

CREST - GENES

Cours de Formation par la Recherche

2011 – 2012

Methodology for Competence Assessment in Large-Scale Surveys : Measurement Models

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Item response theory has been seen mainly as a technique to solve a certain class of technical problems in measurement applications, principally those problems that involve usage or manipulation of subsets of items (or single items) from an instrument: For example, using a subset of the items of a whole test, or even, using a single item at a time, as in CAT. This mini-course will introduce and develop a class of item response models that can indeed be used to deal with such problems, but a second principal focus of the lectures will be to discuss how these models can be used to help address the fundamental task of measurement: The construction of meaningful latent variables, and the analysis of evidence about the validity and reliability of the instruments used to measure those variables.

Topics to be covered will include:

- (i) Measurement Models: Why, What, and How?
- (ii) Constructing Measures—The BEAR Assessment System;
- (iii) Quality control—reliability and validity evidence using the Wright Map;
- (iv) An introduction to multidimensional measurement using Rasch Models;
- (v) Using measurement models in large-scale assessment;
- (vi) An introduction to Explanatory Item Response Modeling.

Bibliographie

- Briggs, D. et M. Wilson (2003), "An Introduction to Multidimensional Measurement Using Rasch Models", *Journal of Applied Measurement*, 4(1), 87-100.
- De Boeck, P. et M. Wilson (Eds.) (2004), *Explanatory Item Response Models : A Generalized Linear and Nonlinear Approach*, New York, Springer-Verlag.
- OECD Programme for International Student Assessment (PISA) Technical Report (2009), Chapters 19, 9, 12.
- Wilson, M. et M. Hoskens (2005), "Multidimensional Item Responses : Multimethod/Multitrait Perspectives", dans Alagumalai, S., Curtis, D. D. et N. Hungi (Eds.), *Applied Rasch Measurement : A Book of Exemplars (Papers in Honour of John Keeves)*, Dordrecht, The Netherlands, Springer-Kluwer.
- Wilson, M. (2004), "Assessment, Accountability and the Classroom : A Community of Judgment", dans M. Wilson (Ed.), *Towards Coherence Between Classroom Assessment and Accountability*, 103rd Yearbook of the National Society for the Study of Education, Part II, Chicago, University of Chicago Press.
- Wilson, M. (2005), *Constructing Measures : An Item Response Modeling Approach*, Mahwah, NJ, Erlbaum.
- Wilson, M. (forthcoming), "Responding to a Challenge that Learning Progressions Pose to Measurement Practice : Hypothesized Links Between Dimensions of the Outcome Progression", dans Alonzo, A. C. et A. W. Gotwals (Eds.), *Learning Progressions in Science*, Rotterdam, The Netherlands, Sense Publishers.

Cours les	Jeudi	24	Mai 2012	de 14h à 16h
	Jeudi	31	Mai 2012	de 14h à 16h
	Lundi	4	Juin 2012	de 14h à 16h
	Jeudi	7	Juin 2012	de 14h à 16h
	Lundi	11	Juin 2012	de 14h à 16h

à l'ENSAE 3, Avenue Pierre Larousse, Malakoff (Métro : Malakoff/Plateau de Vanves)

Ces cours sont proposés aux étudiants de 3^{ème} année de l'ENSAE, de l'ENSAI se préparant à la recherche et ouverts aux étudiants de M2 ou inscrits en thèse. **Une inscription préalable est demandée impérativement** pour tous les étudiants de l'ENSAE, de l'ENSAI, ou extérieurs, par courriel à quedi@ensae.fr ou par tél. au **01 41 17 35 50, afin de pouvoir être admis dans les locaux de l'ENSAE**. Les renseignements sur le contenu et les dates de ces cours peuvent être obtenus au 01 41 17 35 50.