------------------------|--|
| ROOM REQUIREMENTS | A room large enough to accommodate the maximum number of participants expected, at tables with comfortable, movable chairs. Having lights that dim—dark enough for a good picture, light enough for you to watch audience reaction and for people to jot down notes if they want to—is also desirable. Make sure the monitor screen is free of glare from sunny windows. |
| LOCATION | On-site or off-site? This depends on the policy and budget of your organization. Off-site sessions are often received with more excitement and enthusiasm and participants are better able to stay focused on the topic. Off-site facilities might be a hotel, conference center, or community hall. |
| SEATING ARRANGEMENT | <p>Tables in a U-shape (horseshoe) provide the best training results because they enable all participants to have eye contact with one another during the session and an unobstructed view of the television monitor.</p> <p>If this is not possible, then a round, square, or oblong table is suggested as an alternative.</p> <p>Other possibilities include a T or herringbone arrangement.</p> <p>Theater-style seating and traditional classroom set-ups are less desirable arrangements since they discourage interaction and involvement.</p> |
| SPECIAL NOTE | If the only room available is too large, arrange your grouping in one section. Arrange the furniture so that exits are located in the back of the room to minimize disruption by latecomers. |
| REFRESHMENTS | Participants appreciate refreshments appropriate to the time of day, such as coffee, tea, juice, or soft drinks. |
| NUMBER OF PARTICIPANTS | With the standard-size monitor (19"–25"), no one should be more than 15 feet away, hence group size of 10–20 is desirable. With large groups, a big screen, projection system, or multiple monitors may be necessary. |

SETTING UP

ARRIVE EARLY Arrive at least 30 minutes before the scheduled starting time.

CHECK ROOM AND EQUIPMENT Room temperature—comfortable? 68°-72°? (Temperature will increase with bodies in the room.)
 VCR, monitor, and remote control—working properly?
 Flipchart—enough paper? Markers?
 Seating arrangement—appropriate?
 Monitor and board or flipchart—visible from all seats?
 Lighting—dimmer switch?
 Microphone—working? (for large groups)
 Loud enough but not too loud?
 Refreshments

ARRANGE NAME TAGS If pre-printed, arrange name tent cards alphabetically so participants can pick them up on their way into the room. If blank, put one at each place along with a marker.

DISTRIBUTE SUPPLIES Set each participant's place with the following supplies or have them easily accessible so they can be handed out with minimum disruption. Have you arranged in advance for assistance if needed?

- Adequate number of copies of the FIFTY-MINUTE SERIES book (You may prefer to distribute books after viewing of tape.)
- Pencils or pens
- Notepad



CONDUCTING SUCCESSFUL DISCUSSION SESSIONS

The success of any discussion depends upon participation. An atmosphere of free exchange can be created only when group members see that a mutual sharing of opinions and ideas is welcome without criticism or judgment by the instructor or participants. The skillful use of questions will encourage discussion.

Group participation may be a new experience for some. Never put anyone on the spot. Interaction should be voluntary and supported by positive reinforcement. If the right atmosphere is created, the members will feel comfortable and naturally take part.

Establish a nonthreatening environment. Encourage open and relaxed communication. Keep discussions on a positive, constructive note. Keep in mind that there are no wrong responses. If the response you get is not the one you are seeking, ask the group for additional answers.

Ask for volunteers to respond. Don't demand participation by calling on a person by name unless it is to answer a question that has an obvious answer or you know the person can handle it. Use the person's name before asking the question so he or she will focus on the question.

You should be constantly on the alert for cues from the group that suggest problems. If participants begin to fidget, look bored, or show by their expressions that they disagree or do not understand, you should ask questions to find out what is going on.

Questions are of four basic types:

1. *General*, which elicit a broad range of potential responses.
2. *Specific*, which permit a limited range of responses.
3. *Overhead*, which are asked of the group, allowing volunteers to respond.
4. *Direct*, which are asked of a selected individual.

General and overhead questions are less threatening and therefore are better to start a discussion. Direct and specific questions are best used after participants become comfortable with group discussion.

FIFTEEN TIPS FOR MORE EFFECTIVE DISCUSSIONS

The following examples provide some useful guidelines for generating discussion.

1. *Ask for Feelings and Opinions*

Use a method of asking questions that will help people express their ideas, draw people out, and encourage discussion. For example:

- What is your reaction to . . . ?
- How do you feel about . . . ?
- What is your thinking on . . . ?
- Would you say that . . . ?

