

Data Collection

Gallup researchers have designed and conducted tens of thousands of measurement-based engagements in our 70-year history, ranging from large and complex customized evaluation studies to monthly omnibus tracking studies and polls. Last year alone, we completed over 10 million surveys of consumers and business executives all over the world. Our data collection methods include phone, mail, Web, IVR, and multiple-mode surveys.

Phone

The Gallup Organization operates one of the world's largest telephone research data-collection systems. With an unparalleled capacity for completing small- to large-scale projects, Gallup's telephone interviewing teams have conducted more than 20 million interviews over the last five years, averaging 10,000 completed interviews per day across 200 individual survey research questionnaires. Gallup's telephone survey capabilities include extensive use of the latest computer-assisted telephone interviewing (CATI) and automated sample management technologies. In addition, our interviewers often leverage our pre-recruited Gallup Panel members to conduct quick, efficient telephone research. On an average day, Gallup processes approximately 2 million sample records, using state-of-the-art data processing procedures and quality sample methodologies.

Mail

Gallup offers the capability to produce mailed or self-administered questionnaires in a variety of formats in multiple languages. For assured quality control and maximum efficiency, questionnaires are printed and mailed by Gallup, using our internal print shop for production, distribution, and fulfillment tracking. More than 150,000 surveys can be processed in one day by our optical scanning center.

Optical Mark Recognition Capability

For high-speed, low-cost data collection and capture, Gallup offers optical mark recognition (OMR) scanning capabilities. Our four state-of-the-art optical mark readers use reflective read technology and a digital line-scan camera that captures survey data at a very high rate: approximately 4,000 sheets per machine, per hour. Unlike conventional optical scanning systems that read surveys based on a universal setting, Gallup uses an algorithm that determines the characteristics of each individual page. To establish an algorithm, all response positions on a page are examined to assess how the respondent has filled out the questionnaire. Based on that assessment, the algorithm for that page is developed. This algorithm then becomes the mark discriminator for that page, differentiating at the pixel level between intended responses and cross-outs, erasures, and stray marks. In addition, our scanning confidence level is 100%. All "out data" (anything the computer can't read at the 100% confidence level) are automatically sent to one of 50 operators at the optical scanning center for verification. Every question type, from closed-ended to alphanumeric to verbatim, can be verified within the single system, significantly streamlining the data collection process at 10,000 items per hour.

Optical Character Recognition/Image Capture System

Gallup has an additional survey processing approach that minimizes handling of surveys and improves the speed, accuracy, and efficiency of the data collection task when compared to hard copy surveys, but is less expensive and more appropriate for smaller data collection studies. Specifically, as each survey is received in Gallup's scanning facility, it can be immediately be scanned using our proprietary optical character recognition and image capture system. This system produces a digital image of all the contents of the survey. The scanning procedure minimizes hand sorting while maximizing flexible and efficient electronic sorting, processing, and reporting.

Web

Gallup began using Web-based surveys in 1996. By 1998, Gallup formalized its operations by constructing a comprehensive Web-based system with full-time programming staff devoted exclusively to supporting its Web operations. Today, our systems support more than 450 simultaneous Web surveys -- fielded in multiple languages -- with tens of thousands of respondents each.

Gallup has in place a system for capacity planning for all of its Web surveys, and monitors Web use in real time to identify capacity needs and to assess the quality of our projections against actual usage. Should circumstances warrant, our system architecture has been designed so that it can be expanded immediately upon demand. Gallup's Internet survey services also include complete sample management, including e-mail invitations and reminders.

Gallup has developed its own Java-based Internet data collection software to control survey execution. Data that are collected on the Web are stored in an Oracle[®] database. Gallup's Web servers are available 24 hours a day, 7 days a week.

IVR

Interactive Voice Response (IVR) is a data collection technology in which the computer plays a recording of the question to the respondent over the telephone, and the respondent indicates the response by pressing the appropriate key on his or her touch-tone telephone keypad. IVR is created by programming the computer to play prerecorded prompts to the respondent based on the respondent's answers. Ideally, IVR is used when the data desired are numeric or can easily be linked to a numeric code, such as, "press 1 if yes; press 2 if no" (though open-ended data can also be collected via IVR). IVR is especially appropriate for surveys that are short and repetitive.

