

Fox and Glas (2001). Bayesian Estimation of a Multilevel IRT Model using Gibbs Sampling. *Psychometrika*, 66, 271-288.

In this example, a dataset of a mathematics test for grade-8 school children is analyzed. Students from 97 schools were given 18 mathematics items taken from the school leaving exam developed by CITO. The items were scored correct/incorrect and in total 2,156 students took the test.

## Files

*math.dat* :: Binary response regarding the math test

*predict1.dat* :: Explanatory variables at the individual (students; ISI, SES, Gender (female=1)).

*predict2.dat*:: School level (Cito-school: regularly participated in the school-leaving examination=1, number of students per school).