To sketch the outlines of a methodological framework that allows an opening up of the “black box” of data practices in the field of education.

**INTRODUCTION**

**01. CHARACTERISTICS OF DATA PRACTICES**

- **Datafication**
- **Data Points**
- **Data Infrastructures**

**TOOLBOX** = INTERFACE + USE + DESIGN + ECOLOGY

**02. RESEARCH PROBLEM AND OBJECTIVE**

To sketch the outlines of a methodological framework that allows an opening up of the “black box” of data practices in the field of education.

**03. A RELATIONAL UNDERSTANDING OF DATA PRACTICES**

- **DOINGS** ➔ Fluid and heterogeneous ontology.
- **FLATNESS** ➔ Distributed, changing, and constantly re-arranged data infrastructures.
- **TOPOLOGY** ➔ Methodological lens; how methods can be used.

**TOPOLOGICAL METHODOLOGIES** ➔ permit to...

- Explain the patterning, the flow of forces, power, and subjectivity in specific contexts.
- Display the ways in which space and time are productive effects of data practices.
- Investigate how data practices are built.

**04. TOPOLOGIES OF DATA PRACTICES**

- **INTERFACE** ➔ Various methods to enquire into interface topologies such as:
  1. Walkthrough method.
  2. Methods focused on specific manifestations of platform interfaces.
  3. Analyzing the interface for the type of user who is implied in the platform.
- **USER** ➔ Analysis of user topologies (including unexpected actors).
- **DESIGN** ➔ Investigating how data practices are concretely designed.
- **ECOLOGY** ➔ Disentangling how data practices are situated in broader relational constellations.

**05. CONCLUSIONS**

The toolbox is based on a topological methodology that allows us to understand and scrutinize data practices by investigating their relational characteristics. It can work in any type of data practice, including education.