The Gallup Panel is The Gallup Organization's most dynamic research method to date, and is foremost in the field of market and social research. Built on Gallup's rich tradition as the world's leading public opinion pollster, The Gallup Panel gives true representation -- and a collective voice -- to the people while studying their behaviors, preferences, and attitudes. When scientific integrity is of primary importance, the world's leading organizations turn to Gallup.

Recruitment

The Gallup Panel uses random digit dial (RDD) methodology to recruit its members. Panel members reside in all 50 states. Those who elect to join the panel are committing to the completion of two to three surveys per month, with the typical survey lasting 10 to 15 minutes. We do not sell our sample to anyone. Gallup retains full control and our clients hold exclusive rights to leverage this scientifically valid sample.

Response Rates

We conduct research via phone, mail, and Web. Our research experts will guide you in the most reliable mode to meet your needs. Our response rates -- which track as high as 88% -- are among the highest in the industry and help to ensure accurate research results.

Retention and Attrition

The Gallup Panel is a discontinuous panel in that members are surveyed on a variety of topics over time. As a result, to keep responses fresh and representative, some attrition is not only expected, but welcomed. Panel members who do not respond to multiple requests are subsequently dropped from the panel.

The Gallup Panel Advantage

Multiple data collection methods	Offers outbound phone, Web, and/or mail surveys to ensure we reach the right audience and leverage the best research method to get the answers you need.
----------------------------------	--

Random digit dial recruitment	Ensures accurate representation that allows for precise weighting for insight among total populations.
Controlled survey management	Provides responses that are more thoughtful and accurate by carefully managing the number of surveys and topics consumers receive. An average Gallup panelist completes no more than two to three surveys per month.
No incentives Longer, more detailed surveys	Eliminates professional survey respondents and helps ensure unbiased responses. Allows for longer, more detailed surveys (up to 30 minutes) because we already have consumer commitment to participate and profile information collected.
Demographic and lifestyle profiling	Enables you to pinpoint exactly whom you want to survey, with extreme precision and unprecedented speed.
Custom panels	Leverages our panel development and management expertise with the creation of a custom panel exclusively for your own research needs.
Dedicated consultants	Ensures seamless data collection and detailed analysis, resulting in recommendations and plans that are both scientifically sound and actionable.

Tracking Public Opinion Is a Delicate Blend of Science, Art

By WILLIAM NOTTINGHAM
Times Staff Writer

So how do you really feel about abortion? Immigration, the economy or Iraq? Or the president? Or the governor?

With the fall election season heating up in California and other states, public opinion pollsters will be asking questions on such topics to thousands of people in a drive to pin down the ever-shifting mood of the country.

As Los Angeles Times Poll Director Susan Pinkus explains below, obtaining a valid result involves a keen blend of art and science.

Gallup, Roper, Field and newspapers such as The Times — to name just a few major polling organizations — begin with a bank of telephone callers who ask carefully written questions of people scientifically chosen at random. Randomness is a key that allows pollsters to accurately project the opinions of thousands based on a sample of only 1,000 or even hundreds.

The answers are entered into a computer and sorted against various statistical measures. The results are then analyzed in the aggregate and qualified with a mathematical “margin of error” that tells readers the results might vary within that range.

Question: What is the value of a public opinion poll?

Answer: It tells us what people are thinking at that particular moment about a particular issue. Polling is just a snapshot in time, and it's not a predictor of the future. It's just basically telling you, if there's a [polling period] of let's say, Oct. 1 to Oct. 7, that's what voters were thinking about those issues during that period of time. We can get a sense of what Americans are feeling about the war in Iraq, for example, or the government response to Hurricane Katrina, or the special election in California.

Q: As a professional pollster, how do you react when you hear a politician say something like “Oh, I don't believe in polls”?

A: I laugh. It's probably be-

cause they have a result they don't really like. Because I am sure that they all have their own pollsters, they all care about public opinion and they all want to be on the right side of it so that they get the votes the next time they run for election.

Q: Websites occasionally ask a “question of the day” and then show how people responded — is that a poll?

A: It's not a poll because it's not a scientifically designed sample. You can have a website where 10,000 people get on it, saying whether you want John O'Hurley or Kelly Monaco to win “Dancing With the Stars.” That's a simple issue and that's a silly issue. But does it matter? No.

