

# C&I Seminars for Research, Publication and Scholarship of Teaching 2023/24

## Rasch model and analysis of educational assessment data: An introduction to ShinyTAM

### Abstract

Teachers' feedback has a significant impact on students' learning. Therefore, it is crucial to equip both in-service and pre-service teachers with the skills to provide effective feedback using assessment data. In this seminar, you will learn how to use ShinyTAM, a free and interactive online platform that employs **Rasch model for comprehensive analysis of educational assessment data**.

Regardless of your technological proficiency, you'll learn the basic concept of Rasch modeling and ShinyTAM's user-friendly features, from importing data to interpretation of the outputs. ShinyTAM not only validates your data for potential errors but also presents results in a variety of insightful formats. These include the 'Wright Map', 'Item Report', 'Person Performance-Fit Map', and 'Person Report', each offering a comprehensive understanding of both person performance (e.g., unexpected wrong responses to items within a person's ability) and quality of test paper (e.g., item discrimination of high and low ability students).

This seminar is not just about mastering a new data analysis tool. It's about equipping educators and scholars with a resource that can significantly enhance the quality of assessments and facilitate individualized feedback for learning and teaching enhancement. With ShinyTAM being free and easy to use, this workshop promises to be an invaluable experience for all attendees. We warmly welcome **potential audiences**, including **in-service and pre-service teachers, undergraduate and postgraduate students**, and **researchers who are interested in Rasch modeling or analysis of assessment data**.

**21 March 2024 (Thu), 16:00 – 17:00, D1-LP-06 or Zoom**

**Medium of Instruction:**

**Mainly English and will be supplemented by Cantonese /Putonghua**

### About the speaker

Dr Jinxin ZHU is an Assistant Professor at the Department of Curriculum and Instruction at The Education University of Hong Kong (EdUHK). His research focuses on digital assessment and learning, aiming to reduce teachers' workload with digital tools allowing them to have more time and energy to help students to take an active role in the assessment and feedback process and become self-directed learners and thereby lifelong learners. Meanwhile, he applies rigorous data analytic methods (e.g., structural equation modeling, Rasch model, and multilevel modeling) to educational studies.

**Dr. Jinxin ZHU**



**Registration**

[https://eduhk.au1.qualtrics.com/jfe/form/SV\\_bP1BEgA4ZAleKcm](https://eduhk.au1.qualtrics.com/jfe/form/SV_bP1BEgA4ZAleKcm)

