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ABSTRACT
                These guidebooks were designed to help central office
personnel, principals, teachers, and members of the community to plan
and conduct a community survey. The main volume--the staff
handbook--describes seven tasks involved in planning and conducting
the survey and offers guidelines for the survey staff to follow. The
project director's guidebook is designed for the person who has
overall responsibility for both planning and managing the survey. It
provides guidance for the major activities involved in the survey
process, namely: (1) defining the purpose of a community survey, (2)
developing questions to ask, (3) deciding on a sampling and data
collection method, (4) developing data collection materials, (5)
conducting a community survey, (6) processing the data, and (7)
interpreting the data and preparing a report. The guidelines,
directions, examples, and planning sheets were developed using
suggestions from school personnel who have had actual experience in
conducting a community survey. (Author/LD)

Surveying Your Community:

An Approach to Community Involvement in Schools

Project Director's Guidebook

by

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June 1976

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Acknowledgements

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INTRODUCTION

Surveying Your Community: An Approach to Community Involvement in Schools has been designed to guide central office personnel, principals, teachers, and members of the community in planning and conducting a community survey.

These materials are presented in two volumes—the *Staff Handbook* and the *Project Director's Guidebook.* The main volume, the *Staff Handbook,* describes a sequence of seven tasks involved in planning and conducting a community survey, along with guidelines for the survey staff to follow. The *Project Director's Guidebook* is designed for the person who has overall responsibility for both planning and managing the community survey. It provides guidelines to help the decision maker(s) decide whether the school district is prepared to conduct a community survey. If the district is ready to survey its community, the volume also provides specific guidelines and suggestions for the project director in planning and managing the survey, task by task.

These materials have been developed in recognition of the fact that good working relationships between school and community can do much to insure the quality of education for the community's children. Such relationships take a long time to develop and require continuing maintenance and strengthening. Gathering community information on a regular basis to help school staff plan programs and to make decisions is one way to develop and maintain a good working relationship.

The approach presented in these materials suggests that community members be involved in a survey in two ways: one, as members of the group planning the survey; two, as the people surveyed. Experience of districts involving community members in planning and conducting a survey suggests that their contribution to the project can be significant.

This program has helped school district staff and community members conduct surveys on many different kinds of issues. The following accounts show how three school districts used these materials to collect evaluation data, set district-wide objectives, and plan a district's public information program.

EXAMPLE 1

School personnel in one district conducted a community survey as part of their evaluation of an innovative mini-school attended by all students during the 5th and 6th grades. Information describing the community's perceptions of the school's curriculum, orgainzation, and facilities was collected and used to supplement evaluation data obtained from teachers and students.

EXAMPLE 2

Another district used a community survey in conjunction with implementing a management by objectives system. The survey assessed the value parents put on the learning of basic skills, discipline, guidance, individualization of instruction, the enhancing of pupil self-esteem, and career education. The results of the survey helped school administrators and school board members develop a list of district-wide objectives.

EXAMPLE 3

The staff in another school district surveyed the community in order to identify the most effective channels of information about school activities. They questioned parents and other community members to determine how they obtained information about the schools. The results of the survey were used to plan the school district's public information program.

Surveying Your Community provides guidance for planning and conducting the major activities involved in the survey process: (1) defining the purpose of a community survey, (2) developing questions, (3) deciding on sampling and data collection method, (4) developing data collection materials, (5) conducting a community survey, (6) processing the data, and (7) interpreting the data and preparing a report. To learn more about these activities, turn now to the *Staff Handbook*.

After you have reviewed the Staff Handbook, return to this Guidebook and continue reading.

DECIDING WHETHER TO SURVEY
YOUR COMMUNITY

In order to decide whether you want to survey your community using the procedures suggested by these materials, consider the following questions:

1. *Do you have an issue about which you want to consult the community?*

Yes	No	Maybe
☐	☐	☐

An "Issue" is a general question which needs to be answered in order to plan effectively or to make a specific decision. The issues raised in the foregoing examples were:

- How effective is the new mini-school?
- What goals and objectives should the school district strive to accomplish?
- How do people get information about schools?

In each case above, the community had information the staff could use to help answer a general question or resolve an issue.

2. *Should this information be gathered by a survey?*

Yes	No	Maybe
☐	☐	☐

A survey, as described by the *Staff Handbook,* is a way of formally gathering information from community groups to help you answer a general question or issue. The important thing here is to decide whether you want to formally obtain information from community groups or representatives of those groups, rather than informally collect data from a small number of community members.

3. *Will you be prepared to use the information gathered?*

Yes	No	Maybe
☐	☐	☐

In order to be prepared to use the results of a survey it is advisable to:

- Know who will be using the information obtained and specify clearly who is going to receive the information.
- Get a commitment from the people receiving the results to use them. Try to determine how the information obtained from the community will contribute to the total decision or planning effort.
- Know how the information the community provides will be used to make a specific decision and/or to contribute to a planning effort.

- Know whether the data will be used alone or combined with other data. In Example 1, the information gathered from the parents of the community was one part of the data available; community perceptions were combined with student achievement and teacher data to evaluate a mini-school. In the situation described in Example 3, the community was clearly the best source of information on the issue being considered.
- Obtain support for the survey from any other key people in your district (superintendent, school board members, etc.).

4. *Can your district provide the personnel and other resources necessary to conduct a survey?*

Yes	No	Maybe
☐	☐	☐

Before committing yourself to conducting a survey, you should be aware that you will need:

- A team of six to nine survey staff which may include:

  a leader who has the time and ability to take responsibility for the success of this project; several interested school personnel and community members who are willing to commit themselves to working on this project; and, perhaps, some experts or consultants who are experienced in survey methodology, namely, in the areas of survey design, survey instrument development, sampling, data collection, data processing and interpretation of data.

- Funds to cover:

  survey staff's time

  the materials needed for instrument construction and production

  the collection of data (communication and travel)

  specialized facilities or services when and where needed (computer time, meeting rooms, etc.)

- Sufficient time to plan and conduct the survey and analyze the results before a decision must be made or planning must begin.

The actual resources needed will be estimated in the next section of this *Guidebook.* You may want to review this before making a final decision about conducting a survey.

*   *   *

If your answers to the above four questions are positive, you are ready to begin planning a community survey using these materials. All of the answers should be "yes" before you actually initiate a community survey.

PLANNING A SURVEY

This section of the *Guidebook* describes three planning tasks a project director will need to complete before actually beginning a survey project: selecting a staff, preparing an initial project schedule, and estimating project costs. Each of these planning tasks is discussed below.

Selecting a Staff

Experience shows that a community survey can be most effectively carried out by a group of about six to nine individuals. Each staff member should have the following characteristics:

- An interest in the issue being addressed.
- A willingness to serve on this task force.
- A commitment to community involvement with school matters.
- An ability to work with other group members.

Among the survey staff, at least one member will act on or use the information gathered by the survey.

In addition to the staff, you may need to obtain help from other people who will provide skills not available on the staff but which are required by the task:

- A questionnaire writer may be able to help with Task 2.

- An expert in survey design may be able to help with Task 3.

- A questionnaire writer and a data processing consultant may be helpful in developing data collection materials in Task 4.

- Experienced interviewers or group meeting leaders may be helpful when collecting the data in Task 5.

- A data processing consultant will be helpful during Task 6.

- A person experienced in writing technical reports can be helpful during Task 7 (interpreting the data and preparing the report).

PLANNING SHEET 1

Project Staff

List the name, position, and telephone number of each potential survey staff member below.

	NAME	POSITION	PHONE
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			

Preparing an Initial Project Schedule

The second step in planning a survey is to develop a tentative schedule for the project. Experience has shown that some districts have been able to carry out a well-organized survey in 4 to 8 weeks, whereas other districts have run a project for a year or more. The actual time required depends on a number of factors. The most critical ones are the experience and availability of staff, and the scope of the project. Generally, the more experienced and more available the staff, the less time it will need to do a project. The second factor, the scope of project, can be defined in three ways: the number of issues raised or questions asked, the number of community members involved, and the type of data collection method used. Generally the more issues raised by the survey, the more community members involved in the survey, and the more personalized the data collection method, the longer the survey will take.

At this time, you probably have some idea of who will be on the project staff and what kind of experience they have had with surveys. Obviously, at this time, you will not have fully defined the scope of your project. In fact, its scope will not be completely defined until the end of Task 3. Therefore, the schedule you will make is an estimate—an estimate which you should update after each task is completed.

An example of time estimates for a community survey is presented on the next page.

Figure 1 presents an example of a schedule. Here is how it was built.

1. Assumptions about staff availability and experience were made:
   - staff were available for the equivalent of one day a week.
   - staff were generally inexperienced; however, the project director had managed one survey before and one staff member was from the school system's evaluation unit.

2. The decision was made to keep this project fairly narrow in scope. It would focus on one issue. For purposes of estimating timelines, it was assumed that 20 to 30 survey questions might be needed, and data might be collected from up to 800 community members.

3. As a result of a discussion with the superintendent, May 3, 1976 was set as the due date for the survey report.

4. To prepare the survey report (Task 7), it was assumed that a staff member would need 3 days to draft the report, that the total staff would want to review the report at a meeting, and that the staff member might need another 3 days to revise the report. To play it safe, 2 weeks were allowed for Task 7.

5. As a result of the estimate for Task 7, April 19 was set as the date for the completion of data processing. Discussion with staff at the computer center resulted in an estimate that 2 weeks would be required to punch and run the data collected from 800 persons. Before the data are sent to the computer center, the survey staff need to code and tabulate them on the data record sheets.

FIGURE 1

AN EXAMPLE OF TIME ESTIMATES FOR A COMMUNITY SURVEY

Time Period: January 5, 1976   to   May 3, 1976

	1.	2.	3.	4.	5.	6.	7.
Activity:	Defining the Purpose of a Community Survey	Developing Questions	Deciding on Sampling and Data Collection Method	Developing Data Collection Materials	Conducting a Community Survey	Processing the Data	Interpreting the Data and Preparing a Report
Due Date:	Jan. 12	Jan. 26	Feb. 2	Feb. 23	March 29	April 19	May 3
Weeks Scheduled:	1 week	2 weeks	1 week	3 weeks	5 weeks	3 weeks	2 weeks
Number of staff meetings or work sessions needed (estimate 2-3 hours per session)	1	1-2	1	2-3	1	1-2 (Computer processing)	1

The explanations of how these time estimates have been derived are given on the following page.

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Therefore, one or two staff work sessions might be needed. Three weeks were allowed for Task 6.

6. As a result of the estimate for Task 6, March 29 was set as the date for completing the collection of data. It was assumed that, given the availability of the survey staff plus some additional volunteers or trained interviewers or group leaders, 5 weeks would be needed to collect the data: one week to make the initial contact with the community members (mailing questionnaires, scheduling interviews, or group meetings); two weeks for collecting the data (returning the completed questionnaires, conducting the interviews, etc.); and maybe another one or two weeks to follow up the non-respondents. To play it safe, 5 weeks were allowed for Task 5.

7. As a result of the estimate for Task 5, February 23 was set as the date for completing the development of materials. It was assumed that staff would be working in small groups on individual assignments (editing and revising questions, formatting the questionnaire or meeting materials, pre-testing materials, revising the materials based on the pre-test results, and duplicating the materials). A couple of staff meetings might be necessary for the survey staff to review the materials. Therefore, 3 weeks were allowed for Task 4.

8. As a result of the estimate for Task 4, February 2 was set as the due date for the survey staff to make decisions on sampling and data collection method. It was assumed that a couple of staff members would prepare tentative recommendations on these two decisions based on their knowledge or previous experiences and that in a staff meeting the recommendations would be discussed and decisions would be finalized. Therefore, one week was allowed for Task 3.

9. As a result of the estimate for Task 3, January 26 was set as the date for the completion of question development. It was assumed that one or two staff meetings would be needed to accomplish this task: the first meeting would be a brainstorming session inviting the staff to list the subtopics for the topics of interest; then the staff could work individually by generating some questions for the subtopics selected. A second meeting would be held in which the staff would review the questions and select the most suitable. Two weeks were allowed for Task 2.

10. As a result of the estimate for Task 2, January 12 was set as the date for the completion of orientation and Task 1—orienting the staff to the project and defining the purpose of the survey. It was assumed that one staff meeting would be needed for the staff to reach consensus on the issue of survey, topics of interest, the community groups to be surveyed, how the information would be used, and the scope of the survey. Therefore, one week was allowed for Task 1.

Complete Planning Sheet 2 on the following page by estimating the time you'll need for your survey project.

PLANNING SHEET 2

TIME ESTIMATES*

To complete this planning sheet, consider how much overall time you have for the survey and when the final report is due; then work your way back through the seven activities.

Time Period: _____ to _____

	1.	2.	3.	4.	5.	6.	7.
Activity:	Defining the Purpose of a Community Survey	Developing Questions	Deciding on Sampling and Data Collection Method	Developing Data Collection Materials	Conducting a Community Survey	Processing the Data	Interpreting the Data and Preparing a Report
Due Date:	____	____	____	____	____	____	____
Weeks Scheduled:	____	____	____	____	____	____	____
Number of staff meetings or work sessions needed (estimate 2-3 hours per session)	____	____	____	____	____	____	____

*Note that these time estimates should be revised regularly as the survey proceeds.

Estimating Project Costs

The third step in planning a community survey is estimating the costs of personnel, materials, communications, and other resources necessary to conduct the survey. Note that the costs planned at this time are estimates which will have to be revised as survey activities proceed, particularly after decisions about sampling and data collection method have been made (Unit 3).

To help you estimate costs, the chart below suggests cost categories for various activities included in the survey process.

FIGURE 2.

COST ESTIMATE CHART

Cost Category	Survey Activities				
Personnel	Preliminary Planning	Survey Staff Planning (Units 1-4)	Collecting the Data (Unit 5)	Processing the Data (Unit 6)	Interpreting the Data and Preparing a Report (Unit 7)
1. Survey Staff	Project director undertakes preliminary planning	Plan and develop materials	Depends on data collection method	Code and summarize data	One staff member writes the report.
2. Clerical Staff	Assist the Project Director in planning	Type and format materials	Depends on data collection method	Type data summary sheets	Type the report.
3. Consultants		Review materials	Train interviewers or group meeting leaders	Assist in designing ways to summarize data.	Assist in interpreting the results.
Reproduction/Purchase of Materials	Purchase sufficient copies of the *Staff Handbook* for the survey staff	Duplicate sufficient copies of data collection materials.		Duplicate coding sheets for summarizing data	Duplicate the report.
Communication/Travel 1. Telephone	For contacting potential survey staff and experts or consultants		For telephone interviews		
2. Postage			For letters and questionnaires		
3. Travel			For interviewers		
Other			Facilities for group meetings	Computer services	

Five survey activities are listed on the cost estimate chart—the first is the preliminary planning necessary before any group action begins, while the other four cover the seven tasks described in the *Staff Handbook*.

Preliminary planning includes all the activities discussed in this *Guidebook*. The main cost items will be the project director's time and copies of the *Staff Handbook*.

Survey staff planning covers the tasks described in Units 1-4 in the *Handbook*. These activities include defining the purpose of the survey, developing survey questions, deciding on sampling and data collection method, and developing and duplicating data collection materials. The main cost items are personnel and material reproduction.

Collecting the data includes all the activities necessary to contact community members and obtain their answers to the survey questions (Unit 5). The main cost items include personnel, telephone, postage, and possibly travel and meeting facilities. If interviews or group meetings will be held, the cost of training interviewers or group leaders should be estimated when Unit 3 is completed.

Processing the data includes coding, categorizing, and tabulating the information obtained from the community (Unit 6). Data can be processed either by hand or by computer. Therefore, the main cost items will be personnel and possibly computer services.

Interpreting the data and preparing a report include reviewing the summarized data and describing the survey's results in a written report (Unit 7). The main cost items are personnel and duplicating the report.

With this interview in mind, your task is now to estimate the cost for each survey activity. Some approaches to estimating various types of costs are discussed below.

Personnel

Personnel costs will depend on the number of hours necessary to plan and conduct the survey and on whether school employees on the survey staff are to be paid or released from other duties, the number of volunteers obtained and the amount of consultant help needed, as well as the scope of the survey itself. If staff are released during school hours, pay for substitutes may be required. The following formula is suggested for estimating the cost of each staff member involved. The cost should be estimated for each survey activity:

$$\boxed{\begin{array}{c}\text{Estimated}\\\text{Average}\\\text{Daily Rate}\end{array}} \times \boxed{\begin{array}{c}\text{Estimated}\\\text{Number}\\\text{of Days}\end{array}} = \boxed{\begin{array}{c}\text{Estimated Personnel}\\\text{Cost for a Staff}\\\text{Member}\end{array}}$$

Reproduction/Purchase of Materials

This category includes both the costs of purchasing copies of the *Staff Handbook* and the costs of duplicating data collection materials for the survey. It is suggested that reproduction costs be tentatively estimated using the following formula for each type of material. Only a very rough estimate of reproduction costs can be made before Unit 3 (deciding on sampling and data collection method) is completed.

Number of copies needed (including extras)	×	Number of pages (including front cover, directions page, and back cover, if desired)	×	Cost per page	=	Reproduction Costs

Communications/Travel

This category includes whatever staff or consultant travel expenses are involved. Also included are all telephone and postage costs involved in contacting potential respondents. Since each school district already has its own method of estimating these costs, no special formula is given here.

Other

This category includes stationery, audiovisual aids, furniture, facilities, data processing, and any other expenses that are not covered by any of the foregoing cost categories. These costs vary depending on each school district's situation. In addition, if you are going to use computer data processing, you will have to obtain a cost estimate from the service agency.

Use the planning sheet on the following page to estimate the costs for your survey.

PLANNING SHEET 3

Tentative Estimate of Survey Costs*

Use this chart to tentatively estimate the funds needed for your survey.

Cost Category	Survey Activities					
	Preliminary Planning	Survey Staff Planning (Units 1-4)	Collecting the Data (Unit 5)	Processing the Data (Unit 6)	Interpreting the Data and Preparing a Report (Unit 7)	Total
Personnel						
1. Survey Staff						
2. Clerical Staff						
3. Experts or Consultants	▓▓▓					
Reproduction/Purchase of Materials			▓▓▓			
Communications/Travel						
1. Telephone		▓▓▓		▓▓▓	▓▓▓	
2. Postage	▓▓▓	▓▓▓		▓▓▓	▓▓▓	
3. Travel	▓▓▓	▓▓▓		▓▓▓	▓▓▓	
Other						
Totals						

*This estimate should be revised when your group decides whether or not to sample and which data collection method to use in completing Unit 3 in the *Staff Handbook*.

The remainder of this Guidebook is designed to help the project director manage the survey. If you are not planning to implement a survey, you may stop here. If you are going to implement a survey, continue reading.

MANAGING A COMMUNITY SURVEY

This section presents a brief description of each task involved in a survey, a general approach to each task, and specific suggestions on how to carry out each task. The content is based on the experiences of school district staffs who have conducted community surveys. In general, their suggestions reflect that successful surveys are well managed efforts.

It is suggested that the project director review the suggestions given in the section before initiating each task.

ORIENTATION: INTRODUCTION AND OVERVIEW OF A CUMMUNITY SURVEY

Description of Orientation

Orientation involves explaining and discussing the survey materials, the survey process as a whole, and the roles staff members will play during the survey.

The survey materials and process are described in the "Introduction" and "Overview" in the *Staff Handbook* and an example illustrates the various activities involved in planning and conducting a community survey.

Suggested Approach to Orientation

The orientation is best carried out in an informal group discussion.

Preparation for Orientation

- Ask staff members to skim through the *Staff Handbook* materials before the first meeting.

- Prepare a summary of the reasons why the survey is being held and what outcomes are expected.

- Prepare a general estimate of the resources that will be used to conduct the survey. Be able to answer questions about personnel, money, and time available for the project.

Suggestions for the Orientation

- Present the reasons for the survey and the resources available to conduct it.

- Ask the staff members to share with each other their interests, experiences, and skills related to community surveys.

- Using the example in the "Overview," discuss the survey process as a whole and the various activities involved in conducting a community survey.

- Discuss the responsibilities staff members will have during the survey.

Completion of Orientation

- Be sure that staff questions have been discussed and that the group is ready to move to the first survey activity.

UNIT 1: DEFINING THE PURPOSE OF A COMMUNITY SURVEY

Description of Task 1

In Unit 1 of the *Staff Handbook*, the task is to discuss and define the purpose of the survey. The staff will prepare a written statement which describes (1) why the survey is being conducted, (2) the issue, (3) the main topics of interest/concern, (4) the community groups to be surveyed, and (5) how the information collected will be used.

The unit contains information that will help the staff prepare a purpose statement for the survey. It includes an example of a purpose statement, explains each of its parts, gives examples of purpose statements with different scopes (one broad and one narrow), and provides a planning sheet to guide the staff's preparation of its own purpose statement.

Suggested Approach to Task 1

Task 1 is best accomplished through group discussion of each of the points to be made in the purpose statement. The goal of the discussion is to build group consensus about the purpose of the survey.

Preparation for Task 1

- Clarify your own expectations about staff activity during the meeting. You may have an issue and topics in mind, but experience suggests that the staff should have an opportunity to develop its own purpose statement so that group ownership and commitment to the survey are established.

- Be ready to clarify the reasons why the survey is being conducted and to facilitate group discussions about the various parts of a purpose statement.

Suggestions for Accomplishing Task 1

- Past experience with school districts indicates that survey staff tend to describe a purpose which is too broad in scope (raises too many issues or too many topics) and involves too many community groups. If this is your first community survey project, it is especially important to keep its scope narrow.

- The survey staff sometimes comes to consider the purpose statement as a rigid decision. Keep before the group the fact that the purpose statement is only a guide that can be revised if necessary as the survey proceeds.

Completion of Task 1

- Be sure that you have a complete purpose statement that contains all the points the group wishes to include.

- Check that the scope of the survey is sufficiently narrow to be feasible.

- In preparation for Unit 3, assign one staff member to read Appendix A and to compile master lists of the members of the community groups identified in the purpose statement.

UNIT 2: DEVELOPING QUESTIONS

Description of Task 2

In Unit 2 of the *Staff Handbook*, the task is to refine the topics of interest and develop issue-related and demographic questions for the survey.

The unit is organized in four sections. The first three sections describe an approach to developing issue-related questions that includes listing subtopics for each topic, developing a general question for each subtopic, and writing each general question in both a closed and an open-ended format. The last section provides some guidelines for writing demographic questions. Examples and a planning sheet are included in each section of the unit.

Suggested Approach to Task 2

Task 2 is best accomplished by guiding the staff through each of the steps involved in developing questions. In doing each step, encourage brainstorming first; then, critically review the list of topics and questions generated and select what the group feels is most relevant to the purpose of the survey.

Preparation for Task 2

- Experience suggests that survey staffs tend to consider question formats without first focusing on the substantive aspects of the survey questions to be asked. To avoid redundant, overlapping questions, be prepared to discuss the rationale behind the sequence of steps involved in developing issue-related questions:

  - The first step asks the group to agree about what subtopics they want to raise.

  - The second step asks the group to formulate general questions for each subtopic.

