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Launching Your Survey Project

When you want information from someone, how do you usually go about getting it? Often, you ask questions. In a conversational setting, you can ask questions of someone to gain the information you need. A structured version of these conversations is called an interview. But for many reasons—mostly cost and resources—we're usually not able to talk with a great number of people in person. If data collection is limited to a few people, that information may not represent the views of the larger group to whom we want to generalize the results. Decisions based on such data may be misleading or even erroneous. A practical way of gathering information from a large number of people is to use a questionnaire.

Asking questions, getting responses, and using that information is what survey research is all about. *Survey research* or a *survey project* denotes the process of gathering information from members of a particular group using an interview or a questionnaire. The focus in this book is on creating and using questionnaires.

A *questionnaire* is a tool used to gather information in a survey project using either paper-based or Web-based modes of delivery.

A *survey project* consists of the tasks and activities required to plan and create a questionnaire and use it to gather information.

◆ WHEN ARE QUESTIONNAIRES USED?

Questionnaires are used as data collection tools for many types of survey projects, including fact-finding questionnaires; determining opinions, perceptions, and attitudes; identifying interests and experiences; conducting needs assessments; and so on.

Survey research using a questionnaire is an appropriate method of data collection when . . .

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- Existing information is not available to answer the questions posed
- A questionnaire is the best means to provide the information required (rather than interviews, an experiment, or observations)
- A sponsor and resources (staff and budget) are available to complete the survey project
- There is a plan in place to *use* the results of the survey project

Using Questionnaire Results for Data-Based Decision Making

A well-done survey project provides high-quality data. In many cases, results of questionnaires are used to inform decisions. For high-stakes decisions, you should use other sources of information in addition to the responses from a questionnaire. A high-stakes decision is one that takes significant resources to implement and one for which the consequences of being wrong are great. For example, data from questionnaires may be used to guide important decisions such as recommending the location of a new school, determining the need for a charter school, or creating special programs in response to requirements from the No Child Left Behind (NCLB) Act. In all these situations, significant time and resources are required to implement decisions—and there's a high cost associated with making a wrong decision.

If your decision has low stakes—for example, selecting a topic for the spring one-day inservice session—then results from a carefully constructed questionnaire administered to an appropriate target audience will most likely provide the information you need to make your decision. The more important the decision, the better—and more varied—your sources of data must be.

Depending on the decision you need to make, you may need to *disaggregate* your data to explore potential differences among subgroups.

Disaggregating your data means that you create subsets of your data for purposes of analysis. For example, for data gathered in response to requirements from the NCLB Act, it's important to gather information on ethnicity/race and gender so you can make comparisons of responses among these groups.

A caveat: Sometimes people who respond to a questionnaire don't tell the whole truth, or they give only partial information. That's why it's important to validate the information from a questionnaire with other information and common sense.

Using a questionnaire to gather data to make a decision has several benefits:

- Involving a wide range of constituents in the decision-making process
- Gathering a range of viewpoints—ensuring that many people are heard
- Determining support for proposed projects or actions (Avoid hindsight!)

Following are some examples of data-based decisions:

Problem: Many students who rode their bikes to school were not using helmets, resulting in a number of injuries.

A school district noted that one in three of its elementary and middle school students were riding bicycles without helmets, ranging from zero in

one school to 83% in another. This district has a high unemployment rate and a high proportion of the population below the national poverty level. A questionnaire to parents indicated that the primary reason for their children not wearing helmets was the cost of the helmet. The district held a series of bicycle safety awareness workshops and publicized these in the community. As a result, over 500 helmets were donated, and the use of helmets rose significantly over a two-year period as documented by a follow-up questionnaire.

Note that another means of gathering information about helmet use following the donation of the helmets would be observation: Are all or most of the children wearing their helmets? The observational data would corroborate the results of the questionnaire.

Problem: Informal reports by teachers suggested the presence of bullying in the elementary school, but there were no hard data on the types of bullying or their prevalence.

Several school districts worked together to create a questionnaire that was distributed to all fourth graders. Students were asked how safe they felt at school, whether bullying happened to them (specific behavioral examples were used), and if so, what they did. Questionnaire results indicated that nearly one-quarter of the students reported being bullied, albeit of a mild nature such as teasing. However, 25% of these students reported serious bullying, including being kicked, hit, or pushed on a frequent basis. Most often the bully was a boy from a higher grade level. The results of this questionnaire were used to create awareness and support programs to lessen the incidence of bullying at school.

Another data source to validate the results of this questionnaire would be observations in the school, interviews with teachers, and reports of bullying by students and teachers. All these data sources can be used in planning an intervention program.

In these examples, a questionnaire provided information to make data-based decisions. In the bicycle helmet study, the questionnaire revealed that the reasons children did not wear helmets had nothing to do with understanding the need for wearing them.

For the school districts focusing on making the school environment a safer place, data on the incidence of bullying, and the types of bullies and their actions led to the development of an intervention program.

Using Questionnaire Results for Planning, Describing, and Identifying

Results of questionnaires can be used for many purposes, including the following:

- Identifying needs (needs assessments)
 - What are the technology needs of the district—and what training must be provided for that technology to be used effectively?
- Determining opinions, attitudes, and beliefs
 - What are parents' attitudes about charter schools?

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- Identifying interests
 - What is the level of interest among parents in participating in activities in their child’s classroom?
- Identifying feelings and perceptions
 - How do parents perceive the value of magnet schools?
- Describing behaviors
 - What kinds of reading-related activities do parents of early-elementary students use with their children?

◆ **WHAT QUESTION DO YOU WANT TO ANSWER?**

You’ve learned about uses of questionnaire data and how those data need to be a part of the evidence for high-stakes decisions. You’ve also learned about other uses of data from questionnaires, such as planning or describing interests or preferences. So now, here are some questions to consider: What question do you want to answer? Who needs the information (project sponsor or decision maker)? How will that information be used?

Table 1.1 describes some goals for survey projects, as well as uses of the results from the questionnaires. For some, the data will be used to make a decision, while for others, the information will be used to plan activities or understand perceptions.

