

# Using the CEFR Rasch and/or IRT resources: The benefits, the challenges, and the ellipsis

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# The Benefits

# Reference Supplement

## Section B: Standard Setting (2004)



December 2004

DGIV/EDU/LANG (2004) 13

**Reference Supplement**  
to the

**Preliminary Pilot version of the Manual for**  
*Relating Language examinations to the*  
*Common European Framework of Reference for Languages:*  
*learning, teaching, assessment*

**Section B: Standard Setting**

Language Policy Division, Strasbourg

- IRT SS advantages
  - sample free item & person parameter estimation
- Overview of SS methods
  - empirical data through IRT highlighted

# Reference Supplement

## Section G: Item Response Theory (2004)



December 2004

DGIV/EDU/LANG (2004) 13

### Reference Supplement

to the

Preliminary Pilot version of the Manual for

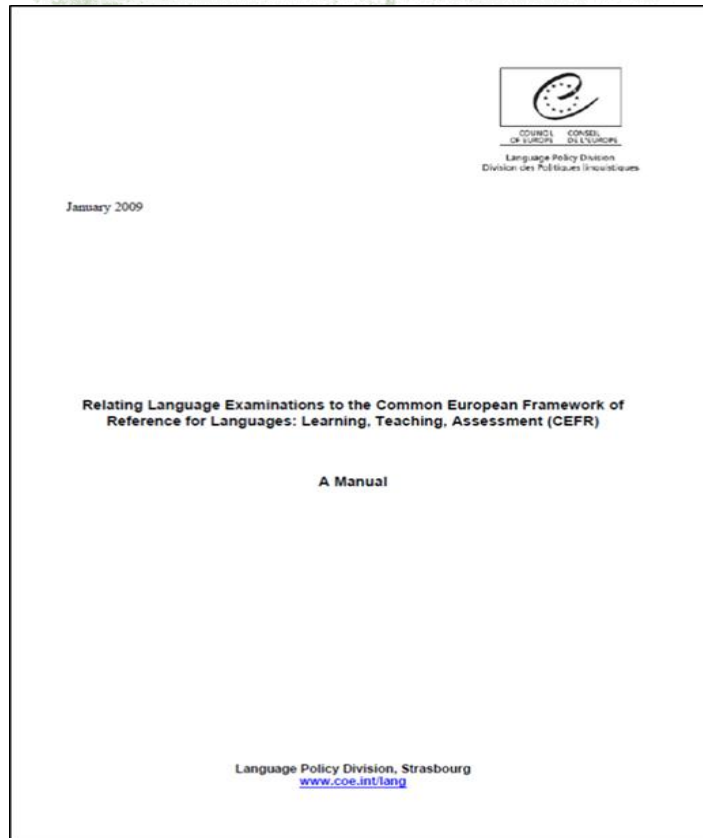
*Relating Language examinations to the  
Common European Framework of Reference for Languages:  
learning, teaching, assessment*

Section G: Item Response Theory

Language Policy Division, Strasbourg

- Basic notions of IRT explained & discussed
- IRT notions & techniques covered (technical discussion)

# The Manual (2009)



- Concepts related to IRT
  - difficulty parameter and level, and discrimination
- IRT Standard Setting (SS) methods
  - The Bookmark Method
  - A Cito Variation of the Bookmark Method
  - reference to Item-descriptor Matching Method
- SS & test equating
  - reference to test equating through anchor items

# Further Material on Maintaining Standards across Languages, Contexts and Administrations by exploiting Teacher Judgment and IRT Scaling (2009)



COUNCIL OF EUROPE  
Language Policy Division  
Division des Politiques Linguistiques

January 2009

Relating Language Examinations to the Common European Framework of Reference for Languages: Learning, Teaching, Assessment (CEFR)

Further Material on Maintaining Standards across Languages, Contexts and Administrations by exploiting Teacher Judgment and IRT Scaling

Brian North (Eurocentres / EAQUALS)  
Neil Jones (Cambridge Assessment / ALTE)

Language Policy Division, Strasbourg  
[www.coe.int/lang](http://www.coe.int/lang)

- Creating a scale of items linked to CEFR
- Data Collection & Scale Construction
  - Rasch sample size (100 test takers)
  - Using CEFR Anchor Items
- Using CEFR Descriptors as IRT items
  - self-assessment & teacher assessment
- Benchmarking with MFRM (FACETS)