  - The third step asks the group to try out each general question in both a closed and an open-ended format.

- Have available extra copies of the purpose statement developed during Unit 1.

- Depending on the skills of the group, consider having a person who is skilled in writing survey questions serve as a resource for the group and as a reviewer of the group's questions.

Suggestions for Accomplishing Task 2

- Discuss the scope of the survey. Most survey groups, in doing the first step, generate too many topics and subtopics. Surveys involving large numbers of topics are costly to conduct, frequently discourage respondents, and often lack focus. To avoid this problem, encourage the group to set a limit on the number of topics to be raised and to take time to test the value of *each* topic by asking: How will the information the community provides on this topic contribute to answering the general survey question?

- Keep before the group the purpose of the second step—namely, to make clear what questions the staff needs to ask to achieve the survey's purpose. Survey groups tend to get entangled in format and methodology concerns before they agree about the

substance of their questions. To avoid this problem, make sure that the group tests *each* question by asking:

"Why do we want to ask this question?"

"What are we going to do with the information we obtain?"

- Explain that the purpose of the third step is to try out alternative formats for each general question. Experience suggests that the meaning of a question can be lost or changed when it is rewritten in different formats. Therefore, try to write each question in both closed and open-ended formats. Note: the group should not try to agree on the exact wording of each question until a data collection method has been selected.

Completion of Task 2

- Be sure that you have a copy of Planning Sheets 3 and 4 listing all the issue-related and demographic questions. These sheets will be used when the group prepares data collection materials (Unit 4).

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Description of Task 3

In Unit 3 of the *Staff Handbook*, the task is to make two decisions: (1) Should information be collected from all members of the community groups listed in the purpose statement or from a sample of those people? and (2) Should information be collected by mailing questionnaires or conducting interview or group meetings?

The unit contains information about sampling, three data collection methods, and a three-step strategy which will help survey staff make decisions about sampling and the data collection method. The three steps are (1) making initial decisions regarding community involvement based on the importance of the survey issue, (2) making initial decisions regarding appropriateness of methods based on the purpose of your survey, and (3) finalizing the initial decisions by considering the cost of the proposed survey. For each step, a planning sheet is provided.

Suggested Approach to Task 3

Task 3 is best accomplished by an individual or subcommittee of the staff working through the task and recommending the decisions which could be made. The total staff can then review those recommendations and decide if it wants to accept them or request changes based on their suggestions.

Preparation for Task 3

- Have the following resources available to help make the decisions:
  - The purpose statement and questions previously developed.
  - Master lists of the community groups and estimates of the population size.
  - Projected costs of personnel, reproduction/purchase of materials, communications, travel, and any other expenses for developing materials and collecting and processing the data. Review Units 4, 5, 6, and 7 in the *Staff Handbook* for necessary cost considerations and refer back to your budget for the survey.
- Ask one or two staff members to work through Unit 3 and to read Appendix B. Have these staff members prepare recommendations for the survey along with reasons for their decisions.

Suggestions for Accomplishing Task 3

- Be sure that the staff members have an opportunity to explain the reasons for their recommendations.
- Lead a general group discussion of the recommendations and of possible alternatives. The final decisions may be yours or the group's.

Completion of Task 3

- Keep a record of the decisions that have been made and the rationale behind them.
- If the decision is to sample, assign one person to review Appendix B, select the sample(s), and prepare a list of the respondents in each community group to be surveyed. Obtain technical assistance as needed.

- If all members of the community groups to be surveyed will be asked to respond, assign a staff member to check the accuracy and completeness of the master list—spelling of names, addresses, phone numbers.

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UNIT 4: DEVELOPING DATA COLLECTION MATERIALS

Description of Task 4

In Unit 4 of the *Staff Handbook*, the task is to develop, test, revise, and duplicate the materials needed to collect information from the community using the method your group has selected—mail questionnaires, interviews, or group meetings.

The unit is organized in three sections—one for each data collection method. The staff will need to use only those sections which are relevant to its survey. Each section contains examples and guidelines for editing and formatting the questions, and pretesting, revising, and duplicating the materials.

Suggested Approach to Task 4

Task 4 is best accomplished by one person directing the materials development effort—that is, making staff assignments, directing staff review of draft materials, managing the pretest, monitoring revisions, and serving as quality control on duplication of materials.

Preparation for Task 4

- Have copies of the list of questions developed in Unit 2.

- Make a list of the different types of materials to be developed (cover letter, instructions for respondents or interviewers, envelopes, and types of questions) and the different activities necessary to materials development (editing and pretesting).

- Depending on the skills of your group, consider asking special resource personnel (editors or graphics people) to assist in editing and formatting the materials.

- If the data will be computer processed, ask computer personnel to help the group format the materials or develop forms for coding community responses.

Suggestions for Accomplishing Task 4

- Assign each type of material to be developed to individual staff members.

- Take time to have the group as a whole review and critique the materials for completeness, consistency, and relevance to the purpose of the survey.

- Be sure to pretest the materials. Experience indicates that pre-testing reveals revisions that are necessary to facilitate collecting and processing the data.

- Take time to plan data processing procedures. Use the data obtained from the pretest to check the appropriateness of the intended procedures.

Completion of Task 4

- Have a sufficient number of materials duplicated and distributed to staff collecting the data.

UNIT 5: CONDUCTING A COMMUNITY SURVEY

Description of Task 5

In Unit 5 of the *Staff Handbook*, the task is to collect data from the community using the materials developed in Unit 4.

The unit is divided into three sections—one for each data collection method: mail questionnaires, interviews, and group meetings. The section for each data collection method provides an overview of the major steps involved in conducting a survey and suggestions for carrying out the key steps.

Suggested Approach to Task 5

Task 5 is best accomplished by one person directing the data gathering effort. That person should make staff assignments, make sure staff are trained, and monitor the quality of staff work.

Preparation for Task 5

● Using the planning sheet in the *Staff Handbook* as a guide, develop a detailed schedule of personnel and time allocated to each activity necessary to collect the data.

● After group discussion, review and finalize staff assignments and schedules.

Suggestions for Accomplishing Task 5

● Assign work to each staff member and make sure they understand what is required.

● Monitor the progress of data collection carefully. Use the planning sheet to keep track of the daily activities necessary to collect the data.

● Take steps to ensure a satisfactory return rate:

— Before contacting the respondents, publicize the survey in the local newspaper or school newsletter to encourage community support.

— Carry out follow-up activities to obtain data from nonrespondents.

● Review the data obtained as interviews or group meetings are completed to be sure that the data are complete.

Completion of Task 5

● Organize the data collected for data processing.

UNIT 6: PROCESSING THE DATA

Description of Task 6

In Unit 6 of the *Staff Handbook*, the task is to summarize community responses to each survey question to facilitate the interpretation of survey findings.

The unit contains examples and guidelines for summarizing responses to both open-ended and closed survey questions and calculating some simple statistics—percentages, means, or modes.

Suggested Approach to Task 6

Task 6 is best accomplished by having one person with experience direct the data processing effort. That person will manage the staff effort to code, tabulate, and summarize the data. If a computer service is used, that person will serve as liaison to the computer service.

Completion of Task 6

- Be sure that the responses to each question are summarized on separate sheets to facilitate comparisons among questions and/or community groups and interpretation of the results.

UNIT 7: INTERPRETING THE DATA AND PREPARING A REPORT

Description of Task 7

In Unit 7 of the *Staff Handbook,* the task is to interpret the summarized data and prepare a report describing the survey and the results.

The unit contains procedures for examining the meaning of the statistics that have been calculated and presents suggestions and examples for organizing and presenting the results of the survey in a written report.

Suggested Approach to Task 7

Task 7 is best accomplished by assigning one person to write the report. That person will need suggestions from the group on how to interpret the data collected and how to improve drafts of the report as they are written. The person assigned to write the report can, of course, request the assistance of others who might help prepare specific sections, edit the content, prepare graphics, etc.

Preparation for Task 7

● Assign a person to be the writer of the report.

● Be prepared to discuss the three approaches to interpreting the results of your survey presented in the *Staff Handbook:*

— The first approach is writing a simple summary statement describing the response of each community group to each question.

— The second approach is deciding whether responses from more than one community group are sufficiently similarly to be combined, and if so, preparing a summary statement that describes the combined responses.

— The third approach is deciding whether responses to two or more questions on one topic or subtopic should be considered together, and if so, preparing a summary statement which suggests how the combined responses support a general conclusion or interpretation.

● Have available copies of the data summary sheets for each question.

Suggestions for Accomplishing Task 7

● Discuss the three approaches to interpreting the data, and as a group, discuss how the data may be interpreted.

● Have the person asigned to write the report prepare a draft.

● Have the group review a draft of the report for its relevance to the purpose of the survey, its accuracy, its clarity and completeness, and its appropriateness for the audience (school staff, board members, community members, and/or students).

Completion of Task 7

● Be sure that any conclusions drawn are adequately supported by the data.

● Have sufficient copies of the report duplicated and distributed to appropriate school authorities.

CONCLUDING A COMMUNITY SURVEY

With the submission of the survey report, the basic tasks of planning and conducting a community survey are accomplished. There are, however, three remaining tasks for the project director who wants to insure that the results of the survey are used.

Assist School Planners or Decision-Makers

In preparing the purpose statement, the project director and survey staff clarified who would receive the results of the survey and how the data would be used. The project director, in transmitting the report to a planning group or a decision-maker, should explore with them how he or she can help them understand and use the results of the survey. Only with such follow-through will the survey results be fully utilized.

Plan and Release the Report

The project director, if necessary, should initiate discussions with appropriate administrators and the school district's public information office regarding the timing and methods of releasing the results of the survey. The director should work with school personnel in whatever ways are necessary to insure that the school district's release accurately reflects the results of the survey. If appropriate, the director and project staff should be prepared to make presentations about the results of the survey at school-sponsored or community-sponsored meetings.

Prepare a Survey File

As a final task, the project director should prepare a survey file as a resource for other school staff who may want to conduct a survey. Such a file should contain the materials produced by the project director and staff in planning and carrying out the seven tasks involved in conducting a survey—the management plan, purpose statement, initial topics and questions, record of decisions about sampling and data collection method, data collection materials, data collection plan, raw data, data summaries, and survey report. If possible, the file should also contain the director's notes about problems encountered and the ways in which those problems were solved.

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Surveying Your Community:
An Approach to Community Involvement in Schools

Staff Handbook

by

Bea Cromwell
Suzanne Root

June 1976

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Acknowledgements

TABLE OF CONTENTS

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INTRODUCTION

Surveying Your Community: An Approach to Community Involvement in Schools has been developed to help school administrators, teachers, and community members gather information from the community. These materials describe a way of planning and conducting an effective community survey.

The materials are presented in two volumes, the *Staff Handbook* and the *Project Director's Guidebook.* The guidelines, directions, examples, and planning sheets contained have been developed using suggestions and examples based on actual experiences of school personnel in conducting community surveys.

This volume, the *Staff Handbook*, is divided into seven units; each unit covers one of the activities listed below and provides guidelines for survey staff to follow in carrying out that particular activity:

1. Defining the purpose of a community survey

2. Developing questions

3. Deciding on sampling and data collection method

4. Developing data collection materials

5. Conducting a community survey

6. Processing the data

7. Interpreting the data and preparing a report

Experience suggests that a community survey can be most effectively carried out by a group of six to nine people. A typical survey group includes the project director, selected school personnel, and members of the community.

The *Project Director's Guidebook* is designed for the person who has the overall responsibility for both planning and implementing the community survey. It provides guidelines to help develop a work plan, schedule, and budget.

* * * * * *

The following pages contain an overview of a community survey project. This example, involving a team teaching program, illustrates just one of the many kinds of community surveys that are currently being undertaken. Sometimes the initiative for conducting such a survey is provided by school board members or central office staff who believe that information on community feelings and attitudes is needed to help them make a sound decision. In other cases, the principal and teachers in a specific school want to gather information from community members who might be affected by a proposed curriculum change or parents or other community members provide the initiative for conducting a community survey.

OVERVIEW OF A COMMUNITY SURVEY

The procedures and guidelines presented in the *Staff Handbook* are organized into seven activities. The following example of a community survey is presented in two columns: the left-hand column describes the activities undertaken by the survey group, while the right-hand column supplies some explanatory notes concerning those activities. This example has been simplified in order to clarify the activities described.

Activity 1: Defining the Purpose of a Community Survey

Explanatory Notes

Staff members in the Green School have a team teaching program. They want to know what changes might be made to improve the program and what direction the changes should take. They have collected information on student achievement as well as student and faculty attitudes toward the program. They want to know what the parents of 7th and 8th grade students think.

The group states why the survey is being conducted.

The issue of interest is: What changes are needed to improve the team teaching program?

The group identifies the issue of interest.

The topics of interest are: (1) school-day schedule, (2) team organization, and (3) curriculum.

The group lists specific topics to be raised.

The members of the community from whom information should be collected are the parents of 7th and 8th grade students in the Green School team teaching program.

The group identifies the community groups from whom information should be collected.

The information collected will be given to a staff planning group in the Green School. This group will combine information from the community with student achievement information and student and faculty survey information to develop a set of recommendations on the team teaching program for the principal and faculty.

The group specifies how the information collected will be used.

Activity 2: Developing Questions

The Green School staff discussed each topic and identified several subtopics for each. For example, for the topic school-day schedule, they identified the following subtopics: (1) interteam activities schedule, (2) length of school day, and (3) opportunities for library use.

Staff members then developed questions for each subtopic, decided which questions should be included, and wrote a closed and an open-ended question for each general question selected. For example, the following questions were written for a general question about the interteam activities schedule:

General Question: Is the current schedule of interteam activities convenient?

Refined Questions:

1. How convenient is the current interteam activities schedule?

2. The current interteam activities schedule is:

   Very convenient   □

   Convenient   □

   Not convenient   □

The staff also developed some demographic questions to be used in collecting information on the survey respondents. For example, one of these questions was:

How many years have you lived in this community?_____

Activity 3: Deciding on Sampling and Data Collection Method

The staff decided that it was important to ask the parents of all three hundred 7th and 8th grade students in the team teaching program to participate in the survey. The staff also decided to use mail questionnaires to collect information from the community.

Explanatory Notes

The group develops subtopics for each topic of interest.

The group develops general questions for each subtopic, decides which questions should be included in the survey materials, and writes a closed and an open-ended question for each general question selected.

The group develops demographic questions and decides which questions should be included in the survey materials.

The group decides whether or not to sample and whether they should use questionnaires, interviews, or group meetings to collect data.

Activity 4: Developing Data Collection Materials

The survey staff prepared a mail questionnaire (using mostly closed questions) and a cover letter to be mailed to the parents of all 7th and 8th grade students in the team teaching program.

The group develops the materials needed to collect information from community members.

Activity 5: Conducting a Community Survey

The staff mailed the questionnaire on schedule. Approximately one-third (33%) of the parents completed and returned the questionnaire. The staff followed up all nonrespondents and, as a result, received completed questionnaires from another 15% of the parents.

The group conducts the survey.

Activity 6: Processing the Data

The data from the mail questionnaires were processed in the following way:

For the closed questions, code numbers were assigned to the response categories for each question and the responses were coded. For each question, a frequency table was prepared to show how many people gave each response; percentages were also calculated for each response.

For the open-ended questions, response categories were established, code numbers were assigned to each response category, and the responses were coded. For each question, a frequency table was prepared to show how many people gave each response; percentages were also calculated for each response.

The group summarizes the data collected.

Activity 7: Interpreting the Data and
                Preparing a Report   Explanatory Notes

Staff reviewed the summarized responses to   *The group interprets the summarized data.*
each question and prepared a statement
describing the results. The responses to all
questions on each subtopic were then
examined by the staff who prepared inter-
pretative statements about those results.

Using the purpose statement, the data   *The group prepares a report about the*
collection materials, and the data sum-   *community survey.*
maries and interpretations, one staff mem-
ber prepared a report on the survey. The
report included an introduction, a section
on procedures, a section presenting the
results, and a brief summary. The survey
staff reviewed the report before final copies
were prepared.

Now, having read this brief overview describing major survey activities, you are probably
ready to begin. One general topic should be discussed, however—how your staff plans to
work as a group. To be more specific, you may want to discuss the following questions:

●   What special skills does each staff member have which could be helpful in
    conducting this survey?

●   How will specific tasks and responsibilities be assigned to specific staff members?

●   How will differences of opinion be resolved?

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Unit 1

Defining the Purpose of a Community Survey

CONTENTS

INTRODUCTION

The first activity in planning a community survey is defining the purpose that will provide a framework for all subsequent survey activities: deciding what questions to ask; selecting the data collection method; developing data collection materials; collecting, processing and interpreting the data; and preparing a report.

A clear purpose statement should (1) present background information explaining why the survey is being conducted, (2) identify the issue of interest, (3) list the specific topics to be raised, (4) identify the community groups from whom information should be collected, and (5) explain how the information collected will be used.

This section will help you develop a purpose statement for your survey. The example below illustrates the content and format of a completed purpose statement. The text and illustrations which follow the example raise some of the points you may want to consider before using the planning sheet at the end of this unit to record the purpose of your own survey.

EXAMPLE OF A COMPLETED PURPOSE STATEMENT

1. Background: *Staff members in the Green School have a team teaching program. They want to know what changes might be made to improve the program and what direction the changes should take. They have collected information on student achievement as well as student and faculty attitudes toward the program. They want to know what the parents of 7th and 8th grade students think about this program. The data obtained from the parents will be part of the information that the school staff will use to determine what program changes should be made.*

2. The issue of interest is: *What changes are needed to improve the team teaching program?*

3. The topics of interest are: *(1) school-day schedule, (2) team organization, and (3) curriculum.*

4. The community groups from whom information should be collected are: *Parents of 7th and 8th grade students in the Green School team teaching program.*

5. The information collected will be: *given to a staff planning group in the Green School. This group will combine the information from the community with student achievement information and student and faculty survey information to develop a set of recommendations on the team teaching program for the principal and faculty.*

BACKGROUND

A brief background description is developed to outline the situation which led to the community survey. It makes clear why the survey is being conducted. Most surveys are conducted for one of two reasons: to provide information which will help staff make a specific decision about some aspect of the school program, or to provide information which will suggest some possibilities to be considered by a planning group.

The Green School staff are engaged in a planning effort to improve the team teaching program. The information collected from the parents will help school staff determine what program changes might be needed. In another example, a planing group considered different ways of dealing with the problem of declining enrollments. This group collected community members' perceptions of different reorganization plans. Their suggestions for the alternative use of existing facilities helped the planning group present alternatives which would have community support.

Other projects may be conducted to obtain information to help a school staff make a specific decision. For example, school district personnel working under fiscal constraints may have to make a specific decision about program cutbacks. They could present concrete alternatives to community members and use the information obtained to help them decide which program to cut back..

Thus, in this section of the purpose statement, your task is to state why your survey is being conducted.

THE ISSUE OF INTEREST

The issue of interest is the general question you want to pose to the community. In the Green School example, the issue of interest is, "What changes are needed to improve the team teaching program?"

Some ways of stating the issue are:

- should (a program) be changed?
- in what ways can (a program) be improved?
- which (alternative) is preferred?

In all cases, the subject of the issue statement is the specific school program, service, or function which is being considered from either a planning or decision-making perspective.

TOPICS OF INTEREST

To clarify the issue of interest, it is helpful to list more specific aspects of a school program, the topics of interest. In our example, three particular aspects of the team teaching program were identified as specific topics of interest: (1) school-day schedule, (2) team organization, and (3) curriculum. Two other examples of such an analysis follow:

1) School staff planning a career education program wanted to obtain suggestions from members of the community. They decided that they needed community ideas on only two aspects of the program, i.e., the use of community resources and the scheduling of regular classes and work experiences. They then listed these program aspects as their topics of interest.

2) School staff seeking to improve their elementary reading program decided they needed information from parents regarding their children's interests and reading habits. They listed student interests and student reading habits as their topics of interest.

For this section of your purpose statement, then, clarify the specific aspects of a school program you want to ask the community about. You will have an opportunity to further refine these topics during the next survey activity.

COMMUNITY GROUPS FROM WHOM INFORMATION SHOULD BE COLLECTED

The community groups to be involved in the project should be those whose members are best able to furnish the information needed. In the foregoing example, the parents of 7th and 8th grade students in the team teaching program are the community members who will be affected by whatever program changes are made; they should be asked to provide the information.

In a situation where the revision of an elementary school curriculum is being considered, school personnel will be interested in the perceptions of the people who are most concerned and have had the most recent experience with those programs. Parents of elementary school children should certainly be included in this survey. Parents of children currently enrolled in the junior high school may also have useful perceptions of the elementary school programs. On the other hand, a survey concerning a community-based career education program for high school students could involve such community groups as parents of high school students, local employers, and perhaps even parents of junior high school students.

Here are some examples of community groups which may prove relevant in your survey.

parents of school children
parents of elementary students
parents of middle school students
parents of any one grade of students
parents of pre-school children
taxpayers (e.g., property owners)
ethnic groups
senior citizens
all adult residents of the community
members of the business community
members of various civic organizations
recent high school graduates

For this section of the purpose statement, list the community groups from whom you will collect information. The planning sheet at the end of this unit is designed to help you decide which groups are most relevant. Later, at least one staff member will compile a master list of the specific people included in each group.

HOW THE INFORMATION COLLECTED WILL BE USED

To complete the purpose statement, decide just how the information collected during your community survey will be used. Exactly who will receive this information and what will they do with it? In our example, the purpose statement shows that a staff planning group will receive the information collected and combine it with other information to develop recommendations on changing the team teaching program.

For this section of your purpose statement, specify how the information collected will be used.

SCOPE OF THE SURVEY

Experience suggests that one of the problems every community survey planning group must confront is how to limit the scope of their survey. Consider these two examples of differences in scope of community surveys.

Example 1
WOODSIDE SCHOOL SYSTEM
PURPOSE STATEMENT

1. Background: *The Hill Elementary School in the Woodside School System has been implementing a new intermediate language arts program for two years. Student progress has been satisfactory, but staff members would like to find out what parents think of the program before deciding whether or not to continue it for two more years.*

2. The issue of interest is: *Should the intermediate language arts program be continued?*

3. The topics of interest are: *(1) the goals of the program, (2) the instructional materials being used, (3) the methods of reporting student progress, and (4) homework assignments.*

4. The community groups from whom information should be collected are: *Parents of students enrolled in grades 4, 5, and 6 at the Hill Elementary School.*

5. The information will be: *given to the principal and the language arts staff to help them decide whether the intermediate language arts program should be continued for two more years.*

Example 1 illustrates a rather limited scope since it focuses on four topics related to one program and is designed to collect information from parents of children in three grades in a single school. The next example presents a survey of broader scope which includes five topics related to a district-wide program and is designed to gather information from four geographically-dispersed community groups.