But it's different when we're talking about current events or timely issues, like [President] Bush's job approval rating or whether you think abortion should be legal or not. When a website says “OK, click yes if you agree” there could be a systematic or a concerted effort from one major group to answer it multiple times. You don't know if it's children answering it or only adults answering it or whether they've answered it many times.

Q: So what makes a poll scientifically accurate?

A: We begin with a “probabilistic sample,” which allows every adult 18 or over to be chosen to participate in the survey. We use a random-digit dialing technique that uses computer-generated telephone numbers.

And you only want to speak to one person in a household who is 18 or over. We don't even let the interviewers decide whom to choose because for the most part women answer the phone, so if you didn't balance it out you would have a very one-sided survey of more women answering than men. So even within the household we randomly pick somebody by asking to speak to the person with the most recent birthday.

It's a scientifically produced sample, so that you get representative numbers of men and women. You compare some demographics to census data. A

random sample will have the right amount of men and women, the right proportion of blacks, whites, Latinos and Asians.

Q: Does it matter what kinds of people are questioned?

A: It depends on what your poll is trying to do. If you're getting close to an election, you want to look at “likely voters” because those are the people who are going to vote. You don't want to look at everybody, because not everybody votes. We just saw that in our last presidential election: Only about 54% of the population voted.

Q: How do you determine who is a “likely voter”?

A: We ask the person we're calling about their past voting history, their intention to vote, their interest in voting, are they a citizen, are they registered to vote, whether they are definitely or probably going to vote.

Q: Is there any magic to the way a poll question is phrased?

A: Polling is called an art and a science. The science is the sampling and the methodology, and the art is the way you design the survey questionnaire. You have to be very careful of the order in which you ask the questions so that one question doesn't taint the next question.

And then you have to figure out a way of writing a question that hopefully is neutral. You don't want to use any inflammatory language. Like for abortion you try not to use the words “pro life” or “pro choice” because that conjures up very different, very clear images. Affirmative action is another example; you don't want to use the words “preferential treatment” or “quota” because those are loaded terms. You want to ask questions that people understand, that are not ambiguous; we try to write to a very understandable level; we use simple, clear language.

Q: How do you ask about initiatives?

A: Initiatives are very hard to do because people really don't pay attention to them until the

last couple of weeks leading up to the election. We first ask if they have heard anything about the proposition and mention what the title is and then say nothing else about it. And we get a very high “don't know.”

Then what we say is “as you know, the proposition is . . .” and then what we do is read the ballot summary because this is what voters are going to see when they go into the voting booth. It doesn't have any arguments for or against it at that particular point.

Q: What should people keep in mind in reading poll results?

A: They should look to see who sponsors the polls because some are sponsored by bipartisan groups, while others are conducted by independent polling organizations.

And they should look at the sample size and the dates of the interviewing period. They should look at the “margin of error” so they know if there's some significance between answers or, in the case of elections, the yes and the no vote for each initiative or the vote between each candidate.

For example, if a poll shows 43% of respondents would vote for Politician X and 41% would vote for Politician Y, Politician X may not really be ahead if the margin of error is plus or minus 3 percentage points. If the distance between the candidates is closer than the margin of error, the result would be a statistical dead heat.

Q: Does a poll result, say in September, necessarily mean that will be the result when the election is held in November?

A: Absolutely not. If it's a poll on initiatives, the campaign hasn't started yet. And so once advertising comes out or people come out in support of it, one organization or another, public opinion changes and that's what's so wonderful about it. Because people start hearing about it, they start tuning in.

A poll in September tells you how the issue is doing at that moment. This is why the cliché “a snapshot in time” is entirely true.



About Sampling Methodology in Detail

The sample for a typical national survey consists of a random digit sample of telephone numbers selected from telephone exchanges in the continental United States. The random digit aspect of the sample is used to avoid "listing" bias and provides representation of both listed and unlisted numbers (including not-yet-listed). The design of the sample ensures this representation by random generation of the last two digits of telephone numbers selected on the basis of their area code, telephone exchange, and bank number.

