

FED-ETARC Workshop on “Secondary Analysis of Large Scale Assessment Data”

Educational Testing and Assessment Research Centre, Faculty of Education

Date & Time: 23 March 2026 (Monday); 15:00-18:00

Venue: E33-2034, Faculty of Education

Language: English

Registration: Online Registration (<https://umac.questionpro.com.au/t/ARsqfZSBLK> or )

Enquiries: Mr. Alex CHEN (Email: fed_event@um.edu.mo / Tel: 8822-4575)

Speaker:

Prof. Luyang GUO is an Assistant Professor of the Faculty of Education at the University of Macau. She earned her Ph.D. in Education from The Chinese University of Hong Kong in 2024, with a strong methodological foundation supported by an M.Ed. in Measurement and Evaluation (2018) and an M.S. in Applied Statistics (2017) from Teachers College, Columbia University, as well as a B.Ed. in Public Affairs Administration from Beijing Normal University (2015). Her primary research interests include Educational Psychology, Career Development, and International Large-Scale Assessment, with a focus on quantitative research methods, school-to-work transitions, and educational measurement. She has contributed to major projects, including serving as Hong Kong’s International Quality Control Monitor for TIMSS 2023 on behalf of the IEA (2022–2023) and working as a Research Assistant at Beijing Normal University’s Collaborative Innovation Center of Assessment for Basic Education Quality (2018–2021). Prof. Guo’s work has appeared in leading journals and recently examines adolescents’ career expectations and elite aspirations, career uncertainty in volatile contexts, trends in teaching and healthcare professions, and the individual and contextual factors shaping these patterns across global education systems.

Abstract:

Large Scale Assessments (LSAs) such as PISA, TIMSS, PIRLS, and NAEP provide rich, publicly available data that support detailed investigations of educational achievement, equity, and cross-national patterns. Producing high-quality, publishable research with these datasets, however, requires strong methodological rigor and clear conceptual framing. This workshop is designed to help participants master the key skills and avoid common challenges involved in working with LSA data effectively. It provides practical guidance on selecting datasets and constructs, understanding data files and codebooks, applying sampling weights and plausible values correctly, conducting multilevel analyses, making appropriate centering decisions, and interpreting contextual and cross-national effects. The workshop also addresses common pitfalls, interaction and nonlinear analyses, strategies for cross-cultural comparison, and how to frame research questions and causal arguments responsibly in cross-sectional designs.