Questionnaires are used to gather data, and they require resources and commitment from many people, including those who are providing you with the data (the respondents). The results of questionnaires must be *used!* That does seem obvious, but on occasion, questions will be included on a questionnaire that do not need to be there. For example, will the data from all demographic questions be used in the analyses? If not, why are they being asked? Sometimes questionnaires contain questions that were added because someone was curious but there were no specific plans to use the data. Careful planning can avoid this—and perhaps shorten the questionnaire.

◆ **WILL A SURVEY PROJECT PROVIDE YOU WITH THE INFORMATION YOU NEED?**

A strange question, especially when you are reading a book about how to create a great survey project! But let’s be sure that’s what you need. Following are some types of research studies that provide data and information to support decision making—but they use different methods of doing so.

Experimental Research Studies

An experimental research study is one in which a variable is manipulated and outcomes are measured to evaluate the effect of the manipulation. For example, the effect of a new curriculum on student understanding of mathematics may be investigated. Experimental research is characterized by careful controls in the design of the study to help ensure that you are able to measure the effect of the intervention—in this example, the new mathematics curriculum. Questionnaires can be used before and after the experimental intervention to gather information. The experimental

Table 1.1 Examples of Survey Project Goals

<i>Group Sponsoring Survey Project</i>	<i>Goal of Survey Project</i>
Parent-Teacher Organization (PTO)	To determine the current level of parent involvement among parents of students in different grade levels for the purpose of developing outreach programs to be more inclusive for all parents (This questionnaire could be administered at different times to look for trends in participation.)
School board	To gather information on salaries, benefits, and working conditions in similar districts in the state to assist the board in making decisions relative to collective bargaining
Group of school librarians in the district	To identify best practices for public and school libraries working together to support academic success to guide the development of new districtwide library programs
School alumni office	To describe alumni outcomes for the purpose of identifying role model graduates to encourage students to stay in school until they graduate
Community group	To gather information about citizen involvement with the district and its schools for the purpose of identifying ways to increase citizen involvement (This questionnaire could be administered at different times to look for trends in participation.)
Teacher inservice committee	To determine teacher reactions to a series of several different workshops delivered during the school year for the purpose of determining what works best
School district	To gather information about perceptions regarding the district, its schools, and the quality of the education it provides to students—for the purpose of designing an effective communication plan

research question is as follows: What is the effect of the new mathematics curriculum on student achievement in mathematics? Additional details about experimental research can be found in research textbooks (e.g., Fraenkel & Wallen, 2002; Gall, 2002; Johnson & Christensen, 2000; Mertler & Charles, 2001).

Action Research Studies

Action research is similar in some ways to experimental research in that an activity or a program is implemented and its effect or outcome is measured. The goal is to find out why something happened or why something worked as it did. Action research does not use a random sample of participants, is not designed to be generalized to other groups or to other settings, and has no control or comparison group. Action research studies are on a much smaller scale than are experimental research studies, focus on questions of immediate interest to teachers and other educators who conduct these studies, and often seek to answer a specific question that will guide specific actions. Both questionnaires and observations may be used to gather the data.

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For example, a middle school teacher observed that in her third-period computer class, some of her students were acting as peer tutors and helping other students who were challenged by some of the features and functions of the computer programs they were using. These peer tutors were working with their classmates during study hall. She observed that the tutored students became proficient in using the computer program much faster than students in some of her other classes where there were no peer tutors. She decided to try peer tutoring in another of her classes and identified three students who were interested. After two weeks, the students who received the peer tutoring were able to use the computer programs proficiently.

The action research question is as follows: What is the effect of using peer tutors to increase the proficiency level of students using a particular computer program? Further information about action research can be found in sources such as Arhar, Holly, and Kasten (2000), McLean (1995), or Mills (1999).

Questionnaires can be used to gather information in experimental and action research studies, as well as in survey projects. But the difference here is that the survey projects described in this book focus on gathering information to make a data-based decision.

◆ CREATING A SURVEY PROJECT

Let's begin the process of creating your survey project. Survey projects come in all sizes—from an individual school leader creating a questionnaire to administer to a small group of teachers to large districtwide, statewide, or even national survey projects. Much of the discussion in this book is geared to larger survey projects because they have more people involved. But all points made in this book will work for any size survey project.

Table 1.2 provides a summary of the steps of a successful survey project. For each step in the process, the critical success factors are identified—those things that must be done *during this step in the process* to help ensure that your survey project is successful. The table also indicates in which chapter each step is discussed.

Table 1.2 A Summary of the Steps and Critical Success Factors in a Survey Project

<i>Step</i>	<i>Critical Success Factor</i>	<i>Find More Information in Chapter</i>
1. Conduct the initial planning.	<ul style="list-style-type: none"> • Identify the sponsors and stakeholders and garner their support in all phases of the initial planning. • Get buy-in and sponsorship at the right levels within the organization. • Identify the audiences for the final report. • Identify sources of information you can use to help you with the project. 	1 – Launching Your Survey Project
2. State the guiding question and create clear, concise, and unambiguous objectives.	<ul style="list-style-type: none"> • Have a clear guiding question and clear and unambiguous objectives. 	1 – Launching Your Survey Project

<i>Step</i>	<i>Critical Success Factor</i>	<i>Find More Information in Chapter</i>
3. Identify the target audience: the people who have the information you need.	<ul style="list-style-type: none"> Carefully define the target audience to ensure you'll get the information you need. 	1 – Launching Your Survey Project
4. Determine the mode of data collection that's appropriate for your target audience.	<ul style="list-style-type: none"> Tailor the mode of data collection (paper-based or electronic questionnaire) to the skills and needs of the target audience. 	1 – Launching Your Survey Project
5. Create a detailed project plan.	<ul style="list-style-type: none"> Create realistic schedules and timelines. Create detailed project plans and resource assignments. Create reasonable, realistic budgets and stick to them. Create a plan for analysis, including disaggregating your data so that you'll know what demographic questions to include. 	1 – Launching Your Survey Project
6. Gain needed approvals to contact members of the target audience and to conduct the survey project.	<ul style="list-style-type: none"> Plan for and obtain needed approvals from the school district, the Institutional Review Board, or other oversight organization at the beginning of the project. 	1 – Launching Your Survey Project
7. Write the questions.	<ul style="list-style-type: none"> Write questions that map to the guiding question and the objectives. Have enough questions to meet the objectives of the survey project, but not so many that respondents quit or feel so overwhelmed that they do not even begin the questionnaire. Use response scales that are appropriate to the question, are clear and complete, are appropriate to the target audience, and require no interpretation. Tailor the types of responses to the level of understanding of the respondents. 	2 – Asking the Right Questions 3 – Creating Response Choices for Rating Scales
8. Create the questionnaire.	<ul style="list-style-type: none"> Create directions that are clear and complete. Format the questionnaire so that it is easy for respondents to understand. 	4 – Putting the Questionnaire Together