The telephone exchanges are selected with probabilities proportional to their size. The first eight digits of the sampled telephone numbers (area code, telephone exchange, bank number) are selected to be proportionally stratified by county and by telephone exchange within county. That is, the number of telephone numbers randomly sampled from within a given county is proportional to that county's share of telephone numbers in the U.S. Only working banks of telephone numbers are selected. A working bank is defined as 100 contiguous telephone numbers containing one or more residential listings.

The sample is released for interviewing in replicates. Using replicates to control the release of sample to the field ensures that the complete call procedures are followed for the entire sample. The use of replicates also ensures that the regional distribution of numbers called is appropriate. Again, this works to increase the representativeness of the sample.

As many as 10 attempts are made to complete an interview at every sampled telephone number. The calls are staggered over times of day and days of the week to maximize the chances of making a contact with a potential respondent. All interview breakoffs and refusals are re-contacted at least once in order to attempt to convert them to completed interviews. In each contacted household, interviewers ask to speak with "the youngest male, 18 years of age or older, who is now at home." If there is no eligible man at home, interviewers ask to speak with "the youngest female, 18 years of age or older, who is now at home." This systematic respondent selection technique has been shown empirically to produce samples that closely mirror the population in terms of age and gender.

Non-response in telephone interview surveys produces some known biases in survey-derived estimates because participation tends to vary for different subgroups of the population, and these subgroups are likely to vary also on questions of substantive interest. In order to compensate for these known biases, the sample data are weighted in analysis.

The demographic weighting parameters are derived from a special analysis of the most recently available Census Bureau's Current Population Survey (March 2005). This analysis produces population parameters for the demographic characteristics of households with adults 18 years of age or older, which are then compared with the sample characteristics to construct sample weights. The analysis only includes households in the continental United States that contain a telephone. The weights are derived using an iterative technique that simultaneously balances the distributions of all weighting parameters.

OBTAINING PERSONAL INFORMATION

The name of the game in statistics is the inferring of information about a large population by examining characteristics of a small, randomly selected sample. The techniques involved—from the enumerative induction of Francis Bacon to the theories of hypothesis testing and experimental design of Karl Pearson and R. A. Fisher, the founding fathers of modern statistics—all depend on this (now) obvious insight. Several unusual ways of obtaining information follow.

The first, which will perhaps become increasingly important in an inquisitive age which professes to still value privacy, makes it possible to obtain sensitive information about a group of people without compromising any person's privacy. Assume we have a large group of people and want to discover what percentage of them have engaged in a certain sex act, in order to determine what practices are most likely to lead to AIDS.

What can we do? We ask everyone to take a coin from his or her purse or wallet and direct them to flip it once. Without letting anyone else see the outcome, they should note whether it lands on heads or tails. If the coin lands heads, the person should answer the question honestly: Has he or she ever engaged in the given sexual practice—yes or no? If it comes up tails, the person should simply answer yes.

Thus, a yes response could mean one of two things, one quite innocuous (the coin's landing tails), the other potentially embarrassing (engaging in the sex act). Since the experimenter can't know what yes means, people presumably will be honest.

Let's say that 620 of 1,000 responses are yes. What does this indicate about the percentage of people who engage in the sex act? Approximately 500 of the 1,000 people will answer yes simply because the coin landed tails. That leaves 120 people who answered yes out of the 500 who replied to the question honestly (those whose coins landed heads). Thus, 24 percent ($120/500$) is the estimate for the percentage of people who engage in the sex act.

There are many refinements of this method that can be used to learn more detail, such as how many times people engaged in the sex act. Some variations of the method can be more informally implemented, and could be used by a spy agency to estimate the number of dissidents in an area, or by an advertising agency to estimate the market for a product whose attractiveness people are likely to deny. The raw data for the calculations can come from public sources and, appropriately massaged, can yield surprising conclusions.

Another somewhat uncommon way of obtaining information is the so-called capture-recapture method. Assume we want to know how many fish are in a certain lake. We capture one hundred of them, mark them, and then let them go. After allowing them to disperse about the lake, we catch another hundred fish and see what fraction of them are marked.

INNUMERACY

If eight of the hundred we capture are marked, then a reasonable estimate of the fraction of marked fish in the whole lake is 8 percent. Since this 8 percent is constituted by the one hundred fish we originally marked, the number of fish in the whole lake can be determined by solving the proportion: 8 (marked fish in the second sampling) is to 100 (the total number of the second sampling) as 100 (the total number marked) is to N (the total number in the lake). N is about 1,250.

