students for a university-sponsored study. The ads produced about 33,000 clicks, 1,742 men who started the survey, and 1,026 men who finished it. The response rate to Internet surveys and mailed surveys can be comparable, if you send potential respondents a note by regular mail telling them about the study (Kaplowitz et al. 2004). But this assumes that you have a sampling frame with the names and addresses of the people you want to interview. In 2000, my colleagues and I tried to do a national survey of people who met two simultaneous criteria: They had access to the Internet and they had purchased a new car in the last 2 years or were in the market for a car now. There’s no sampling frame of such people, so we decided to do a national RDD (random-digit-dialing) survey to find people who met our criteria. Then, we’d offer them $25 to participate in an Internet survey, and, if they agreed, we’d give them the URL of the survey and a PIN.

We made 11,006 calls and contacted 2,176 people. That’s about right for RDD surveys. The rest of the numbers either didn’t answer, or were businesses, or there was only a child at home, etc. Of the 2,176 people we contacted, 910 (45%) were eligible for the web survey. Of them, 136 went to the survey site and entered their PIN, and of them, 68 completed the survey. The data from those 68 people were excellent, but it took an awful lot of work for a purposive (nonrepresentative) sample of 68 people.

In fact, Internet surveys are used mostly in studies that don’t require representative samples. In 2003, only about 80% of households in the United States with college graduates had access to the Internet and that dropped to 24% in households with less than a high school education (SAUS 2004–2005, table 1152). (About 43 million adults had less than a high school education in the United States in 2003.) By contrast, over 95% of households in the United States have a telephone. Even in households with less than $5,000 annual income, the penetration of telephones is around 82% (see the section on telephone surveys, below).

Still, Internet surveys hold great promise for anthropologists. There are Internet points in the most out-of-the-way places today, which means that we can continue to interview our informants between trips to the field.

Advantages and Disadvantages of Survey Formats

Each major data-collection method—face-to-face, self-administered, and telephone interview—has its advantages and disadvantages. There is no conclusive evidence that one method of administering questionnaires is better, overall, than the others. Your choice of a method will depend on your own
calculus of things like cost, convenience, and the nature of the questions you are asking.

**Personal, Face-to-Face Interviews**

Face-to-face administration of questionnaires has major advantages, but it also has some disadvantages as well.

**Advantages of Face-to-Face Interviews**

1. They can be used with people who could not otherwise provide information—respondents who are illiterate or nonliterate, blind, bedridden, or very old, for example.
2. If a respondent doesn’t understand a question in a personal interview, you can fill in, and, if you sense that the respondent is not answering fully, you can probe for more complete data.

Conventional wisdom in survey research is that each respondent has to hear exactly the same question. In practice, this means not engaging in conversation with people who ask for more information about a particular item on a survey. Not responding to requests for more information might mean sacrificing validity for reliability. There is now evidence that a more conversational style produces more accurate data, especially when respondents really need to get clarifications on unclear concepts (Schober and Conrad 1997; Krosnick 1999).

So, carry a notebook that tells you exactly how to respond when people ask you to clarify an unfamiliar term. If you use more than one interviewer, be sure each of them carries a copy of the same notebook. Good interview schedules are pretested to eliminate terms that are unfamiliar to intended respondents. Still, there is always someone who asks: “What do you mean by ‘income’?” or “How much is ‘a lot’?”

3. You can use several different data collection techniques with the same respondent in a face-to-face survey interview. Part of the interview can consist of open-ended questions; another part may require the use of visual aids, such as graphs or cue cards; and in still another, you might hand the respondent a self-administered questionnaire booklet and stand by to help clarify potentially ambiguous items. This is a useful technique for asking really sensitive questions in a face-to-face interview.
4. Personal interviews at home can be much longer than telephone or self-administered questionnaires. An hour-long personal interview is relatively easy, and even 2- and 3-hour interviews are common. It is next to impossible to get respon-
dents to devote 2 hours to filling out a questionnaire that shows up in the mail, unless you are prepared to pay well for their time; and it requires exceptional skill to keep a telephone interview going for more than 20 minutes, unless respondents are personally interested in the topic (Holbrook et al. 2003). Note, though, that street-intercept or mall-intercept interviews (where you interview people on the fly), while face to face, usually have to be very quick.