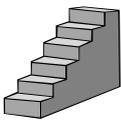
(Continued)

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Table 1.2 (Continued)

<i>Step</i>	<i>Critical Success Factor</i>	<i>Find More Information in Chapter</i>
	<ul style="list-style-type: none"> • Produce a questionnaire that is professional looking, useful, and functional. • Plan for and build in reliability and validity. 	
9. Select the sample and plan the method to contact and gain cooperation from participants.	<ul style="list-style-type: none"> • Create a detailed plan for contacting your target audience. • Determine how many respondents you need so you'll have the data to make your decisions. • Identify the gatekeepers and gain needed permission to contact members of the target audience. 	5 – Identifying and Contacting Respondents
10. Create cover letters or invitations.	<ul style="list-style-type: none"> • Make good use of their one minute to reach your audience. • Create powerful invitations and cover letters that will convince participants to become respondents. 	5 – Identifying and Contacting Respondents
11. Conduct a thorough pilot test of all aspects of the survey project.	<ul style="list-style-type: none"> • Try out everything—from the wording of the questions to the directions and format to the data coding and analysis. 	6 – Pilot Testing the Questionnaire
12. Use the information from the pilot test to make revisions.	<ul style="list-style-type: none"> • Use the information gathered in the pilot test to make needed revisions—even if it takes a bit of extra time. 	6 – Pilot Testing the Questionnaire
13. Produce the questionnaire and gather your data.	<ul style="list-style-type: none"> • Send prenotifications to participants selected for your study. • Send out your questionnaire at a time in the lives of your target audience that will maximize your response rate. • Conduct follow-up contacts to increase your response rate. • Send reminder notices halfway through the time period the questionnaire is available. 	7 – Maximizing Your Response Rate: Collecting the Data

<i>Step</i>	<i>Critical Success Factor</i>	<i>Find More Information in Chapter</i>
14. Analyze the data.	<ul style="list-style-type: none"> • Code the responses carefully and conduct frequent checks on the reasonableness and quality of your data. • Use appropriate analyses for the type of data provided by the questionnaire. • Back up your data set. 	8 – Analyzing the Data and Making Data-Based Decisions
15. Use the data to make decisions.	<ul style="list-style-type: none"> • Consider other sources of information in addition to the data from the questionnaire to make data-based decisions. 	8 – Analyzing the Data and Making Data-Based Decisions
16. Create the reports of the results and recommendations.	<ul style="list-style-type: none"> • Create reports that match the needs of the audiences for information. 	9 – Communicating the Results



STEP 1: CONDUCT THE INITIAL PLANNING

Who Needs the Information?

Who are the sponsors and stakeholders in the survey project? A sponsor is the person who needs the information.

A sponsor may be any of the following:

- A school district gathering information about salaries and benefits for teachers and administrators
- A community group seeking input on school facilities planning, including building or remodeling schools in the district
- A vocational high school curriculum committee wanting to ensure that its graduates have the skills, knowledge, and competencies required for successful performance on the job
- A school guidance counselor who needs information about student interests in career planning workshops

Sponsors have different expectations based on their own experiences. It's important to understand the sponsor's expectations of the results of the survey project. For example, does he prefer using qualitative or quantitative data to make decisions? Or perhaps a combination of both? What are her expectations for the final report? Details, as in a technical report, a high-level overview such as a presentation, or both?

A word of caution: Watch out for possible biases that could creep into a survey project, such as when a sponsor has an ax to grind or a controversial point that she

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or he wants to demonstrate has support. As discussed later (Chapter 2, “Asking the Right Questions”), the wording of questions is critically important: Questions must be free of biases to ensure that fair and accurate data are gathered.



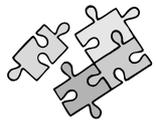
HINT: Make sure you know as much as possible about the sponsor’s preferences and design for them.

How do you identify stakeholders in the survey project? Answer these questions:

- Who needs the information?
- Who makes the decisions based on the results of the questionnaire?
- Who has an interest in the outcome of the questionnaire results?
- Whose “turf” might be affected?
- Who controls the funding?
- Who might be interested in the survey project not being completed?
- Who needs to be included in the planning?



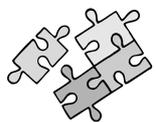
HINT: Garner support from a variety of stakeholders.



For our case study, the sponsor is the Parent-Teacher Organization (PTO). Stakeholders include school administrators, teachers, and school staff members who will implement parent involvement programs and parents who will participate in these programs.

Who Are the Audiences for the Final Report?

Who will be interested in the results? Audiences for the final report can include the sponsor, stakeholders, and members of the target audience. Other potential audiences could include researchers, members of the community, or members of selected professional associations. Each audience requires a different type of report in terms of the amount of detail, particularly of the analyses.



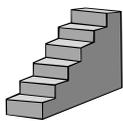
For our case study survey project, the primary audience for the final report is the sponsor, the PTO. We’ll need to provide a detailed report to the PTO Steering Committee and a presentation for the PTO membership.

What Existing Information Is Available for Your Survey Project?

As you plan your survey project, consider other sources of information that may be available. When you are gathering data to make a high-stakes decision, it's important to have information from other sources, such as interviews, observations, and depending on the type of decision you're making, perhaps results from statewide assessments. When you have data from several sources, and if the data from the different data sources support the results from your survey project, then you have strong evidence for your decision. This process is called "triangulating the information."