Of course, care must be taken that the marked fish don't die as a result of the marking, that they're more or less uniformly distributed about the lake, that the marked ones aren't only the slower or more gullible among the fish, etc. As a way to get a rough estimate, however, the capture-recapture method is effective, and of more generality than the fish example might suggest.

Statistical analyses of works whose authorship is disputed (books of the Bible, *The Federalist Papers*, etc.) also depend on related clever ways of glean-
ing information from uncooperative (because dead) sources.

Use this tutorial to master the concepts of survey design

This tutorial will teach you how to design a survey. You'll learn the latest survey research techniques...what works and what doesn't. You'll discover the secrets used to maximize survey response rates, and how to design a questionnaire that gets at the true opinions of your sample. The tutorial is packed with information! It tells everything you need to begin writing your own market research surveys right now.

Questionnaires are the most common marketing research method. They are used for structured interviews, written surveys, email and online surveys. Fortunately, good survey design skills can be learned in a short period of time. We invite you to use this tutorial to become an expert in conducting surveys. The tutorial is actually a chapter from our book *Survival Statistics*, where we take the mystery out of statistics and make it understandable to anyone.

This tutorial will make designing surveys easy!

The *Designing Surveys and Questionnaires* tutorial is over 20 pages, so it may be more convenient to download it for offline viewing. Click either link to download the tutorial

[Survey Design Tutorial \(.doc format\)](#)

[Survey Design Tutorial \(.pdf format\)](#)

If you prefer, type your email address and we'll send you the tutorial by email

E-mail:

Designing Surveys and Questionnaires

Select a topic or click here to start at the beginning

Research Methods	Questionnaire Research Flow Chart	Time Considerations
Cost Considerations	Advantages of Written Questionnaires	Disadvantages Of Written Questionnaires
Questionnaire Design - General Considerations	Qualities of a Good Question	Pre-notification Letters
Cover Letters	Response Rate and Following up on Nonrespondents	Nonresponse Bias
The Order of the Questions	Anonymity and Confidentiality	The Length of a Questionnaire
Incentives	Notification of a Cutoff Date	Reply Envelopes and Postage
The Outgoing Envelope and Postage	The "Don't Know", "Undecided", and "Neutral" Response Options	Question Wording
Sponsorship	Sampling Methods	The Meaning of "Significance"

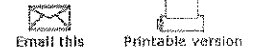
Pretty easy tutorial, huh?

Science Buddies: Ad Free Thanks To Our Donors \$84,467 Our Goal: \$100,000 



- Home
- Project Ideas
- Project Guide
- Ask an Expert
- Blog
- Teachers
- Parents
- Students
- Science Careers
- My Science Buddies
- More

Home > Project Guide > Designing a Survey



Designing a Survey

The key to obtaining good data through a survey is to develop a good survey questionnaire. Whether you are conducting interviews or mailing out surveys, you will need to know how to design a good survey questionnaire.

What is a survey questionnaire?

Survey questionnaires present a set of questions to a subject who with his/her responses will provide data to a researcher. On the surface, it seems a fairly simple task to write up a set of questions to collect information, but there are many pitfalls that should be avoided to develop a good survey questionnaire. We will focus here on describing some of the key elements in designing a survey questionnaire, and then highlighting some tips and tricks to for creating a good survey questionnaire.

Objectives

The key to developing a good survey questionnaire is to keep it short while ensuring that you capture all of the information that you need. This is not an easy task. Before you even begin to design your survey questionnaire, you should develop a set of objectives for your research and list out the information that you are trying to capture. This list of objectives and research goals will serve as your plan for the survey questionnaire.

Now that you know what you are looking for, you can begin to structure the questions that will help you capture the information. Once you have developed your survey questionnaire, you can use your objectives to go back through the questions and determine if each of the questions is providing you with information that you need. Any question that is not providing necessary information should be removed.

Types of Questions:

There are two different types of questions that can be used to collect information. The first is called a structured or fixed response question and the second is called non-structured or open question. It is important to understand when and how to use these questions when designing your survey.

