

Primary Data Collection

Essential Questions

- *What are effective ways to collect information?*
- *What kind of data can young people gather that civic professionals often cannot?*

Objectives | Students will be able to...

- Learn important data collection terms and concepts
- Understand the differences between data collection methods like interviewing and surveying
- Determine when interviews or surveys are the most effective strategy for data collection.
- Identify and reword biased or double-barreled questions.



Key Terms

- **Quantitative Data:** Information that can be counted or measured, and given a numerical value—such as length in centimeters or revenue in dollars.
- **Qualitative Data:** Information that is described in qualities and cannot be measured using numbers.
- **Community Action Research:** An alternative research method that uses collaborations with community leaders and residents to explore and develop solutions to local problems. A researcher may come from outside the community to bring resources whereas residents can offer local expertise. Communities can also conduct action research projects without outside support.
- **Primary Data:** Primary data is a type of data that is collected by researchers directly from main sources through interviews (first-hand accounts), surveys, counts (tallying up observations), experiments, etc. Primary data are usually collected from the source—where the data originally originates from and are regarded as the best kind of data in research. Primary data can be either qualitative or quantitative.
- **Secondary Data:** Secondary data is the data that has already been collected through primary sources and made available for other researchers to use for their own research. It is a type of data that has already been collected in the past. This data can be qualitative and quantitative as well.
- **Interview:** A conversation in which a writer/reporter/researcher asks questions of one or more persons from whom material is sought for a news story, research project, etc.
- **Interviewer:** The person asking questions during an interview.
- **Interviewee:** The person who is answering questions during an interview.
- **Survey:** A survey is a sampling (partial collection, since not everyone can be contacted) of facts, figures, or opinions that is used to reveal things about larger populations. Surveys can be conducted in-person, over the phone, or electronically.

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- **Population:** A population is the full set of individuals who could potentially take part in your research (in this case, a survey).
- **Sample:** A sample is a subset of the population that is actually surveyed.
- **Investigator:** A researcher who develops, shares, and analyzes a survey.
- **Respondent:** Someone who completes a survey.
- **Biased Question:** Biased questions are those that lead the respondents towards a specific response, even if it does not accurately reflect their own circumstances or beliefs. Biased questions also refer to questions that are vague and unclear, leaving the respondents confused.
- **Double-Barreled Question:** This is a question that asks about two or more issues but leaves room for just a single answer. This leads to inaccuracies in survey results because respondents can only answer one of the two questions and have no way of indicating which they responded to.

Steps

1. **Warm Up:** Ask the class to draw/reflect on who they consider an 'expert'
 - View this [video](#) created by the CUNY Public Science Project on the participatory action-research project, 'Polling for Justice.' Young people, academics and diverse professionals established a community of practice in order to create a survey and conduct research *with* young people to understand their lived experiences and how public policy directly affects them.
 - Remind students that everyone - their friends, siblings, parents, neighbors - are experts of their own lives and environments. To truly understand a place, it is important to get information directly from the people who live/work/play there. Researching *with* a community is called '**community action research**.' You can do this using quantitative and qualitative methods, which this lesson will cover
2. **Pair Share:** Have students work in pairs to discuss the questions below:
 - *What is the purpose of a survey or an interview? How are they different?*
 - *Do you think surveys or interviews are a valid method of gathering info?*
 - *Are there different questions asked in surveys vs. interviews?*
 - *Have you ever participated in a survey or an interview?*
 - *What are the pros and cons of surveys or interviews as a method of gathering community input?*
3. **Share Out:** Ask student pairs to share what they had discussed.



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4. Introduce Concept of Interviewing:

- An interview is a conversation in which a writer/reporter/researcher asks someone questions to get detailed information on a specific topic.
- Interviews are most useful when they are conducted with individuals who are very knowledgeable on the city planning topic/community issue you are studying.
- Interviews often happen in-person but can also take place over the phone or video calls.
- *Remember how we questioned the idea of who actually has 'expertise?'* Keep this in mind when considering who would make sense to interview - not *only* specialists (engineers, scientists, politicians, etc.) know things that you may want to hear about! 'Ordinary' people often have a deep understanding of the issues facing their communities.

