# Simulation exercise

#### Simulation Exercise Title:

## Selecting an Applied Research Method

## **Objectives**

- To understand the principles and practices of designing applied research methods.
- To identify methods to ensure the validity and reliability of applied research designs.
- To formulate actionable recommendations based on anticipated research findings.

# **Background**

In applied research, the utilization of mixed-methods study designs is very beneficial. This methodology facilitates the integration of diverse data sets and viewpoints, culminating in a more intricate comprehension of the study problem.

#### **Data Provided**

You are a vocational education teacher tasked with improving the employability skills of your students. You have noticed that many students struggle with essential skills such as communication, teamwork, problem-solving, and adaptability, which affects their job prospects. You decide to design a mixed-method research study to identify effective methods to enhance these skills and implement a training program in your institution.

### Task

- 1. Define the research problem.
- 2. Outline the main objectives of the research.
- 3. Select one of the proposed applied research methods, analyze the research topic and objectives..
- 4. Outline strategies to ensure the validity and reliability of your research and fill in the table below:

How to make research valid	How to make research reliable

5. Analyze which method would work best in this applied research topic and why.

- 6. Think about what adjustments you would make to improve the research process
- 7. Based on your anticipated findings, list actionable recommendations to enhance employability skills training. For example:

Increase hands-on workshops to improve communication and teamwork.

### Guidelines

- Carefully read the provided example of applied research in VET.
- Refer to information in Session 1 to correctly define validity and reliability.
- Ensure the research design is appropriate for the research questions.
- Recommended video "Mixed Methods Research Designs" to watch before task completion: https://www.youtube.com/watch?v=A7YYA9qQjJA&t=1189s

### **Deliverables**

- A template on the validity and reliability of research.
- A selection of templates, created based on the development of the Mixed Method Research.
- A list of recommendations, based on the anticipated research finding.