Structured (fixed response)

Structured questions are questions that offer the respondent a closed set of responses from which to choose. Structured questions make data collection and analysis much simpler and they take less time to answer. Structured questions are best suited in the following situations: (1) when you have a thorough understanding of the responses so that you can appropriately develop the answer choices (2) when you are *not* trying to capture new ideas or thoughts from the respondent.

Examples of Structured Questions

Do you have a driver's license? <input type="checkbox"/> Yes <input type="checkbox"/> No	Which subject do you enjoy the most at school? <input type="checkbox"/> Math <input type="checkbox"/> Science <input type="checkbox"/> English <input type="checkbox"/> Foreign Language <input type="checkbox"/> History <input type="checkbox"/> Government <input type="checkbox"/> Art / Music <input type="checkbox"/> Other	How many hours a day do you spend doing homework? <input type="checkbox"/> 0 to 1 hour <input type="checkbox"/> 2 to 3 hours <input type="checkbox"/> 4 to 5 hours <input type="checkbox"/> more than 5 hours
--	---	---

When writing the selection of responses for a structured question, you should make certain that the list covers *all possible alternatives* that the respondent might select AND that *each of the answers is unique* (ie they do not overlap). So for example, in the homework question above, we have included every option on the number of hours (from 0 to infinity). Also, you will notice that we were careful not to overlap the hours when defining the ranges by stating them as "0 to 1 hour" and "2 to 3 hours" rather than saying "0 to 1 hour" and "1 to 2 hours".

Sometimes, including general catch all responses (such as "Other", "Don't know", "None of the above", etc...) at the end of a list of answer choices will help to ensure that the data you are collecting will be accurate. In the school subject example above, you will notice that the last answer choice is "Other". Since the selection of non-required courses varies dramatically from school to school the option of "Other" helps to ensure that you are capturing the responses that do not fit into the broader subject areas already listed, rather than forcing respondents to select one of the other subject areas. Similarly, adding "Don't know" to a response list for a question that some of the respondents may not be capable of answering will help ensure you are collecting valid data. In general however, you want to use the "Don't know" option sparingly. You should try to ensure that your respondents are capable of answering the majority of the questions on your survey questionnaire.

You should also make sure that all of the answers are *relevant* to the question. Irrelevant responses may distract the respondent in addition to adding unnecessary length to your survey questionnaire. Consider the following change to the favorite school subject question.

Example of a Bad Question With an Irrelevant Answer Choice

Which subject do you enjoy the most at school? <input type="checkbox"/> Math <input type="checkbox"/> Science <input type="checkbox"/> English <input type="checkbox"/> Foreign Language <input type="checkbox"/> History <input type="checkbox"/> Government <input type="checkbox"/> Art / Music <input type="checkbox"/> Football Practice <input type="checkbox"/> Other

Search

Report a Problem with this Page

Does something not look right on your screen? Did you receive an error? Please take a moment and [let us know](#) what isn't working so we can fix it!

Related Links

- [Sociology Project Ideas](#)
- [Human Behavior Project Ideas](#)
- [Sample Survey: Science Buddies Advisor Survey](#)
- [Sample Survey: Science Buddies Teacher Survey](#)

Sponsor

Sponsored by a generous grant from Elmer's



Elmer's supports the Broadcom MASTERS



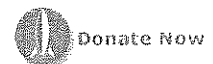
A Competition for 6-8th Grade Students

www.societyforscience.org

Getting Expert Help

[Ask an Expert](#) is an online bulletin board you and/or students can use to ask science fair and/or career-oriented questions of our volunteer advisors, all of whom are professional scientists or engineers.

Help Support Science Buddies



Even a \$1 Donation Helps: Science Buddies is a 501c3 public charity that relies on donations to operate.

Please rank the following Homecoming activities in order of preference (starting with 1 for your favorite activity).

- ___ Homecoming Pep Rally
- ___ Homecoming Parade
- ___ Homecoming Football Game
- ___ Homecoming Dance

In general, if you are trying to get a respondent's opinion about something, it is best to have them do a rating rather than responses in order of preference. This type of question leads you to an answer where the respondent is comparing one item about each individual item. The disadvantage to a ranking is that if the respondent feels the same about two or more items, the results of a ranking basically tell you which is the most preferred and which is the least preferred item on the list, but you don't know if they dislike any or all of the items on the list.

