

Activity Guide



Research Methodologies

Making sense of qualitative, quantitative, and mixed methods through a co-created personality-style quiz

Summary

Research methodologies reflect assumptions about what can be known and how it can be known. For example, qualitative methodologies may seek to understand experiences, quantitative methodologies to measure patterns, and mixed methods to bring these perspectives together.

To explore the three methodologies, youth were invited to co-create a personality-style quiz. It's a fun question game where the answers lead to a "type" at the end. The result isn't about being right or wrong. It's about discovering what fits you best. Because participants don't just *take* the quiz, but co-design it, deciding and discussing which traits, questions, and answers connect to different research methodologies, they actively explore how methodologies connect to different ways of thinking and doing research.

Why It Works

A personality-style quiz translates concepts like qualitative, quantitative, and mixed methods into choices, preferences, and scenarios that participants can relate to. Co-creating the quiz positions participants as creators, not just learners, and conversations help surface assumptions, clarify concepts, and deepen understanding. Using a recognizable and playful format lowers barriers to engagement and creates a sense of curiosity and fun.

What You Need

- **Materials:** papers and pencils or markers
- **Time:** 90 minutes
- **Ideal Group Size:** 3-4 participants per group
- **Format:** in person or online

How It Works

1. Welcome and Warm Up

10 mins

Get to know each other, create a safer space for discussion, start thinking about learning about science and research.

Icebreaker questions: What can make science class boring? What can make it exciting?

2. Discover: What Kinds of Research and Researchers Are There?

15 mins

Introduce (briefly) the three research types: quantitative, qualitative, and mixed methods. The purpose is to show that there's not only one way to do research.

Then personify each type with a researcher type.

For example:

Dr Nina Numbers – quantitative researcher

- *Trusts: Percentages, scores, statistics*
- *Favorite pastime: Creating surveys and quizzes*
- *Less comfortable with: Vague or overly emotive responses*

Sam the Story Weaver – qualitative researcher

- *Superpower: Finding meaning in people's words*
- *Sees the world as: Full of hidden stories*
- *Favorite question: "How was it for you?"*

3. Group Brainstorm: Quiz Questions

30 mins

Introduce the idea: Let's create a quiz that helps people discover what type of research suits them best!

Show examples:

Your favorite way to learn something new is to...

- a) Read the facts and look at statistics.*
- b) Talk to people about their experiences.*
- c) Do a little of both: check the facts and talk to people.*

Ask participants to work in small groups of 3–4 people to come up with as many questions as they can, with response options that correspond to researcher types.

If stuck, provide prompts, for example using everyday situations: “When you work on a group project, you usually...” or “If you could spend a day doing whatever you wanted, you would...”

4. Match Answers to Researcher Types

15 mins

All together, go through each question and answers matching them to a type of researcher.

Ask the group to come up with fun names for each type of researcher.

For example: If your results are mostly A, you are most likely to be...

5. Reflection and Wrap-Up

20 mins

To reinforce learning and self-awareness, ask participants what type of researchers they are according to our quiz questions.

To reflect on the activity, ask: What do you think of this activity? If we were to do it again, what should we keep and what should we change?