



## Autumn Academy 2007 November 5th through 9th, 2007

### Multilevel and Categorical Data Analysis in Large Scale Surveys Venue: IEA Data Processing and Research Center, Hamburg, Germany

The IEA-ETS Research Institute (IERI) is organizing a five-day Autumn Academy. The academy will be held at the IEA Data Processing and Research Center in Hamburg, Germany from **November 5th to 9th, 2007**.

**November 5<sup>th</sup> to 7<sup>th</sup>**

#### **How to Handle Multilevel Data - An Introduction into HLM**

Prof. Dr. Knut Schwippert, University of Hamburg, Germany

Learners are individuals who attend schools. For anyone who is interested in teaching and learning this fact is obvious – but nevertheless in many statistical analysis this fact is often ignored. Many users of international databases prefer to summarize student data to a class mean or multiply every teacher record to each student in the class. Both approaches have specific advantages and disadvantages – namely the aggregation and dis-aggregation bias. In this workshop a strategy to handle data organized hierarchically will be presented. Next to some statistical background concerning sampling, multiple regression analysis, and variance de-composition the approach of „hierarchical linear models“ will be presented. Within the workshop first steps by using the HLM-program will guide to more individual hands-on training.

**November 8<sup>th</sup> to 9<sup>th</sup>**

#### **Analysis of Categorical Data by Using SPSS**

Dr. Leslie Rutkowski, IEA Data Processing and Research Center (IEA DPC)

Categorical data abound in international surveys such as TIMSS and PIRLS. This two day seminar will cover selected topics in applied categorical data analysis. Topics include:

- Measures of association between two or more categorical variables,
- Tests of association for categorical variables
- Binary and multinomial logistic regression

Participants will learn how to conduct these analyses in SPSS through interactive examples as well as hands-on exercises using IEA data.

Participants should have knowledge of basic statistics and working knowledge of SPSS.

For registration information please contact the IEA – ETS Research Institute (IERI) at: [IERInstitute@iea-dpc.de](mailto:IERInstitute@iea-dpc.de) or visit our homepage at: [www.IERInstitute.org](http://www.IERInstitute.org)