

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

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| 10:00-10:15 | Introductions of participants and instructors – Paul |
| 10:15-10:30 | Overview of Educational Large-scale Assessments –Emmanuel |
| 10:30-11:00 | Weighting and variance estimation - Ting |
| 11:00-11:05 | 5 mins break |
| 11:05-11:30 | Plausible values and direct estimation – Ting |
| 11:30-11:40 | Coffee break |
| 11:40-12:00 | Plausible values and direct estimation (cont.) – Ting |
| 12:00-12:25 | Introduction to R and the packages EdSurvey and Dire – Paul |
| 12:25-12:30 | 5 mins break |
| 12:30-1:10 | 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) <ul style="list-style-type: none">• lm.sdf - Paul• mml.sdf - Paul |
| 4:00-4:20 | Coffee Break |
| 4:20-5:00 | Direct estimation and updating plausible values –Paul <ul style="list-style-type: none">• 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 |