Example 2   BERSON SCHOOL DISTRICT
                                 PURPOSE STATEMENT

1. Background: *The Berson School District has a number of programs for the adult members of the community. District staff have decided to collect information from members of the community to help them determine what improvements are needed in school-community programs and services.*

2. The issue of interest is: *How can our school-community programs and services be improved?*

3. The topics of interest are: *(1) adult education services, (2) school-community volunteer system, K-12, (3) PTA operations, K-12, (4) school district recreational services, and (5) senior citizen lunch program.*

4. The community groups from whom information should be collected are:

   Parents of all students, K-12

   Taxpayers

   Senior Citizens

5. The information collected will be: *used to help district staff determine the adequacy of existing school-community programs and services and how they can be improved.*

    The experience of other community survey groups suggests that an initial survey effort should be *limited in scope.* By limiting the survey, you will be able to work through the process rapidly, experience success, and acquire the understanding and skills needed to execute more complex surveys later.

PLANNING SHEET 1

Purpose Statement

As a group, discuss the background and purpose of your survey. After a group consensus has been achieved, complete this planning sheet.

1. Background:

   _____

   _____

   _____

   _____

   _____

2. The issue of interest is:

   _____

   _____

   _____

   _____

   _____

3. The topics of interest are:

   _____

   _____

   _____

   _____

   _____

PLANNING SHEET 1 (Continued)

4. The community groups from whom information should be collected are:

The following questions are designed to help you decide which community members to include in your survey.

— Which members of the community are or are likely to be affected by the issue?

_____

_____

— Which other members of the community can supply needed information?

_____

_____

— Which other taxpayers or residents might have ideas or views to contribute which could affect your decision and/or supply information for your planning effort?

_____

_____

— Which members of business, professional, or other groups might have ideas or views on the decision or planning effort involved?

_____

_____

As a group, examine and discuss the answers filled in above; then list below the community groups to be included in your survey.

Community Group

a. _____

b. _____

c. _____

d. _____

PLANNING SHEET 1 (Continued)

As a group, discuss the foregoing list. Are there any subgroups within any of these community groups that might be expected to have different views that would be relevant to your survey? (It may be helpful to refer to the list of community groups on page 1-6 before answering this question.)

	YES	NO

List relevant subgroups below.

_____

_____

List below the groups that do not need to be divided into subgroups.

_____

_____

Examine the above list to make sure that it includes all community groups to be included in your survey.

5. The information collected will be: _____

_____

_____

_____

Reminder: Before progressing to the next activity, prepare a final copy of this planning sheet. Be sure that your group feels satisfied that the scope of the survey is practical and that the purpose is worth achieving.

Also, assign at least one member of the survey staff to compile a master list of all the members of each community group included in your survey. The master list should provide the name, address, and telephone number of each person listed. See Appendix A for suggestions on how to prepare this list.

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Unit 2

Developing Questions

CONTENTS

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INTRODUCTION

The purpose of this unit is to develop the specific issue-related and demographic questions which you want to ask the community groups identified in your purpose statement.

DEVELOPING ISSUE-RELATED QUESTIONS

An approach to developing issue-related questions is illustrated in Figure 1.

```
Issue of Interest → Topics → Subtopics → Questions
```

Figure 1. An Approach to Developing Issue-Related Questions

This approach involves subdividing the issue of interest into topics of interest, breaking each topic down into subtopics, and then developing questions for each subtopic. This approach is useful because it helps survey group members to clarify what they want to ask questions about before they get involved in the details of how best to word their questions. When using this approach, you have the option of assigning different subtopics to different people. This section describes this approach in three parts: (1) developing subtopics, (2) developing questions, and (3) writing an open-ended and a closed question for each of the general questions developed. Each of these parts provides directions, examples, and planning sheets.

Developing Subtopics

To develop a list of subtopics, begin by reviewing the topics of interest in your purpose statement. For each of those topics, ask yourselves: On what aspects of this topic do we need information from members of the community?

For example, in the case of the Green School survey, the topics of interest related to the team teaching program were: school-day schedule, team organization, and curriculum. The example below shows the subtopics developed by the Green School staff as they discussed and refined their topics of interest. For instance, three subtopics have been developed for the topic school-day schedule: interteam activities schedule, length of school day, and opportunities for library use.

EXAMPLE – GREEN SCHOOL TOPICS AND SUBTOPICS

Issue of Interest: What changes are needed to improve the team teaching program?

Topic of Interest	Subtopics
1. School-day schedule	a. Interteam activities schedule
	b. Length of school day
	c. Opportunities for library use
2. Team organization	a. Mixed ability grouping
	b. Team approach to student evaluation
3. Curriculum	a. Reading program
	b. Homework assignments

Use Planning Sheet 1 on the following page to list topics and subtopics related to the issue of interest identified for your survey.

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PLANNING SHEET 1

Listing Topics and Subtopics

As a group, review and discuss your purpose statement: the issue of interest, the initial list of topics, the community groups included in the survey, and how the information collected will be used. Then, working as a group, list the subtopics staff members feel are related to the issue of interest and to each specific topic raised. *Test the usefulness of each topic or subtopic you list by asking the following questins: Why do we want to raise this topic? How will we use the information we obtain?* Make sure that each topic or subtopic listed is relatively clear-cut and explicit.

Issue of Interest: _____

_____

Topic of Interest   *Subtopics*

_____   _____

   _____

_____   _____

   _____

_____   _____

   _____

_____   _____

   _____

_____   _____

   _____

55 — *When you have completed this planning sheet, continue reading. Any subtopics added later should also be recorded on this planning sheet.*

Developing General Questions

With Planning Sheet 1 before you, your next task is to develop the general questions you want to ask about each of the subtopics listed. Usually, different subtopics are assigned to different members of the group in order to speed the completion of this task. When this approach is taken, individual members first write questions on one or more subtopics and then the whole group meets to review the questions developed and

decide which ones they wish to use. Of course, question development can also be accomplished as a group effort, if you prefer.

Whichever approach you select, keep in mind that the content of the questions is the most important consideration; the actual wording of each question will be decided at a later time.

The example below shows the general questions one staff member developed for the subtopic interteam activities schedule in the Green School survey.

**EXAMPLE – GENERAL QUESTIONS DEVELOPED
FOR A SPECIFIC SUBTOPIC**

Topic: School-day Schedule

Subtopic: Interteam activities schedule (Currently students in the team teaching program take part in interteam activities before and after school, i.e., between 8 and 9 a.m. and between 3 and 4 p.m.)

General
Question 1: Is the current schedule of interteam activities convenient?

General
Question 2: How important is it to extend this schedule so that students can participate in additional interteam activities? Why?

General
Question 3: If you could change the interteam activities schedule, what changes would you make?

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PLANNING SHEET 2

Developing General Questions

This planning sheet can be used for two purposes: (1) to develop general questions for each of the subtopics involved in your survey and (2) to summarize the results of the questions developed in your group review. As your group reviews each question, ask yourselves: *Will community response to this question provide information which will help us realize the purpose of our survey?*

Topic: _____

_____

Subtopic   General Question

_____   _____

                                                  _____

_____   _____

                                                  _____

                                                  _____

_____   _____

                                                  _____

_____   _____

                                                  _____

                                                  _____

5 7

The project director should have a completed copy of Planning Sheet 2 for each subtopic listed in your purpose statement to make sure that your group has developed general questions for all of the subtopics listed.

Deciding How to Refine
Your General Questions

To help you decide how to refine those general questions listed on Planning Sheet 2, this section briefly reviews the major types of questions, presents examples of each type, and provides a planning sheet for preparing questions.

Closed Questions

A closed question provides a set of possible responses. The person being questioned is instructed to make a choice of the most appropriate response. The number of responses provided for a given question may run from a simple choice between "yes" and "no" to a five-point or even seven-point scale. Often a catch-all response category is included which follows the list of specific responses provided. For yes-no response categories, the catch-all response category usually is "don't know." When a list of specific responses has been provided, a catch-all response category, usually "other," enables the person answering the question to make any other response he or she would like to give.

Closed questions are especially useful where alternative responses can be pre-determined, are limited in number, and are relatively clear-cut. They are most appropriate for securing either factual information or predictable expressions of opinion.

Closed questions are generally of two types: first, there are questions like "how much" (quantity), "how frequently," "how much in agreement," "how good" (quality), or "how important"; these can best be answered by responses based upon a continuous scale which indicates a gradual increase or decrease from one response category to the next. Second, there are questions involving "which one," "which type"; these are typically answered best by responses that indicate differences in kind. It is important to determine what kind of information you want to elicit before selecting the specific response categories for each question. Some examples of formats which can be used for closed questions are provided below and on the following pages.

EXAMPLES – CLOSED QUESTION FORMATS

I. Response Choices Based on Continuous Scales

A. Types of Three-Point Scale Responses

1. *Quantity:*	More	—	The Same	— Less
2. *Frequency:*	Always	—	Sometimes	— Never
3. *Quality:*	Excellent	—	Good	— Fair
4. *Importance:*	High Importance —	Medium Importance — Low Importance		
5. *Agreement:*	Agree	—	Undecided	— Disagree

Examples of questions:

How important do you think it is that:	High Importance	Medium Importance	Low Importance
a. Schools help students develop leadership abilities?	☐	☐	☐
b. Students develop the ability to analyze and criticize written and visual materials?	☐	☐	☐
c. Schools provide athletic programs for students not engaged in varsity athletics?	☐	☐	☐

B. Types of Four-Point Scale Responses

1. *Frequency:* Always — Often — Seldom — Never

2. *Agreement:* Strongly Agree — Agree — Disagree — Strongly Disagree

Examples of questions:

a. The work-study program should be expanded to include 10th grade students. SA A D SD

b. The current grading system should be changed. SA A D SD

C. Types of Five-Point Scale Responses

1. *Quantity:* A Great Deal — More than Average — Average — Less than Average — Very Little

2. *Frequency:* Always — Often — Sometimes — Seldom — Never

3. *Quality:* Excellent — Good — Acceptable — Fair — Poor

4. *Agreement:* Strongly Agree — Agree — Undecided — Disagree — Strongly Disagree

Examples of questions:

	Always	Often	Sometimes	Seldom	Never
a. How frequently do you attend school board meetings?	☐	☐	☐	☐	☐
b. How frequently do you attend parent-teacher organization meetings?	☐	☐	☐	☐	☐

II. Response Choices Involving Differences in Kind

A. Types of Two-Response Choices

1. *Affirmation/Denial:* Yes — No

2. *Which Program:* Mathematics — Language Arts

3. *Which Type:* Self-Contained — Open Space

Examples of Questions:

	Yes	*No*
a. On the whole, would you say that your child enjoys school?	☐	☐
b. Does your child study at home?	☐	☐

B. Types of Three-Response Choices

1. *Affirmation/Denial/Uncertainty:*	Yes	—	No	—	Don't Know
2. *Which Program:*	Mathematics	—	Language Arts	—	Social Studies
3. *Which Type:*	Self-Contained	—	Open Space	—	Other

Examples of Questions:

a. Which type of physical/organizational structure would you recommend for the new elementary school we are planning?

Self-Contained ☐
Open Space ☐
Other

Since closed questions offer the respondent a choice among two or more responses, they focus attention on the specific topic being discussed and provide specific data on particular topics. The answers do not have to be written out and the data processing required is relatively fast and inexpensive.

Closed questions do not provide the respondent's own formulation of a topic, information on the context from which the respondent perceives the topic, or the reasons for the opinions expressed. Responses thus may not provide an accurate alternative for a particular person. Also, since closed questions provide a limited number of responses, they may irritate those people who do not find an alternative which expresses their view.

Open-Ended Questions

Open-ended questions permit a free response, rather than one limited to the responses provided. The respondent is completely free to comment on any aspect of the topic of interest. Open-ended questions can be designed to obtain facts, opinions, or attitudes, as well as to probe for explanations of the responses given to previous questions.

Questions of this type are appropriate when the topic is complex, its dimensions are not clear-cut, and limited information exists on the kinds of answers specific questions are likely to elicit or when a broad range of responses is expected. They are especially useful when survey staff want to probe for more information related to a specific response.

Open-ended questions can be asked in several ways. For example, the questions below might be used to collect information on a work-study program.

I. The topic can be presented in a single question; then a follow-up question can be asked to elicit additional data:

A. What do you know about the high school work-study program?

B. Where did you get your information?

II. The topic can be introduced with one or two brief statements followed by questions based on the statements presented:

A. The work-study program has been under way for six months.

1. What do you like *most* about the program?

2. What do you like *least* about the program?

3. If you could change the work-study program, what changes would you make?

B. Currently, only 12th grade students participate in the work-study program, but younger students have asked to be included.

1. What do you think about offering this program to 11th grade students?

III. The question can be an incomplete statement which the respondent is asked to complete in his or her own words:

A. The students in the work-study program . . .

B. The benefits of the work-study program . . .

IV. The question can be divided into parts when multiple responses are likely.

Sometimes you may wish to obtain multiple responses to a particular question, such as naming three extracurricular activities you would like the school to provide. In a case like this, it is suggested that separate questions be asked. For example, ask: What extracurricular activity would you most like the school to provide? What other extracurricular activity should be provided? Is there a third extracurricular activity that you feel should be provided?

Open-ended questions permit the respondent to reply freely in terms of personal perceptions of the topic. Responses to these questions may suggest relationships not originally anticipated, and the length and quality of the answers can vary greatly from respondent to respondent. Thus, coding the responses to open-ended questions is a relatively complex and time-consuming task.

Closed Questions Followed by Open-Ended Questions

By asking a closed question which is immediately followed by an open-ended question that asks the respondent to elaborate on his or her answer, you can combine the advantages of both types of questions. Data processing is less complicated than it would be if only open-ended questions were asked, but freely expressed information can still be collected.

With this background on the types of questions which can be asked, your next task is to refine the wording of each general question listed on Planning Sheet 2. (Note: Further refinement of your questions may be needed when you prepare the data collection materials for your survey in performing Task 4.)

To perform this task, members of your group may want to divide the subtopics and related questions among themselves. Then, using copies of Planning Sheet 3, each group member should try to write an open-ended and a closed question for each of the general questions assigned. Open-ended questions are more generally used in interviews and group meetings, while closed questions are more generally used in mail questionnaires. In performing this task, you may find it difficult to word certain questions in both formats. In a case like this make a note of whatever difficulty you encountered as it may indicate that the general question should be reworded. It may also have implications for your choice of a data collection method when you work through Unit 3. After all of your general questions have been refined, the whole group may want to review the results to make sure that the purposes of the general questions have not been lost.

The example provided below shows the pair of open-ended and closed questions one staff member developed for a general question.

EXAMPLE — WRITING PAIRS OF ISSUE-RELATED QUESTIONS

Topic: School-day Schedule

Subtopic: Interteam activities schedule (Currently students in the team teaching program take part in interteam activities before and after school, i.e., between 8 and 9 a.m. and between 3 and 4 p.m.)

General Questions

1. Is the current schedule of interteam activities convenient?

Refined Questions

a. Open-ended question:

How convenient is the current interteam activities schedule?

b. Closed question:

The current interteam activities schedule is:

Very Convenient ☐

Convenient ☐

Not Convenient ☐

PLANNING SHEET 3

Writing Pairs of Issue-Related Questions

Use a copy of this planning sheet for each subtopic. Fill in the topic and subtopic at the top; then fill in the general questions to be used for this subtopic from the copy of Planning Sheet 2 completed by your group. Write an open-ended question and a closed question for each of the general questions listed. Discuss each pair of questions and make sure that the refined questions have the same purpose as the general questions on which they were based. Finally, circle the question preferred by the group.

*Topic:*_____   *Subtopic:*_____

General Questions   *Refined Questions*

_____   _____

                                       _____

                                       _____

_____   _____

                                       _____

_____   _____

                                       _____

                                       _____

_____   _____

                                       _____

DEVELOPING DEMOGRAPHIC QUESTIONS

In a community survey, demographic information is usually gathered for one of two purposes. First, such questions can be used to verify that a respondent does belong to the community group in which he or she has been listed as a member (frequently, you may find that respondents have changed groups or belong to more than one of the groups included in your survey). Second, such information can be used to determine whether the respondents' characteristics have any relationship to their answers to specific questions. For example, you may want to determine whether or not age or sex can be related to a person's answers to particular questions. Thus, if you are going to ask for any demographic information, you should be planning to use it in interpreting your data.

When demographic questions are asked, it is strongly suggested that they follow all of your issue-related questions, since some of them may raise sensitive topics (e.g., questions about the respondent's age).

Demographic information can be collected with either closed or open-ended questions. Where possible, closed questions should be used as the responses will be easier to process. Some examples of both kinds of demographic questions are provided below.

EXAMPLES — DEMOGRAPHIC QUESTIONS

I. Examples of Closed Demographic Questions

Sex	*Age*	*Education*
Male _____	20 to 29 years _____	High school incomplete _____
Female _____	30 to 39 years _____	High school graduate _____
	40 to 49 years _____	Technical, trade, or business school _____
	50 years or over _____	College incomplete _____
		College graduate _____
		Graduate school incomplete _____
		Graduate school degree _____

Years of Residence in the Community

0-5 _____	11-15 _____	21 or more _____
6-10 _____	16-20 _____	

Children

How many children do you have? Circle the appropriate number.

0   1   2   3   4   5   6   7   or more

Indicate the number of your children enrolled in each grade (if none, leave blank).

K _____   5 _____   9 _____
1 _____   6 _____   10 _____
2 _____   7 _____   11 _____
3 _____   8 _____   12 _____
4 _____

II. Examples of Open-Ended Demographic Questions

What is the date of your birth? _____

What is your occupation? _____

How many years have you lived in this community? _____

How many years of education have you completed? Include high school, college, graduate, technical, trade, or business school in your answer.

_____

How many children do you have? _____

What are the ages of your children? _____

In which school grades are your children enrolled? _____

PLANNING SHEET 4

Developing Demographic Questions

As a group, discuss and list below any demographic questions you may want to ask. Review this list in terms of the following questions: how will this demographic information help us in considering the issue of interest? and how can we use the information collected in processing and interpreting our data?

Question	How Responses Will be Used

Unit 3

Deciding on Sampling and Data Collection Method

CONTENTS

INTRODUCTION

In completing Unit 2, you prepared a list of questions to ask community members. At this point, you need to make two decisions: (1) should an attempt be made to collect information from all of the members of the community groups listed in your purpose statement or from a sample of those people; (2) should mail questionnaires, interviews (face-to-face or telephone), or group meetings be used to collect information.

This unit presents material to help you make these decisions. The first section provides an overview of the sampling question, the second describes the three data collection methods, and the last section presents a strategy for making these decisions.

SAMPLING

The people in a specific community group are referred to as the population. A sample is a group of people chosen to reflect the composition of that population (community group). Sampling is the process of selecting a group of people from a given population who will reflect the composition of that entire population. Sampling is usually used when you cannot afford the costs associated with gathering information from the entire population. In Appendix B, you will find a supplement which describes, in general terms, different ways to select a sample.

Assign at least one staff member to study Appendix B. This person will be able to advise the group on various sampling considerations as you work through Unit 3.

DATA COLLECTION METHODS

Three data collection methods — questionnaires, interviews, and group meetings — are briefly described in this section. The advantages, disadvantages, and some of the costs associated with each method are discussed.

Questionnaires

A questionnaire is a list of questions together with directions and examples illustrating how the questions could be answered. Most community survey questionnaires are sent to the respondents by mail, although in cases where parents are the respondents, the questionnaires can be sent home with the students. Questionnaires generally ask closed questions. However, sometimes these closed questions can be followed by open-ended questions.

Some advantages of using questionnaires include:

- A large number of respondents can be contacted simultaneously.

- Anonymity is possible with questionnaires.

- Questionnaires are usually the most economical data collection method.

Some disadvantages of using questionnaires include:

- People frequently do not complete or return the questionnaires.

- There is no opportunity to clarify the meaning of a question or a response.

- Completing a questionnaire requires both reading and writing skills.

The costs associated with mail questionnaires may include: time for staff to prepare, type, format, pre-test, and mail the questionnaire; monitor the questionnaires returned; follow up on unreturned questionnaires; code questionnaires and responses; and prepare data summaries. Other costs may include printing, postage, and automatic data processing, if a computer is used.

Interviews (Face-to-Face and Telephone)

An interview is a personalized method of collecting data over the telephone or in person. Any type of question can be used in an interview questionnaire, although the value of open-ended questions can best be exploited through this method. Since interviewing requires trained personnel and a substantial amount of time, this method is usually most practical when only a small number of respondents is involved.

Some advantages of the interview include:

● Most of the interviews scheduled are conducted.

● Answering interview questions does not require specific reading or writing skills.

● An interviewer can establish rapport with a respondent and strengthen his or her motivation to reply.

● An interviewer can clarify both questions and answers, if necessary.

Some disadvantages of conducting interviews include:

● Training is required to prepare the interviewers; recorded responses may reflect interviewer biases in spite of training.

● Interviewing is a relatively more time-consuming process than other data collection methods.

● Interviewing can be costly if the personnel conducting the interviews must be paid.

The costs associated with conducting interviews may include staff time to: prepare the letters of invitation and the interview questions; type, format, and pre-test the questionnaire; train interviewers; schedule interviews; conduct interviews; monitor the progress of interviews; code responses; and prepare data summaries. Other costs may include printing, telephone, and travel costs.

Group Meetings

Group meetings can be structured to collect information from participants as individuals, or in small groups. To insure that information is collected, record sheets are used. Any type of question can be asked, although open-ended questions are particularly useful for stimulating group discussion of an issue and exploration of alternatives.

Some advantages of conducting group meetings include:

● Participants are able to discuss multiple approaches to a problem or question.

● Participants can develop a better understanding of the reasons for particular decisions.

Some disadvantages of conducting group meetings include:

● All participants may not contribute.

● A skillful leader is needed to insure individual participation.

● Social pressures may influence the responses given.

● People are needed to record the data.

● The group process frequently makes it difficult to gather complete data or, in some instances, to keep the discussion focused on the agenda.

● The data collected may not accurately reflect the context in which the information was provided.

The costs associated with conducting group meetings may include staff time to: plan the meeting; prepare invitations, worksheets, and record sheets; type, format, and pre-test the materials; train group leaders and recorders; conduct the meeting; code responses; and prepare data summaries. Other costs may include printing, postage, and meeting facilities.

DECIDING WHETHER TO SAMPLE AND WHICH DATA COLLECTION METHOD TO USE

Your decisions on sampling and data collection method are not independent decisions. They affect each other and, in turn, are affected by a number of other factors. This section presents three of the most critical of these factors: (1) the importance of trying to involve all of the members of each community group included in your survey, (2) the questions you want to ask, and (3) the cost of the proposed survey. Some guidelines are provided in this section to help you consider these factors as you make your decisions about sampling and method. Planning sheets are also provided for your use in making these decisions.

This section is organized in three steps. In the first two steps, you will make your initial decisions regarding sampling and data collection method; then, in Step 3, you will reconsider these initial decisions in terms of cost.