# Reference Supplement

## Section H: Many-Facet Rasch Measurement (2009)



### Reference Supplement

to the

Manual for

*Relating Language Examinations to the  
Common European Framework of Reference for Languages:  
Learning, Teaching, Assessment*

**Section H: Many-Facet Rasch Measurement**

Language Policy Division, Strasbourg  
October 2009

[www.coe.int/lang](http://www.coe.int/lang)

- Use of Many-Facet Rasch Measurement (MFRM) for rater-mediated assessments
- Coverage of MFRM terms and notions
- MFRM & SS
  - reference to SS

# Reference Supplement

## Section I: Cito variation on the bookmark method (2009)



October 2009

### Reference Supplement

to the

Manual for

*Relating Language examinations to the  
Common European Framework of Reference for Languages:  
learning, teaching, assessment*

*Section I: Cito variation on the bookmark method*

Language Policy Division, Strasbourg  
[www.coe.int/lang](http://www.coe.int/lang)

- SS procedure
- Estimating RP50 & RP80
  - Rasch model; two parameter logistic model, and three parameter model
- Decision making
  - Transforming the latent scale



# Manual for Language Test Development and Examining (ALTE)

## Manual for Language Test Development and Examining

For use with the CEFR

Produced by ALTE on behalf of the  
Language Policy Division, Council of Europe



### Rasch analysis

- minimum no. of test takers: 50 – 80

### MFRM

- minimum no. of performances: 30 per task
- minimum no. of ratings per rater: 30 per rater

### DIF analysis with Rasch analysis

- minimum no. of test takers: 500, with at least 100 per group



# The Challenges & the Ellipsis

# CEFR Anchor Items

- Limited no. of CEFR anchor items/tasks available
- Limited no. of CEFR anchor test methods used in CEFR anchor tasks
- Few writing tasks and/or responses
- No Rasch and/or IRT calibrated writing tasks/ writing responses
- No Rasch and/or IRT calibrated speaking tasks/ responses

# Setting cut scores through Rasch and/or IRT procedures

**“The basic flaw of many applications of IRT modelling in language testing especially is that there is not enough evidence provided about the model-data fit, which makes the findings of these studies more or less questionable” (p.17).**

**(Kaftandjieva, 2004)**

- No guidance on analysing cut-scores based on Rasch and/or IRT procedures
- No framework for evaluating standard setting cut scores set through Rasch and/or IRT procedures
- No framework for evaluating intra-panellist and inter-panellist consistency within Rasch model



# Q & A



Thank you

# References

*ALTE (2011). Manual for language test development and examining: For use with the CEFR. Strasbourg: Council of Europe/Language Policy Division.*

*North, B. & Jones, N. (2009). Further material on maintaining standards across languages, contexts, administrations by exploiting teacher judgments and IRT scaling: Relating language examinations to the Common European Framework of Reference for Languages: Learning, teaching, Assessment (CEFR).*

*Council of Europe. (2009). Relating language examinations to the Common European Framework of Reference for languages: Learning, teaching, assessment (CEFR). Strasbourg: Language Policy Division.*

*Eckes, T. (2009). Many-Facet Rasch measurement . In S. Takala (Ed.), Reference supplement to the manual for relating language examinations to the Common European Framework of Reference for Languages: Learning, teaching, assessment, (Section H). Strasbourg: Council of Europe/Language Policy Division.*

*Kaftandjieva, F. (2004). : Standard setting. In S. Takala (Ed.), Reference Supplement to the Preliminary Pilot version of the Manual for Relating Language examinations to the Common European Framework of Reference for Languages: learning, teaching, assessment (Section B). Strasbourg: Council of Europe/Language Policy Division.*

# References

*Verhelst, N. D. (2004). Item response theory. In S. Takala (Ed.), Reference supplement to the preliminary pilot version of the manual for relating language examinations to the Common European Framework of Reference for Languages: learning, teaching, assessment (Section G). Strasbourg: Council of Europe/Language Policy Division.*

*Van der Schoot, F. (2009). Cito variation on the bookmark method. In S. Takala (Ed.), Reference supplement to the preliminary pilot version of the manual for relating language examinations to the Common European Framework of Reference for Languages: learning, teaching, assessment (Section I). Strasbourg: Council of Europe/Language Policy Division.*