2. *Paraphrase*

One way to help people reach mutual understanding is to paraphrase, that is, to ask one person to repeat what they understood that someone else said. Then, to verify with the originator that they understood correctly.

- Let me see if I understand your position. Are you saying that . . . ?
- What I am hearing is . . . Is that right?
- Do you mean that . . . ?

3. *Encourage Participation*

Sometimes people hold back. They can be encouraged to participate by such questions as:

- Carla, how do you feel about this?
- Matt, how would you answer Brent's questions?
- Before we go on, I'd like to hear from Kathy on this.

4. *Ask for a Summary*

- A lot of good ideas have been presented in the last few minutes. Will someone please summarize the major points before we go on?
- It is clear that Phil does not agree. Phil, will you summarize your major objections?

5. *Ask for Clarification*

- I didn't understand that last comment. What would you do if . . . ?
- I saw Maria shaking her head. Maria, what is your point of view on this subject?

6. *Ask for Examples*

- Diana, will you give some examples of what you mean?
- Juan, can you expand on that? I'm not sure I understand.

FIFTEEN TIPS FOR MORE EFFECTIVE DISCUSSIONS (continued)

7. *Test for Consensus*

- It seems that we agree on this issue. Let me ask for a show of hands on this. Does everyone accept the idea that . . . ?
- Bill, is that your feeling too . . . ?
- Before we go on, let me check to make sure that we all agree that . . .

8. *Initiate Action*

- How do you think we should . . . ?
- Kevin, how would you suggest that we proceed on this?

9. *Explore an Idea in More Detail*

- What are some other ways to approach this problem?
- Are there other things we might consider?
- Who has something to add?

10. *Do a Quick Survey*

- Let's see a show of hands. How many agree with this approach?
- How do you feel about this?

11. *Suggest a Break*

- We have been discussing the program for a while now. I propose we take a 10-minute break.

12. *Suggest a Procedure*

- I noticed that Brian has contributed the most. I suggest we go around the table to see how others feel.
- Would it help if we put the items in order of importance?

13. *Suggest They Try Something*

- Let's go around the table so that everyone gets a chance to comment on this.

14. *Stop the Action and Ask the Group to Talk about Something*

- Let's stop the discussion for a moment. I think it might help if each of us told the group what he or she thinks about this point right now.