Step 1: Decide How Important It Is to Try to Involve all Members of Each Community Group in Your Survey

Ideally, you might like to invite everyone to participate in your survey and to personally interview each person to obtain the information needed. In reality, you will seldom have the time and resources needed. In the first step, you should consider whether your survey is based upon an issue of such importance that you would like to disregard the constraints of time and money, and try to achieve the ideal. Consider the following questions:

a. *Is your issue of such importance that you want to include all of the members of each community group in your survey?* Use Planning Sheet 1 (page 3-7) as a guide in making this decision. Note: If you decide that your issue is so important that most group members should be included, you will need to determine whether or not you can afford such a survey (see Step 3). If it is not that important, you can consider sampling.

b. *Is your issue of such importance that you should conduct interviews — either face-to-face or telephone — to gather responses from each community group?* If it is, interviews would be the preferred data collection method for you to use. If not, you can consider using any of the three data collection methods. Record your initial decision on Planning Sheet 1 (page 3-7).

Step 2: Decide How Appropriate Your Preferred Data Collection Method Is for the Purpose of Your Survey

In this step, critically examine each data collection method in light of the purpose of your survey and the specific questions you have developed. Which of those methods would be best for your survey? To answer this question, review the discussion of the three data collection methods presented earlier in this unit. Remember:

- Interviews can be used to ask any type of question but they are particularly suitable for asking open-ended questions which may require the use of probes to obtain complete responses.

- Mail questionnaires generally use closed questions, although sometimes the closed questions are followed by related open-ended questions.

- Group meetings can be used to ask any type of question although open-ended questions are particularly useful for stimulating group discussion of an issue and exploration of alternatives.

After examining the appropriateness of each data collection method for asking the questions you have developed, use Planning Sheet 1 to indicate which method you find most appropriate. If possible, numerically rank the other two methods to indicate their relative appropriateness for your questions.

PLANNING SHEET 1

Initial Sampling and Data Collection Method Decisions

Use this planning sheet to record your decisions about sampling and data collection method made during Steps 1 and 2 and to reconcile any differences in method suggested by those decisions.

Step 1: Initial Decisions Regarding Community Involvement

a. Is your issue of such importance that you want to include all members of this group?

To make this decision, list the community groups included in your survey on the chart below. Then note the size of each group (this information should be available from the staff members who in Unit 1 were asked to study Appendix A and prepare master lists). Now, indicate whether or not you want to include all members of each community group in your survey. In cases where you answer is "no", you will need to decide how large a sample you want to select. Consult the staff member who was assigned to study Appendix B.

Community Group	Size*	Is your issue of such importance that you want to include all of the members of this group?		If no, note sample size
		Yes	No	
Total				

b. Indicate below whether or not your issue is of such importance that interviews should be conducted to gather information.

Yes ☐   No ☐

*This information will be needed in order to estimate survey costs in performing Step 3.

PLANNING SHEET 1 (Continued)

Step 2: Initial Decision Regarding Appropriateness of Method

Keeping in mind the purpose of your survey, the specific questions you want to ask, and the discussion of the three data collection methods presented earlier in this unit, place a "1" next to the data collection method which you feel would be most appropriate for your survey and note the reasons for your choice. If possible, numerically rank the other two methods to indicate their relative appropriateness.

Method	Ranking
Questionnaire	
Interview	
Group Meeting	

Reasons for Initial Choice

If in completing Step 1 you indicated that interviews should be conducted, but in performing Step 2 you decided that another method is preferred, review both steps from the perspectives suggested and determine which of the alternative methods you prefer. Note your preference below.

Preferred Method	Reasons for Preference

Step 3: Consider the Cost Implications of Your Initial Decisions

In completing Steps 1 and 2, you decided whether or not to consider sampling and noted which data collection method would be most appropriate for the questions you want to ask. At this point, you should consider whether or not you can afford to implement your initial decisions.

The chart below suggests the kinds of costs which may be incurred during a community survey, whichever data collection method is used. It suggests that you consider survey costs in terms of three activities: developing materials, collecting data, and processing the data.

	Developing Materials	Collecting Data	Processing Data
Personnel			
1. Survey Staff	Develop materials	Depends on data collection method	Code and summarize data
2. Clerical Staff	Type and format materials	Depends on data collection method	Type data summary and report
3. Experts or Consultants	Review materials	Train interviewers or group meeting leaders	Assist in designing ways to summarize data and in reviewing interpretations of data
Production of Materials	Duplicate sufficient copies of data collection materials		Duplicate coding sheets for summarizing data
Communications/Travel			
1. Telephone		For telephone interviews	
2. Postage		For letters and questionnaires	
3. Travel		For interviewers	
Other		Facilities for group meetings	Computer services

To be more specific:

1. Developing materials primarily requires funds to cover people's time and production costs:

   • The project staff time in preparing the materials.

   • Secretarial time in typing and formatting the materials.

   • Possibly, the time of an expert to review the materials.

   • Production costs include sufficient materials for the people being surveyed, together with enough extra copies for following up nonrespondents.

The costs of developing materials do not vary greatly from one data collection method to another; they are affected, however, by the scope and complexity of the survey.

2. Collecting data involves two basic types of costs:

   • Staff time will vary by data collection method. Questionnaires require staff time to mail the survey materials, monitor the returns and, if necessary, follow up any nonrespondents. Interviews require staff time for training on how to interview, for scheduling and conducting the interviews, and for monitoring the progress of the interviews. Group meetings require staff time to mail letters of invitation and monitor returns, participate in training for the roles staff are to play during the meeting, conduct the meeting, and organize data after the meeting.

   • Communication and travel costs will also vary by method. Questionnaires require postage for mailing and for returning. Interviews may involve mailing letters of invitation, telephone calls to schedule the interviews, and travel costs for the interviewers. Group meetings may involve letters of invitation and followup telephone calls. Both interviews and group meetings involve mailing thank you letters to the participants; questionnaires do not involve such letters if they are anonymous.

3. Processing data involves primarily the cost of staff time to code the responses, summarize the data, and prepare the survey report. Experts may be called on to help with these tasks. The cost of processing the data depends in part on the types of questions asked. The responses to closed questions take less time to code than the responses to open-ended questions. Other costs may involve the duplication of coding sheets and computer services.

* * *

To gain a more detailed understanding of the costs outlined above, you may wish to glance through Units 4, 5, 6, and 7 before preparing a cost estimate for your survey.

PLANNING SHEET 2A
Estimating Survey Costs

Use a copy of the chart below to estimate the funds needed for your survey. Note at the top of this sheet the data collection method you prefer and the total number of people you want to survey. (This information can be taken directly from Planning Sheet 1.)

Preferred Method _____   Desired Number of Participants _____

	Developing Materials	Collecting Data	Processing Data	Total
Personnel				
1. Survey Staff				
2. Clerical Staff				
3. Experts or Consultants				
Production of Materials			—	
Communication/Travel				
1. Telephone				
2. Postage				
3. Travel				
Other				
Totals				

If you can afford to implement your initial decisions, turn to Unit 4. If not, turn to the following page and work through Step 4 which suggests various ways of reducing costs and provides another copy of this planning sheet which you can use to re-estimate your survey costs.

Step 4 (Optional): Reduce Estimated Costs

There are four general ways to reduce your cost estimates. These alternatives are outlined below; check the cost cutting measures that you consider practical.

☐ *Consider sampling.* One way to reduce costs is to reduce the number of people included in your survey. For example, instead of inviting everyone to participate, consider selecting a sample. If you have already decided to draw a sample, consider reducing the size of that sample (see Appendix B).

☐ *Consider using a different method.* If you were planning to conduct face-to-face interviews, consider using telephone interviews. If you were planning to conduct interviews or group meetings, consider using mail questionnaires.

☐ *Modify the questions to be asked.* A survey involving a small number of questions saves staff time as well as printing and data processing costs. Similarly, using closed questions rather than open-ended questions can reduce data processing costs.

☐ *Reduce other costs.* For example: use volunteers instead of paid personnel; use less expensive paper for your data collection materials; use a less costly class of postage.

As a group, discuss the possibilities various group members have checked and reconsider your Step 1 and Step 2 decisions in deciding how best to reduce the costs of your survey. After deciding how your costs can be reduced, use the copy of Planning Sheet 2 on the following page to revise your original cost estimates.

PLANNING SHEET 2B
Re-Estimating Survey Costs

Use a copy of the chart below to estimate the funds needed for your survey. Note at the top of this sheet the data collection method you prefer and the total number of people you want to survey.

Preferred Method _____   Desired Number of Participants _____

	Developing Materials	Collecting Data	Processing Data	Total
Personnel				
1. Survey Staff				
2. Clerical Staff				
3. Experts or Consultants				
Production of Materials				
Communication/Travel				
1. Telephone				
2. Postage				
3. Travel				
Other				
Totals				

Now, having considered all cost factors, turn to the planning sheet on the following page and record your final decisions on sampling and data collection method for each community group included in your survey.

PLANNING SHEET 3

Recording Your Final Decisions on Sampling and Data Collection Method

Record your final decisions on sampling and data collection method below.

Community Group	Data Collection Method	Sampling*		Number of People To Be Surveyed
		Yes	No	

*In cases where you have decided to draw a sample, you can use the master list as the total population from which the sample will be drawn. The member of the survey staff who studied Appendix B should draw any samples needed and prepare a list of the people included in each sample.

Unit 4

Developing Data Collection Materials

CONTENTS

INTRODUCTION

You now have a set of questions and you have decided whether or not to sample and which data collection method to use for each community group. This unit provides guidelines on developing data collection materials. It is organized into three sections:

Each section includes a brief introduction to the method, examples of data collection materials, and guidelines for editing, formatting, pre-testing, revising, and duplicating such materials. Each section is complete in itself — if you read the information presented on more than one data collection method, you will note some repetition.

If you have not had any experience in developing data collection materials, you may want to obtain some technical help. This help may be in the form of an expert who works through this unit with you, or it may simply be an expert's review of the materials you develop.

MAIL QUESTIONNAIRES

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INTRODUCTION

Although a questionnaire can be distributed to respondents in a number of ways, it is usually thought of as a "mail questionnaire."

Since a questionnaire is, in essence, a self-contained instrument, its effectiveness is solely dependent on the clarity and logic of the directions and the cooperation of the respondents. Most effective questionnaires include directions for answering the questions, some examples of questions which have been answered, and the actual questions respondents are expected to answer.

To encourage the respondents to cooperate, your questionnaire should be accompanied by a covering letter or statement explaining the purpose of the survey and the importance of the respondent's assistance. Consider including the following kinds of information in such a letter:

1. The name and address of the school/district conducting the survey.

2. Introductory remarks (the purpose of the survey and how the data will be used).

3. The importance of the respondent's role in the survey.

4. An indication that all responses will be confidential or anonymous and that they will be summarized so that individual respondents cannot be identified.

6. A reasonable time limit for returning the questionnaire — perhaps a week to ten days.

7. An indication that the community may receive more information about the survey in the local newspaper or school district bulletin. You might also want to include a telephone number for use by any respondents who want more information on the survey.

A postage-paid return envelope should be enclosed which respondents can use to return their completed questionnaires.

An example of a covering letter that includes some of the points mentioned above is supplied on the following page.

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EXAMPLE OF A COVER LETTER

Name and address of the district and/or school conducting the survey. →

MAIN TOWNSHIP SCHOOL DISTRICT

Harris High School
120 South Main Street
Newtown, Massachusetts

October 6, 1975

Respondent's impor-tance and introduc-tory remarks (purpose of the survey and how the information will be used) →

Dear Community Member:

Harris High School is eager to learn what you think about many aspects of our school. We hope your responses on the enclosed questionnaire will express your particular concerns and will lead to a better relationship between school and community. Our hope is that your responses will help us to improve Harris High School.

Indication that re-sponses will be confidential →

Your answers will be completely confidential and you will not be identified by name in any report on this survey.

Estimate of time required and date questionnaire should be returned →

We hope you will be able to complete this questionnaire (it takes approximately 15 minutes to fill out) and return it to us in the enclosed envelope by October 13th. We appreci-ate your willingness to respond to this questionnaire and hope you will share your opinions with us so that decisions about Harris High School can better reflect the viewpoints of parents and other community members.

Sincerely,

John S Roberts

John S. Roberts, Assistant Principal
and Project Director

In this example, confidentiality was promised to all respondents. Code numbers can be assigned to the questionnaires to maintain confidentiality while enabling survey staff to identify and follow-up nonrespondents. In cases where survey staff may want the questionnaires to be completely anonymous, code numbers would not be used.

Examples based on questionnaires actually used in community surveys are provided below and on the following page. The first example is a one-page, single question form which was used in a survey conducted in the Alberson School District. Note the brief introductory statement and the directions. Also note that the return of the questionnaire was simplified by supplying a return envelope.

EXAMPLE OF A ONE-PAGE QUESTIONNAIRE

ALBERSON SCHOOL DISTRICT

Community Survey

October 20, 1975

Dear Parent:

As you know, changes in student enrollment figures have made it necessary to revise the transportation schedule and school opening time for the Westside School. Community members who attended the meeting at the Westside School on October 10 discussed various possible schedule revisions. The following suggestions for a new school opening time were made. Will you please indicate your first, second, and third choices below:

Westside School

8:00 _____

8:15 _____

8:30 _____

Using the stamped envelope enclosed, please return this form to the Westside School by November 1. Many thanks.

Mary Hyatt

Mary Hyatt
Survey Director

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The second example shows one page from a mail questionnaire used in a survey conducted by the Berson School. Note the instructions to the respondent, the clarifying example, the questions and response formats, and the instructions for returning the questionnaire. Also note the punchcard numbers on the right-hand side of the example; these were added to facilitate automatic data processing.

EXAMPLE SHOWING ONE PAGE FROM A QUESTIONNAIRE

Instructions for responding to questions ➡

Read the statements below and check the space on the right to indicate how important you think each goal is. Your answers will be completely anonymous; therefore, you need not put your name on this questionnaire.

Example:	High Importance	Medium Importance	Low Importance
GOAL			
The student should be able to listen, speak, read, and write.	X	___	___

GOALS	High Importance	Medium Importance	Low Importance
The student should . . .			
have the knowledge and skills needed to obtain employment.	___	___	___	6
be prepared to enter college.	___	___	___	7
develop critical thinking abilities.	___	___	___	8
be able to converse in a foreign language.	___	___	___	9
use leisure time wisely.	___	___	___	10
develop respect for self and others.	___	___	___	11
respect the property of others.	___	___	___	12
participate in community service activities.	___	___	___	13
understand our system of government.	___	___	___	14

Instructions for returning the questionnaire ➡

When you have completed this questionnaire, please use the stamped envelope enclosed to return it to the Berson School. Please return the questionnaire by November 1. Thank you.

Punch card column numbers for responses to closed questions to facilitate automatic data processing.

GUIDELINES FOR EDITING AND REVISING QUESTIONS

In completing Unit 2, you developed a list of questions you wanted to ask members of the community groups included in your survey. Before using your questions, it is suggested that you edit and revise them in accordance with the guidelines provided below.

Question Content

1. Is this question needed? Is the point explored in this question already covered by other questions?

2. Does this question cover too many points? If so, can it be rewritten as two or more questions?

3. Is this question concrete enough? Can it be more directly related to the respondents' personal experience? Do respondents have the knowledge and/or experience needed to answer this question?

Question Wording

1. Is this question simple, understandable, and as brief as possible?

2. Is this question unbiased — is it presented in a neutral way so that neither positive nor negative answers are suggested? Or, is the wording of this question likely to be objectionable in any way to the respondents?

3. Can any of the open-ended questions be easily answered with such responses as "yes," "no," or "don't know"? If so, such questions should be rewritten.

4. Does the wording of the open-ended questions allow respondents complete freedom to respond?

5. If any closed questions are being asked, have the most appropriate kinds of response categories been provided for them? Are the response formats understandable, specific, and adequate?

FORMATTING A QUESTIONNAIRE

1. Choose a layout and typography which make the questionnaire easy to read and to complete. Ideas on the format can be obtained by studying examples of effective questionnaires and from school district personnel who are familiar with graphics and printed materials.

2. Group the questions by subtopic and arrange them on enough pages to allow easy reading.

   a. The questionnaire should appear easy to complete. This can be accomplished by requiring very little writing by the respondent and/or by arranging the various items so that the questionnaire does not seem crowded.

   b. Spacing and indentation should be uniform. Be consistent in lining up the numbers, questions, and response spaces (boxes, scale items, blank lines). Provide sufficient space for the responses to open-ended questions.

   c. Consider using headings or transitional sentences to indicate change in topic.

   d. Provide space at the end of the questionnaire for any additional comments the respondent may wish to make.

   e. Make sure that every question has a number and that the questions are numbered consecutively.

   f. If you intend to have the responses to questions machine-processed, ask someone familiar with computers to help format the questionnaire to facilitate key punching.

PRE-TESTING A QUESTIONNAIRE

Pre-testing a questionnaire is essential. Information obtained from the pre-test should provide answers to the following questions: Are the directions clear? Are the questions clear or should some

questions be revised? Is enough room provided on the questionnaire for the answers? How long does it take to complete the questionnaire? The following pre-test procedures are suggested:

1. Pre-test the questionnaire with five to ten members of the community group included in your survey. These people should not participate as respondents when information is collected at a later time.

2. After each part·: pant completes the questionnaire, he or she should be asked to discuss any changes needed in the directions or the questions.

3. Analyze the comple:ed questionnaires and the respondents' comments to identify any revisions that should be made.

4. Give the pre-test questionnaires to the personnel in charge of whatever data processing is planned. Pre-test data can help you check the adequacy of the procedures you intend to use to process the data.

5. Estimate the amount of time needed to fill out the questionnaire to be sure that it does not take too long.

PREPARATION OF FINAL MATERIALS

Revision

Revise your questionnaire in accordance with pre-test findings. If extensive changes are made, the revised questionnaire should also be tested.

Duplicating

Check the master list or the sample drawn for each community group to see how many people are included in the project. Then, meet with the person in charge of duplicating the questionnaire and make a final decision concerning printing or xeroxing. Have extra copies of the questionnaire made for follow-up use, public relations, and documentation. You may want to include a copy of the questionnaire in your report on the survey.

Now, using the information presented above, take the issue-related and demographic questions you developed in Unit 2 and arrange them in an appropriate format for a questionnaire; then pre-test, revise, and duplicate the questionnaire for your survey.

INTERVIEWS

INTRODUCTION

Interviews can be conducted in two ways: face-to-face or by telephone. Both approaches are basically the same except for the eye contact possible in a face-to-face interview. The discussions in this section are based on the general principles that are common to both approaches. Some suggestions on initiating telephone interviews will be provided later.

To encourage people to participate, a letter should be sent out which explains the purpose of the survey and the importance of community participation. Consider including the following kinds of information in such a letter.

1. The name and address of the school/district conducting the survey.

2. Introductory remarks (the purpose of the survey and how the data will be used).

3. The importance of community participation in the survey.

4. An estimate of the time required for the interview.

5. An indication that all responses will be confidential.

6. An indication that the community may receive more information about the survey in the local newspaper or school district bulletin. You might also want to include a telephone number for use by anyone who wants more information on the survey.

The letter should also indicate that someone will contact the recipient to schedule the interview at a convenient time. An example of a letter used to invite people to participate in an interview is provided on the following page. The letter includes some of the points mentioned above.

EXAMPLE OF AN INVITATION

Name and address of the district and/or school conducting the survey.

Purpose of the survey and community participation planned

Invitation to participate and indication that an interview will be scheduled

Indication that responses will be confidential

MAIN TOWNSHIP SCHOOL DISTRICT
110 Walnut Boulevard, Main Township, Maryland
301-212-6700

October 1, 1975

Dear Mrs. Backer:

We have decided to attempt to identify the mo. important problems of violence and disruption in Hood High School in terms of the perceptions of parents, students, and school staff and to collect suggestions from members of these groups on possible solutions.

To this end, a series of interviews are being planned with the parents of Hood High School students. We hope that you will participate in this survey. Accordingly, we have asked Pat Jones, one of the parents who has volunteered to help with this survey, to contact you and schedule a convenient time to interview you during the next two weeks. It should take no more than 30 minutes to complete this interview.

Please be assured that all information gathered in this survey will be confidential.

Your assistance will be very useful in helping us improve the situation in Hood High School. Thank you for your cooperation.

Sincerely yours,

John C. Mully

John C. Mully
Superintendent

The effectiveness of an interview depends on the ability of the interviewer to establish and maintain rapport with the respondent, the clarity of the questions and instructions included on the interview questionnaire, and the cooperation of the respondent.

An interview is a personalized approach to gathering information. A skilled interviewer is able to establish rapport by setting the respondent at ease. Usually, this is accomplished by having the interviewer present the background and the purpose of the interview. The interviewer then tries to create and maintain an attitude that is neutral yet friendly to encourage the respondent to share information and confidences with a stranger. The respondent should be made to feel that he or she is sharing information, attitudes, feelings, and beliefs with someone who is interested and who understands. An effective interviewer can facilitate this rapport with well-timed yet neutral comments such as, "uh huh," "I see," or "I understand." The interviewer must be an interested listener because if the respondent senses any disinterest, boredom,

or irritation, he or she may lose any sense of importance that might have been associated with the experience, resulting in low quality responses or even in the termination of the interview. If the respondent attempts to terminate the interview before it has been completed, the interviewer might say, "I have just a few more questions." If this approach is not effective, the interviewer might offer to schedule more time later or to call back at a more convenient time to complete the interview.

The questions the interviewer asks and the instructions provided for the interviewer on the questionnaire must be clear and straightforward. Often, however, the interviewer can be given a degree of latitude to clarify and interpret questions or even to change the sequence and the wording of the questions. The ground rules for making such changes should be based on pre-test results and the advice of any experts consulted.

An example of instructions for interviewers is provided below.

INSTRUCTIONS FOR INTERVIEWERS

When introducing the interview—

- Be brief, casual, and positive. Introduce yourself and explain the purpose of the survey: "Good morning. I'm Pat Jones. As you know we are working on a project concerning innovations in school programs. We would like to get a few of your ideas. For instance, . . ." and read the first question.

- Answer any questions the respondent may have — how he or she was selected for the interview, more detailed information on the survey.

- Indicate that the interview is not a test — there are no right or wrong answers.

When asking the questions—

- Follow the instructions written next to the questions. Ask each question exactly as it is worded.

- If the respondent indicates that a question is unclear, repeat the question slowly and with proper emphasis. If the respondent still has difficulty understanding the question, reword the question slightly and record any changes made in the wording of a question next to that question. Ask every question unless the instructions indicate that certain items can be skipped.

- Spaced periods (. . .) indicate places where you should pause when you are asking the questions.

- Underlined words should be stressed when you are asking the questions.

When obtaining the responses—

- Be friendly and courteous; do not express personal reactions to the respondent's replies.

- If the respondent's reply is too general, vague, or incomplete, ask neutral follow-up questions to obtain a more complete response. Note all follow-up questions asked on the interview questionnaire.

When recording the responses—

- If time permits and the respondents agree, interviews can be tape recorded.

- For closed questions, circle or check the answer that comes closest to the respondent's reply. Record the responses to open-ended questions *accurately* as the respondent is speaking, omitting "an," "the," "you know," etc. It is perfectly acceptable to ask the respondent to wait until the response has been recorded.

After completing the interview—

- As soon as each interview has been completed and before the respondent leaves, check the questionnaire for legibility, accuracy, and completeness.

- Return the completed interview questionnaires to Mary Hyatt, Project Director.

