

Day 1 morning – Progress testing, computerized adaptive testing and the Erasmus+ project

09.00 Welcome and overview of the day

09.10 Interactive lecture: Progress testing: rationale, validity and reliability

10.00 Coffee/tea break

10.30 Interactive lecture: Computerized adaptive (progress) testing

11.30 Short lecture: ERASMUS+ project

12.00 Plenary discussion

12.30 Lunch

This module focuses on

- Introducing the concept of progress testing, its educational utility and psychometric properties.

Activities and working formats

- Interactive lectures.
- Plenary discussion.

Objectives

- Raise awareness for current practices for evidence-based assessment in medical education.

Preparatory and/or further reading

Wrigley W, van der Vleuten CP, Freeman A, Muijtjens A. A systemic framework for the progress test: strengths, constraints and issues: AMEE Guide No. 71. Med Teach. 2012;34(9):683-97. doi: 10.3109/0142159X.2012.704437.

Collares CF, Cecilio-Fernandes D. When I say ...computerised adaptive testing. Med Educ. 2018 Aug 19. doi: 10.1111/medu.13648. [Epub ahead of print]

Day 1 afternoon - Blueprinting

14.00 Short lecture: Introduction to blueprinting

14.15 Workshop: blueprinting locally relevant test contents

15.30 Coffee break

16.00 Continuation of the Workshop: Blueprint fine-tuning

16.30 Presentation of the blueprint and plenary discussion

17.00 Closing

This module focuses on

- How to ensure validity based on test content using the blueprinting method.

Activities and working formats

- Short lecture;
- Workshop;
- Plenary discussion.

Objectives

- Enable participants to apply the blueprinting method to the development of the locally oriented part of the blueprint.

Preparatory and/or further reading

Coderre S, Woloschuk W, McLaughlin K. Twelve tips for blueprinting. Med Teach. 2009 Apr;31(4):322-4.

Mookherjee, S., Chang, A., Boscardin, C. K., & Hauer, K. E. (2013).

How to develop a competency-based examination blueprint for longitudinal standardized patient clinical skills assessments. Medical teacher, 35(11), 883-890.

Day 2 - Item Writing and Reviewing

09.00 Welcome and overview of the day

09.10 Interactive lecture: introduction to technical item writing flaws

10.00 Coffee/tea break

10.30 Small group exercise: Identifying technical item writing flaws in small groups

11.00 Small group exercise: Writing items

12.30 Lunch

14.00 Continuation of the small group exercise: Writing items

15.00 Small group exercise: Reviewing items

16.00 Plenary discussion: Approving items

17.00 Closing

This module focuses on

- Acknowledging of the impact of flawed item writing on test validity;
- The construction of good MCQ questions and;
- The identification of technical item writing flaws.

Activities and working formats

- Interactive lecture;
- Item review in small groups;
- Item construction in small groups;
- Plenary discussion of results.

Objectives

- Insight in the tips and tricks for the construction of multiple choice questions (MCQ's);
- Practicing item writing and reviewing for MCQ assessment.

Preparatory and/or further reading

European Board of Medical Assessors. Guidelines for Item Writing. Schuwirth, L.W.T., Vleuten, C.P.M. van der (2003). ABC of learning and teaching in medicine: Written assessment. British Medical Journal, 326, 643-645.

Day 3 morning – Writing and reviewing locally relevant items

09.00 Plenary discussion: Remembering the local blueprint

09.15 Small group exercise: Writing locally relevant items

10.30 Coffee break

11.00 Small group exercise: Reviewing locally relevant items

12.00 Plenary discussion: Approving locally relevant items

12.30 Lunch

This module focuses on

- The construction and review of locally relevant MCQ questions according to the local blueprint;

Activities and working formats

- Plenary discussions;
- Small group exercises.

Objectives

- Enabling the creation of locally relevant items according to the local blueprint.

Preparatory and/or further reading

European Board of Medical Assessors. Guidelines for Item Writing. Schuwirth, L.W.T., Vleuten, C.P.M. van der (2003). ABC of learning and teaching in medicine: Written assessment. British Medical Journal, 326, 643-645.

Day 3 afternoon – Interpreting test results and psychometric analyses

14.00 Plenary discussion: the test cycle and the post-test phase

14.15 Interactive lecture: Introduction to Psychometrics

15.30 Coffee break

16.00 Small group exercise: Understanding institutional test results

16.30 Plenary discussion: Q & A session

17.00 Take-home messages and closing

This module focuses on

- Comprehension of basic psychometric concepts;
- Interpretation of institutional test reports.

Activities and working formats

- Interactive lectures;
- Plenary discussions;
- Small group exercises.

Objectives

- Enabling the appropriate interpretation of test results;
- Enabling the use of test results to support quality management, curricular governance and faculty development.

Preparatory and/or further reading

De Champlain, A. F. (2010). A primer on classical test theory and item response theory for assessments in medical education. Medical Education, 44(1), 109-117. Downing, S. M. (2003). Item response theory: applications of modern test theory in medical education. Medical Education, 37(8), 739-745.