5. Face-to-face respondents get one question at a time and can’t flip through the questionnaire to see what’s coming. If you design an interview to start with general questions (how people feel about using new technologies at work, for example) and move on to specific questions (how people feel about using a particular new technology), then you really don’t want people flipping ahead.

6. With face-to-face interviews, you know who answers the questions.

**Disadvantages of Face-to-Face Interviews**

1. They are intrusive and reactive. It takes a lot of skill to administer a questionnaire without subtly telling the respondent how you hope he or she will answer your questions. Other methods of administration of questionnaires may be impersonal, but that’s not necessarily bad, especially if you’ve done the ethnography and have developed a set of fixed-choice questions for a questionnaire. Furthermore, the problem of reactivity increases when more than one interviewer is involved in a project. Making it easy for interviewers to deliver the same questions to all respondents is a plus.

2. Personal interviews are costly in both time and money. In addition to the time spent in interviewing people, locating respondents in a representative sample may require going back several times. In urban research especially, count on making up to half a dozen callbacks to get the really hard-to-find respondents.

   It’s important to make all those callbacks in order to land the hard-to-get interviews. Survey researchers sometimes use the sampling by convenient replacement technique—going next door or down the block and picking up a replacement for an interviewee who happens not to be home when you show up. As I mentioned in chapter 6, this tends to homogenize your sample and make it less and less representative of all the variation in the population you’re studying.

3. If you are working alone, without assistants, in an area that lacks good roads, don’t plan on doing more than around 200 survey interviews in a year. If you’re working in major cities in Europe or North America you can do more, but it gets really, really tough to maintain a consistent, positive attitude long before you get to the 200th interview. With mailed and telephone questionnaires, you can survey thousands of respondents.

4. Personal interview surveys conducted by lone researchers over a long period of time run the risk of being overtaken by events. A war breaks out, a volcano erupts, or the government decides to cancel elections and imprison the opposition. It sounds dramatic, but these sorts of things are actually quite common across the world. Far less dramatic events can make the responses of the last 100
people you interview radically different from those of the first 100 to the same questions. If you conduct a questionnaire survey over a long period of time in the field, it is a good idea to reinterview your first few respondents and check the stability (reliability) of their reports.

Interviewer-Absent Self-Administered Questionnaires

Mailed questionnaires, questionnaires dropped off at people’s homes or where they work, questionnaires that people pick up and take home with them, and questionnaires that people take on the Internet—all these are interviewer-absent, self-administered instruments for collecting survey data.

These truly self-administered questionnaires have some clear advantages and disadvantages.

Advantages of Self-Administered Questionnaires

1. Mailed questionnaires (whether paper or disk) puts the post office to work for you in finding respondents. If you cannot use the mail (because sampling frames are unavailable, or because you cannot expect people to respond, or because you are in a country where mail service is unreliable), you can use cluster and area sampling (see chapter 6), combined with the drop-and-collect technique. This involves leaving a questionnaire with a respondent and going back later to pick it up. Ibeh and Brock (2004) used this in their study of company managers in Nigeria. The standard response rate for questionnaires mailed to busy executives in Sub-Saharan Africa is around 36%. Using the drop-and-collect technique, Ibeh and Brock achieved a nearly 60% response rate. With both mailed surveys and the drop-and-collect method, self-administered questionnaires allow a single researcher to gather data from a large, representative sample of respondents, at relatively low cost per datum.

2. All respondents get the same questions with a self-administered questionnaire. There is no worry about interviewer bias.

3. You can ask a bit more complex questions with a self-administered paper questionnaire than you can in a personal interview. Questions that involve a long list of response categories, or that require a lot of background data are hard to follow orally, but are often interesting to respondents if worded right.

But for really complex questions, you’re better off with CASI. In computer-assisted self-administered interviews, people don’t have to think about any convoluted instructions at all—instructions like: “Have you ever had hepatitis? If not, then skip to question 42.” Later, after the respondent finishes a series of questions about her bout with hepatitis, the questionnaire says: “Now
return to question 40.” With a CASI, the computer does all the work and the respondent can focus on responding.