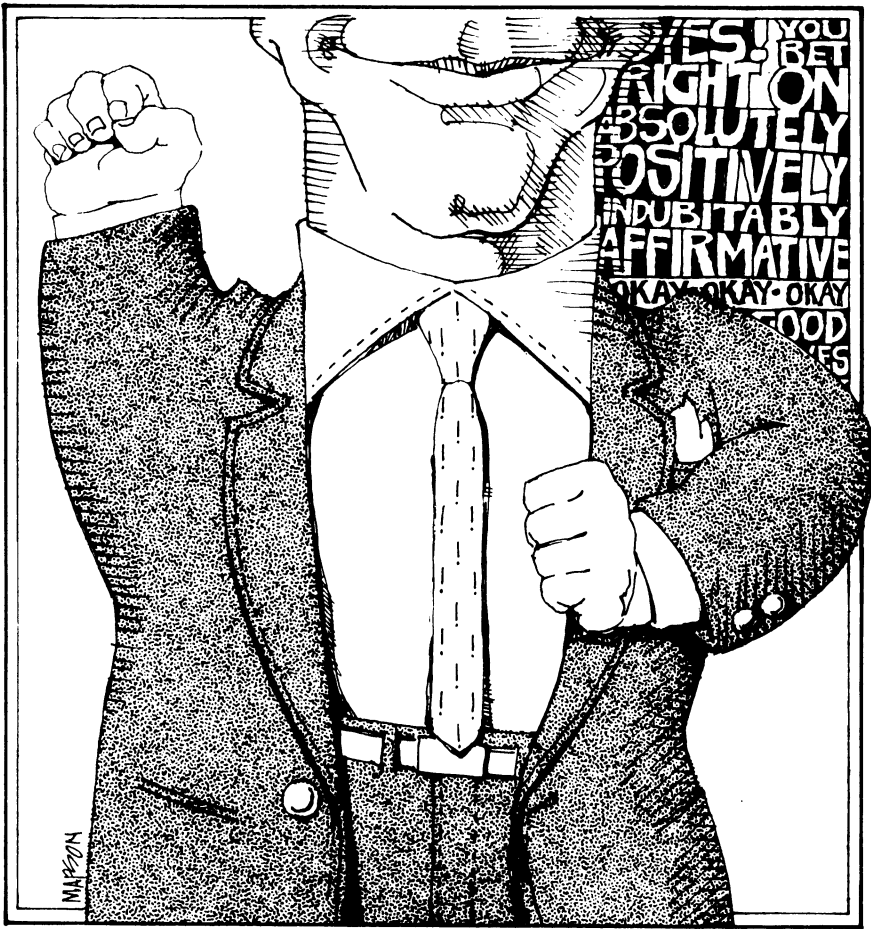
15. *Share Your Feelings*

- I feel this way . . .
- I'm frustrated. How do the rest of you feel?
- This point doesn't apply to me. How do you feel?

NOTES

PART II

**GETTING
STARTED**



INTRODUCTION

Introduce yourself to the group. Include your position within the organization. Ask each member to introduce himself or herself briefly.

If the group is too large for individual introductions, you might warm up the participants with a question relevant to the topic and ask for a show of hands.

You may want to explain where the restrooms are, what the smoking policy is, about refreshments, etc.

LEARNING OBJECTIVES

Explain the objectives of the program.

Participants in this program will learn to:

- Clarify projects before starting them
- Organize projects so they can be completed within budget and schedule
- Set up a monitoring system that will keep them up-to-date on project status
- Deal with changes to project plans
- Improve their effectiveness as project managers

SUGGESTED QUESTIONS

What do you hope to learn from this program? Which objectives are most important to you?

KEY POINTS

Objectives give us a sense of direction, a definition of what we plan to accomplish, and a sense of fulfillment when they are achieved.

DESIRED OUTCOME

Participants will focus on the objectives that are important to them. They will commit themselves to learning the techniques that will help them successfully conceive, plan, implement, complete, and evaluate projects.

VIEWING THE VIDEO

INTRODUCE VIDEO The 25-minute video is designed to stimulate interest in the subject matter and set the agenda. (If you would prefer to stop and start the video for discussion, please see the accompanying *Outline for Interactive Use*.)

Explain that the program was developed to introduce the principles and practices of project management.

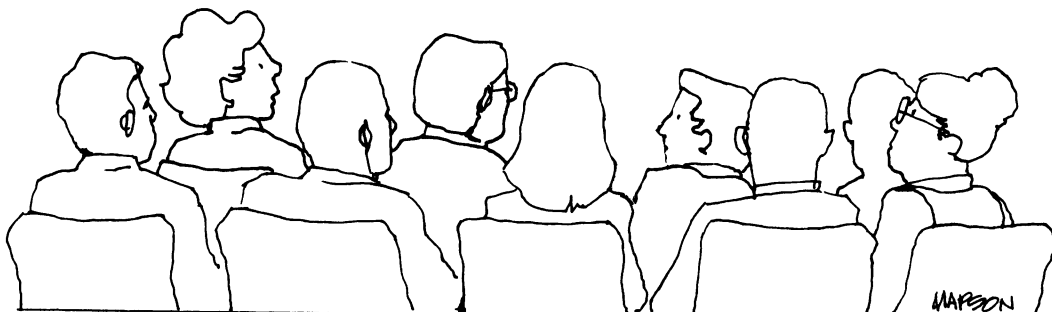
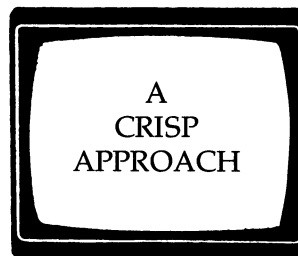
Suggest that participants try to identify any situation in the video which they have personally experienced.

VIEW VIDEO The video should be viewed in a relaxed atmosphere. Note-taking is not required since the information is in each participant's book. They may want to make brief notes of questions or comments they have or that arise during viewing.

SUGGESTED QUESTIONS A lot of positive ideas are presented in the video. What's your impression?

What situations can you identify with?

