2022 IMPS Short Course:
Analyzing TIMSS/Educational Large-scale Assessment Data with Direct Estimation Using R

Agenda

7/11/2022
10:00 am to 5:20 pm

Instructors: Emmanuel Sikali, Ting Zhang, Paul Bailey

10:00-10:30   Introductions of participants and instructors – Paul

10:30-11:00   Overview of Educational Large-scale Assessments –Emmanuel

11:00-11:05   5 mins break

11:05-11:30   Weighting and variance estimation - Ting

11:30-11:40   Coffee break

11:40-12:10   Plausible values and direct estimation – Ting

12:10-12:15   5 mins break

12:15-1:10   Introduction to R and the packages EdSurvey and Dire – Paul

　　　　　　　　Data process and manipulation - Paul

1:10-2:30   Lunch Break

2:30-3:00   Descriptive statistics (e.g., summary2, edsurveyTable) – Ting

3:00-3:05   5 mins break

3:05-4:00   Linear regression and Direct estimation (TIMSS 2019 as example data)

- lm.sdf - Paul

- mml.sdf - Paul

4:00-4:20   Coffee Break

4:20-5:00   Direct estimation and updating plausible values –Paul

- direct estimation with process data/teacher data

- draw Plausible Values (PVs)

5:00-5:05   5 mins break

5:05-5:20   Closing information and evaluations – Paul