Initiating Telephone Interviews

A telephone interviewer should begin with a confident request for the respondent's assistance: 'Mrs. Jones, I am calling on behalf of the Chelten Hills Schools and need about five minutes of your time." This direct request for cooperation is usually effective. If the respondent is hesitant the interviewer can add, "We need to have your opinion; will you help?" If the respondent expresses further hesitancy or outright refusal, the interviewer might say, "If another time would be more convenient for you, I can call back. When would be a good time?"

* * * * *

On the following two pages there is an example of a page from an interview questionnaire.

EXAMPLE OF A PAGE FROM AN INTERVIEW QUESTIONNAIRE

Spaced periods indicate that interviewer should pause. →

11. In your opinion . . . in what ways are the Main Township public schools particularly effective?

36 - 37 42 - 43
☐☐ ☐☐

38 - 39 44 - 45
☐☐ ☐☐

40 - 41
☐☐

Underline indicates that interviewer should stress key words. →

_____
_____
_____
_____
_____
_____
_____

Sufficient space for recording the response. →

_____
_____
_____
_____
_____
_____
_____

Space around question where interviewer can record any changes made in the wording of the question. →

12. What information would you like to receive about the Main Township public schools?

46 - 47 52 - 53
☐☐ ☐☐

48 - 49 54 - 55
☐☐ ☐☐

50 - 51
☐☐

_____
_____
_____
_____

Instructions for the interviewer →

┌─────────┐
│ PROBE │
└─────────┘

Why? _____
_____
_____
_____
_____

Punch card column numbers for categories of responses to open-ended question to facilitate automatic data processing.

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IF RESPONDENT HAS CHILDREN IN SCHOOL AS
DETERMINED FROM QQ. 1 and 2, ASK Q. 13, OTHER-
WISE SKIP TO Q. 16.

13. Did you attend the PTA meeting last September where
the topic was how parents could increase the interest of
their children in their school work?

INTERVIEWER CIRCLE 1 or 2	YES	1
	NO	2

IF RESPONDENT ANSWERS "YES" TO Q. 13, ASK Q. 14.
OTHERWISE SKIP TO Q. 16.

14. Have you tried any of the methods suggested?

INTERVIEWER CIRCLE 1 or 2	YES	1
	NO	2

IF RESPONDENT ANSWERS "YES" TO Q. 14, ASK Q. 15.
OTHE. VISE SKIP TO Q. 16.

15. Which ones? _____

_____

Did they make any difference? _____

_____

```
56 - 57        62 - 63
[    |    ]     [    |    ]

58 - 59        64 - 65
[    |    ]     [    |    ]

60 - 61
[    |    ]
```

16. People have different reasons for wanting their children
to get an education. What are the chief reasons that
come to your mind?

INTERVIEWER: Circle the numbers that most closely correspond to the respondent's reply or write the response under "Other."	To get better jobs	1
	To get along better with people at all levels of society	2
	To make more money— achieve financial success	3
	To elevate social status	4
	To attain self-satisfaction	5
	To stimulate their minds	6
	Other (SPECIFY): _____	7

```
66 - 67        70 - 71
[    |    ]     [    |    ]

68 - 69        72
[    |    ]     [    ]
```
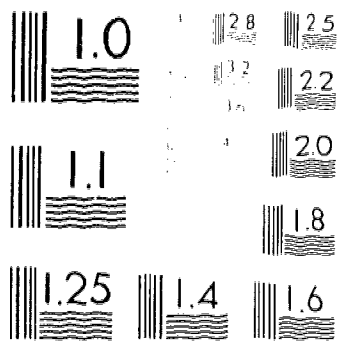
GUIDELINES FOR EDITING AND REVISING QUESTIONS

In completing Unit 2, you developed a list of questions you wanted to ask members of the community groups included in the survey. Any type of question can be used in an interview questionnaire, although the value of open-ended questions can best be exploited through this method. Before organizing your questions into an interview questionnaire, it is suggested that you edit and revise them in accordance with the guidelines provided below.

Question Content

1. Is this question needed? Is the point explored in this question already covered by other questions?

2. Does this question cover too many points? If so, can it be rewritten as two or more questions?

3. Is this question concrete enough? Can it be more directly related to the respondents' personal experience? Do respondents have the knowledge and/or experience needed to answer this question?

Question Wording

1. Is this question simple, understandable, and as brief as possible?

2. Is this question unbiased — is it presented in a neutral way so that neither positive nor negative answers are suggested? Or is the wording of this question likely to be objectionable in any way to the respondents?

3. Can any of the open-ended questions be easily answered with such responses as "yes," "no," or "don't know"? If so, such questions should be rewritten.

4. Does the wording of the open-ended questions allow respondents complete freedom to respond?

5. If any closed questions are being asked, have the most appropriate kinds of response categories been provided for them? Are the response formats understandable, specific, and adequate?

FORMATTING AN INTERVIEW QUESTIONNAIRE

1. Choose a layout and typography which make the questionnaire easy to read and to complete. Ideas on the format can be obtained by studying examples of effective interview questionnaires and from school personnel who are familiar with graphics and printed materials.

2. Provide space on the cover or on the first page for any information the interviewer is to convey to the respondents or record. This information may include:

   a. The name of the school or district conducting the survey.

   b. The purpose of the survey.

   c. Identifying information to be included: name of interviewer, date and time of the interview, and the name of the respondent —if necessary. If the respondent's name is needed, explain that the information collected will be summarized and that all information will be confidential.

3. Group the questions by subtopic and arrange them on enough pages to allow easy reading.

   a. Do not crowd the items on each page. Spacing and indentation of questions should be uniform. Be consistent in lining up the numbers, questions, and response spaces (i.e., boxes, scale items, blank lines). Provide sufficient space for recording the responses to open-ended questions.

   b. Always allow space around each question where the interviewer can record any changes made in the wording of the question.

c. Use symbols to highlight any special instructions for the interviewer on asking the questions.

- For example, if you wish the interviewer to pause at certain points in a particular question, insert spaced periods at those points: "On the whole . . . what do you think of the proposed work-study program?"

- If you wish the interviewer to stress key words in a question, underline the words to be emphasized—e.g., "Would you like to have more time with the teacher, less time, or about as much time as you do now?"

d. As you arrange each question on the page, consider whether or not it is suitable for probing.

- If the question is related to a topic which you wish to explore in some depth, provide adequate space to record the response. For example,

---

1. What benefits do you think students will obtain from the work-study program?

_____

_____

_____

2. PROBE: Could you tell me a little more?

_____

_____

_____

---

e. Provide specific, boxed instructions for the interviewer on how to record the responses to closed questions. For example,

---

3. Would you prefer having student trainees in your office in the morning or in the afternoon?

INTERVIEWER CHECK ONE

□ Morning   □ Afternoon   □ Either Time

---

f. Consider using headings or transitional sentences to indicate a change in topic or type of question.

g. Make sure that every question has a number and that the questions are numbered consecutively.

h. Provide space at the end of the questionnaire where the interviewer can record any additional comments the respondent may wish to make.

i. If you intend to have the responses to questions machine-processed, ask someone familiar with computers to help format the questionnaire to facilitate key punching.

PRE-TESTING AN INTERVIEW QUESTIONNAIRE

Pre-testing an interview questionnaire is essential. Information obtained from the pre-test should provide answers to the following questions: Does the questionnaire provide sufficient guidance to enable the interviewer to obtain and record complete responses? Are the questions clear or should some of the questions be revised? Is enough room provided on the questionnaire to record the responses given? How long will it take to conduct

each interview? The following pre-test procedures are suggested:

1. Conduct practice interviews:

   Have one or two interviewers interview a couple of respondents individually and complete the questionnaires. Respondents in the pre-test should be members of the community groups included in the survey; however, they should not be interviewed in the actual survey.

   If you are pre-testing the questionnaire for a telephone interview, the interviewer and the respondent should be separated by a partition or screen to simulate voice contact only.

2. Observe the practice interviews:

   A third person should observe each interview. For each question, the observer should record what actually happens during the practice interview—what the interviewer says and what the respondent says. The observer's notes should include any changes the interviewer makes to facilitate data collection. The comments of the interviewer and the observer will be used to determine what revisions are needed in the questionnaire.

3. Tape record the interviews for later analysis, if possible:

   Transcribing and listening to pre-test tapes are high cost activities. The tapes should be used to clarify any unclear portions of the observer's notes.

4. Critique the practice interviews:

   Analyze the completed questionnaires, the observers' reports, and the tapes to identify any revisions that should be made in the questionnaire.

   a. Instructions should help the interviewer to ask each question and to obtain and record a complete and accurate response.

   b. The questions (content, wording) should be clear and easy to answer, they should also elicit the information needed. Make sure that the response choices provided for closed questions are adequate and that enough space has been provided to record the responses to open-ended questions.

5. Give the observer's notes and the pre-test questionnaires to the personnel in charge of whatever data processing is planned. Pre-test data can help you check the adequacy of the procedures you intend to use to process the data.

6. Estimate the amount of time needed to conduct each interview.

PREPARATION OF FINAL MATERIALS

Revision

Revise your interview questionnaire in accordance with pre-test findings. If extensive changes are made, the revised questionnaire should also be tested.

Duplicating

Check the master list or the sample drawn for each community group to see how many people are included in the project and meet with the person in charge of duplicating the interview questionnaire. Make a final decision concerning printing or xeroxing. Have extra copies of the questionnaire made in case the interviewers want to recopy responses onto a clean questionnaire, use them for public relations or for documentation. You may want to include a copy of the questionnaire in your report on the survey.

Now, using the information presented above, take the issue-related and demographic questions you developed in Unit 2 and arrange them in an appropriate format for an interview questionnaire; then pre-test, revise, and duplicate the interview questionnaire for your survey.

If you also plan to conduct group meetings to collect data, continue reading. Otherwise, you have completed Unit 4.

GROUP MEETINGS

1

INTRODUCTION

Group meetings provide an opportunity for discussion among the participants so that they can cover many dimensions of an issue as well as develop individual and group judgments about problems and potential solutions. The effectiveness of a group meeting depends on the activities planned and the materials developed for the participants. Group meeting materials can be designed to structure the flow of activities in both large and small group settings and to ensure a record of individual as well as group positions on the issues.

The group leader plays an important role since in any group meeting interaction occurs among the members of the group and between the members and the leader; therefore, the leader's actions and comments influence the information gathering process. He or she should introduce each activity, encourage participation, listen attentively, ask questions to help group members clarify their comments, and make it clear that every group member is a potential source of information, a person with knowledge, skills, and attitudes that are important. At the same time, however, the leader will need to exercise some control over the discussion to keep it focused on the issue at hand and, as the discussion proceeds, to coordinate, clarify, and summarize the participants' comments.

To encourage people to participate, a letter should be sent out which explains the purpose of the survey and the importance of community participation. Consider including the following kinds of information in such a letter:

1. The name and address of the school/district conducting the survey.

2. Introductory remarks (the purpose of the survey and how the data will be used).

3. The importance of community participation in the survey.

4. The time and location of the meeting.

5. An estimate of the time required to participate in the group meeting.

6. An indication that the community may receive more information about the survey in the local newspaper or school district bulletin. You might also want to include a telephone number for use by anyone who wants more information on the survey.

A postage-paid return postcard should be enclosed with the invitation so that recipients can indicate whether or not they plan to attend. An example of a letter of invitation for a group meeting that includes some of the points mentioned above is provided on the following page.

EXAMPLE OF AN INVITATION

Name and address of the district and/or school conducting the survey →

SOUTHERN TOWNSHIP SCHOOL DISTRICT
23 Post Road, Southern Township, Ohio
216-309-7100

October 1, 1975

Dear Parents:

Purpose of the survey and community partici- pation planned →

Violence and disruption are getting out of hand in Hood High School. We feel that the perceptions of parents, students, and school staff could help us cope with this serious problem.

Information on the group meeting →

To this end, a group meeting including people from these three groups has been scheduled for Thursday, October 30, at 8:00 p.m. in Hawthorn Hall at Hood High School, 330 Summer Street. This meeting will last for about two and a half hours. During the course of this meeting, we hope to identify the most important problems in Hood High School and propose some possible solutions.

Invitation to partici- pate and importance of this participation →

We urge you to participate in this meeting and share with us your perceptions and suggestions. Your participation in this meeting will be very helpful.

Return postcard for reply →

Enclosed please find a return postcard. Please check your reply and mail the postcard by October 14. Thank you for your cooperation.

We hope to see you at the meeting!

Sincerely yours,

Martha Adams

Martha Adams
Superintendent

The following section includes examples of group meeting materials for participants and group leaders. The guidelines for editing and revising your questions, a worksheet for planning group meeting activities, and information on formatting, pre-testing, revising, and duplicating survey materials concludes the information on group meetings. Project staff should review and discuss the information provided in these pages, edit and revise their questions, and then plan the activities and prepare the materials for their meeting.

AN EXAMPLE

Woodside School District was faced with the problem of increased school violence. School personnel felt that they needed to involve community members in exploring the nature of the problem and possible steps which could be taken to reduce the level of violence and disruption in the schools. The school personnel charged with the task of planning the survey chose group meetings as their data collection method. In working through Units 1 to 3, the survey staff specified the purpose, respondents, and data collection method for the survey and developed their questions:*

- The purpose of the survey is to examine the perceptions community members, students, and educators have of violence and disruption in the schools. Their perceptions of various problems (attacks, weapons, gangs, intruders, vandalism) and proposed solutions are needed.

  The information gathered will be used to help school personnel determine which problems have the greatest priority and which solutions have the most support.

- The community groups included in the survey are parents, students, and school staff at the Hood High School. Since there are more than 1500 people in these three groups, a sample of people from each group will participate in the meeting.

- A group meeting is being used to give members of the three groups involved an opportunity to discuss the general problem of violence and disruption and to work together to identify the most pressing specific problems and propose possible solutions.

- The questions developed for the survey are:

  1) What problems have you encountered?

  2) What do you think the five most important problems in this school are?

  3) What activities or approaches can be used to reduce school violence and disruption?

  4) What do you think about the potential effectiveness of various activities that can be used to reduce school violence and disruption?

Faced with the task of preparing meeting materials, the team began by planning major activities to help the participants deal with the four questions developed, establishing the setting for each activity, and identifying the personnel and materials needed. The results of this planning effort are summarized on the chart on the following page.

---

*For group meetings, any type of question can be used, although open-ended questions are particularly useful for stimulating group discussion of an issue and exploration of alternatives.

GROUP MEETING PLAN

Survey Questions	Activities	Setting	Materials
	1. Orientation: The group coordinator opens the meeting, explaining the purpose of the survey and the activities planned for the meeting.	Large Group	Written instructions for group coordinator (see example on page 4-31). Meeting agenda for each participant. Flip charts, transparencies, chalkboards, etc.
What problems have you encountered?	2. Orientation: Students present their perspective on the problem, providing a common framework for small group discussions. *		
	3. Introduction: Small group members introduce themselves. Small group leader explains individual and group activities.		Written instructions for small group leaders (see example on page 4-32). Name tag and list of participants for each group member.
What problems have you encountered?	4. Individual activity: Individual participants use worksheet to record problems they have faced in the school.		Individual Activity Worksheet 1 (see example on page 4-33) and instructions for small group leaders (see example on page 4-34). Pencils.
What do you think the five most important problems in this school are?	5. Group activity: Group members identify the five most important problems faced in their school.	Small Groups	Group Activity Worksheet 2 (see example on page 4-35) and instructions for small group leaders (see example on page 4-35). Large chart paper on chart stand. Magic markers.
What activities or approaches can be used to reduce school violence and disruption?	6. Individual activity: Individual participants use worksheets to record suggested solutions or approaches to the most important problems identified.		Individual Activity Worksheet 3 (see example on page 4-36) and instructions for small group leaders (see example on page 4-36).
What do you think about the potential effectiveness of various activities that can be used to reduce school violence and disruption?	7. Group activity: Group members discuss and judge the potential effectiveness of each group member's proposed solution.		Group Activity Worksheet 4 (see example on page 4-37) and instructions for small group leaders (see example on page 4-38). Large chart paper on chart stand. Magic markers.
	8. Closing remarks: The group coordinator makes closing remarks and describes future survey activities.	Large Group	Flip charts, transparencies, chalkboards, etc.

*Note: In this example, students describe their perspective on the problem. This introductory role could be played by a special guest speaker, an expert on the topic, etc.—anyone with substantial knowledge of the problem.

In a simpler form, this plan could be used as the basis for a group meeting agenda.

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After preparing their overall plan for the meeting, the survey staff prepared general instructions for the personnel conducting the meeting—the group coordinator and the small group leaders. Examples of such instructions are provided below and on the following page.

INSTRUCTIONS FOR GROUP COORDINATOR*

BEFORE THE MEETING STARTS:

1. Check the facilities with the small group leaders and any personnel assigned to welcome community members. Be sure that the following items are ready.

   • AV equipment

   • Tables and chairs

   • Data collection materials

   • Refreshments

2. Check the procedures for welcoming late arrivals and special guests. Be sure that personnel are assigned to show them to their seats.

3. As time permits, introduce yourself to as many individual participants as possible.

DURING THE MEETING:

1. Introduce yourself to the group. Describe the purpose of the survey and the activities planned for the meeting. Answer any questions the participants may have.

2. Introduce the speaker (special guest, student, expert) who will give his or her perspective on the problem. Lead off the presentation by asking this person a question—e.g., "What kinds of violence or disruption have you experienced at school?"
   If more than one speaker is describing the problem, give everyone a chance to present his or her views.

   Call on any participants who have questions for the speakers.

3. When the presentation is finished, thank the speakers and tell the participants that the next activity will take place in small groups. The small group leaders and the speakers will join the small groups to which they have been assigned.

4. Be available during the small group meetings. Explain procedures and answer questions as needed.

5. Make a few closing remarks to the participants when the small group activities have been completed. Thank the participants for their help and tell them what future survey activities are planned and what their involvement will be.

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*These instructions will vary, of course, according to the activities planned for the meeting and the responsibilities assigned to the group coordinator.

INSTRUCTIONS FOR SMALL GROUP LEADERS*

1. Check your materials. You should have the following items at your table:

   - A folder for each participant. Each folder should contain an agenda, a list of participants, a name tag, and a copy of Worksheets 1 and 3.

   - Pencils

   - Pad of large chart paper on a chart stand

   - Magic markers

2. As each participant joins your group, introduce yourself and the other people assigned to your group.

   - Give each participant a folder.

   - Explain that the people at the speaker's table will be giving a report to everyone in the room and that small group activities will follow.

   - Small group members should feel free to ask questions during the report.

3. After the report has been given, turn to the individual and small group activities.

   - Give a brief description of each activity.

   - Follow the instructions provided as you complete each activity worksheet.

4. When the small group activities have been completed, the group coordinator will make a few closing remarks to the participants.

5. Deliver all small group meeting materials to the group coordinator.

For each small group activity, the survey staff prepared materials—worksheets for individual and group activities and instructions for the group leaders. These materials are shown on the following pages.

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*These instructions will vary, of course, according to the activities planned for the meeting and the responsibilities assigned to the small group leaders.

INDIVIDUAL ACTIVITY WORKSHEET 1

WORKSHEET 1   GROUP _____

INDIVIDUAL ACTIVITY   NAME _____

Problems of School Violence and Disruption You Have Encountered

Instructions: Based on the preceding discussion, review the problems listed below.
Feel free to add new problems or to delete or modify any of the problems listed.
Indicate which problems you have encountered in school.
Rate the importance of solving each of the problems you have encountered. High
indicates most important to solve; low indicates the least important to solve.
When small group members have completed this activity, the group will discuss
their responses and try to achieve consensus on the five most important problems.

Problems:	Have Encountered in Schools		Importance of Solving		
	Yes	No	High	Med	Low
Attacks in Schools Assaults, rapes, and murders of students or staff on school premises are increasing					
Weapons More weapons (guns, knives) are being carried to school.					
Gangs Gang violence has become well established in schools					
Intruders Outsiders, including dropouts, truants from other schools, and unemployed youth, terrorize students and vandalize school property.					
Intergroup Clashes Confrontations among racial, social, and ethnic groups have disrupted the educational process.					
Vandalism Wanton destruction of facilities, equipment, and student projects is prevalent					
Fear of Violence A climate of fear is pervasive in schools					

INSTRUCTIONS FOR SMALL GROUP LEADERS

WORKSHEET 1 INDIVIDUAL ACTIVITY

TIME: 20 minutes

Review the instructions on Worksheet 1 with the group and answer any questions.

Encourage the participants to list additional problems or topics.

Remind the participants to indicate the importance of solving only the problems they have encountered.

GUIDING QUESTIONS:

● Why was it considered highly important to solve this problem?

● How important are these problems in comparison to other school problems, e.g., funding, curriculum, etc.?

GROUP ACTIVITY WORKSHEET 2

WORKSHEET 2   GROUP:_____
GROUP ACTIVITY

Establishment of Five Priority Problems by the Group

Instructions: Each member has shared with the group his/her experiences with violence and disruption in schools (Worksheet 1).

As a group, try to achieve consensus on the five most important problems in your district, on the basis of your collective experience. List these problems in order from most important to least important. Indicate why these specific problems were selected.

The group leader should record the five priority problems selected and summarize the reasons they were selected on this worksheet.

	Priority Problems	Reasons for Selection
Most Important	1._____	_____
	2._____	_____
	3._____	_____
Least Important	4._____	_____
	5._____	_____

INSTRUCTIONS FOR SMALL GROUP LEADERS

WORKSHEET 2 GROUP ACTIVITY
TIME: 20 minutes

Review the instructions on Worksheet 2 with the group and answer any questions.

Make sure every group member has a chance to participate in the discussion. Group discussions may stray from the topic. I to keep group attention focused on these tasks: list all the problems on Worksheet 1, reach group consensus on the five most important problems, and have the group rank them in terms of relative importance. Group members can assign the same priority to two problems.

Take notes on the discussion; then complete this worksheet while the participants are working on Worksheet 3.

Collect all copies of Worksheet 1 when this activity has been completed; be sure that each worksheet is identified by name and group.

GUIDING QUESTIONS:

● On what basis (most disruptive to the educational process, most physically harmful, most expensive) should the most important problems be selected? NOTE: The most important problems are those that need to be solved immediately.

INDIVIDUAL ACTIVITY WORKSHEET 3

WORKSHEET 3   GROUP: _____

INDIVIDUAL ACTIVITY   NAME: _____

Activities for Reducing School Violence and Disruption

Instructions: As an individual, identify activities or approaches that might be used by schools in attempting to solve each priority problem. If you know of specific people or places where an effective activity is being pursued, please identify them in the far righthand column. Give particular attention to the problems which your group ranked as relatively most important. A given activity may be appropriate for more than one problem area.

Priority Problem	Activities Suggested to Solve this Problem	People/Places Associated with this Approach (Optional)
1._____	_____	_____
2._____	_____	_____
3._____	_____	_____
4._____	_____	_____
5._____	_____	_____

INSTRUCTIONS FOR SMALL GROUP LEADERS

WORKSHEET 3 INDIVIDUAL ACTIVITY

TIME: 40 minutes

Review the instructions on Worksheet 3 with the group and answer any questions.