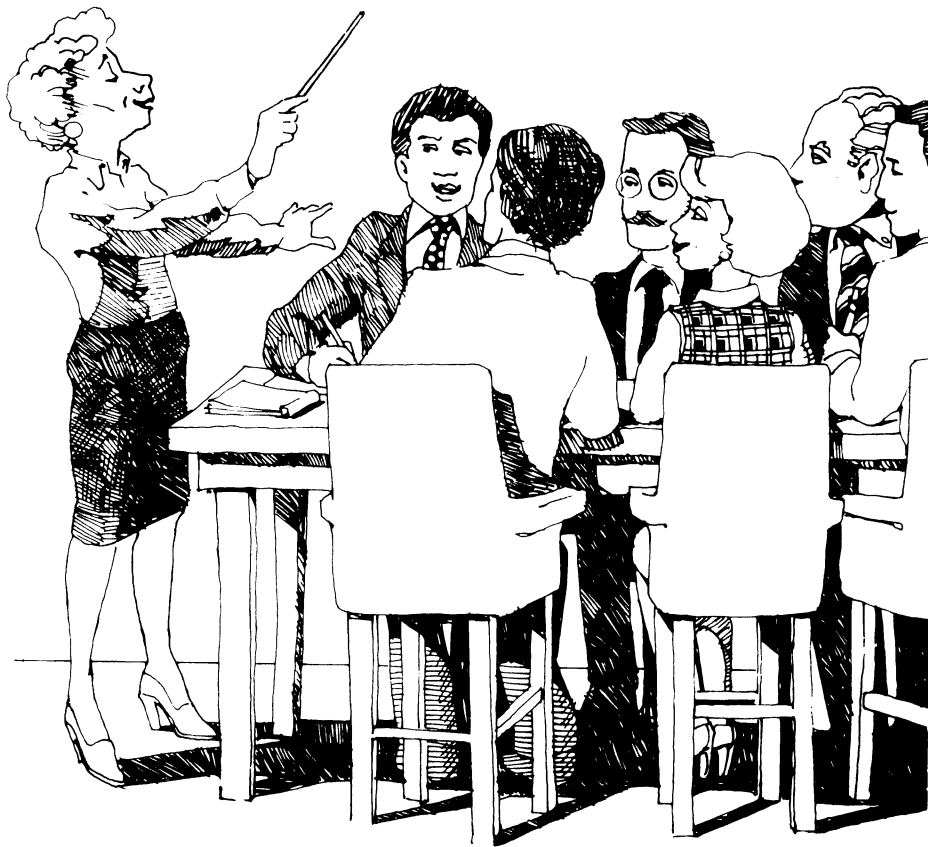
Is there anything in the video you feel reluctant to accept?



NOTES

PART III

DISCUSSIONS



DISCUSSION #1: THE PRINCIPLES OF PROJECT MANAGEMENT

WHAT IS PROJECT MANAGEMENT?

SUGGESTED How would you define project management?

QUESTIONS What are some characteristics of a project?

KEY POINTS A project is an undertaking that has a beginning and an end and is carried out to meet established goals within cost, schedule, and quality objectives.

Project management brings together and optimizes the resources necessary to successfully complete the project. These resources include the skills, talents, and cooperative effort of a team of people; facilities, tools and equipment; information systems and techniques; and money.

SUGGESTED How does project management differ from other management principles?

KEY POINTS Project management differs in two significant ways. First, it focuses on a project with a finite life span, whereas departments or other organizational units expect to exist indefinitely.

Second, projects frequently need resources on a part-time basis, whereas permanent organizations try to utilize resources full-time. The sharing of resources frequently leads to conflict and requires skillful negotiation to see that projects get the necessary resources to meet objectives throughout their project life.

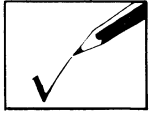
THE PROJECT LIFE CYCLE

SUGGESTED Each project moves through a predictable life cycle of four phases, with each phase calling for different skills from the project manager. What are these four phases?

KEY POINTS The four phases of a project's life cycle are:

- Conceiving and defining the project
- Planning the project
- Implementing the plan
- Completing and evaluating the project

EXERCISE PROJECT PHASES



The exercise on pages 6 and 7 in the book will help participants understand the four phases of a project.

PROJECT PARAMETERS

SUGGESTED QUESTION During a project's life, management focuses on three basic parameters. What are they?

KEY POINTS The three basic parameters are **quality, cost, and time**. A successfully managed project is one that is completed at the specified level of quality, on or before the deadline, and within budget.

SUGGESTED QUESTION What part does negotiation play in project management?

KEY POINTS If there is a client involved who must accept the project upon completion, the specifications that define a successful outcome must be negotiated and agreed to by the client, and included as part of the contract. A project manager also negotiates for materials, supplies, and services. He or she may use negotiation to resolve differences.

