LehrPuls

FOR RESEARCHERS AND THESES

Classroom data in long format, across cohorts, with an API — ready for R.

The same question across many cohorts yields a data set that does not exist otherwise. LehrPuls records every answer with timestamp and response time, knows peer-instruction rounds and exports everything as raw data — no cloud, no vendor in between. The data belongs to the institution.

Raw-data export in long format

One row per answer: session, question, round, participant pseudonym, answer, timestamp, response time. Column names as a fixed contract.

Metrics already computed

Difficulty, discrimination, response times, topic maturity — or compute your own from the raw data.

Read-only REST API

On the instructor's computer, with a time-limited key, anonymized by default. Templates for R, Python and Power BI.

1 row
per answer — long format, straight into tidyverse and pandas

2
peer-instruction rounds per question, stored separately

5
join modes: anonymous, pseudonym, name, name + student ID, guests

0
vendors between the lecture hall and the data set

Open questions this data can answer

- **Peer instruction** outside the natural sciences: round-one to round-two gain per discipline
- **Response time** as a learning indicator: distribution by difficulty and trend across the semester
- **Calibration:** self-assessment (scale) against correctness at item level
- **Drift:** the same question across cohorts, effect of course changes

Research kit on lehrpuls.com

- **Data model** with relationship diagram and the export's column contract
- **Sample scripts** in R and Python against export and API
- **Synthetic sample data set** to try before collecting
- **Ethics notes:** consent at join, pseudonymization, minimum group size, deletion periods

Conflict of interest disclosed: The developer teaches and does research with his own tool. Hence the offer: the data belongs to the institution, independent co-authors analyze it, the analysis plan is preregistered.

Cooperation for a study in summer semester 2027

Partner institutions wanted for peer instruction in business and engineering, response time as a learning indicator, and calibration across a semester. I provide the seats for data collection.

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