4. You can ask long batteries of otherwise boring questions on self-administered questionnaires that you just couldn’t get away with in a personal interview. Look at figure 10.1. Imagine trying to ask someone to sit still while you recited, say, 30 items and asked for their response. And again, computer-assisted interviewing is even better at this.

Here is a list of things that people say they'd like to see in their high school. For each item, check how you feel this high school is doing.

<table>
<thead>
<tr>
<th></th>
<th>WELL</th>
<th>OK</th>
<th>POORLY</th>
<th>DON'T KNOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. High-quality instruction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Good pay for teachers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Good mix of sports and academics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Preparation for college entrance exams</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>5. Safety</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Music program</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Good textbooks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 10.1. A battery item in a questionnaire. Batteries can consist of many items.

5. There are question-order effects and acquiescence effects in self-administered interviews, just as there are in other instruments. (Acquiescence is the tendency for some people to respond to anything, even if they don’t know the answer, just to satisfy the questioner.) But response effects, based on features of the interviewer, are not a problem. Questions about sexual behavior (including family planning) and about attitudes toward women or men or members of particular ethnic/racial groups are particularly susceptible to this problem. The perceived sexual orientation of the interviewer, for example, affects how supportive respondents are of homosexuality (Kemph and Kasser 1996).

6. Some people are more willing to report socially undesirable behaviors and traits in self-administered questionnaires (and in telephone interviews) than they are in face-to-face interviews (Aquilino 1994; de Leeuw et al. 1995; Tourangeau and Smith 1996). Peterson et al. (1996) randomly assigned two groups of 57 Swedish Army veterans to fill out the Beck’s Depression Inventory (Beck et al. 1961).
One group used the pencil-and-paper version, while the other used a computer-based version. Those who used the computer-based version had significantly higher mean scores on really sensitive questions about depression.

In self-administered interviews, people aren’t trying to impress anyone, and anonymity provides a sense of security, which produces more reports of things like premarital sexual experiences, constipation, arrest records, alcohol dependency, interpersonal violence, and so on (Hochstim 1967; Bradburn 1983).

This does not mean that more reporting of behavior means more accurate reporting. We know better than that now. But, as I’ve said before, more is usually better than less. If Chicanos report spending 12 hours per week in conversation with their families at home, while Anglos (as white, non–Hispanic Americans are known in the American Southwest) report spending 4 hours, I wouldn’t want to bet that Chicanos really spend 12 hours, on average, or that Anglos really spend 4 hours, on average, talking to their families. But I’d find the fact that Chicanos reported spending three times as much time talking with their families pretty interesting.

**Disadvantages of Self-Administered Questionnaires**

Despite these advantages, there are some hefty disadvantages to self-administered questionnaires.

1. You have no control over how people interpret questions on a self-administered instrument, whether the questionnaire is delivered on paper or on a computer or over the Internet. There is always the danger that, no matter how much background work you do, no matter how hard you try to produce culturally correct questions, respondents will be forced into making culturally inappropriate choices in closed-ended questionnaires. If the questionnaire is self-administered, you can’t answer people’s questions about what a particular item means.

2. If you are not working in a highly industrialized nation, or if you are not prepared to use Dillman’s Total Design Method (discussed below), you are likely to see response rates of 20%–30% from mailed questionnaires. It is entirely reasonable to analyze the data statistically and to offer conclusions about the correlations among variables for those who responded to your survey. But response rates like these are unacceptable for drawing conclusions about larger populations. CASI and audio CASI studies are based on real visits with people, in the field. Response rates for those forms of self-administered questionnaires can be very high. In that study that Hewett et al. did in Kenya, they had a response rate of over 80% (2004:328).

3. Even if a mailed questionnaire is returned, you can’t be sure that the respondent who received it is the person who filled it out. And similarly for Internet and e-mail questionnaires.
4. Mailed questionnaires are prone to serious sampling problems. Sampling frames of addresses are almost always flawed, sometimes very badly. If you use a phone book to select a sample, you miss all those people who don’t have phones or who choose not to list their numbers. Face-to-face administration of questionnaires is often based on an area cluster sample, with random selection of households within each cluster. This is a much more powerful sampling design than most mailed questionnaire surveys can muster.