PROJECT MANAGEMENT SKILLS

SUGGESTED QUESTIONS What skills do you feel are required of a successful project manager? Which of these skills would you like to develop?

KEY POINTS Effective project managers are good at:

- Organizing a project from beginning to end
- Structuring a plan that will stand up under pressure
- Getting people to accept plans and support them
- Setting measurable project objectives
- Motivating team members
- Helping team members solve problems
- Utilizing available resources
- Eliminating waste of time and money
- Measuring project performance
- Using information systems that respond to project needs.

DESIRED OUTCOME With an understanding of what a project is and what it takes to be successful, participants will be ready to define their projects.

DISCUSSION #2: DEFINING THE PROJECT

CASE STUDY



Have participants choose a project that they would like to work on as a case study throughout this session. You may select a single project for the entire class, divide into small groups and share a project, or have each individual focus on his or her own case.

SUGGESTED QUESTION What is the first order of business after your project team is assembled?

KEY POINTS The first order of business is to clarify the project and arrive at agreement among team members about the project's definition and scope, as well as the basic strategy for carrying it out.

There is an orderly process that can guide you through these steps. The following sequence of activities will get your project smoothly underway:

1. Study, discuss and analyze
2. Write the project definition
3. Set an end-results objective
4. List imperatives and desirables
5. Generate alternative strategies
6. Evaluate alternatives
7. Choose a course of action

EXERCISE



GETTING UNDER WAY

Using the guidelines on page 13 in the book, participants can study, discuss, and analyze the project that they have chosen as a case study. The next step is to write a project definition. If time allows, they can continue through all seven steps and then share results with the group.

TESTING YOUR PRELIMINARY STRATEGY

SUGGESTED QUESTIONS Before moving to a full-scale project, a feasibility study must be carried out to test your preliminary strategy and answer the basic question, *Will it work?* Depending on the nature of the project, one or more of three alternatives will help answer this question. What are the three alternatives? What part does money play in the study?

KEY POINTS The choices are to do a **market study**, **pilot test**, or **computer simulation**. The amount of money and other resources that are invested in feasibility studies must be in proportion to the amount of money that the project will put at risk.

SUGGESTED QUESTIONS What type of study or studies would be appropriate for your project? Why?

KEY POINTS If your project is to bring a new product to market, you must determine its market potential through a market study.

A pilot test is a small-scale tryout of your project. Sometimes referred to as field testing, a pilot test gives you the opportunity to observe your project's performance under actual conditions.

Current technology permits many different types of projects to be modeled on computers. Computer simulation can help you identify potential problems before a project is built.

DESIRED OUTCOME Having defined their project and tested their strategy, participants can confidently begin detailed project planning.

DISCUSSION #3: PLANNING THE PROJECT

SUGGESTED QUESTIONS Planning is critical in project management. What does planning involve? What three critical dimensions must be considered?

KEY POINT Planning means listing in detail what is required to successfully complete the project along the three critical dimensions of quality, time, and cost.

THE QUALITY DIMENSION

SUGGESTED QUESTION What does planning for quality entail?

KEY POINTS Planning for quality requires attention to detail. The goal of quality planning is to assure that the output of the project will perform—that it will do what it is supposed to do. The quality plan also establishes the criteria of performance by which the project output will be measured when it is completed.

SUGGESTED QUESTION What types of specifications should you include in planning the quality dimension?

KEY POINT Include specifications for the quality and types of materials to be used, the performance standards to be met, and the means of verifying quality such as testing and inspection.

SUGGESTED QUESTION Two techniques facilitate planning for quality. What are they?

KEY POINT A **work breakdown structure** and **project specifications** are two techniques that facilitate planning for quality.

SUGGESTED QUESTIONS What is a work breakdown structure? What is its value?

KEY POINTS A work breakdown structure is the starting place for planning all three parameters of a project: quality, cost, and time. It is a technique based on dividing a project into subunits or work packages.

Because all elements required to complete the project are identified, you reduce the chances of neglecting or overlooking an essential step.

EXERCISE**MAKING A WORK BREAKDOWN STRUCTURE**

The exercise on page 24 in the book gives participants an opportunity to practice making a work breakdown structure.

SUGGESTED QUESTIONS

From the work breakdown structure, specifications can be written for each subunit of the project. What is involved in writing specifications? Why is extreme care needed in doing so?