Following are some suggested activities to identify available information to help you create your survey project:

- Determine the data requirements for the decision you need to make—what data do you need to make a decision?
- Determine what data and information already exist. If there is some, determine how much is available and usable for your study. You want to avoid asking for information that's already been gathered. Depending on the information you need, here are some suggestions:
 - If you're working in a school district, check with staff members who may know about studies that have been completed in the past three to five years.
 - Check with other similar organizations, such as school districts in the same state.
 - Check on the Internet. There are numerous reports of questionnaires and survey project results on the Web. Use a search engine such as Google to find information about completed survey projects.
 - Check reports of completed survey projects in journal articles, in sources such as ERIC, and on the Web (e.g., alumni outcomes, salary and benefit packages). Your school or district may also have some completed survey projects. Some data may be appropriate for your project.
 - Review sources of questionnaires such as *Dissertation Abstracts*, *Buros Mental Measurements Yearbook*, *Pro-Ed Test Critiques*, and *Tests in Print*.
- Identify similar survey projects that can help you formulate your objectives clearly and provide ideas for questions for your questionnaire.



STEP 2: STATE THE GUIDING QUESTION FOR THE SURVEY PROJECT AND CREATE CLEAR, CONCISE, AND UNAMBIGUOUS OBJECTIVES

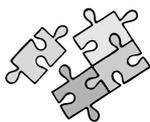
Think about the information you need—whether it be to make a decision or for other uses. The data can be points of view, opinions, a needs analysis, facts, behaviors, or activities. The guiding question indicates why the survey project is being done—and the uses that will be made of the results of the questionnaire.

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Write Your Guiding Question

Your guiding question will assist you in creating the questionnaire that will provide information you need. A carefully constructed questionnaire can provide information for many uses.

- Identifying needs (needs assessments)
 - What kinds of strategies will increase parent involvement in the schools in our district?
 - What types of sports programs will parents and the community support?
 - What are the technology needs of the district—and what training must be provided for that technology to be used effectively?
- Determining opinions, attitudes, and beliefs
 - What are parents' attitudes about charter schools?
 - How do teachers view parent involvement in their classrooms?
 - What are parents' opinions of the teacher strike in the district?
- Identifying interests
 - Which class activities should be kept and which should be changed?
 - What is the interest level of sophomores in participating in community service activities?
 - What is the level of interest among parents in participating in activities in their child's classroom?
- Identifying feelings and perceptions
 - How do students feel about homework assignments that require Internet-based research?
 - How do parents perceive the value of magnet schools?
 - How satisfied are parents with their child's overall school experience?
- Describing behaviors
 - How often do students use various school facilities, such as the library, resource center, computer lab, sports equipment, and pool?
 - What kinds of reading-related activities do parents of early-elementary students use with their children?
 - What kinds of volunteer activities have parents participated in during the current school year?



The guiding question for the case study that is developed throughout the book is as follows:

What kinds of strategies will increase parent involvement in the elementary schools in our district?

After you have written your guiding question, it's time to create the specific objectives that will guide the development of the questionnaire.

Develop Objectives Based on Your Guiding Question

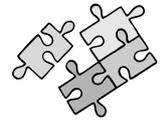
An *objective* is an idea or concept you want to measure. Objectives flow from the guiding question and provide specific guidance to create the questions for your questionnaire. Questionnaire objectives must be clear, concise, and measurable.

◆ GUIDELINES FOR WRITING CLEAR OBJECTIVES

1. Focus each objective on one concept or idea.
2. Do not use the word *and*. If one of your objectives uses *and*, it probably is really two objectives.
3. Tie each objective to the guiding question.

Objectives for our case study survey project include the following:

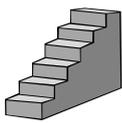
- Determine parental awareness of opportunities the school currently provides for parents to be involved in their child's school.
- Identify current levels of parent participation in the available activities.
- Determine parent satisfaction with the parent participation activities currently available.
- For parents who do not participate in these activities, identify reasons and barriers.
- Identify types of parent involvement activities preferred by parents.



Each of the preceding objectives will guide the creation of a set of questions.



HINT: The clearer and more focused your objectives, the more likely you are to gather the information you will need to make your decision.

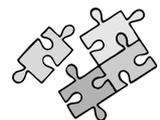


STEP 3: IDENTIFY YOUR TARGET AUDIENCE

Although Chapter 5, "Identifying and Contacting Respondents," provides greater detail on the target audience, here we will identify the target audience. The reason for considering this aspect of the survey project at this time is that it will help you to determine how the data will be collected. Will you use a paper-based questionnaire? Will you use a Web-based questionnaire? What are the features, benefits, advantages, and disadvantages of each of these modes of data collection?

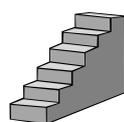
For our case study survey project, we'll need input from parents from all three elementary schools in the district.

Let's look at some of the guiding questions provided earlier as examples and identify appropriate target audiences. Table 1.3 provides this information.



14 USING WEB AND PAPER QUESTIONNAIRES FOR DATA-BASED DECISION MAKING**Table 1.3** Examples of Guiding Questions and Target Audiences

<i>Guiding Question</i>	<i>Target Audience</i>
What types of sports programs will parents and the community support?	Parents at the school plus a sample of members of the community who are not parents at the school
Which class activities should be kept and which should be changed?	Students and teachers
How do students feel about homework assignments that require Internet-based research?	Students
What kinds of reading-related activities do parents of early-elementary students use with their children?	Parents of early-elementary students



STEP 4: DETERMINE THE MODE OF DATA COLLECTION THAT IS APPROPRIATE FOR YOUR TARGET AUDIENCE

Begin by considering the following questions:

- Who is the target audience?
- What is the best way to gather information from this audience?
- What must you consider as you decide on the mode of data collection?

The mode of data collection (mail, telephone, e-mail, Web) might depend in part on what kind of access you have to the target audience as well as their access to, and level of comfort with, computers.

Paper-Based Questionnaires

Most people are familiar with paper-based questionnaires they receive in the mail. But unless the potential recipient receives prenotification or a very persuasive cover letter, the questionnaire might be lost in a pile of unsolicited mail. Some studies show that people are more honest with an anonymous paper-based questionnaire.

A disadvantage of a mailed questionnaire is time: Data collection usually takes two to four weeks—sometimes longer. In addition, data must be entered into the computer for analysis, requiring additional time.

