



IERI Academy

January 17-21, 2011

Principles of Sampling, Item Response Theory and Proficiency Estimation

Venue: National Institute of Education
Nanyang Technological University
Singapore

The IEA-ETS Research Institute (IERI, <http://www.ierinstitute.org>) is organizing a five-day Academy on the Principles of Sampling, Item Response Theory and Proficiency Estimation in the context of Large Scale Assessments. The IERI Academy will be organized in two consecutive sessions. The first session will cover issues related to sampling; the second session will cover issues related to Item Response Theory and Proficiency Estimation.

The schedule will be as follows:

<p>January 17th - 18th</p>	<p>Principles of Sampling</p> <p>This session introduces the different sampling designs applied in large scale educational surveys, their background, and significance. The concepts of cluster sampling, stratification, and intra-class correlation are defined and illustrated. The complex sampling design calls for the use of weighted data in large scale studies. This necessity is demonstrated and the calculation of weights is explained. Also, the importance of taking the sampling variance into account when interpreting results is emphasized, and different sampling variance estimation methods are presented and discussed.</p>
<p>January 19th - 21st</p>	<p>Item Response Theory and Proficiency Estimation</p> <p>This session will present an overview of principles of classical test theory and item response theory. It will review advantages and disadvantages of different models currently in use and models currently being developed and becoming operational. It will also cover an overview of principles of population modeling and proficiency estimation using current operational models, review of the procedures and techniques for carrying out conditioning and multiple imputations with large scale assessments will be conducted, and provide hands on training on the use of available software to carry out item calibration and proficiency estimation, as well as the generation of files for subsequent secondary data analysis</p>

Presenters will include Olaf Zuehlke and Sabine Meinck, from the IEA Data Processing and Research Center, and Kentaro Yamamoto and Matthias von Davier from Educational Testing Service.

Both sessions will comprise lectures and hands-on trainings for each of the topics. Demonstration versions of the software for the hands-on training will be distributed to the participants during the Academy. Participants are expected to bring their own laptop computer (Windows compatible) and be proficient in basic statistical methods and procedures.

Registration information:

Participation in the Academy will be limited to the first 25 registrants. Registration fee is 400 Euros if payment is received before December 15th, 2010. Registration fee after December 15th will be 425 Euros.

Participants are expected to cover their own travel and accommodation costs. A set of hotel rooms has been reserved at the Nanyang Executive Centre where the Academy will be held. Information for hotel reservations, course requirements and final agenda will be sent to you upon registration.

To register you will need to complete the registration form available at www.ierinstitute.org. For further information on the IERI Autumn Academy please visit our website or write to ierinstitute@iea-dpc.de.