5. In some cases, you may want respondents to answer a question without their knowing what’s coming next. This is impossible in a self-administered paper questionnaire, but it’s not a problem in CASI and audio CASI studies.

6. Self-administered paper and CASI questionnaires are simply not useful for studying nonliterate or illiterate populations, or people who can’t use a keyboard. This problem will eventually be solved by voice recognition software, but we’re just at the beginning of that particular revolution.

**Telephone Interviews**

Once upon a time, telephone surveys were considered a poor substitute for face-to-face surveys. Today, telephone interviewing is the most widely used method of gathering survey data across the industrialized nations of the world where so many households have their own phones. Administering questionnaires by phone has some very important advantages.

**Advantages of Telephone Interviews**

1. Research has shown that, in the United States at least, answers to many different kinds of questions asked over the phone are as valid as those to questions asked in person or through the mail (Dillman 1978).

2. Phone interviews have the impersonal quality of self-administered questionnaires and the personal quality of face-to-face interviews. So, telephone surveys are unintimidating (like self-administered questionnaires), but allow interviewers to probe or to answer questions dealing with ambiguity of items (just like they can in personal interviews).

3. Telephone interviewing is inexpensive and convenient to do. It’s not without effort, though. Professional survey organizations routinely do at least three callbacks to numbers that don’t answer, and many survey researchers insist on 10 callbacks to make sure that they get an unbiased sample. As it is, in most telephone surveys, you can expect 30%–40% refusals. You can also expect nearly 100% sample completion, because it’s relatively easy to replace refusers with people who will cooperate. But remember to keep track of the refusal rate and to make an extra effort to get at least some of the refusers to respond so you can test whether cooperators are a biased sample.

4. Using **random digit dialing** (RDD), you can reach almost everyone who has a phone. In the United States, that means you can reach almost everybody. One
survey found that 28% of completed interviews using RDD were with people who had unlisted phone numbers (Taylor 1997:424). There are huge regional differences, though, in the availability of telephones (see below).

5. Unless you do all your own interviewing, interviewer bias is an ever-present problem in survey research. It is relatively easy to monitor the quality of telephone interviewers’ work by having them come to a central place to conduct their operation. (But if you don’t monitor the performance of telephone interviewers, you invite cheating. See below, in the section on the disadvantages of telephone interviewing.)

6. There is no reaction to the appearance of the interviewer in telephone surveys, although respondents do react to accents and speech patterns of interviewers. Oskenberg et al. (1986) found that telephone interviewers who had the lowest refusal rates had higher-pitched, louder, and clearer voices. And, as with all types of interviews, there are gender-of-interviewer and race-of-interviewer effects in telephone interviews, too. Respondents try to figure out the race or ethnicity of the interviewer and then tailor responses accordingly.

In the National Black Election Study, 872 African Americans were polled before and after the 1984 presidential election. Since interviewers were assigned randomly to respondents, some people were interviewed by a white person before the election and an African American after the election. And vice versa: Some people were interviewed by an African American before the election and a white person on the second wave.

Darren Davis (1997) looked at data from this natural experiment. When African American interviewers in the preelection polls were replaced by white interviewers in the postelection surveys, African Americans were more likely to say that Blacks don’t have the power to change things, that Blacks can’t make a difference in local or national elections, that Blacks cannot form their own political party, and that Whites are not responsible for keeping Blacks down—very powerful evidence of a race-of-interviewer effect.

7. Telephone interviewing is safe. You can talk on the phone to people who live in urban neighborhoods where many professional interviewers (most of whom are women) would prefer not to go. Telephones also get you past doormen and other people who run interference for the rich.

**Disadvantages of Telephone Interviewing**

The disadvantages of telephone surveys are obvious.

1. If you are doing research in Haiti or Bolivia or elsewhere in the developing world, telephone surveys are out of the question, except for some urban centers, and then only if your research is about relatively well-off people.
Even in highly industrialized nations, not everyone has a telephone. About 95% of all households in the United States have telephones. This makes national surveys a cinch to do and highly reliable. But the distribution of telephones is uneven, which makes some local surveys impossible to do by phone. Almost every household in the United States with a median annual income of at least $60,000 has a phone, but only 82% of households with median annual incomes below $5,000 have a phone.

