

***2023 NCME Virtual Training:  
Tools For Analyzing NAEP and TIMSS Data in R Using Latent Regression  
Agenda***

3/28/2023  
1:00 pm to 5:00 pm

**Instructors:** Emmanuel Sikali, Ting Zhang, Paul Bailey, Sinan Yavuz, Blue Webb

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| 1:00- 1:10  | Overview of the workshop – Emmanuel  |
| 1:10 - 1:40 | Weighting and variance estimation – Ting   |
| 1:40 - 1:45 | 5 mins break   |
| 1:45 - 2:15 | Plausible values and direct estimation – Ting  |
| 2:15 – 2:25 | Introduction to the packages EdSurvey and Dire – Sinan   |
| 2:25 - 2:30 | 5 mins break   |
| 2:30 – 3:00 | Data process and manipulation – Blue   |
| 3:00 – 3:15 | Descriptive statistics (e.g., summary2, edsurveyTable) – Sinan   |
| 3:15 - 3:20 | 5 mins break   |
| 3:20 - 4:30 | Linear regression and Direct estimation (TIMSS 2019 as example data) <ul style="list-style-type: none"><li>• lm.sdf - Blue</li><li>• mml.sdf – Paul</li><li>• 5 mins break</li><li>• direct estimation with process data - Paul</li><li>• draw Plausible Values (PVs) – Blue</li></ul> |
| 4:30 – 4:50 | Hands-on practice and Q&A  |
| 4:50 – 5:00 | Closing information and evaluations – Emmanuel   |