SECRETS OF COMPETENCY TESTING:
WRITING ITEMS FOR HOSPICE AND PALLIATIVE CERTIFICATION EXAMINATIONS

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The planning committee members and the presenters have declared no conflict of interest involved in the content contained in this course.

AGENDA

Part I
I. Overview of Measurement
II. Item Anatomy and Item Types
III. Cognitive Levels
Part II
IV. Subverting Test Wiseness
V. General Rules for Item Writing
Part III
VI. Item Writing and Feedback

Overview of Measurement

Job Analysis
Test Specifications
Item Writing
Examination Development
Standard Setting
Administration and Scoring

Job Analysis

- Also called a Role Delineation Study
- Purpose: to identify practice
- Upholds standards of testing
- Conducted by Advisory Committee
- Survey distributed to national sample
- Results show importance of tasks

Test Specifications

- Developed based on judgment:
  - from hundreds of respondents, as interpreted by Advisory Committee
- Ensures content validity
- Used to build all examinations
- Provides information to candidates
  - Why is that important?

Item Writing

- Training provided through workshop
- All items linked to specifications
- Consistent style and format

Examination Development

- Unanimous agreement of experts
- Comparable examination forms
- Exactly match test specifications
- Extensive review process
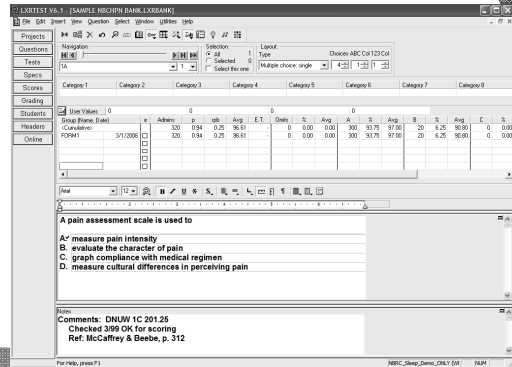
Sample of LXR*Test Item Banking System

Standard Setting

- Criterion-referenced
- Definition of borderline candidate
- Use judgments of content experts
- Consistency through equating
- Passing depends on amount of knowledge displayed, not the ability of other candidates

Scoring

- Quality control procedures
- Review of item analysis
- Review of candidate comments
- Final scoring

Item Anatomy and Item Types

- Multiple Choice - WHY?
- Each measures one unit of content
- Response allows inference about candidate's ability in this content area
- All items linked to outline, which allows inference about job-related competencies

Item Components

- Stem and four Options

- Stem - the statement or question to which candidates respond. The stem can also include a chart, table or graphic. The stem should clearly present the central problem or idea.
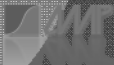

Example Stems

- Direct Question:
- In a terminally ill patient, dysphagia would most likely indicate which of the following?
- Incomplete Statement:
- Dysphagia in a terminally ill patient would most likely indicate

Novice writers tend to write clearer direct question item types. If you are new to item writing, it is best to concentrate on that type.

The four options will include:

- one key
  - the key is the best or most appropriate of the *available* options
- three distractors
  - *plausible*, yet incorrect responses or completions

- Why four options?

Negatively worded item stems

- should be avoided
- try to rewrite as positively worded
- can cause measurement error when able candidates become confused

Cognitive levels

- Recall
  - an effort of rote memorization
  - never situationally dependent
- Application
  - interpretation, classification, translation, recognition of elements and relationships
- Analysis
  - synthesize information, solve problems, evaluate the best response

Recall item

The authority to make decisions regarding a patient's care ultimately rests with the

A. patient/family.
B. attending physician.
C. interdisciplinary team.
D. Hospice medical director.

Application item

If a patient with a history of breast cancer experiences pain between the shoulder blades, it is most likely to indicate metastases to the

**A. liver.**
B. bone.
C. brain.
D. pancreas.

Analysis item

A certification examination shows a reliability index of .45. One-half of the items have *p* values greater than .90, and 15% have negative point-biserial correlations. The psychometrician should recommend that the committee write

A. longer, more difficult to read items that are more clearly job-related.
B. easier items, focusing on basic facts.
C. more difficult items, with better distractors.
D. stems requiring complex computations.
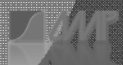
How to write items to test higher cognitive levels

⊙ develop an evaluative objective
⊙ think about job-related situations
⊙ expand on opportunities (problems) that have occurred

Evaluative Objectives

⊙ Recall:
    identify, define, recognize, restate
⊙ Application:
    compute, differentiate, specify
⊙ Analysis:
    judge, estimate, predict, conclude

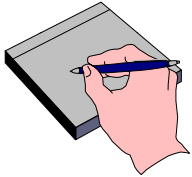**PLEASE COMPLETE THE ITEM WRITING APTITUDE TEST**