For questionnaires distributed in person, or sent home with students, the time period usually is shorter.

Electronic Questionnaires

There are three major types of electronic questionnaires:

- E-mail questionnaire
- E-mail invitation linked to URL (Web “address”)
- Questionnaire on a Web page



Electronic questionnaires are being used more often with many target audiences, including teachers, administrators, parents, and students and in many communities. If you don't have good technical skills and want to use an electronic questionnaire, you'll need to work with a consultant who has those skills. But the survey project team must complete many activities, whether a paper-based or electronic questionnaire is used. Throughout this book, the computer indicates additional details about electronic or Web-based questionnaires—and we'll refer to all of these types of electronic questionnaires as “Web-based.”

E-mail questionnaires are contained within an e-mail. They are usually limited to plain text because many e-mail services cannot handle graphics or grid-type responses. (Details about grid-type responses are in Chapter 4, “Putting the Questionnaire Together.”) They are sent to a specific list of people for whom you have e-mail addresses. The respondent uses the “reply” e-mail function and answers the questions—and the respondent's e-mail address is usually a part of this reply. There are ways to block a person's e-mail address from the response, depending on the software you use. If you choose not to block the respondent's e-mail address on the response, then promise confidentiality of the data.

E-mail invitation link to URL (or Web address) questionnaires invite the participant to respond to the questionnaire by either clicking on an embedded URL or copying and pasting the URL into their Web browser. The participant responds to the questionnaire on the Web.

Web page questionnaires are those posted on an organization's Web site. A variety of ways are used to contact potential respondents and direct them to the Web page to complete the questionnaire. A Web questionnaire resides on a Web server and is accessed via an organization's home page or a link to another site from the home page. Advantages include the use of multimedia, graphics, and video. You can use grid-type responses and can program filters and skip patterns. (See Chapter 4 for examples of these kinds of questions.) A program can check for consistency of responses—and if certain patterns of inconsistency are noted, the respondent can be prompted to reconsider a response. Other advantages include a cost that is often lower than for a paper-based mail questionnaire, quick turnaround time to receive data, and a greater variety of response formats than are possible with a paper-based or e-mail questionnaire.

For both e-mail and Web-based questionnaires, members of the target audience need access to and familiarity with computers. In our case study example, this statement leads us to the question: Are Web-based questionnaires useful for the K-12 audience, including teachers and parents? The answer is a qualified “yes—it depends.” The greatest dependency is whether teachers, administrators, parents, students, and

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community members have access to the Web. Some school districts currently have their own Web sites, and others are exploring the options for going online.

There are many advantages for schools to move toward Web-based data gathering. For example, a secondary school may collect data from parents, students, and other community members about their satisfaction with different facets of school activities and policies. Some districts conduct follow-up studies of former students about the adequacy of their preparation, either for a job or for college. More school districts are moving toward total quality strategies as they plan organizational improvements—and Web-based questionnaire methodology is a realistic alternative in terms of efficiency of data collection and conserving financial resources.

Disadvantages include the software and skills required to program or load a questionnaire, although many companies can do this for you. Another disadvantage is the process used to contact members of the target audience to invite them to come to the Web site to respond to the questionnaire. Chapter 5, “Identifying and Contacting Respondents” and Chapter 7, “Maximizing Your Response Rate: Collecting the Data” provide some suggestions for distributing Web-based questionnaires. Other disadvantages include computer access to the questionnaire and various technology-related issues.

Despite these limitations, the use of Web-based questionnaires will continue to grow, and within a decade their use is likely to surpass the use of paper-based questionnaires. There will continue to be a variety of methods of gathering questionnaire data, including face-to-face interviews, telephone interviews, paper-based questionnaires (mail and in-person), and electronic questionnaires (e-mail and Web-based).

The most important consideration in selecting which mode to use is to know the capabilities of your target audiences and determine which mode of delivery best matches their capabilities for responses and your project’s capabilities in terms of resources.

What about mixed mode? Can you use both Web-based and paper-based questionnaires in the same project? The answer is a qualified yes, since this is an area where the measurement implications are being explored. Initial results of research where multiple modes of responding to the questionnaire were available found that although some respondents switched modes of response when offered the chance, overall the response rate did not change. However, it may be possible to increase response rate by using a different mode of delivery in the follow-up, such as offering a Web-based questionnaire to persons who have not responded to a paper-based questionnaire (Dillman, 2000; Matz, 1999).

Comparing Paper-Based and Electronic Questionnaires

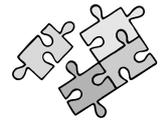
Important advantages of using electronic questionnaires include low cost and speed of getting the questionnaires to the participants and the responses back into your database. Unlike paper-based questionnaires, inviting additional participants to respond to a Web-based questionnaire has a very low incremental cost. An important advantage is that the responses can be automatically transferred to a database so there is no need to code the information and enter the data into your computer for

analysis. It is also possible to include a wider geographic representation—including respondents from outside the United States—at a very small incremental cost (unlike the hefty costs of international postage for a paper-based questionnaire).

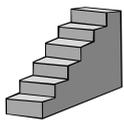
As an example, after the questionnaire has been created and the target audience identified, a Web-based questionnaire can provide data in approximately five days after participants receive access to the questionnaire, compared with two to four weeks for a mailed paper-based questionnaire. In terms of cost, a Web-based questionnaire sent to 2,000 participants costs little more than sending the questionnaire to 200 participants. However, for a paper-based questionnaire, if you provide a postage-paid return envelope, you'll need to use 2,000 stamps, plus the costs of printing and copying the questionnaires and cover letters, stuffing the envelopes, paying outgoing postage, and entering the data into your database when the completed questionnaires come back.

Expenses associated with a Web-based questionnaire include loading the questionnaire onto the Web (which may involve some programming skill or using a commercially available Web questionnaire package) and server access costs (unless the organization has its own Web site).

For our case study survey project, we will use a Web-based questionnaire on the school district's Web site.



Now that you've created your guiding question, developed your objectives, and identified your target audience and the mode of data collection, let's focus on creating a detailed project plan.



STEP 5: CREATE A DETAILED PROJECT PLAN

Successful projects—whether they are survey projects, curriculum development projects, or long-range instructional development projects—are all characterized by carefully developed project plans. It is possible to conduct a survey project without detailed planning, but the results may not be useful or credible, and the resources used will not have been well spent.