5. Introduce Concept of Surveying:

- Surveys are a series of questions that a large number of people answer. All respondents receive the exact same questions.
- Surveys can be conducted in-person, over the phone, or electronically.
- Surveying is a great way to discover what a large number of people think about a particular issue or how a group of people report their behavior.
- A survey is a 'sampling' (partial collection, since not *everyone* can be contacted) of facts, figures, or opinions that is used to reveal things about larger populations.

Facilitator Tip: To help your students understand survey samples and populations, consider posing the following example and questions. Let's say you survey 100 people (sample) in a town of 1,000 residents (total population). If 80 of the survey respondents (80% of sample) said they like the town's parks and 20 respondents (20% of sample) said they *do not* like the town's parks, you could argue that roughly 80% (800 people) of the total population likes the town's parks and 20% (200 people) of the total population *does not* like the town's parks. There is no way to be *completely* sure of this claim without surveying every single resident, but you can probably assume that most people *do* like the town's parks.

- *Do you think the sample would accurately represent the entire population if 77 of the 100 respondents were members of the town's Park Appreciation Club?*
- *How do you think this would affect the data?*
- *What steps could be taken to make the sample more representative of the population?*

6. Explain Plans for Interviews & Survey: To better understand the project, we will conduct surveys or interviews with local stakeholders. Before we contact people to get their opinions, we must first develop a clear and effective set of questions.7. Introduce Question Types: Although there are many different categories of questions, go over these basic types:

- **Multiple Choice:** This is the most popular type of questions that are used in surveys. They provide respondents with a list of options to choose from. It is up to the researcher to decide whether a question should require respondents to



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choose a single response (“Yes,” “No”) or be able to select several options.

- **Likert Scale:** ‘Likert scale’ - sometimes referred to as ‘ordinal scale’ - questions are used to measure respondents’ attitudes, perceptions, and opinions about a certain topic. They can choose one of several, ordered responses. A common example of these options are: “Very Good,” “Good,” “Average,” “Bad,” and “Very Bad.”
 - **Open-Ended:** Unlike the previous two question types, open-ended questions are *qualitative* and allow people to give answers in their own words. While using these can be extremely valuable, the data it reveals is not numerical and can therefore be harder to analyze. When used in a survey, there is a space for respondents to write/type their thoughts. Most interviews only include open-ended questions.
8. **Student Worksheet:** Distribute the [‘Primary Data Collection’ worksheet](#) and explain that it is fine if students do not remember everything - the handout is just meant to see what has stuck with them thus far and if they already have ideas for how to conduct data collection. Consider completing the worksheet as a class. The handout has a second page that is meant for teachers, which shows a filled-in version.
9. **How to Avoid Asking ‘Bad’ Questions:** Survey and interview questions must be well thought out. There are two types of ‘bad’ questions that we will consider today:
- **Biased Question:** Biased questions are those that lead the respondents towards a specific response, even if it does not accurately reflect their own circumstances or beliefs. Biased questions also refer to questions that are vague and unclear, leaving the respondents confused. Have students revise this question:
 - **Example:** *Most students at this school believe classes start too early, do you agree?*
 - **Revised question:** *Do you agree or disagree that classes start too early?*
 - **Double-Barreled Question:** This is a question that asks about two or more issues but leaves room for just a single answer. This leads to inaccuracies in survey results because respondents can only answer one of the two questions and have no way of indicating which they responded to. Have students revise this question:
 - **Example:** *How likely are you to walk to a park and play soccer this weekend?*
 - **Revised questions:**
 - *How likely are you to walk to a park this weekend?*
 - *How likely are you to play soccer in a park this weekend?*

Homework

- Have students come up with five questions they want answered in an interview or survey.