Indicate that this is a brainstorming activity and that detail is not as important as variety.

Start with the most important problems listed on Worksheet 2.

Note that no possible solution should be considered too broad or too limited and that a given activity may be effective in attempts to solve one or more specific problems.

If necessary, assist group members in identifying and describing possible solutions.

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SMALL GROUP ACTIVITY WORKSHEET 4

WORKSHEET 4   GROUP: _____

GROUP ACTIVITY

Potential Effectiveness of Various Activities

Instructions: The group leader should complete one copy of this worksheet for each priority problem—listing all of the activities group members suggested on their copies of Worksheet 3. While these activities are being listed, group members should add any other ideas they may have.

The group then should review each of the activities suggested and discuss its potential effectiveness for reducing this problem. If the group does not reach consensus on the potential effectiveness of a given activity, the group leader should note how many group members support each rating and, if possible, indicate the reasons for these differences of opinion.

Problem: _____

	Potential Effectiveness			
Activities Suggested to Solve this Problem	High	Medium	Low	Undecided

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INSTRUCTIONS FOR SMALL GROUP LEADERS

WORKSHEET 4 GROUP ACTIVITY

TIME: 40 minutes

Prepare a copy of Worksheet 4 for each group priority problem.

Review the instructions on Worksheet 4 with the group and answer any questions.

Starting with the most important problem listed on Worksheet 2, list the activities suggested to solve that problem on your chart.

Make sure every group member has a chance to participate in the discussion. The group should then assess and rank the potential effectiveness of each activity suggested. Repeat this procedure (list suggested solutions, rank effectiveness) for each of your priority problems. Solution activities can involve agencies other than the school — police, social agencies, etc.

Collect all copies of Worksheet 3 when this discussion has been completed; be sure that each worksheet is identified by name and group.

GUIDING QUESTIONS:

- Can you outline that solution activity for us?

- Are there any combinations of solutions that might be really effective?

- Are some of these solution activities more appropriate for long-range attempts to improve the situation than for dealing with the immediate crisis?

GUIDELINES FOR EDITING AND REVISING QUESTIONS

In completing Unit 2, you developed a list of questions you wanted to ask members of the community groups included in the survey. Any type of question can be used in group meeting materials, although open-ended questions are particularly useful for stimulating group discussion of an issue and exploring alternatives. Before developing activity worksheets based on your questions, it is suggested that you edit and revise them in accordance with the guidelines provided below.

Question Content

1. Is this question needed? Is the point explored in this question already covered by other questions?

2. Does this question cover too many points? If so, can it be rewritten as two or more questions?

3. Is this question concrete enough? Can it be more directly related to the respondents' personal experience? Do respondents have the knowledge and/or experience needed to answer this question?

Question Wording

1. Is this question simple, understandable, and as brief as possible?

2. Is this question unbiased — is it presented in a neutral way so that neither positive nor negative answers are suggested? Or, is the wording of this question likely to be objectionable in any way to the respondents?

3. Can any of the open-ended questions be easily answered with such responses as "yes," "no," or "don't know"? If so, such questions should be rewritten.

4. Does the wording of the open-ended questions allow respondents complete freedom to respond?

5. If any closed questions are being asked, have the most appropriate kinds of response categories been provided for them? Are the response formats understandable, specific, and adequate?

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PLANNING SHEET

Group Meeting Plan

Review the purpose of your survey and the community groups involved. Fill in the questions developed for your survey below. Through staff discussions, decide what activities (orientations, panel reports, individual and group activities) should be planned for the meeting. For each activity, specify the setting and materials needed. Record these decisions on this planning sheet. If more than one group meeting is scheduled, use one copy of this planning sheet for each meeting.

Questions	*Activities*	*Setting*	*Materials*

DEVELOPING AND FORMATTING GROUP MEETING MATERIALS

1. For both the instructions for group leaders and the worksheets for participants, choose layouts and typography which make the materials easy to read and to complete. Ideas on the layout can be obtained by studying the examples of data collection materials provided here, and from school personnel who are familiar with graphics and printed materials.

2. When preparing group leader instructions, keep the following suggestions in mind:

   a. Use a checklist style so that the key points stand out.

   b. Allow space around each instruction where the group leaders can record any changes made in conducting the activities.

   c. For each activity, note the specific steps the group leader will take, the time allotted, and guiding questions which the group leader can ask.

3. When preparing activity worksheets, the following procedures are suggested:

   a. Number each worksheet and indicate whether the worksheet is for an individual or group activity.

   b. Provide space where the participants/group leaders can identify each worksheet by name and/or group.

   c. Give each worksheet a title that indicates what the activity concerns.

   d. Include instructions for completing the worksheet.

   e. Arrange the contents of each page to allow easy reading. Spacing and indentation should be uniform. If questions are included on the worksheets, be consistent in lining up numbers, questions, and response spaces. If open-ended questions are included, be sure to provide sufficient space for the responses.

   f. If you intend to have the responses to questions machine-processed, ask someone familiar with computers to help format the worksheets to facilitate key punching.

PRE-TESTING GROUP MEETING MATERIALS

Pre-testing group meeting activities and materials is essential. It is strongly suggested that survey staff role play or simulate a group meeting and work through each activity planned. Information obtained from the simulated meeting should provide answers to the following questions: Do the instructions for the group coordinator and the small group leaders provide guidance which enables them to conduct the activities easily? Do the worksheets elicit the needed information? Are the activities, worksheets, and questions clear or should some of them be revised? The following pre-test procedures are suggested:

1. Simulate a group meeting:

   Assign one group coordinator and two or three small group leaders to conduct the large group, individual, and small group activities, with two or three participants each. Participants in the simulation should be members of the community groups involved in the survey, but who would not participate in the group meetings when information is collected at a later time.

2. Observe the simulations:

   One person should be assigned to observe the large and small group simulations and record what happens throughout. For each activity, the observer should record what the group coordinator or leader says and does as well as the comments of participants. The observer should also note any changes needed in the facilities (chairs, AV equipment, etc.). The observer's notes will be used to determine what revisions are needed.

3. Critique the simulations:

   Analyze the observers' notes, the group meeting plan, the individual and group activity worksheets, the instructions for the coordinator and the small group leaders, notes made by the group leaders, and the participants' comments to identify any revisions needed.

   a. Review the instructions for the group coordinator. These instructions should help the coordinator check the procedures and facilities for the meeting and outline his or her responsibilities during the meeting—e.g., begin the meeting, describe the purpose of the survey and the activities planned for the meeting, introduce the presentations made in a large group setting, help the participants during small group activities, and present closing remarks.

   b. Review the instructions for the small group leaders. These instructions should help the leaders check their materials, initiate and explain small group activities, conduct small group discussions, and complete the group activity worksheets.

   c. The directions on each worksheet should be clear and easy to follow.

   d. Any questions included (content, wording) should be clear and should elicit the information needed. Make sure that the response choices provided for closed questions are adequate and that enough space has been provided for the responses to open-ended questions.

4. Check the adequacy of AV equipment and seating arrangements.

5. Give the observers' notes and copies of the pre-test materials to the personnel in charge of whatever data processing is planned. Pre-test data can help you check the adequacy of the procedures you intend to use to process the data.

6. Estimate the amount of time needed to conduct the group meeting and each small group session. Use this information during Unit 5 when scheduling the meeting.

PREPARATION OF FINAL MATERIALS

Revision

Revise your group meeting plan, the small group activities, the worksheets, and the instructions for the group coordinator and the small group leaders in accordance with pre-test findings. If extensive changes are made, the revised worksheets, activities, and instructions should also be tested.

Duplicating

Check the master list or the sample drawn for each community group to see how many leaders and participants will be included in the meeting and meet with the person in charge of duplicating the worksheets, instructions, and any other materials needed. Make a final decision concerning printing or xeroxing. Have extra copies of the worksheets and instructions made for public relations use and for documentation (you may want to include copies of the data collection materials in your report on the survey).

Now, using the information presented above, take the issue-related and demographic questions you developed in Unit 2 and use them as the basis for your data collection materials; then pre-test, revise, and duplicate the materials for your survey.

Unit 5

Conducting a Community Survey

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CONTENTS

INTRODUCTION

In completing Unit 4, you prepared materials appropriate for the data collection methods you have decided to use. In this unit, information is presented on how you can use those materials to collect information from members of the community and organize the completed materials for data processing (see Unit 6).

This unit is divided into the following three sections:

Mail Questionnaires	pages 5-5 to 5-11
Interviews	pages 5-13 to 5-19
Group Meetings	pages 5-21 to 5-27

An overview gives the major steps for each data collection method; suggestions are provided on some or all of the steps involved; and a planning sheet is provided so that you can check on the progress and completion of each step. You may choose to read only the sections describing the methods you have decided to use.

MAIL QUESTIONNAIRES

1. ...

INTRODUCTION

From the previous activities, you have a list of the people who are to receive the questionnaire, sufficient copies of the questionnaire and the covering letter, mailing envelopes, and postage-paid return envelopes.

The steps listed below should be followed in conducting a survey by mail questionnaire:

1. Select a mailing date and the date by which questionnaires should be returned.

2. Set up a monitoring system.

3. Assign code numbers to the questionnaires to assure confidentiality.

4. Select the postage class to be used; prepare the mailing envelopes and the postage-paid return envelopes.

5. Address and mail the envelopes—enclosing the postage-paid return envelopes.

6. Follow up nonrespondents, if possible.

7. Sort the questionnaires for data processing.

8. Send the respondents a letter of thanks.

Since some of the steps listed above are self-explanatory, only a few of them are discussed below and on the following pages.

Select Dates for Mailing and Returning the Questionnaires

When selecting the dates for mailing and returning the questionnaires, you should consider the time needed for data processing, the date data processing should begin, and when your school board members or school administrators need the report on the survey. For instance, the mailing date should be approximately four to five weeks before data processing should begin if seven to ten days are allowed for returning the questionnaires plus three weeks for late returns resulting from follow-up activities.

To assure relatively prompt returns, mail the questionnaires at times other than holiday or vacation periods. Also, choose a time when staff will be available to prepare the mailing.

Set Up a Monitoring System

To determine how many people have returned the questionnaires, your data collection effort should be monitored. For a monitoring system, you will require a control chart to keep track of the status of each questionnaire. This chart can be developed on your master list of potential respondents in each community group. An example of a completed control chart is shown on the following page.

EXAMPLE OF A CONTROL CHART

Alberson School District
Community Group: *Parents of Elementary School Children*

Name & Address	Phone	Code Number	Mailing Date	Date Returned	Follow-Up
Mr. & Mrs. Joseph Williams 3462 Stone Mill Lane Alberson, MD 04610	846-3098	001	10/1	10/?	
Ms. Carolyn Wolf 1021 Frolters Way Middletown, MD 04720	Unlisted	002	10/1	10/20	*Postcard reminder (10/?)*
Mr. Peter Cagne 34 Parker Street Alberson, MD 04610	941-4600 524-1000 wk.	003	10/1		*Phone (10/?) Second mailing (10/11)*

In this example, a code number was assigned to each respondent in order to assure the confidentiality of individual responses. Space was also provided to indicate the date the questionnaire was mailed, the date it was returned, and any follow-up activities.

An additional column can be provided on the chart to show when letters of thanks were sent to the people who returned the questionnaires, unless anonymity was promised.

Select the Postage Class to be Used

Different classes of postage affect both speed of return and rate of return. First class stamped envelopes will assure the quickest delivery and return and usually produce the best or highest number of returns from a mailing. If first class postage is used and an address has changed, letters usually are forwarded to the new address auto-matically. Metered envelopes, using first class postage, are delivered just as quickly as first class stamped envelopes but usually yield fewer returns. Third class postage assures slower delivery time and usually produces fewer returns.

Follow Up Nonrespondents

When address corrections are received the questionnaires can be remailed, but other steps that can be taken to increase your response rate depend on whether or not you can identify the nonrespondents by name. If nonrespondents can be identified, it is suggested that you contact them by mail or by phone. If nonrespondents cannot be identified, you might consider sending a postcard reminder to everyone who received the questionnaire—asking them to ignore the reminder if they have already returned the questionnaire. An example of such a reminder is provided on the following page.

MAIN TOWNSHIP PUBLIC SCHOOLS
1101 Washington Boulevard, Crathersburg, Virginia

October 1, 1975

Dear Community Member:

We decided to take a look at the Main Township Public Schools through the eyes of members of this community—an ambitious effort but one with great potential advantages for our schools.

The success of the whole project depends on the questionnaire mailed to you about two weeks ago. To date, we have only received half of the responses we need to obtain reliable survey results.

Won't you pull the questionnaire out of your correspondence basket and mail it today? It will take you about 15 minutes to complete.

Please help! Our entire purpose is to get information to help us serve you better.

If you have already returned your questionnaire, please accept our thanks and overlook this reminder.

Cordially yours,

Barbara Overland
Superintendent

Sort the Questionnaires for Data Processing

Review the questionnaires from each community group, noting on a summary sheet the number of questionnaires sent out, the number returned, and the number completed. An example of such a summary sheet appears below.

Community Group: *Parents of Elementary School Children*	
Number Sent	100
Number Returned	62
Complete	40
Incomplete	20
Blank	2

Note that if, as in the foregoing example, you have a large number of nonrespondents, it is good practice to determine whether those nonrespondents hold different views than those of the respondents. To make this determination draw a small sample of the nonrespondents and use your mail questionnaires to interview them by telephone. Then, after processing the data from both the respondents and the sample of nonrespondents who were interviewed (see Unit 6), compare their responses—noting both similarities and differences in these responses in your interpretation of the data and in your survey report (see Unit 7).

The planning sheet on the following page can be used to record the following information for each activity listed: the staff members assigned, the target and completion dates, and any important notes. Before you begin to complete this planning sheet, make sure that you have the list of potential respondents and sufficient copies of the questionnaire and related materials.

PLANNING SHEET

Conducting a Survey by Mail Questionnaire

This planning sheet can be used by survey staff to record names, dates, or notes related to each activity involved in conducting a survey by mail questionnaire.

Activity	Personnel Assigned	Target Date	Completion Date	Notes
1. Select a mailing date and the date questionnaires should be returned.				
2. Set up a monitoring system.				
3. Assign code numbers to the questionnaires.				
4. Select the postage class to be use.. prepare mailing envelopes and postage-paid return envelopes.				
5. Address and mail the envelopes.				
6. Follow up nonrespondents.				
7. Sort the questionnaires from each community group for data processing.				
8. Send the respondents a letter of thanks.				

INTERVIEWS

INTRODUCTION

From the previous activities, you have a list of the people you want to interview, sufficient copies of the interview questionnaire and the letter inviting people to participate, and mailing envelopes for the letters.

The steps listed below should be followed in conducting an interview survey:

1. Select and train the interviewers.

2. Select starting and ending dates for conducting the interviews.

3. Set up a monitoring system.

4. Mail the letters of invitation.

5. Schedule the interviews.

6. Conduct the interviews.

7. Follow up people who did not keep their appointments.

8. Review the interview questionnaires for data processing.

9. Send the participants a letter of thanks.

Since some of the steps listed above are self-explanatory, only a few of them are discussed below and on the following pages.

Select and Train the Interviewers

Generally, anyone who is willing to interview has the potential to be a good interviewer, but you should select only those people who demonstrate the characteristics of a good interviewer during the training session. A training session should include the following steps:

1. An experienced interviewer meets with the potential interviewers and goes over the interview questionnaire and the instructions for interviewers discussed in Unit 4.

2. Make sure that the potential interviewers understand the survey—why and how it is being conducted—and the interview questionnaire being used. The potential interviewers should be completely familiar with the purpose, content, and wording of every question.

3. Have the potential interviewers role play as both an interviewer and a respondent while an experienced interviewer and other trainees observe.

The potential interviewers who demonstrate the characteristics listed below during the training session should be selected:

1. The interviewer creates a permissive atmosphere in which the respondent feels at ease and is willing to express opinions freely, without fear that the attitudes will be revealed to others and without any expression of surprise or disapproval by the interviewer.

2. The interviewer expresses no personal ideas, reactions, or preferences.

3. The interviewer follows each question as it appears on the questionnaire, records the respondent's replies accurately, and probes when necessary.

Select Starting and Ending Dates for Conducting the Interviews

To select the time period for conducting the interviews, you should consider when your report is needed by the planners or decision makers and estimate how much time will be needed to process and interpret the data and prepare your report (see Units 6 and 7). This estimate should enable you to determine the date by which the interviews must be completed.

To determine the starting date for your interviews, estimate how many days are required to conduct your interviews. To make this estimate, you will need to know the amount of time needed for one interview, the number of interviewers available, the number of interviews which an interviewer can realistically schedule and conduct each day, and the number of people to be interviewed. The chart below presents an example of this information: each interview takes one hour (allowing time for the interviewer to review each

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interview questionnaire to make sure that it is ready for data processing), two interviewers are available who can each schedule and complete four interviews each day (the interviewers here expect that the respondents will be generally available and that scheduling the interviews will present no problems), and 48 people are to be interviewed. Thus, for the situation outlined in this example, six days will be needed. Allowing for scheduling difficulties as well as for holidays, weekends, or vacations, it might be appropriate in this case to set aside two weeks to conduct the 48 interviews.

TIME ESTIMATE CHART

	Example	Time Estimate for Your Survey
Time required for one interview	1 hour	
Number of interviewers available	2	
Number of interviews an interviewer can conduct each day	4	
Total number of respondents	48	
Numbers of days required to conduct the interviews	6	

Set Up a Monitoring System

To keep track of progress in completing the interviews, your data collection effort should be monitored. For a monitoring system, you will require a control chart to keep track of the status of each interview. This chart can be developed on your master list of potential participants in each community group.

The example below shows how such a chart can be used to monitor and record progress in conducting a series of interviews.

EXAMPLE OF A CONTROL CHART

Community Group: *Parents of Elementary School Children*								
Respondent	Interviewer	Invitation Letter Mailed	Phone Call	Date of Interview	Completed on Time	Follow-Up Steps	Data Checked for Completeness	Data Forwarded for Processing
01	Jones	10/20	10/22	11/3	yes		11/3	11/3
02	Greene	10/20	10/23	11/3	no	Completed 11/6	11/6	11/7
03								
04								
05								
06								
07								
08								
09								
10								
etc.								

In this example, space was provided to indicate the interviewer assigned to each respondent, when the interview was scheduled, whether the interview was completed on time, and when the data were forwarded for processing. The chart shows that Ms. Jones completed her interview with Respondent 01 on time and forwarded the data to be processed on November 3rd. The interview conducted by Mr. Greene with Respondent 02 apparently required more time than was available on the original interview date; more time was scheduled later so that this interview could be completed.

An additional column can be provided on the chart to show when letters of thanks were sent to the people who were interviewed.

Mail the Letters of Invitation

Letters of invitation should be sent to all potential participants at least one month before the dates scheduled for the interviews. Before mailing the letters of invitation, check the different classes of postage and decide which one would be best for your mailing in terms of speed of delivery.

Schedule the Interviews

For a face-to-face interview, the interviewer usually follows up each letter of invitation with a telephone call to make an appointment with the respondent. The interviewer should verify the date, time, and location of the interview. A postcard should be sent to the respondent as a reminder a few days before the interview. Include the name and phone number of a staff member the respondent can call if they are delayed or cannot keep the appointment for any reason. The interviewer should be prepared, at the beginning of the interview, to explain the purpose of the survey, how the data will be used, and the importance of the respondent's role.

For a telephone interview, the interviewer calls the respondent and conducts the interview; if the timing of the call is inconvenient for the respondent, the interviewer should make an appointment to call at another time.

In case appointments have been made, make certain that each interviewer has a list of the people to interview, indicating the date, time, and location, and instructions for conducting the interviews.

Follow Up People Who Did Not Keep Their Appointments

Follow-up steps might include setting a new date for an interview or for completing one which was interrupted or delayed.

Review the Interview Questionnaires for Data Processing

As the interviews are completed, survey staff should review the questionnaires to make sure that the interviewers have completed them properly and that they are legible. If the interview questionnaires are incomplete or illegible, survey staff should discuss their analysis with the interviewers to help them solve such problems in conducting further interviews.

When all of the interviews with members of a specific community group have been conducted, note on a summary sheet the number of interviews scheduled, the number actually conducted, and whether or not the interview questionnaires are complete. An example of such a summary sheet is provided below.

Community Group: *Parents of Elementary School Children*	
Number of Interviews Scheduled	*100*
Interview Questionnaires	
Complete	*50*
Incomplete	*20*
Total Conducted	*70*

The planning sheet on the following page can be used to record the following information for each activity listed: the staff members assigned, the target and completion dates, and any important notes. Before you begin to complete this planning sheet, make sure that you have the list of potential respondents and sufficient copies of the interview questionnaire and related materials.

PLANNING SHEET
Conducting an Interview Survey

This planning sheet can be used by survey staff to record names, dates, or notes related to each activity involved in conducting an interview survey.

Activity	Personnel Assigned	Target Date	Completion Date	Notes
1. Select and train the interviewers.				
2. Select starting and ending dates for the interviews.				
3. Set up a monitoring system.				
4. Mail the letters of invitation.				
5. Schedule the interviews.				
6. Conduct the interviews.				
7. Follow up people who did not keep their appointments.				
8. Review the questionnaires from each community group for data processing personnel.				
9. Send the people who were interviewed a letter of thanks.				

GROUP MEETINGS

INTRODUCTION

From the previous activities, you have a list of the people you want to participate, sufficient copies of the meeting materials, mailing envelopes, and postage-paid return postcards.

The steps listed below should be followed in conducting a survey using group meetings:

1. Select and train the personnel needed to conduct the meeting.

2. Select a date and location for the group meeting.

3. Set up a monitoring system.

4. Mail the letters of invitation.

5. Follow up the people who did not return the postcards.

6. Conduct the group meeting.

7. Review the data collection materials for data processing.

8. Send the participants a letter of thanks.

Since some of the steps listed above are self-explanatory, only a few of them are discussed below and on the following pages.

Select and Train the Personnel Needed to Conduct the Meeting

If possible, select staff members with some experience in conducting group meetings. Meet with the people selected and go over the meeting materials and the instructions prepared for them. Make sure these people understand the purpose of the survey—why and how it is being conducted—and the group meeting materials. In a training session, staff members should follow the same procedures used in Unit 4 to pre-test the meeting materials.

Select a Date and Location for the Group Meeting

When selecting a date for the group meeting, you should consider the time needed for data processing, the date data processing should begin, and when your school board members or school administrators need the report on the survey. You should select the most convenient time for both the group leaders and the participants. Holidays and vacation periods should be avoided.

The group meeting should be held in a location which is convenient for the participants. You should make sure that the facilities are large enough for the number of participants expected.

Set Up a Monitoring System

In order to estimate how many people will participate in the group meeting, your data collection effort should be monitored. For a monitoring system, you will require a control chart to organize your activites. This chart can be developed on your master list of potential praticipants in each community group.

