

Table 1 Some types of replication studies

	Direct replication	Close replication	Conceptual replication	Internal replication	External replication
Characteristics	An exact replication of an experimental procedure. It is virtually unfeasible to carry out this type of replication study in the social sciences (including mathematics education)	Replication that tries to adhere to the procedures of the original study as much as possible	Repetition of a test of a hypothesis or a result of earlier research work with different methods from those used in the original study	Replication conducted by the same researchers who ran the original study	Replication conducted by researchers external to the original study

Task 1

Analyzing replication papers

In small groups, analyze the three assigned research articles and discuss the following:

1. **Type of replication**: Identify whether it is close, conceptual, internal or external.
2. **Elements maintained and changed**: Describe what aspects of the original study are preserved and what elements are modified.
3. **Purpose of the replication**: Explain whether the goal is to verify results, extend a theory, or test the study in a new context, among other possibilities.

Be ready to share your group's results during the plenary discussion.

Task 2

Sketch your own replication study

In groups, outline how you would design a replication study in mathematics education. Your plan should include:

- **Objective**: What would your study aim to achieve?
- **Elements to maintain**: Which aspects of the original study would you keep?
- **Elements to modify**: What would you adapt or change, and why?
- **Justification**: Explain the rationale behind your modifications.
- **Possible challenges**: Identify potential contextual, methodological, or other kind of issues you might face.