

## Simulation exercise

### Simulation Exercise Title:

---

### Comparing Pilot Testing and Pre-Testing

#### Objectives

---

- To compare different types of experimentation in VET.
- To analyse the advantages and disadvantages of pre-experimental, quasi-experimental, and true experimental designs.

#### Background

---

Experimentation in Vocational Education and Training (VET) is crucial for testing hypotheses, refining methodologies, and collecting data. This exercise will focus on understanding and comparing pilot testing and pre-testing by examining pre-experimental, quasi-experimental, and true experimental designs.

#### Data Provided

---

Study the resources provided in Session 1 of Module 5.

Additional literature to use while exercise implementation:

Pre-experimental Design:

<https://www.voxco.com/blog/pre-experimental-design-definition-types-examples/#:~:text=What%20is%20Pre%2Dexperimental%20Design,not%20have%20a%20comparison%20group.>

Quasi-experimental design:

<https://www.scribbr.com/methodology/quasi-experimental-design/#:~:text=Like%20a%20true%20experiment%2C%20a,based%20on%20non%2Drandom%20criteria.>

True experimental design:

<https://www.voxco.com/blog/true-experimental-design/#:~:text=True%20experimental%20design%20is%20a,support%20the%20existence%20of%20relationships.>

#### Task

---

1. Carefully study the resources provided in the Session 1 of Module 5 and additional literature suggested (optionally, for better understanding).

#### *Similarities and differences chart template:*

Criteria	Pre-experimental Design	Quasi-experimental design	True experimental design

Definition			
Purpose			
Characteristics			
Advantages			
Disadvantages			

## Guidelines

---

1. **Study the Resources:** Begin by thoroughly reading the provided resources and additional literature to understand each experimental design type.
2. **Complete the Chart:** Use the chart template to note the definition, purpose, characteristics, advantages, and disadvantages of each experimental design.
3. **Analysis and Comparison:** Analyse the similarities and differences between the three types of experimental designs.
4. **Follow-up analysis:** Think of the experimentation that would fit your own research questions. Why/ What is the benefit of application of experimentation? Write a brief summary (300-500 words).

## Deliverables

---

- Completed chart comparing pre-experimental, quasi-experimental, and true experimental designs.
- Short summary of 300-500 words, highlighting the relevance of experimentation to research questions.