

Diagnostic Assessment: Theory, Methods, Applications, and Software
2016 NCME Training Session
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8:00am – 10:00am Section 1: Conceptual Foundations of Diagnostic Measurement
(Jonathan Templin)

- Section 1 introduces the concepts underlying diagnostic measurement methods, focusing on how such methods differ from conventional assessment methods and the types of information that can be obtained by using such methods. The session is a conceptual overview, given without technical specifics or details.

10:00am – 10:15am Refreshment Break

10:15am – 11:45am Section 2: Fundamental Concepts for Using Diagnostic Classification Models
(Jonathan Templin)

- Section 2 introduces the key terms and definitions useful to understanding how to build tests for use with diagnostic classification models. Examples from the Diagnosing Teachers' Multiplicative Reasoning project will be used to provide context.

11:45pm – 1:15pm Lunch

1:15pm – 3:00pm Section 3: Diagnostic Measurement - Psychometric Models (Jonathan Templin)

- Section 3 introduces the psychometric models that are often used in diagnostic measurement studies, the types of data that are commonly modeled, and the interpretation of each of the model estimates. Examples from the Diagnosing Teachers' Multiplicative Reasoning project will be used to provide context.

3:00pm – 3:15pm Refreshment Break

3:15 – 4:00pm Section 4: Estimation of DCMs Using Mplus (Meghan Sullivan)

- Section 4 demonstrates how to estimate DCMs using Mplus and beta software from Dr. Templin.

4:00- 4:30pm Section 5: Issues in Estimation (Hongling Lao)

- Section 5 will focus on an important issue in the estimation of DCMs and how it can impact results.

4:30- 5:00pm Open Time for Questions