2. Telephone interviews must be relatively short, or people will hang up. There is some evidence that once people agree to give you their time in a telephone interview, you can keep them on the line for a remarkably long time (up to an hour) by developing special “phone personality” traits. Generally, however, you should not plan a telephone interview that lasts for more than 20 minutes.

3. Random-digit-dialing phone surveys are big business, and many people are turned off by them. It is becoming increasingly difficult for telephone survey research organizations to complete interviews. It may take thousands of phone calls to get a few hundred interviews. No one knows yet how this may be compromising the validity of the data collected in RDD surveys.

4. And finally, this: It has long been known that, in an unknown percentage of occasions, hired interviewers willfully produce inaccurate data. When an interviewer who is paid by the completed interview finds a respondent not at home, the temptation is to fill in the interview and get on to the next respondent. This saves a lot of calling back, and introduces garbage into the data.

   Unless there is continual monitoring, it’s particularly easy for interviewers to cheat in telephone surveys—from failing to probe, to interviewing unqualified respondents, to fabricating an item response, and even to fabricating whole interviews. Kiecker and Nelson (1996) hired 33 survey research companies to do eight interviews each, ostensibly as “mop-up” for a larger national market survey. The eight respondents were plants—graduate students of drama, for whom this must have been quite a gig—and were the same eight for each of the surveys. Of the 33 interviewers studied, 10 fabricated an entire interview, 32 fabricated at least one item response, and all 33 failed to record responses verbatim.

The technology of telephone interviewing has become very sophisticated. Computer-assisted telephone interviewing (CATI) makes it harder to do things like ask questions out of order, but a determined cheater on your interviewing team can do a lot of damage. The good news is that once you eliminate cheating (with monitoring), the main thing left that can go wrong is inconsistency in the way interviewers ask questions. Unstructured and structured interviews each have their own advantages, but for structured interviews to yield reliable results, they have to be really, really structured. That is, the questions have to be read verbatim so that every respondent is exposed to the same stimulus.

Repeated verbatim readings of questions is boring to do and boring to listen
to. When respondents (inevitably) get restless, it’s tempting to vary the wording to make the interview process seem less mechanical. This turns out to be a bigger problem in face-to-face interviews (where interviewers are generally working alone, without any monitoring) than in telephone interviews. Presser and Zhao (1992) monitored 40 trained telephone interviewers at the Maryland Survey Research Center. For the 5,619 questions monitored, interviewers read the questions exactly as worded on the survey 91% of the time. Training works.

Still, no matter how much you train interviewers . . . Johnstone et al. (1992) studied 48 telephone interviews done entirely by women and found that female respondents elicited more sympathy, while male respondents elicited more joking. Men, say Johnstone et al., may be less comfortable than women are with being interviewed by women and wind up trying to subvert the interview by turning it into teasing or banter.

Sampling for telephone surveys is also aided by computer. There are companies that sell telephone numbers for surveys. The numbers are chosen to represent businesses or residences and to represent the varying saturation of phone service in different calling areas.

Even the best sample of phone numbers, though, may not be enough to keep you out of trouble. During the 1984 U.S. presidential election, Ronald Reagan’s tracking poll used a list of registered voters, Republicans and Democrats alike. The poll showed Reagan comfortably ahead of his rival, Walter Mondale, except on Friday nights. Registered Republicans, it turned out, being wealthier than their counterparts among Democrats, were out Friday nights more than Democrats were, and simply weren’t available to answer the phone (Begley et al. 1992:38).

When to Use What

There is no perfect data-collection method. However, mailed or dropped-off questionnaires are preferable to personal interviews when three conditions are met: (1) You are dealing with literate respondents; (2) You are confident of getting a high response rate (at least 70%); and (3) The questions you want to ask do not require a face-to-face interview or the use of visual aids such as cue cards, charts, and the like. Under these circumstances, you get much more information for your time and money than from the other methods of questionnaire administration.

When you really need complete interviews—answers to all or nearly all the questions in a particular survey—then face-to-face interviews, whether assisted by computer or not, are the way to go. Caserta et al. (1985) inter-