KEY POINTS

Specifications include all requirements necessary to fulfill the project's quality dimension: materials to be used, standards to be met, tests to be performed, etc.

Use extreme care in writing specifications because they become the controlling factor in meeting project performance standards, and directly affect both budget and schedule.

EXERCISE**WRITING PROJECT SPECIFICATIONS**

The exercise on page 26 in the book gives participants an opportunity to practice writing project specs. Depending on time allowed, they can write specifications for one or more subunits of their case study project.

THE TIME DIMENSION**SUGGESTED QUESTION**

What is the objective when planning the time dimension?

KEY POINT

The objective when planning the time dimension is to determine the shortest time necessary to complete the project.

SUGGESTED QUESTIONS

How do you go about planning the time dimension?
What are the logical steps?

KEY POINTS

Begin with the work breakdown structure and determine the time required to complete each subunit. Next, determine in what sequence subunits must be completed, and which ones may be under way at the same time. From this analysis, you will have determined the three most significant time elements:

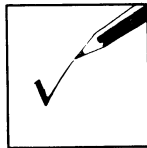
- The duration of each step
- The earliest time at which a step may be started
- The latest time at which a step must be started

SUGGESTED QUESTION How can you determine how long it takes to do each step?

KEY POINTS Planning the time dimension can only be done by people who have experience with the same or similar activities. If you personally do not know how long it takes to do something, you will need to rely on someone else who does have the requisite experience.

Many project managers find it realistic to estimate time intervals as a range rather than as a precise amount. Another way to deal with the lack of precision in estimating time is to use a commonly accepted formula for that task.

EXERCISE DRAWING A GANTT CHART



The exercise on page 33 in the book gives participants an opportunity to practice drawing a Gantt chart. The Gantt chart is one of two commonly used methods for charting a project and is described in detail on page 30 in the book.

EXERCISE DRAWING A PERT DIAGRAM



The exercise on page 37 in the book offers participants a chance to practice drawing a PERT diagram. The PERT, or Program Evaluation and Review Technique, is described in detail beginning on page 34 in the book. It is the other commonly used method for charting a project.

THE COST DIMENSION

SUGGESTED QUESTION What is the main function of a good budget?

KEY POINTS The main function of a good budget is to monitor costs of a project while it is in progress, and to avoid cost overruns. Some inaccuracies in the budget are inevitable, but they should not be the consequence of insufficient work on the original plan. The goal is to be as realistic as possible.

SUGGESTED QUESTION You cannot estimate the cost of your project until you know how long it will take. Why?

KEY POINT You cannot estimate the cost until you know how long it will take because the time of labor is typically the most significant cost item.

SUGGESTED QUESTION What are some typical cost components?

KEY POINTS Typical Cost Components:

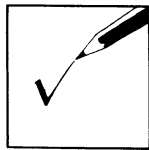
- Labor
- Overhead
- Materials
- Supplies
- Equipment Rental
- General and Administrative
- Profit (if applicable)

EXERCISE **COSTING A PROJECT**



The exercise on page 41 in the book provides participants with an opportunity to prepare a cost estimate for their case study project. They may refer to page 39 in the book for definitions of typical cost components.

EXERCISE **MAKING A PLANNING SUMMARY WORKSHEET**



The exercise on page 43 in the book offers participants a chance to practice making a planning summary worksheet. They are asked to break their project down into its components or steps, estimate the time required and cost for each subunit, and to identify the person or group responsible for carrying it out.

DESIRED OUTCOME Participants will understand the critical role planning plays in project management. Careful planning will help lay the foundation for a project that performs as expected, by deadline and within budget. This knowledge will enable them to begin implementing their plan.

DISCUSSION #4: IMPLEMENTING THE PLAN

SUGGESTED QUESTIONS What happens in the implementation stage?
What is involved?

KEY POINTS During the implementation phase, the project manager coordinates all the elements of a project. This involves a number of responsibilities that require a variety of skills.

Key Duties During Implementation

- Controlling work in progress
- Providing feedback
- Negotiating for materials, supplies, and services
- Resolving differences

CONTROLLING WORK IN PROGRESS

SUGGESTED QUESTION Controlling is the central activity during implementation. The most important tool in this process is the plan that was developed to define the three parameters of the project — specifications, schedule, and budget. These are the standards against which performance is measured. Controlling involves three steps. What are they?