An example of such a chart is provided on the following page. 133

EXAMPLE OF A CONTROL CHART

Community Group. *Parents of Hood High School Students*

Name and Address	Phone	Invitation Letter Mailed	Date Postcard Returned	Plans to Attend		Attended Meeting	Letter of Thanks Sent
				Yes	No		
Mr, & Mrs. Jonathan Male 342 Stone Mill Lane Middletown, MD 04720	846-7312	10/20	.			10	
Mrs. Hedda Morris 72 Spring Avenue Lancaster, MD 04568	567-1234	10/20	10/25	✓		4/22	✓
Mr, & Mrs. Earl Cook 93 Carpenter Street Middletown, MD 04720	Unlisted	10/20	10/23	✓		5/22	✓
. . .							

In this example, space was provided to indicate the date the invitations were mailed, the date the replies were received, and whether or not each person planned to participate. An additional column was provided on the chart to show if letters of thanks were sent to the participants.

Mail the Letters of Invitation

Letters of invitation should be sent to all potential participants at least one month before the date scheduled for the group meeting together with a postcard for each person to return. A date should also be selected for the recipients to advise whether or not they will attend. The reply date should not be so close to the meeting date that you do not have enough time to send reminders or telephone the people who did not reply.

Before mailing the letters of invitation, check the different classes of postage and decide which one would be best for your mailing in terms of speed of delivery.

Follow Up the People Who Did Not Return the Postcards

Use your control chart to determine which people did not return their postcards. Some follow-up activities may be needed to achieve the participation desired.

Review the Data Collection Materials for Data Processing

Data collection materials completed by individuals and small groups during each group meeting should be reviewed for completeness. The examples provided below show the kind of information that could be noted on summary sheets covering your data collection materials.

Individual Worksheet 1				
Group Number	1	2	3	Total
Number of Participants	30	30	30	90
Worksheets Complete	28	26	24	78
Worksheets Incomplete	2	2	5	9
Total Submitted	30	28	29	87

Group Problem List 1		
Group Number	Complete	Incomplete
1	✓	
2		✓
3	✓	
Totals	2	1

The planning sheet on the following page can be used to record the following information for each activity listed: the staff members assigned, the target and completion dates, and any important notes. Before you begin to complete this planning sheet, make sure that you have the list of potential participants and sufficient copies of the group meeting materials.

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PLANNING SHEET
Conducting a Group Meeting Survey

Survey staff can use this planning sheet to record names, dates, or notes related to each activity involved in conducting a group meeting survey.

Activity	Personnel Assigned	Target Date	Completion Date	Notes
1. Select and train the personnel needed to conduct the meeting.				
2. Select a date and location for the group meeting.				
3. Set up a monitoring system.				
4. Mail the letters of invitation.				
5. Follow up the people who did not return the postcards.				
6. Conduct the group meeting.				
7. Review the data collection materials from each group meeting for data processing.				
8. Send the participants a letter of thanks.				

Unit 6

Processing the Data

CONTENTS

INTRODUCTION

In completing Unit 5, your survey was conducted, and you now have the data (in raw form) organized by community group. This unit describes a way of summarizing that data in order to prepare a data summary sheet for each question asked, and later to prepare a report on your survey. An example of such a summary sheet is presented below.

EXAMPLE OF A DATA SUMMARY SHEET

Question   Each student in grades seven and eight should have formal instruction in reading

Strongly Agree	Agree	Disagree	Strongly Disagree
☐	☐	☐	☐

Probe   Please explain your answer below.

_____

_____

_____

A. Data Summary for the Closed Question

Response Category	Code (or Scale Value)	Group 1 (N=215)		Group 2 (N=200)	
		Frequency	%	Frequency	%
Strongly Agree	4	68	32	57	29
Agree	3	98	45	120	60
Disagree	2	32	15	20	10
Strongly Disagree	1	15	7	3	1
No Response	0	2	11	0	0
	Mean = 3.0			Mean = 3.2	

B. Data Summary for the Probe

Response Category	Group 1 (N=215)		Group 2 (N=200)	
	Frequency	%	Frequency	%
1. Teacher guidance is important.	105	49	120	60
2. Students in these grades need discipline in reading.	82	38	55	27
3. The students should have some time for library reading.	21	10	19	10
4. Other	7	3	6	3

Since the question in the foregoing example was in two parts, a closed question and an open-ended probe, the data for each part must be summarized separately. Data for two community groups are presented. Group 1 includes 215 people and Group 2 includes 200 people. For the closed question, the response categories and codes (4 to 0) are listed in the left-hand columns. For each group, frequencies and percentages for each response are recorded. For example, 68 people in Group 1 (32% of the group) checked Strongly Agree on the closed question, while only 57 people in Group 2 (29% of the group) checked the same response. Mean responses were also calculated for both groups: for Group 1, the mean (or average) response is 3.0 (Agree) while the mean response for Group 2 is 3.2 (between Agree and Strongly Agree but closer to Agree).

For the probe data—although there are no fixed response categories like those provided for the closed question—the responses can be grouped into the four categories listed in the left-hand column. Frequencies and percentages are recorded for both groups as before.

To help you prepare data summary sheets for the questions asked in your survey, this unit provides general directions and examples organized into four steps which you may need to take:

1. Assigning codes

2. Coding responses

3. Tabulating data

4. Summarizing responses

Note: Data can be processed by hand or desk calculator, or by computer. If you have a large quantity of data, you may want to use a computer service. In any case, it might be useful to consult a data processing expert about the best way to tabulate your data.

ASSIGNING CODES

To facilitate data processing and summarizing, numerical codes should be assigned to each re-

sponse category for each question. The discussion below is divided into two sections—one for closed questions and one for open-ended questions.

Responses to Closed Questions

Closed questions provide sets of possible responses; therefore, the response categories are already established. When response categories are based on a continuous scale, code numbers should be assigned in such a way that the most positive response category is assigned the highest number, and the most negative response category, the lowest number — Highly Positive (5), Positive (4), Neutral (3), Negative (2), and Highly Negative (1). These code numbers also represent values on a continuous scale. When response categories represent discrete responses, such as Yes (2), No (1), and Don't Know (0), the code numbers assigned cannot be related to the values on a continuous scale.

Responses to Open-Ended Questions

Unlike a closed question which provides a set of possible responses which can be coded immediately, an open-ended question elicits a free response which may reflect the respondent's attitudes, opinions, or knowledge about any aspect of the topic involved. In order to process the data from open-ended questions, the responses to each question must be categorized and then coded.

Categorizing Responses

Three guidelines for categorizing the responses to open-ended questions should be noted:

1. The categories should be derived from a single principle of classification: degree of importance, type of activity, etc.

2. The categories should be mutually exclusive; it should not be possible to place a given response in more than one category.

3. The categories should be exhaustive; that is, it should be possible to place every response

given in one of the categories established. To accomplish this it may be necessary to include a "catch-all" category for each question.

As you begin to tabulate your data, you may wish to modify the response categories originally established. Consider, for example, this open-ended question below:

Name one extracurricular activity you would like to have Weston Elementary School provide for your child.

Some of the answers to this question were:

Field trips	Foreign languages
Baseball	Dramatics
Bowling	Badminton
Arts and Crafts	Tennis
Ballet	Indian Classical Dance
Swimming	Outside field trips
Girl Scouts	Hobby Clubs
Dramatics	Hiking
Music	Baseball
Gymnastics	Sports
Band	Music
Recreational activities	Sculpture
Boy Scouts	Swimming
Intramural sports	Drama Club
Russian Club	Music lessons
Ecology Club	Modern Dance Club
Typing	Crocheting
Painting	Career program

By examining these responses, you can see that certain related activities could be grouped within a single response category. For example, if a group of responses suggests activities associated generally with arts and crafts, one category could be established in that area. Another category might include responses related to athletic activities.

The categories established for the responses listed above could be: arts and crafts, dance, dramatics, musical activities, indoor athletics, outdoor athletics, foreign languages, and other. The "other" category would be used for those few responses which could not be related to one of the more specific categories.

If some specific activities were mentioned more frequently than others, however, they could be listed as separate categories. For instance, if a large number of the responses in the "arts and crafts" category were "painting" and "crocheting," those activities could be established as categories separate from "other arts and crafts." In the same way, "baseball" could be separated from "other outdoor athletics" as a single category. If those changes were made, the following categories could be used for the responses given:

1. Painting
2. Crocheting
3. Other arts and crafts
4. Dance
5. Dramatics
6. Foreign languages
7. Indoor athletics
8. Musical activities
9. Baseball
10. Other outdoor activities
11. Other

Although in the example given above respondents simply listed discrete activities they thought the school might provide for students, some open-ended questions elicit responses which can be related to a continuous scale. Such responses can be categorized in a similar way. For example, when categorizing respondents' opinions—about their children's busing schedule, for instance—responses could be assigned to one of the following three categories: Positive, Negative, or Neutral. An example of responses categorized in this way is presented on the following page.

Actual Response	Category Assigned
"Quite satisfactory."	Positive
"Could be a lot better."	Negative
"It's rather inconvenient."	Negative
"Sometimes it's good, sometimes it's bad."	Neutral
"My children have no trouble with the schedule."	Positive

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As a rule of thumb, it is suggested that staff members read at least 10% of all responses to a given question, in order to group related responses together to form response categories. Often it is wise to have the staff who are categorizing the responses to open-ended questions discuss the definition of each category. The selection of response categories to be used should be made by more than one person.

Assigning Code Numbers to the Response Categories

After all response categories have been established, a code number should be assigned to each. When response categories are based on a continuous scale, codes should be assigned in such a way that the most positive response category is assigned the highest number, and the most negative response category, the lowest number: Highly Positive (5), Postive (4), Neutral (3), Negative (2), and Highly Negative (1); these code numbers also represent values on a continuous scale. When response categories represent discrete responses, such as Mathematics (1), Language Arts, (2), Social Studies (3), and Other (4), the code numbers assigned cannot be related to the values on a continuous scale.

CODING RESPONSES

Each staff member who is involved in data processing should be provided with a master code sheet showing all response categories for each question and the code numbers assigned to each of those response categories. Using these code sheets, the staff should together try to apply the codes to a selection of responses. Differences in the assignment of code numbers to various responses can

then be discussed. This procedure should be used until all staff members involved in coding consistently assign the same codes to the same responses. Then they can proceed to code the remaining responses.

Where multiple responses are given for one question, it is often appropriate to assign a code number to each response. Instructions on the master code sheet should cover these situations. Sometimes it may prove necessary to revise the master code sheet. In this case, all staff members should be informed of any revisions. An example of coding multiple responses for one question is given below.

Question: Check the three most important learning areas listed below.

_____ Reading

_____ Arithmetic

_____ Writing

_____ Spelling

_____ Language Arts

_____ Art

_____ Music

_____ Physical Education

_____ Science

_____ Social Studies

You should code the listed learning areas from 1 to 10 and list the response categories with their codes for this particular question on the master code sheet. The data processing staff should also be informed that three responses, rather than one, are expected for this question.

TABULATING DATA

When the responses to all questions by each respondent from each community group have been coded, the responses can be submitted by code number on a data record sheet like the one shown below. Note: If the data are to be processed by computer, the data should be summarized on sheets provided by the data processing service being used.

EXAMPLE OF A DATA RECORD SHEET

Community Group: *Parents of Middle School Students*

Respondent Code Number	Question Number										
	1	2	3	4	5	6	7	8	9	10	11
001	5	3	4	4	5	2	2	1	2	4	3
002	4	3	1	4	5	2	3	1	3	5	4
003	2	3	3	2	4	1	2	2	2	5	5
004	4	3	1	3	5	2	1	2	1	3	3
005	3	4	2	2	4	1	2	1	3	4	3
006	3	3	1	3	4	3	3	2	2	3	3
007	NR	2	2	4	5	2	2	1	3	3	2
008	4	3	1	3	3	1	X	X	3	4	3
009	3	5	1	4	5	2	1	1	2	5	5
010	4	3	2	3	4	1	1	2	3	5	3
011	2	3	1	2	3	3	2	1	2	3	3
012	5	3	3	3	5	3	1	3	2	4	4

In the above example, each respondent in this community group is identified by a code number in the left-hand column. These numbers should be the same as the numbers assigned to the respondents in Unit 5. Questions are identified by the numbers across the top of the sheet. This sheet was filled out by entering the code number assigned to the response given by each respondent to each question. This can be most easily accomplished by entering the code numbers for each respondent's responses across the sheet. In the example, respondent 001 gave responses assigned the code numbers of 5, 3, 4, 4, 5, 2, . . . Where the respondent did not answer a question, NR (no response) was entered, and where the respondent's answer was illegible or ambiguous, an X was entered. Note that as illustrated by the example a data record sheet should be prepared for each community group.

SUMMARIZING RESPONSES

Using the data record sheets, your next task is to summarize the responses of each community group to each question in a data summary sheet similar to the one at the beginning of this unit. There are two general ways of summarizing responses: preparing a frequency table, or calculating a summary statistic (percentages, means or modes).

Preparing a Frequency Table

Frequency is the total number of people who gave a particular response (or whose responses fall into a particular response category) to a question. A frequency table can be used to display the complete range of responses given to a particular question and the number of respondents who gave each response.

A frequency table could be constructed for each community group. To prepare a frequency table, first list the response categories. Then, referring to your data record sheet, count the number of respondents who gave each response. For example, assume that the data tabulated for the first question on the data record sheet on page 6-7 were responses to the statement "Middle school children should be expected to do homework for one hour each school night" where the following response categories were supplied: Strongly Agree (5), Agree (4), Neutral (3), Disagree (2), and Strongly Disagree (1). The frequency distribution for responses to this question could appear as follows.

EXAMPLE OF A FREQUENCY TABLE

Question 1: Middle school children should be expected to do homework for one hour each school night:	
Response Category	*Frequency*
Strongly agree	36
Agree	70
Neutral	54
Disagree	20
Strongly Disagree	0
No Response	20
Unclear Response	0

A frequency table can also be presented as a histogram or bar graph as shown on the following page. Note: A histogram is optional here, but it may help you to present your data later.

EXAMPLE OF A HISTOGRAM

Question 1: Middle school children should be expected to do
homework for one hour each school night.

Response Frequency

Calculating Summary Statistics

Another way to summarize responses to a question by members of one community group is to calculate a summary statistic. Many types of statistics are available, but three of the most useful are discussed below.

Percentages

Often the figures in a frequency table are converted to percentages to indicate the proportion of the group which gave a particular response to a certain question.

A percentage is calculated by dividing the frequency for each response category by the total number of responses and multiplying the result by 100. In the foregoing example there were 200 responses, so each figure in the Frequency column would be divided by 200 and then multiplied by 100. A frequency table with percentages would be as follows:
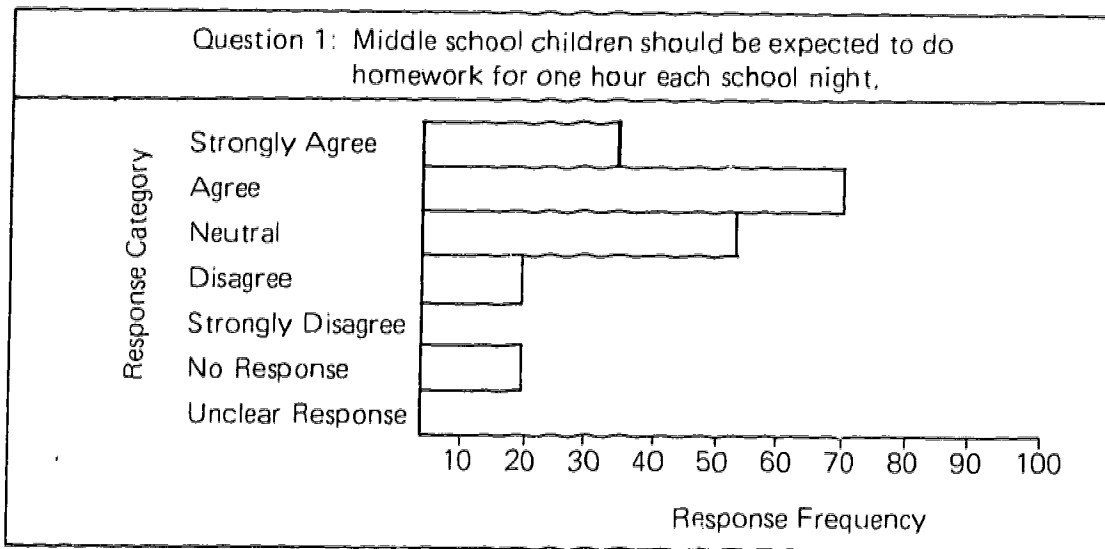
EXAMPLE OF A FREQUENCY TABLE WITH PERCENTAGES

Question 1: Middle school children should be expected to do homework
for one hour each school night:

Response Category	Frequency	%
Strongly Agree	36	18
Agree	70	35
Neutral	54	27
Disagree	20	10
Strongly Disagree	0	—
No Response	20	10
	200	100%

It is usually considered "good" practice to avoid using percentages for small totals. For instance, if two out of ten respondents suggested that they approved of something, it is improper to say that 20 percent approved because using percentages implies at least 100 responses. On the other hand, if 200 out of 1,000 approved, it is quite proper to say that 20 percent approved.

It is usually unnecessary to show fractional percentages. For example, rounding 33.3 percent to 33 percent is quite acceptable, while reporting this result as 33.3 percent may imply greater precision than the data warrant. Due to rounding, however, the percentages for some frequency distributions may total 99 percent or 101 percent. Although this presents no problem, if you would prefer to have a set of percentages total 100 percent, one or more of the individual percentages can be "forced." To "force," round the unrounded percentage closest to .5 up or down, as necessary to get a sum of 100 percent. Fore example, 64.4 would ordinarily be rounded to 64 percent, but if the sum of the percentages is only 99 percent, 64.4 could be rounded to 65 percent to provide a sum of 100 percent.

Mean

The "mean" or "average" response of a set of responses is used to indicate the typical response of a group to a question (or group of questions). It indicates what the group tends to feel about a question when the responses are "averaged out."

If the mean of a set of responses is to be computed, the response categories must be related to a continuous scale (extent of agreement or extent of importance) that indicates a gradual increase or decrease from one response category to the next. When response categories *cannot* be related to a scale (yes/no/don't know, or language arts/mathematics/science/social studies), the mean should not be used. Instead, report the category with the greatest number of responses and the percentage of people who gave that response.

As shown in the example below, the mean can easily be calculated from the figures in a frequency table, like the example on page 6-9. The frequency distribution from that example is repeated in the example below with a third column in which the product of the scale value and the frequency is entered for each response category. The category "No Response" is not on the scale and, therefore, is not included in the calculation of the mean. The products in the third column (Scale Value x Frequency) are then summed and that sum is divided by the sum of the frequency column less the number of responses in the "No Response" category. The result is the mean.

EXAMPLE OF CALCULATING THE MEAN FROM THE FREQUENCY

Question 1: Middle school children should be expected to do homework for one hour each school night:

Response Category	Scale Value	Frequency	Scale Value x Frequency
Strongly Agree	(5)	36	180
Agree	(4)	70	280
Neutral	(3)	54	162
Disagree	(2)	20	40
Strongly Disagree	(1)	0	0
No Response		20	N/A
		200 (less 20 is 180)	662

Mean = 180 $\overline{)662}$ = 3.68 (which can be rounded to 3.7)

Mode

The mode of a set of responses is used to indicate the most frequent or typical response of a group to a question (or group of questions). It is the response that more people gave than any other.

The modal category for the frequency distribution in the foregoing example is "Agree," since more respondents selected that single response than any other. Selecting a modal category is a little simpler than calculating the modal value. Consider the frequency distribution indicated below.

Years of Residence in the Community	Number of Families
0- 5	20
6-10	40
11-15	120
16-20	80
21 or more	35
	295

In this case the modal category is 11-15. What is the value of the mode? It is clear that the mode is somewhere within the category with the greatest frequency; further, it should be closer to the upper limit of that category than to the lower limit because 80 families are in the next higher category while only 40 families are in the next lower category.

The calculation of the mode is made by taking the lower limit of the modal category (11) and going 80/40+80 of the way through the interval (i.e., 5 years). That is, 11 years + 80/120 x 5 years = 11 years + 3-1/3 = 14-1/3 years.

Following the instructions in this unit, prepare data summary sheets for all of the questions asked in your survey. (Refer to the example of a data summary sheet on page 6-3.)

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Unit 7

Interpreting the Data and Preparing a Report

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CONTENTS

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INTRODUCTION

This unit is designed to help you (1) interpret the summarized data, and (2) report the results of your survey. In the first section, procedures are presented for examining the meaning of the frequencies, percentages, and other statistics calculated in completing Unit 6. In the second section, suggestions and examples are provided for organizing and presenting the results of your survey in a written report to appropriate school district authorities and to the community.

INTERPRETING THE RESULTS OF A COMMUNITY SURVEY

This section describes three ways of interpreting the data from a community survey. The way data are interpreted depends not only on the data and the way they were collected, but also on the values and perceptions of the interpreter. Therefore, the interpretation of community survey data must be viewed as a process of preparing survey statements which allow the reader the freedom to infer the implications of the data for school decisions and plans. Using this approach, it is possible to interpret survey data in three ways:

Interpretation 1: For each question, write a simple summary statement describing the response of *each* community group. The statement should specifically mention the statistic (percentage, frequency, mean, or mode) which best describes that response.

EXAMPLE OF INTERPRETATION ONE

Data Summary for Question 1				

1. Emphasizing the importance of responsible citizenship should be a program goal for our school.

   (1) In favor　　　(2) Not in favor　　　(3) Not sure

	COMMUNITY GROUP			
	Hill School		Smith School	
Response Categories	Frequency	%	Frequency	%
(1) In favor	70	70	134	67
(2) Not in favor	20	20	40	20
(3) Not sure	10	10	26	13
Total	100	100%	200	100%

Interpretation.

● Seventy percent of the parents of Hill School students stated that they were in favor of responsible citizenship as a school program goal. Twenty percent were not in favor of the goal, and ten percent were unsure.

● Sixty-seven percent of the parents of Smith School students stated that they were in favor of this goal. Twenty percent were not in favor of this goal, and thirteen percent were unsure.

Interpretation 2: If more than one community group responded to a question, decide whether or not their responses are similar enough to be combined. If the responses are similar, consider combining the responses into a new table, and prepare a summary statement describing the combined responses. In such a summary, be sure to highlight any differences in the esponses of the separate groups.

In the foregoi .g example the responses of the parents of Hill School and Smith School students to Question 1 were similar, differing by only a few percentage points; therefore, the responses of the two groups could be combined.

EXAMPLE OF INTERPRETATION TWO

Data Summary for Question 1						
1. Emphasizing the importance of responsible citizenship should be a program goal for our school.						
(1) In favor		(2) Not in favor		(3) Not sure		
	Hill School		Smith School		Both Schools	
Response Categories	Frequency	%	Frequency	%	Frequency	%
(1) In favor	70	70	134	67	204	68
(2) Not in favor	20	20	40	20	60	20
(3) Not sure	10	10	26	13	36	12
Total	100	100%	200	100%	300	100%

Interpretation:

● Sixty-eight percent of the parents of Hill and Smith School students were in favor of responsible citizenship as a school program goal. Twenty percent were not in favor of this goal, and twelve percent were unsure.

