



## Lesson 2: The Power of First-Hand Information

Target group: 15–17-year-old secondary students in Africa

### Key Learning Outcomes

By the end of this lesson, you should be able to:

1. Explain what primary data is.
2. Describe the types of primary data.
3. Recognize career opportunities linked to primary data.

### 1. Introduction

In Lesson 1, you were given an imaginary exercise of documenting features or characteristics of the students in your class. When you are done with that task, you will come up with a table of rows and columns similar to this one (majority of the students left out in the table for purposes of space).

| SN    | Name        | Height (cm) | Weight (kg) | Skin color | Sex    |
|-------|-------------|-------------|-------------|------------|--------|
| 1     | Oki Etuhu   | 147.6       | 65.2        | Deep Ebony | Male   |
| 2     | Ebua Ariko  | 135.2       | 59.5        | Caramel    | Male   |
| 3     | Emai Akello | 133.0       | 54.3        | Caramel    | Female |
| 4     | Emily Ega   | 141.3       | 57.5        | Bronze     | Female |
| ..... | .....       | .....       | .....       | .....      | .....  |
| 65    | Hilda Okot  | 135.8       | 52.4        | Deep Black | Female |

Such a table has first-hand information collected by you in response to a specific request from your teacher. You will be having what they call primary data.

### 2. Definition of Primary Data

By definition, primary data is first-hand information collected by a student, a researcher, or a worker for a specific purpose directly from original sources using research tools such as surveys, interviews, measurements, observations, and experiments.

In the second column of the table are the names of students in the class studied. Each of these names refers to a student who, as we saw in Lesson 1, is called a case or subject. Often, however, you will find two or more students sharing similar names, which might create confusion in the data. It is for this reason that we have the first column where we assign a serial or identification number that is unique to each subject or case.

Then height, weight, skin color, and sex are features on students that were measured or observed. These features, as we saw in Lesson 1, are called variables.

### 3. Quantitative vs Qualitative Data

The first two variables, namely height and weight, are expressed in numerical values that can be measured and subjected to mathematical analysis. They belong to what is called

quantitative data – information that answers questions such as 'how many?', 'how much?', or 'how often?'

The last two variables, skin color and sex, cannot be measured numerically. They belong to what is called qualitative data, which is information often expressed in the form of words, images, or observations.

In other words, primary data can be divided into Quantitative Data and Qualitative Data.

#### 4. Sources of Primary Data

- Students' assignments in practicals
- Businesses collecting data on their sales, customers, operations, assets, etc.
- Researchers in all fields of study – both science and arts
- Non-governmental organizations
- Churches profiling their followers and assets
- Government agencies
- Opportunities to pursue a career in data generation

#### 5. Entry level Work Opportunities linked to Primary Data

Working with primary data can open up many career opportunities. Examples:

- Enumerator – works with NGOs or government projects to collect data from communities.
- Research Assistant – helping researchers design and run surveys or experiments.
- Data Collection Officer – working in NGOs, schools, or government programs.
- Monitoring and Evaluation Assistant – tracking progress of projects using primary data.
- Laboratory Technician – collects and records experimental data in science labs.
- Agricultural Extension Worker – gathers farm-level data to improve productivity.
- Health Data Collector – gathers patient information in clinics or during health outreach.

#### Professional Career Opportunities (examples)

- Research Scientist
- Epidemiologist
- Market Researcher
- Social Scientist

#### 6. Conclusion

Primary data is first-hand information that you collect yourself using tools like surveys, interviews, and measurements. It can be quantitative or qualitative, depending on whether it is numerical or descriptive. It is widely used by schools, businesses, organizations, and governments, and it opens career opportunities in many fields including research, science, health, and development. Primary data is powerful because it gives you original information you can trust to make decisions and solve problems.