KEY POINTS Controlling involves:

- Establishing standards
- Monitoring performance
- Taking corrective action

SUGGESTED QUESTION There are a number of tools available to help project managers control a project and make sure that the parameters defined in the specifications for quality, time, and budget are actually being met. What are some examples?

KEY POINTS In addition to the Gantt chart and PERT diagram, four additional charts are useful for project control:

- Control point identification charts
- Project control charts
- Milestone charts
- Budget control charts

EXERCISE**MAKING A CONTROL POINT IDENTIFICATION CHART**

The exercise on page 51 in the book gives participants a chance to practice making a control point identification chart. This type of chart is an easy way to summarize what is likely to go wrong in each of the three project parameters.

SUGGESTED QUESTION The heart of the control process is monitoring work in progress. How can you keep abreast of project progress?

KEY POINTS Common ways to keep abreast of project progress include:

- Inspection
- Interim progress reviews
- Testing
- Auditing

Effective monitoring includes more than one source of information. A combination of methods works best to keep you up-to-date on the status of your project.

SUGGESTED QUESTIONS As a project progresses and you monitor performance, there will be situations that call for corrective action. What are some things that can go wrong? What can you do about them?

KEY POINTS Things that might go wrong:

- Quality is not according to specification
- Project begins to fall behind schedule
- Project begins to exceed budget

SUGGESTED QUESTION What would you do if you discovered that work quality did not meet project specifications?

KEY POINTS The customary action is to do the work over according to plan. However, this needs to be more closely examined. The work or materials may exceed specifications, and you may choose to accept it.

If it falls short, you need to consider how much it deviates from specifications and whether the deficiency will cause the project to fail its performance evaluation. The final decision may be to have the work redone, but that is not the automatic outcome.

SUGGESTED QUESTION What can you do if your project starts falling behind schedule?

KEY POINTS There are three alternatives that may correct the problem if your project starts to fall behind schedule:

- Decide whether the lost time can be recovered in the next steps
- Consider offering an incentive for on-time completion of the project
- Consider deploying more resources

SUGGESTED QUESTION What can you do if the project starts exceeding the budget?

KEY POINTS If the project begins to exceed the budget, consider the work remaining and whether or not cost overruns can be recouped on work yet to be completed. If this is not practical, consider narrowing the project scope or obtaining more funding from your client.

PROVIDING FEEDBACK

SUGGESTED QUESTION What is the function and value of feedback in project management?

KEY POINTS Project managers find many opportunities to provide feedback to those who have a hand in completing the project. Through feedback, individuals learn about the effect their behavior has on others and on a project's success. It serves to maintain good performance and correct poor performance.

SUGGESTED QUESTION What is the most important guideline when providing feedback?

KEY POINTS The most important guideline when providing feedback is to deal only with what you can observe. This limits your actions and results because you cannot observe someone's intentions.

SUGGESTED QUESTIONS How would you offer positive feedback?
What is an example?

KEY POINTS When offering positive feedback, describe the actions and results in a straightforward way and include an appropriate statement of your reaction. For example:

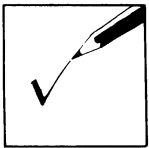
By staying late last night and finishing the work you were doing, the project was able to move forward on schedule. I appreciate your putting out the extra effort.

SUGGESTED QUESTION How would you offer negative feedback?

KEY POINTS Negative feedback can be handled in the same manner but an important element must be added: how the team member should deal with similar situations in the future. The following sequence should prove more effective:

1. Describe the observed actions and results.
2. Ask the individual if those were his or her intended results.
3. With a typical *no* response, ask what different actions would likely produce the desired results.
4. Discuss different alternative courses of action.
5. Agree upon a way to handle similar situations if they should occur in the future.

EXERCISE **CHECK YOUR FEEDBACK STYLE**



The exercise on page 64 in the book offers participants a chance to evaluate their style of giving feedback. It emphasizes the following important actions:

- Describe rather than evaluate
- Be specific rather than general
- Deal with behavior that can be changed
- Be timely
- Communicate directly

NEGOTIATING FOR MATERIALS, SUPPLIES, AND SERVICES

SUGGESTED QUESTIONS Negotiating is an important process that takes up as much as 20% of a project manager's time. Negotiating is one way to resolve differences, and it can contribute significantly to the success of your project. How can you prepare to negotiate effectively? What are some good guidelines?