$1 \vdots$

Interpretation 3: If more than one question was asked on a specific topic or subtopic, decide whether or not the responses to those questions should be considered together. If you conclude that the questions on one topic or subtopic should be considered together, prepare summary statements which clarify the relationship between the responses to those questions and suggest how those responses support a general conclusion or interpretation.

Two questions which the parents of Hill and Smith School students were asked in the survey described in the foregoing examples—Question 1 (a closed question) and Question 5 (an open-ended question)—were on the topic of citizenship. The responses to these two questions are presented below:

EXAMPLE OF INTERPRETATION THREE

Data Summary for Question 1	Data Summary for Question 5
1. Emphasizing the importance of responsible citizenship should be a program goal for our school.	5. Name the one school problem which you believe should receive the most attention.

Data Summary for Question 1

Both Schools

Response Category	Frequency	%
In favor	204	68
Not in favor	60	20
Not sure	36	12
Total	300	100%

Data Summary for Question 5

Both Schools

Response Category	Frequency	%
Truancy	53	18
Contempt of authority	30	10
Peer fights	68	23
Vandalism	20	7
Low achievement scores	40	13
Threats of a teachers' strike	29	9
No response	60	20
Total	300	100%

Interpretation:

● In response to Question 1, a majority of the paretns (68%) favored responsible citizenship as a school program goal. In response to Question 5, a majority of the parents (58%) cited problems related to citizenship (e.g., truancy, contempt of authority, peer figh ts, vandalism). Together, these responses suggest that the parents feel that the schools have a responsibility to emphasize responsible citizenship and that the schools may not be succeeding.

REPORTING THE RESULTS

With the interpretations prepared for each question and/or for each topic, you are now ready to prepare a summary report. The basic material for your report has really been completed—the data summary sheet and the interpretation for each question. Basically, preparing a report requires the preparation of an introduction, a brief description of the procedures followed in the survey, a logical organization of the data summary sheets and interpretations under appropriate headings, and the preparation of a summary of the results. Thus, a report is generally organized into four parts: introduction, procedures, results, and summary. For long reports, an abstract may also be prepared. The remainder of this section briefly describes the four parts of a report and provides examples.

Introduction

The introduction provides an overview of the survey: why the survey was conducted, the issue of interest, and the community groups involved. Basically, it summarizes the information set forth in the purpose statement prepared in completing Unit 1.

EXAMPLE OF AN INTRODUCTION

During the 1975-76 school year, the Piedmont School District conducted a community survey. The purpose of this survey was to assess student curriculum needs in two schools (the Hill School and the Smith School) as perceived by the parents of 6th, 7th, and 8th grade students.

Procedures

This section describes how the survey was planned and conducted and highlights the key decisions made in carrying out the survey (Units 2 through 7) and the reasons for those decisions. For example:

- which data collection method was used, and why (Unit 3)
- were samples drawn; if so, how and why (Unit 3)
- what data collection materials were used (Unit 4)
- how was the survey conducted (Unit 5)
- how were the data summarized and interpreted (Units 6 and 7)

EXAMPLE OF PROCEDURES

A task force including three community members and four teachers (two from the Hill School and two from the Smith School) was formed in early October 1975. Since the parents of 6th, 7th, and 8th grade students in both schools (around 200 each) had shown great interest in school-related projects and activities, the task force decided that a questionnaire could be used to elicit the parents' opinions on student curriculum needs. At the same time, the task force decided to include every eligible parent (396) in the survey; therefore, no samples were drawn.

A two-page questionnaire consisting largely of closed questions was developed by the task force and mailed to the parents in January 1976. About 73 percent of the parents completed and returned the questionnaire. Two members of the task force summarized the data and prepared a summary statement for each question on the questionaire.

Results

The longest section of the report presents a data summary sheet for every question asked and/or topic raised. This section usually begins with an overview of how the section is organized; then the data summary sheets are presented together with any interpretative statements.

EXAMPLE OF RESULTS

Since it is important for the staff of both schools to know how the parents of each school responded, the data were summarized by question and by school.

* * * * *

Question 4: Every student should receive formal classroom reading instruction in grades 6, 7, and 8. (Check one.)

Yes ☐   No ☐   Unsure ☐

Response Category	Hill School		Smith School	
	Frequency	%	Frequency	%
Yes	92	63	42	30
No	16	11	52	37
Unsure	38	26	48	33
	146	100%	142	100%

The bar graph below illustrates another way of presenting the summarized data.

Key
Hill School
Smith School

Percentage of Respondents

Unsure   No   Yes

Response Categories
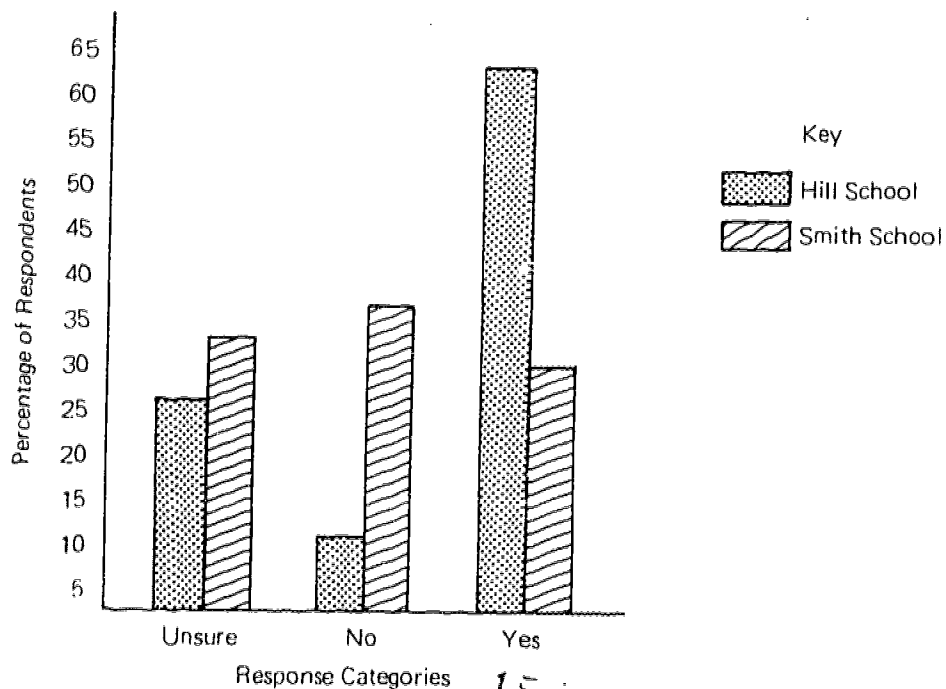
Sixty-three percent of the parents of the Hill School students believe that formal classroom reading instruction should be provided in grades 6, 7, and 8. Although twenty-six percent were unsure about this question, the majority opinion would not change even if all of the unsure respondents were to respond in the negative upon a second polling.

No summary statement can be written for the parents of Smith School students regarding formal classroom reading instruction in grades 6, 7, and 8, since their responses were rather evenly divided. Like the parents of the Hill School students, a rather large percentage (33%) of these parents was unsure.

Note that in the foregoing example, a brief introductory statement is followed by the question, the data summary, a bar graph, and several summary statements on the results.

Summary

The final section is a summary of survey results. Usually, this summary is presented in several short paragraphs. Sometimes a survey group uses this summary to discuss the implications of the survey or to make recommendations; both of these approaches to the summary, however, allow survey staff members to stray from the data and risk imposing their personal biases on the data. More commonly, the summary simply presents the major results of the survey.

EXAMPLE OF A SUMMARY

The majority of the parents of Hill School students feel that formal instruction in basic skills should be provided. Since no similar agreement was found among the parents of Smith School students, we plan to question this group further through a series of personal interviews.

Following the instructions in this unit, prepare summary statements on the data collected for all your survey questions. The survey report may then be completed.

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Appendix A

Compiling a Master List

COMPILING A MASTER LIST

A master list is a complete list of the names, addresses, and telephone numbers (if necessary and available) of all eligible members of each community group identified in your purpose statement.

The master list is needed at certain points in the survey process:

● When you plan the survey, the master list will provide information about the size of each community group and a basis for drawing a sample if sampling is desired (Unit 3).

● The master list is also needed when the survey is being conducted to set up a control chart and to contact potential respondents (Unit 5).

To compile a master list, you should follow the steps outlined below:

1. Obtain any available lists for each community group.

2. If lists are available, make sure that they are current and complete. If necessary, update them.

3. If current lists are not available, refer to the sources listed below to create the lists you need.

4. If more than one community group is included in your survey, check the names listed to see that no name appears on more than one list. If some names appear on several lists, the staff should determine on which list each duplicated name should appear.

Sources of Lists

Most schools have parent lists available. If your survey involves other community groups, some of the sources listed below might be helpful.

Telephone directory

Chamber of Commerce records

City planning offices and health departments

PTA lists

Voter registration lists

Although these sources are helpful, they are rarely complete. Telephone directories exclude people with unlisted numbers, people without phones, and new residents. Voter registration lists exclude most new residents and all non-voters. If you are using any of the sources listed above, survey staff may need to take time to update them so that you will be using the most recent and complete lists possible.

PLANNING SHEET
A Master List

Below is a suggested format you may wish to use or adapt when compiling your master lists. The "Notes" column can be used to record information related to specific respondents while the survey is being conducted (refer to the control charts in Unit 5).

Name and Address	Phone	Notes

School: _____

Community Group: _____

Number of Eligible Group Members: _____

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Appendix B

Drawing a Sample

INTRODUCTION

It is difficult to obtain a sample perfectly representative of a population. However, for our purposes a sample can be drawn which will sufficiently reflect the characteristics of a given community group providing the information you need.

During the process of sampling, however, bias may occur when samples are produced that reflect certain characteristics to a greater extent than does the total population. When the sampling technique is unbiased, you can confidently make inferences about the population group on the basis of responses from the people included in the sample.

Sampling can sometime be a complex process. This appendix is designed to introduce you to the kinds of concerns a sampling specialist might have, giving you some basis for an intelligent appreciation of the considerations involved. You may want to consider seeking the help of a sampling specialist in your project.

This appendix is organized into three sections: the first discusses the question of sample size, the second describes four sampling techniques and presents a chart summarizing the advantages and disadvantages of each, and the third is a planning sheet which can be used to present the sample drawn. A bibliography at the end of this appendix lists some reference materials.

SIZE OF SAMPLE

As a general rule of thumb, you will want to have approximately 50 people from each community group respond to your survey. To be sure of having 50 respondents, you will need to mail questionnaires to considerably more than 50 people. To estimate the size of this group (i.e., the size of the sample), consider the typical response rates discussed below.

For example, a well-conducted mail survey should result in the return of 30 percent to 35 percent of the questionnaires sent out. A well-conducted survey dealing with a very important issue may result in the return of 50 percent to 60 percent of the mail questionnaires.

Using the table below, you can estimate the size of the sample you need to draw to have approximately 50 mail questionnaires returned.

Response Rate	Size of Sample to Obtain Approximately 50 Respondents
10%	500
20%	250
30%	167
40%	125
50%	100
60%	83

PROBABILITY SAMPLING TECHNIQUES

In order to choose the specific respondents (persons or families) to be included in a sample, a technique known as *probability sampling* can be used. In probability sampling, (1) the process for selecting respondents is not left to the judgment or convenience of the investigator and (2) the probability that a given respondent will be included in the sample is known.

Numerous probability sampling techniques can be used. Four of the most common of these techniques are briefly discussed here in terms of method, advantages, and disadvantages. The four techniques are:

- Simple random sampling
- Systematic sampling
- Cluster sampling
- Stratified sampling

Simple Random Testing

Suppose that you are interested in a population of 1000 people and want to select 100 of them for a sample. In this case, the sampling unit is the individual. You could make a list of the 1000 people, put each person's name on a separate piece

of paper, fold it, and drop it into a large bowl. Then you could shake the bowl, draw a name, shake the bowl again, draw another name, and so on until you had the desired number of names. The bowl must be shaken before each name is drawn so that each person's name has the same chance of being chosen.

In practice, a listing of eligible respondents is used in place of a bowl. You should not select a group of names from one part of the list for if you do it is possible that all of the names selected would have some important characteristic in common (for instance, everyone on the list whose last name is Smith). This might result in a biased sample due to a disproportionately high number of Smiths.

Suppose you prepared a list of the 1000 people in the population group and assigned a number to each of the people on the list. You then consulted a table of random numbers and selected 100 people from the 1000 available, including only the people whose assigned numbers were selected. For example, a table of random numbers might appear as below:

53003	78803
47009	68555
10122	24890
.	.
.	.
.	.

The basic idea behind the construction of the table is that if the first digit is "5" the probability that the next digit is any number from "0" to "9" is equal to 1 in 10. Each arrangement of digits, then, has an equal chance of appearing in any given position in the random number table. The table can be used to select sets of digits going, for instance, across rows, down columns, or back-wards. If you assigned numbers to each of the 1000 names on your list, the numbers would range from "000" to "999." Then you would read three digit numbers from the table and select the

corresponding names from your list for inclusion in the sample.

In order to use the table in this way, you must use the master list which includes the names of all 1000 members of a specific community group and assign a three digit number to each name. For instance, the first names on an alphabetical list of one thousand names might appear as follows:

000	A. Adams
001	J. Adams
002	Stacey Adams
003	Paul Baanach
004	Shelley Blanshard
005	Conrad Cromby
006	Hilda Dartmoor
007	Harry Dinsmoor
008	Gertrude Ditworth
009	Harold Ellsworth
.	
.	
.	
999	Bert Zankard

Refer to the table on the left: The first set of three digits is 530. The name corresponding to the number 530 on your master list should be recorded on a separate list of the people to be included in the sample. Moving one digit to the right, the next number of 300; then 003 (Paul Baanach), 037, 378, and so on. When using the table, if the same number appears twice, the corresponding name should not be selected a second time. This process would be continued until 100 different names (or the number required for your sample) have been selected.

One of the primary advantages of simple random sampling is that it is easy to understand. Tables of random numbers can be located in texts such as *Tables for Statisticians* which is listed in the bibliography.

One disadvantage of simple random sampling is that the actual names drawn may not provide a sample which is representative of the population in all respects. Suppose, for example, that 20 percent of the entire population were college graduates. It would be possible, although unlikely, to select the

desired number of people for a sample without selecting a single college graduate. It would also be possible to select a sample which proportionately contains too many college graduates. Whether the representation of college graduates in important or not depends, of course, on the purpose of your survey.

Although the simple random sampling technique is statistically bias-free, it will not necessarily provide a sample which is representative of ... total population. Just due to randomness you could get under or over representation of certain characteristics in your sample. Of course, any inferences formed about a population on the basis of such a sample might also be subject to error. We call this kind of error "sampling error" (as distinct from bias). One way to reduce sampling error is to increase the size of your sample.

The key information requirement for simple random sampling is a complete list of all eligible respondents.

Systematic Sampling

Strictly speaking, systematic sampling is not a probability sampling method, like the others listed in this section. Yet it is easy to understand and, in practice, easier to carry out than simple random sampling. For this reason a systematic sampling approach is often used in actual practice. Again, suppose you want to select 100 people for a sample from a population of 1000 people. Using a systematic sampling procedure, you could divide 1000 by 100 obtaining 10 for your sampling interval. Every tenth name on the list of eligible respondents would then be selected for the sample. If you want your sample to include 100 individuals from a population of 500, the interval size is calculated by dividing 500 by 100 which gives you an interval size of 5. If the interval size is 5, you would select one name at random from among the first five names on your master list as your starting point; if the interval size is 10, you would select a name from among the first ten names on the list as your starting point. You would record every name appearing at the appropriate interval on your list as a name to be included in the sample.

If your procedures are applied correctly, you should be nearing the end of the list when you have selected the desired number of people for your sample. If you are not or if you reach the end of the list without drawing the number of individuals desired, you have made a procedural mistake which can be easily corrected.

It is easier to draw a systematic sample than a random sample because you are not required to look up numbers from a table of random numbers to select each respondent. Systematic sampling, like random sampling, however, requires a complete master list of eligible respondents. Sometimes the list of eligible respondents may contain an order in the listing of names that is correlated with the information that you are seeking; when this is the case, the method is biased. An example of such an arrangement in the list would be a situation in which households are listed by street address. If the number of houses on each block is the same it is possible to select too many or too few corner houses. Even so, systematic samples are frequently drawn by experienced people.

Cluster Sampling

As noted previously, a master list is needed if simple random or systematic sampling procedures are to be used. Often no accurate list is available. In this instance, cluster sampling provides a compromise technique which will enable you to work with clusters of individuals. Suppose that you do not have an accurate population list to use in drawing a sample of 100 people from an area of the city with about 5,000 people, but that you do have a list of the city blocks in which they live. You could choose city blocks (clusters of individuals) at random and then choose, randomly or systematically, the desired number of households from each cluster (city block) selected.

One disadvantage of this technique is that bias is almost impossible to avoid. Using the example of choosing city blocks, it is well known that people's attitudes within a small geographic area are correlated. Depending upon the information needed, the residents of a given city block will often respond in similar ways to the same questions.

Also, when city blocks are used as clusters, there is a good possibility that particular subpopulations will be over or under represented. For example, by selecting some city blocks and excluding others, people from a specific income group might be inadequately represented or even omitted. As a consequence, if cluster sampling procedures are used, a larger sample is needed to keep sampling error at tolerable levels for the inferences to be made than would be needed if simple random sampling procedures were used. In short, clustering produces greater sampling errors than simple random sampling does; however, clustering is often one of the few available means which can be used to select the individuals to be included in a sample.

Stratified Sampling

Although the object in sampling is to reflect a total population in miniature, all of the sampling procedures previously discussed involve some risk that the sample selected may contain a disproportionate number of people from a particular subpopulation.

Suppose a school district is conducting a project to learn what community support exists for closing several school buildings due to decreased enrollment. It is believed that the responses from various population groups will be closely correlated with certain characteristics or variables. Families with children currently enrolled may oppose closing any schools. Their opinions might also vary depending upon which schools are to be closed. Families with children attending a neighborhood school may oppose decisions which necessitate transporting their children across town. People whose children are grown or those without children may favor any district measures which might reduce their current tax burden. The responses of people without children may also vary in terms of how close they live to the schools involved. Those who live near a school scheduled for closing may support the decision because they would like to eliminate the commotion students may create in their neighborhood. People who live near the schools to which students would be transported may oppose closing some schools due to the increased traffic that decision might create in their area. Thus, variables

such as having children in school, the schools involved, and proximity to the buildings affected might be important in a survey of this kind. You should not use a sampling procedure which might omit people in the categories described above; nor should you use a procedure which might include a disproportionate number of people from some of these population groups. In a case like this, you would not want to risk using a simple random sampling procedure; rather, you would use a deliberate sampling technique—stratified sampling—which would provide a sample composed of the various subpopulations which are expected to have different perspectives on specific questions.

One word of caution: Stratified sampling is *not* intended to provide a sample which exactly reflects the population, since this would be a highly unlikely accomplishment. You should not expect to be able to develop a sample containing, proportionately, the same number of males, females, school age children, taxpayers, college graduates, people with Irish surnames, brown-eyed individuals, etc., as the total population contains. What you should try to do is to identify those few characteristics or attributes which you expect to be correlated with the information being collected and stratify the sample on the basis of those characteristics.

With a stratified sampling procedure, therefore, the population is divided into subpopulations on the basis of one or more variables which are believed to be correlated with the information being collected. Each group or stratum would require a sample large enough to provide approximately 50 completed responses. Respondents may then be selected from each subpopulation or stratum by simple random sampling or systematic sampling methods.

Although a stratified sampling technique is a little more difficult to design and more expensive to use (only a few variables, then, should be used when stratifying the population), it will provide samples that answer questions about those variables which might influence responses and, therefore, be important to decision makers. Keep in mind, however, that each subpopulation must be very carefully defined.

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SUMMARY
Probability Sampling Techniques

Sampling Technique	Advantages	Disadvantages
Simple Random: The probability of selection is the same for every eligible respondent and for every possible grouping of eligible respondents.	Provides unbiased results.	A master list of eligible respondents is needed. Somewhat expensive, especially when no population lists are readily available. May result in large sampling error, since an unrestricted sampling procedure is used and certain population groups may be disproportionately represented in the sample.
Systematic: The sampling interval is determined by dividing the number of people to be included in the sample into the total number of eligible respondents.	Easier and less time-consuming to use than simple random sampling.	An eligible respondent list is needed which may be difficult to obtain. May result in a biased sample if some population groups are clustered on the list.
Cluster: The sample is based upon clusters of eligible respondents. Once clusters are selected, simple random sampling or systematic sampling methods are used.	Cluster sampling is a good technique to use if no complete list of the population is available. Cluster sampling is especially appropriate when used in conjunction with other sampling procedures. When personal interviews are to be conducted with members of a population scattered across a large geographical area, clusters should reduce costs.	Clusters are rarely miniatures of the population. Since this is the case, this procedure is biased. If cluster sampling is used alone, the investigator can only form inferences about the populations of the clusters, not about the population as a whole. More individuals are needed for cluster sampling than for simple random sampling to obtain the same levels of tolerable sampling error since this method is likely to result in larger sampling errors than simple random or systematic sampling does.
Stratified: The sample is drawn from subpopulations which are determined on the basis of characteristics believed to be correlated with the information being collected.	This procedure guarantees representation of subpopulations stratified on the basis of characteristics which are expected to affect their responses. Stratified sampling usually results in a more useful sample than could be developed with other sampling procedures.	More complex than simple random sampling or systematic sampling. Each subpopulation or stratum requires its own sample of approximately 50 completed responses.

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COMMON SAMPLING PITFALLS

Pitfall	Example	Suggested Solution
Overemphasis on convenience	Selecting people who are readily available or cooperative.	Use an established sampling technique when selecting people to be included in the sample. Explain the sampling procedure being used to the people actually collecting the data. Explain how the failure to use only the names listed may result in a biased sample.
	Going door to door and including only those people who happen to be at home.	Follow-up procedures should be implemented to contact people who were not at home the first time.
Outdated or insufficient information	Using a list of community members that is outdated and/or inaccurate.	Make every effort to update the population list from which the names for the sample are to be selected.
Insufficient information collected	Low return rate obtained.	Follow-up procedures should be implemented. Try using a different follow-up method than the method originally used, i.e., if mail questionnaires were used, follow up with a telephone call.
	Materials returned indicate respondents did not have sufficient information to answer the questions asked.	Reexamine the community groups included in the project. It is possible that you selected the wrong groups to provide the information you need.
		Reexamine your data collection materials. Ambiguous or unclear questions may have made it difficult for the people included in the sample to provide the information needed.

PLANNING SHEET
Drawing a Sample

For each community group, discuss with your sampling specialist the size of the sample and the sampling technique to be used. Then, select the required number of respondents for your sample from the master list for that particular community group. Use or adapt the form below to compile your sample list. The "Notes" column can be used to record information related to specific respondents while the survey is being conducted (refer to the control charts in Unit 5).

Community Group:_____

Total Number of Eligible Group Members on the Master List:_____

Sample Size:_____

Sampling Technique to be Used:_____

Name and Address	Phone	Notes

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