Table 1.4 describes some planning activities to consider as you create your project plan, which serves as a foundation for your project.



HINT: Use a software tool such as Microsoft Project to create your timeline, resource deployment (people and dollars), tasks, and milestones.

Now let's look in more detail at each of these components of your detailed project plan.

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Table 1.4 Activities in a Project Plan and Their Importance

<i>Activity</i>	<i>Why Is This Important?</i>
1. Identify the deadline and the time and resource requirements for all questionnaire development activities required to meet that deadline.	<ul style="list-style-type: none"> • Tasks almost always take longer than planned. • It will help avoid surprises later in the project and ensure that the final results will be available when you need them.
2. Plan the processes needed for data collection, contacting participants, producing the questionnaire, conducting the analyses, and producing the report.	<ul style="list-style-type: none"> • Most likely you'll need to work with other departments or groups, so you'll need to do more than identify the resources needed. • You may want to identify specialists to help you in these areas.
3. Plan how you will contact members of your target audience.	<ul style="list-style-type: none"> • You'll need to allow time for contacting these people.
4. Plan for and gain approvals to conduct the survey project and to contact members of the target audience.	<ul style="list-style-type: none"> • Ensuring that you have the right approvals at the beginning of the project will save time and headaches later.
5. Plan the data analysis so that you are sure the results of the questionnaire can be analyzed in a way that provides the information needed to make the decisions.	<ul style="list-style-type: none"> • Planning the analyses up front will help you identify the demographic data you'll need to gather in the questionnaire so you can disaggregate your data to identify potential differences among subgroups.

Determine When You Need the Results of the Questionnaire

When you plan the timeline, start at the end: When do you need the results? If you find the date is too close to do a good job, consider alternatives: Push the decision date out, conduct focus groups while you're developing the questionnaire to provide preliminary input, or create a process for staged decision making so that some decisions are made based on preliminary data and validated when the rest of the information is gathered.

A focus group is a group of 8 to 12 people who represent the target audience. They can provide initial input while the survey project is being completed.

Focus groups are also useful for gaining the insights, opinions, and support of stakeholders. See Chapter 6, "Pilot Testing the Questionnaire," for details on how to organize and conduct focus groups.

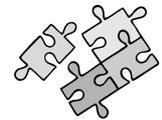
Staged decision making consists of making a series of decisions as the information becomes available rather than waiting until the end of the survey project. For example, suppose a group of school librarians in the district is interested in

providing a wider range of services to support academic success. They carefully plan a survey project, which they project will take approximately eight months to complete. However, they want to identify and implement some best practices from other libraries. They could conduct focus groups and telephone interviews to gather some initial information and perhaps devise a pilot test of one or two of these best practices. Then when their survey project is complete, they can consider a broader range of ideas and best practices and select those that will best fit the needs of their library users. By using staged decision making, they will not have to wait nearly a year to identify and try out some new ways of providing library services.



Planning for a Web-based questionnaire requires several tasks related to the production of the questionnaire that must be included in the planning. Will you use a Web questionnaire service to load your questionnaire on the Web and host it? Such a service handles many of the details and logistics; you provide the questionnaire, and the service loads the questionnaire onto a Web site and provides you with a data set. Another option is to use questionnaire software, but you'll need a Web site to host the questionnaire. Do a search on the Web using a search engine such as Google, with the search terms "Web-based surveys" and "Web-based questionnaires." If you use Google's advanced search feature, you'll get only those entries that have the phrases in them. You'll find resources, vendors with software, and some reports of Web-based survey projects. Evaluate your options for getting your questionnaire onto the Web so you can include this activity in your timeline.

We'll use the case study to create a timeline with estimates of the time required for each task. We'll also share assumptions we made as we created the timeline.



The following example is for our case study:

We need the information by the end of October—so we start with this end date and plan backward. But as you will see, working in a school district means there are many other considerations in addition to the number of months the project will take.

We estimate that the work will take approximately six months, but the timing of the distribution of the questionnaire is critical. It must be available for distribution at the end of the first month of school, around October 1, with the results available by the end of October. That way, parents will have some knowledge of their child's school, teachers, and the kinds of activities available to them to become involved in their child's school. So allowing two weeks for the data collection and one week for the data analysis and report writing, the results would be ready for the decision makers by the end of October.

Counting back six months means starting around the first of May. But that's a really busy time in most schools. So we'll start in the middle of January with the planning process and devise a schedule so that all contact with teachers, parents, and community members who will give input to creating the questionnaire can be completed by the middle of April.

As you can see, even creating a timeline is not straightforward. We need to consider the environment in which we'll be working.

Create a Timeline Based on the Major Steps of a Survey Project

Table 1.2 listed the 16 major steps required in a survey project. We'll use these major steps to create the project timeline for our case study survey project. Note that our case study project is more extensive than are many survey projects. You may be able to complete yours in three to four weeks.

The following steps are for the case study survey project:



1. Conduct initial planning. (6 weeks)
 - Work with sponsors to identify stakeholders, hold focus groups to get their input and support, determine resource requirements, and create a high-level project plan.
 - Identify the needs of decision makers to plan analyses.
 - Gather information from the Web, research literature, and other school districts to determine whether similar work has been done.
 - Gather detailed information about what activities for parent involvement are currently available in each school in the district.
 - Get buy-in from the school administration to gather information from parents using a questionnaire.
2. Write the purpose of the survey project, create the guiding question, and write detailed objectives, including gathering appropriate reviews. (1 week)
3. Identify the target audience. (1 week—overlaps with Step 4)
4. Determine the mode of data collection. (1 week—overlaps with Step 3)
5. Create the detailed project plan. These are the processes necessary to make everything happen, such as determining the sample size, selecting and contacting participants, and producing the paper or electronic questionnaire. (1 week)
6. Gain needed approvals to conduct the survey project and to contact members of the target audience from school administrators.
7. Write questions that link to the objectives, and use response scales appropriate to the target audience. Include reviews by sponsors and stakeholders. (3 weeks)
8. Create the questionnaire: Format the questions and response scales; work with the Web developer to plan loading the questionnaire on the Web. (1 week)
 - Load the questionnaire on the Web and perform quality checks.
9. Select the sample and plan the method to contact participants.
 - Send the prenotification—advance notice that the person will be invited to respond to the questionnaire. Because of the timeline for our case study, we'll send prenotices out while the pilot test is being conducted.
10. Create the invitation to respond to the questionnaire and develop follow-up processes. (1 week)