KEY POINTS **Ten Guidelines for Effective Negotiation**

1. Prepare
2. Minimize perceptual differences
3. Listen
4. Take notes
5. Be creative
6. Help the other party
7. Make trade-offs
8. Be quick to apologize
9. Avoid ultimatums
10. Set realistic deadlines

RESOLVING DIFFERENCES

SUGGESTED QUESTION Skill in resolving differences is an important quality of successful project managers. What are some ways to resolve differences?

KEY POINTS Differences can be resolved either *my way*, *your way*, or *our way*. As a result, four strategies emerge.

Strategies for Resolving Differences

- **Demanding**
High in assertiveness and low in cooperation
- **Problem Solving**
High in assertiveness and high in cooperation
- **Bargaining**
Moderate in both assertiveness and cooperation. It suggests that an important issue is being addressed by equally powerful parties.
- **Giving In**
Low in assertiveness and high in cooperation.

SUGGESTED QUESTION Which strategy do you think is best?

KEY POINTS Each strategy has its place. Learn to distinguish among the various types of situations and adopt an approach that has the greatest chance of success in the long run. Don't overlook the importance of maintaining cooperative relationships.

DESIRED OUTCOME Using the techniques presented, participants will effectively implement their project plans.

DISCUSSION #5: COMPLETING THE PROJECT

SUGGESTED QUESTION What is the ultimate goal of project management?

KEY POINTS The ultimate goal of project management is to obtain client acceptance of the project result. This means that the client agrees that the quality specifications of the project parameters have been met.

SUGGESTED QUESTIONS How can you ensure that the client will accept the project? What can you do throughout the life of the project?

KEY POINTS The project manager must have well-documented criteria of performance in place from the beginning of the project. This is not to say that nothing can change, but when changes are made, the contract must be amended to list the changes in specifications along with any resulting changes in schedule and budget.

SUGGESTED QUESTION What is the final step of any project?

KEY POINTS The final step of any project should be an evaluation review. This is a look back over the project to see what was learned that will contribute to the success of future projects. This review is best done by the core project team and typically in a group discussion.

SUGGESTED QUESTION What, specifically, would be some effective questions to ask during the evaluation?

KEY POINTS Questions to ask during project evaluation would include:

- *How close to scheduled completion was the project actually completed?*
- *What did we learn about scheduling that will help us on our next project?*
- *How close to budget was final project cost?*
- *What did we learn about budgeting that will help us on our next project?*
- *Did the project output meet client specifications?*
- *What did we learn about writing specifications that will help us on our next project?*
- *What did we learn about monitoring performance?*
- *What did we learn about taking corrective action?*
- *If we had the opportunity to do the project over, what would we do differently?*

DESIRED OUTCOME Participants will bring their projects to a successful conclusion as expected, by deadline, and within cost limits. They will also ensure the success of future projects through thoughtful evaluation.

NOTES

PART IV

**WINDING UP THE
WORKSHOP**



SUMMING IT ALL UP

SUGGESTED QUESTIONS

To sum up, what have we learned?

What do we now know about project management that we did not before participating in this program? Which techniques do you think you will find most helpful?

KEY POINTS

We have learned:

- Projects are temporary undertakings that have definite beginnings and endings.
- There are four phases in any successful project: defining, planning, implementing, and completing.
- A successful project produces an outcome that performs as expected, by deadline, and within cost limits. Thus, the three parameters by which a project is planned and controlled are established. Quality is defined by specifications, time is defined by schedule, and costs are defined by budget.
- The progress of the project must be monitored and measured against plans. When deviations occur, corrective action must be taken.
- Project managers are expected to provide feedback to team members; negotiate for materials, supplies, and services; and help resolve differences that occur.
- The goal of the project is to deliver an outcome that the client will accept.
- The final step of any project should be an evaluation review.

**CONCLUDING
REMARKS**

Not every project requires the same attention to each of these activities. It will depend upon the type of project you are undertaking, its size and scope, and the type of organization you are affiliated with. Use your own judgment in selecting the steps that are important to the success of your project.

The book is yours to keep and provides an excellent summary of the program. It provides useful tips and practical guidelines for upgrading your skills. Be sure to use the Project Manager's Checklist on page 85 when planning your next project. Success can be yours if you use the concepts presented.

**THANK
PARTICIPANTS**

Thank participants for taking part in *PROJECT MANAGEMENT*. Sharing a pertinent anecdote is often an effective way to send people on their way.

**DESIRED
OUTCOME**

Participants can immediately put to use the skills learned in this program to manage their projects effectively and with confidence.

NOTES