Non-structured (open-ended)

Non-structured questions, or open-ended questions, are questions where there is no list of answer choices from which to choose a response to a question. Here is an example:

Example of a Non-structured Question

What do you like best about the Science Buddies Classroom Scientists Program?

It is best to use non-structured questions when you are exploring new ideas and you don't really know what to expect from a partial list of answer choices, but you may still have some doubt or uncertainty about other possible responses. You can see the following:

Example of a Partially Structured Question

Why did you sign up for the Science Buddies Classroom Scientists Program (please select all that apply)?

- I really enjoy science
- My teacher asked me to sign up
- My teacher made me sign up
- My parents asked me to sign up
- I'm bored in science class & thought this would be fun
- I thought it would help me do a better project
- I thought it would help me win the Science Fair
- I thought having a Mentor to talk to would be fun
- I knew other students who were doing it
- Other _____

Open-ended questions let you get more insight into the respondents' thoughts and ideas about a subject. As we have already seen, one of the disadvantages of open-ended questions is that it can be much more time consuming and difficult to analyze the data. In general you should try to minimize the use of open-ended questions in a survey questionnaire. If you find yourself designing a survey questionnaire where the majority of the questions are open-ended, you may want to consider using a different research method to get a better foundation of knowledge for the subject you are researching.

Tips to creating a good survey questionnaire:

Here are some tips and tricks to help you ensure you are developing a good survey questionnaire:

- **Clearly state your intentions with the research.**

Many people are hesitant to answer questions about themselves and their opinions. If you are developing your survey, you should be more willing to help if you clearly state your intentions. At the top of your survey, write a brief statement explaining to each respondent that the information is entirely anonymous. If you need to know specifics about a person, respect their privacy, etc...

- **Include instructions with your survey questionnaire**

What may seem obvious to you probably is not very obvious to someone else. To ensure that you collect valid survey data, you should include instructions to answer the survey questionnaire. There should probably be a short introductory set of instructions at the top of the survey for specific questions as needed.

Teachers are satisfied
Students are satisfied
Teachers and students are satisfied

An "unsatisfied" response could mean any of the following:

Teachers are unsatisfied
Students are unsatisfied
Teachers and students are unsatisfied

Since the question was phrased in such an ambiguous way, you will not know what the respondent intended with data.

To solve this problem, you simply need to break this question into two separate questions, as shown in the example.

You will also notice that the two rephrased questions above are very similar and that the key word (which differs) is a good technique to ensure that the respondents are reading the questions correctly when the structures are so similar.

- **Make sure the questions are unbiased**

When developing your survey questionnaire, you want to make certain that you are asking the questions in a neutral way that does not lead to a particular answer. This may seem simple, but when you are writing questions you will often find that the way you phrase a question can lead to a particular opinion. Here is an example of a leading question:

Example of a Leading Question and How to Correct it

Bad Question: Leading	Good Question: Neutral
Do you think that the new cafeteria lunch menu offers a better variety of healthy foods than the old one? () Yes () No () No Opinion	How do you feel about the new cafeteria lunch menu? () The new menu offers a better variety of healthy foods. () The old menu offers a better variety of healthy foods. () The selections are similar. () No opinion.

The leading question drives the respondent to the conclusion that the new menu is healthier than the old. A yes response may simply take the path that requires the least amount of thinking. The neutral question presents no bias.

- **Ask questions that can be answered by your subjects**

Make sure that the questions you are asking are questions that people will be able to answer. The most common mistake is asking a question that people cannot remember. Here is an example:

How much did you spend on school supplies last year?
() \$0 - \$10
() \$11 - \$20
() \$21 - \$30
() over \$30

While this question appears to be perfectly acceptable, it is unlikely that many students will really remember how much they spent. They will probably be guessing rather than actual numbers, and many respondents may become frustrated trying to calculate all that you are looking for, then simply rephrasing the question to the following will make it much easier for the respondent.

How much do you estimate you spent on school supplies in the last year?
() \$0 - \$10
() \$11 - \$20
() \$21 - \$30
() over \$30

- **Order/group questions according to subject**

If you have more than six questions in your questionnaire, then you should make an effort to organize your questions in a logical order. A good way to organize the questions is to group them together by subject. This way your respondents can answer questions around these thoughts.