11. Pilot test the questionnaire, make necessary revisions, and produce the final version. (2 weeks)
12. Use the information from the pilot test to make revisions to any elements of the survey project. (1 week)
13. Gather the data and post the questionnaire on the school's Web site, including prenotices and follow-up notes. (2 weeks)
14. Analyze the data. (1 week)
15. Use the results to make the decisions, make recommendations, and begin to make plans to implement the decisions. (2 weeks)
16. Create the final report. (2 weeks)

Figure 1.1 provides a graphic timeline for the case study survey project.

You might want to set up this template in a project management tool such as Microsoft Project if there are several people on the survey project team. If you're working alone or with one or two other people, a paper version of the timeline and plan is probably sufficient.

The detailed planning just described seems like a lot of work, and it is. But the most common mistake in planning is to underestimate the time needed by making a global estimate rather than considering each of the steps required. Activities can be overlapping, but consider which tasks have dependencies—tasks that must be completed before other tasks can start.



HINT: Plan the schedule and timeline collaboratively with all those who will work on the project. Post the schedule where all team members can see it.

Identify the Resources Needed to Complete the Tasks

Now that we've created the timeline, we need to consider the people and budget needed to complete the survey project. There are three elements to identifying the people needed. The first is to determine what types of skills are needed, the second is to identify who has those skills, and the third is to decide how to obtain that person for your project.

As you plan your people resources, consider the following:

- Who will handle communications with the sponsor and stakeholders?
- Who will create the objectives that will guide the development of the questionnaire?
- Who will work on gaining the needed approvals and permissions?
- Who will gather the detailed content information required to create the questions?
- Who will create the questions and response scales?
- Who will handle all aspects of production?

Figure 1.1 Timeline for the Parent Involvement Case Study Survey Project

Weeks	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
Initial planning																							
Write purpose, guiding question, objectives																							
Identify target audience																							
Determine mode of data collection																							
Create detailed project plan																							
Gain administrative approval																							
Write questions																							
Create questionnaire																							
Select the sample																							
Write invitation																							
Send prenotices																							
Pilot test the questionnaire																							
Revise the questionnaire																							
Gather the data																							
Analyze the data																							
Create the reports																							
Use results to make decisions																							

NOTE: The vertical line between weeks 14 and 15 denotes the "break" in the calendar from the end of May until the school year starts in September.

- Who will do the statistical analysis and report writing?
- Who will present the results to the sponsor?

Who will do the work? Note that some small survey projects are conducted by individuals or by a team of two persons. In that case, the one or two persons conducting the survey project will be responsible for all of the activities listed here.

Create a Budget for Your Survey Project

Resources include more than people, as indicated in the budget factors identified in the following list. Let's look at some of the factors to consider as you create your budget plans:

- Staff time for planning the study and steering it through the various stages, including time spent with the sponsor in refining data needs
- Sample selection costs, including office staff labor and costs to identify members of the target audience
- Staff and materials for pilot testing (Pilot testing might need to be done more than once if there are many revisions.)
- Staff and expenses for contacting participants: prenotices, cover letter or invitation, and follow-ups for nonrespondents
- Staff and material costs for getting information from the questionnaire into a computer file, unless you're using a Web-based questionnaire, in which case the data flow directly into a database
- Staff and material costs for hosting a Web-based questionnaire—for example, software, technical support, Web site
- Cost of spot-checking the quality of the process of computerizing the paper questionnaires or verifying the data files for a Web-based questionnaire
- Analyst costs for preparing tabulations and special analyses of the data
- Staff time and material costs for statistical analyses of the data and report preparation
- Telephone charges, postage, reproduction, and printing for the questionnaire as well as the report



HINT: Work with your institution's finance people to create a detailed and reasonable budget.

Plan the Activities to Support Your Survey Project

All survey projects need data analysis and reporting, and some will need a communication plan. For these activities, you might need to work with members of other groups or departments to obtain these resources, particularly during the production and data analysis portions of the project. But each project is different, and your survey project team might have all of these skills.

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If you are using a Web-based questionnaire, be sure you have detailed plans for getting the questionnaire posted on the Web site and for receiving the data. Unless you have very good technical skills and can handle the technology work yourself, you need to make sure that you have made all the arrangements for this part of the work. If there are challenges with a survey project using a Web-based questionnaire, they are often here. Be proactive in planning to ensure that all aspects of this part of the project go smoothly.

Plan the Data Analysis to Identify Needed Demographic Data

Use your guiding question and your objectives to guide your plans for the data analysis, particularly your plans for disaggregating the data for reporting purposes—and identify the demographic questions you'll need to ask. For many analyses of school-based data, you'll need, at a minimum, demographic information about gender and race/ethnicity so you can disaggregate the data for reporting purposes. For school districts gathering data for the NCLB Act, it's important to have the appropriate demographic data for your analyses.

Demographic information is descriptive information about the respondents, such as gender, ethnicity, age, prior experience of some kind, or level of education. The specific demographic information you will need depends on your purpose and the kinds of information you need to make your data-based decision.

We'll use the case study as an example to plan the analyses at a high level and identify the demographic data we'll need to gather.



For our case study survey project, the demographic information we will need for each objective is described in the following and summarized in Table 1.5.

For our case study, we want to increase parents' involvement in their child's classroom and in their child's education. And for our data analyses, we plan to disaggregate the data by race/ethnicity of parents, working status of parents, and previous experience volunteering in the school. We also need demographic information to describe the respondents, including which school their child attends, the number of children attending an elementary school in the district, grade levels of their children, and gender of parent who is responding to the questionnaire.

The first objective, *"Identify parental awareness of opportunities the school currently provides for parents to be involved in their child's school,"* focuses on determining parental awareness of the activities currently available in the school. So we'll need to know the following information:

- Which of the three elementary schools each child attends
- The number of children attending this school
- The grade levels of each of their children

We will gather gender information from parents to determine the participation of fathers and mothers in the various activities available in the school as well as employment information—if one or both parents is employed outside the home—and we'll also ask for ethnicity. This information will allow us to disaggregate the data by gender and race/ethnicity. Our data analyses can then include subgroup analyses for each of the three schools as well as comparisons about parent awareness of opportunities based on the number of children they have attending the elementary schools, gender and race/ethnicity of responding parent, and employment outside the home.

The second objective, *"Identify current levels of parent participation in the available activities,"* asks parents to indicate in which of the school's activities they have participated during the previous school year. No additional demographic data will be needed for analyses of the results of these questions. Data analyses include comparison of participation in the three schools and comparisons of participation of parents with differing numbers of children in the schools, by gender, race/ethnicity, and employment status of respondent.

The third objective, *"Determine the level of satisfaction with the activities currently provided to parents,"* requires no additional demographic data for analyses of the results of these questions. Data analyses include comparison of participation in the three schools and comparisons of participation of parents with differing numbers of children in the schools, by gender, race/ethnicity, and employment status of respondent.

The fourth objective, *"For parents who do not participate in these activities, identify reasons and barriers,"* focuses on understanding the reasons that some parents do not participate in these parent volunteer activities—in particular, what barriers exist for encouraging parents to become involved in their child's classroom and education. Demographic information needed here includes working status of parents, gender, race/ethnicity, and parents' previous experience in classroom activities in the past year. Analyses will be done for subgroups, comparing participation of parents who work outside the home full-time, part-time, or not at all and comparisons by gender and race/ethnicity of respondent as well as by number of children in the school.

The fifth objective, *"Identify types of parent involvement activities preferred by parents,"* seeks input from parents about what activities they would like to have available and how likely they are to participate in the activities currently available, if the barriers were removed. No additional demographic information will be needed in addition to what has already been identified earlier. Analyses will include subgroups based on child's grade in school, parental working status, school, number of children in school, gender, and race/ethnicity.

Table 1.5 summarizes the demographic information needed for analyses for each objective.

The results of these analyses will inform decisions about the strategies that will increase parent involvement in the elementary schools in the district.

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The demographic variables will be used to disaggregate the results and compare responses from several subgroups such as race/ethnicity of parents, working status of parents, and previous experience volunteering in the school. In addition to the data from the questionnaire, other sources of information will be used in the decision-making process, including interviews with teachers and school staff members and observations of parent involvement at selected activities.

Table 1.5 Demographic Information Needed for Analyses for Case Study Survey Project

<i>Objective</i>	<i>Analyses</i>	<i>Demographic Data^a</i>
1	Descriptive statistics, profiling parents who are aware of opportunities and those who are not; disaggregating the data by race/ethnicity and working status of parents	1, 2, 3, 4, 5, 6
2	Descriptive statistics, searching for differences in parents who participate; examine relationship of awareness of opportunities with satisfaction and participation; disaggregating the data by race/ethnicity of respondents and working status of parents	1, 2, 3, 4, 5, 6
3	Descriptive statistics, searching for differences in parents who participate; examine relationship of awareness of opportunities with satisfaction and participation; disaggregating the data by race/ethnicity of respondents and working status of parents	1, 2, 3, 5, 6
4	Descriptive statistics, examine relationship between reasons and barriers and working status of parents, number of children in school, gender, and race/ethnicity of respondent, previous experience volunteering in schools	1, 2, 3, 4, 5, 6
5	Descriptive statistics, examine relationship of preferred activities, previous experience, and parent characteristics	1, 2, 3, 4, 5, 6

^aCodes for demographic variables:

1 = School

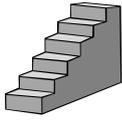
2 = Number of children attending an elementary school in the district

3 = Grade levels of children attending elementary schools in the district

4 = Working status of parents (e.g., full-time, part-time, at home)

5 = Gender of parents

6 = Race/ethnicity of parents



STEP 6: GAIN NECESSARY APPROVALS TO CONTACT MEMBERS OF THE TARGET AUDIENCE AND TO CONDUCT THE SURVEY PROJECT

Depending on your target audience, you may need to obtain permission to contact them to invite them to respond to your questionnaire. For example, if your target audience is made up of students, you'll need permission from parents or guardians. You'll need permission from the principal and perhaps others at the school or the central office to contact parents. And if there's an Institutional Research Review Board (IRRB), you'll need their permission as well.

An *IRRB* is an oversight body that safeguards the rights and welfare of people participating in a research study, including a survey project. This group reviews the ethical appropriateness of the proposed study in terms of potential risks to participants in light of hoped-for benefits. Most survey projects will fall into the "exempt" classification—that is, they do not require review by the full IRRB. For additional details, see a research textbook such as Johnson and Christensen (2000) or Gall (2002). Each school district is different and has different requirements, processes, and timelines required for the approvals. Be sure you understand exactly what you need to do and when you need to do it so you can conduct your survey project in the timeline you have planned.

For our case study survey project, we must obtain permission from the school administration and district office before we can contact parents. Then we will send a note home with the students and post a notice on the district's Web site.



There's been a lot to do in this chapter—as noted earlier, careful planning is critical to the success of your survey project. Before you continue with Chapter 2, complete the following checklist.

Checklist for Launching Your Survey Project

Use the following checklist to make sure you've completed all the activities necessary to begin the detailed planning process described in Chapter 1.

- Have you identified the audiences for the final report?
- Does the guiding question capture the essence of your concern, interest, or need for information?
- Do the objectives clearly link to (and flow from) the guiding question?
- Will the information gathered from these objectives provide the data to support the decision you need to make?
- Does the target group you've identified have the information required to provide valid and useful information?

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- Does the mode of data collection match the access capabilities of the target audience?
- Have you identified the end date of the survey project—when the final report will be due?
- Have you created a detailed timeline to meet the target end date?
- Have you identified the resource requirements for the survey project activities?
- Have you developed a realistic budget for the project?
- Did you identify appropriate demographic questions to include on your questionnaire so you can disaggregate the data in your analyses?
- Do you have the necessary approvals and support for moving forward with the project?