"Sometimes people portray this as if men and women in surveys are closed populations," says William Mosher, a statistician at the Centers for Disease Control and Prevention's National Center for Health Statistics, about the comparisons between male and female sexual behavior. "They are not closed populations."

Then there is the challenge of ensuring that people answer honestly about deeply private matters. Researchers who led the Indiana study acknowledge the difficulty of obtaining truthful information. "There is no perfect method," says Debby Herbenick, research scientist at Indiana University and co-author of the study.

Nonetheless, she says the Indiana group's approach had certain advantages. Researchers hired the survey company Knowledge Networks to interview people electronically. Many pollsters are skeptical of Web surveys because not everyone in the U.S. is online—or online often enough to see ads for Internet-based panels. But Knowledge Networks takes a different approach, contacting people via mail by randomly selecting addresses, and persuading about one in four or five to join a panel. If panelists lack the means to answer online polls, the company equips them.

Another problem with the study: Soldiers, prostitutes and Americans living abroad are unlikely to participate in sex surveys, either because they are outside the geographical range, or because they are reluctant to talk about illicit activities. Their absence can affect results, researchers say.

The survey also had limited statistical power to describe the sexual habits of subgroups of Americans, because of small sample sizes. This prevented researchers from learning much about same-gender sex. And, for instance, an analysis of whether black women who used marijuana before sex also used condoms was hampered by the presence of just eight such women in the sample.

While the anonymity of online surveys might make respondents more comfortable responding honestly, it also can be harder to verify their identity—perhaps the person who claims to be a 45-year-old woman is actually a 20-year-old man. For the last comprehensive survey on Americans' sexual behavior in 1992, researchers faced a different set of issues. Online polling wasn't an option, so interviewers went to people's homes, explains Robert T. Michael, an economist at the University of Chicago and a principal investigator on the study. To persuade respondents to divulge highly personal information, pollsters appealed to people's desire to help supply information and fight the spread of AIDS. "We had a compelling rationale, and our field people were good," Prof. Michael says.

"It's exciting, intellectually challenging research," Prof. Michael says of sex studies. "It's important to get it right."

BENCHMARK INSTITUTE

LINKING PEOPLE
LEARNING AND PERFORMANCE
FOR SOCIAL JUSTICE

Benchmark Institute is a training and performance development organization dedicated to increasing the quality and quantity of legal services to low-income communities.

Leading/Non-Leading Question Cheat Sheet

[Home](#)

[Our Training](#)

[Learning Portal](#)

[Best Practices in Learning](#)

[Orientation to Legal Services](#)

[Alumni](#)

[Library](#)

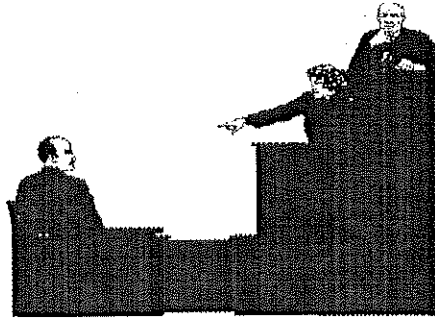
[About Us](#)

[Support Us](#)

[Contact Us](#)

[Email](#)

[Newsletter](#)



[Keeping Evidence Out](#)
[Objection Planning Worksheet](#)
[Checklist of Common Objections](#)
[Leading/Non-Leading Question Cheat Sheet](#)

Non-leading (On Direct)

Who
What
When
Where

Leading (On Cross; On Direct — transitions, neutral background information, foundations, witnesses with memory or language problems).

Blatantly leading

Isn't it true....
Isn't it a fact....
Won't you admit....
Won't you concede....
Wouldn't you agree....
Wouldn't you have to say...

Declarative sentence or assertion followed by

Right?
Correct?
Isn't it true?
Isn't it correct?

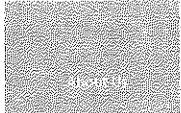
Fairly leading

Don't
Didn't
Isn't
Aren't
Wasn't
Weren't

Mildly leading

Do Are
Did Was
is Were

By Edward Imwinkelreid, King Hall



BENCHMARK INSTITUTE

[Support Us](#)

[News](#)

[Search](#)

[Contact Us](#)