

From: Thompson, Stu [Stu.Thompson@Illinois.gov]

Sent: Monday, August 25, 2014 4:13 PM

Subject: Training for EMS System Coordinators and Lead Instructors

EMS System Coordinators:

The Illinois Department of Public Health's EMS office will be conducting workshops around the state to help prepare our EMS system coordinators along with their Lead Instructors to help prepare their EMT candidates to become licensed EMTs in the state of Illinois.

Who Should Attend:

All EMS system coordinators and Lead Instructors who teach EMS classes. It is highly recommended for those programs who are seeing a greater than 25% failure rate for all the students that they teach.

Description:

Even the most seasoned educators may find it challenging when it comes to measuring cognitive learning by creating valid exams that perform with high reliability. Without formal instruction in item writing, we often create tests from publisher's test banks without blueprints, tables of specifications, objective referencing, or fail to use appropriate psychometric principles. In reality, it just takes adherence to some simple guidelines to take your tests from failing to fabulous!

This workshop is targeted to the educators who write the quizzes and written exams for students in EMS programs. Spend a fun four hours learning the language of item writing and come away with practical tips that you can use immediately to enhance your educational program.

Content:

- I. Why this information is important
- II. Written examinations
 - A. Definition of a test:
 - B. Purposes of testing

- C. Advantages of written examinations
- D. Disadvantages of written examinations
- E. Elements of a good exam
- F. Types of items

III. General guidelines for written test item construction

- A. Creating a blueprint
- B. Creating a Table of Specifications
 - 1. Assessment questions
 - 2. Analysis/interpretation/evaluation of data questions
 - 3. Intervention questions
 - 4. Evaluation questions
- C. Selecting testable material
- D. Mapping questions to objectives
- E. Levels of mastery/Item difficulty (cognitive complexity)
 - 1. Knowledge/Comprehension: Recall/knowledge (lowest level)
 - 2. Application/interpretation (analysis)
 - 3. Synthesis/Evaluation: Problem solving
- F. Content concerns
- G. Style concerns
- H. Provide clear, complete directions and honor code statement on the exam cover
- I. Peer review of items
- J. Attention to detail
- K. Confidentiality and Security of test materials

IV. Multiple choice item writing guidelines

- A. Terminology definitions
- B. Stem construction
- C. Writing OPTIONS (keys and discriminators)
- D. Sensitivity and fairness criteria based on ETS Fairness Review Guidelines (2003)

V. True/false items; construction and limitations

VI. Matching items: construction and limitations

VII. Completion items

- A. Uses

- B. Limitations
 - C. Guidelines for construction
- VIII. Essay
 - A. Uses
 - B. Limitations on both types
 - C. Guidelines for construction; creating a rubric for scoring
- IX. Terminal/certifying examinations - additional considerations.
- X. Post written examination quality review by students
 - A. Should students be able to keep the test?
 - B. Allow students the opportunity to review their test results
- XI. Post written examination quality review by faculty
 - A. Compile the results (item analysis)
 - B. If the upper one-third of the group missed a specific item
 - C. If the lower one-third of the group missed a specific item:
 - D. Calculate measures of central tendency to look for skewed results
- XII. Practical examinations
 - A. Two basic types: Situational and rote
 - B. Advantages
 - C. Disadvantages.
- XIII. Reliability
- XIV. Content validity
- XV. Common mistakes
- XVI. Final checklist for each item
- XVII.

Where:

Mt. Vernon September 29, 2014 10:00am-
 3:00pm 1 hour for lunch
 Rend Lake CC

Downers Grove October 3, 2014 10:00am-

3:00pm 1 hour for lunch
ICEP center

Springfield October 10, 2014 10:00am-
3:00pm 1 hour for lunch
DNR Bldg.
State Fairgrounds

Cost: Free

Registration:

Please email: Stu.Thompson@Illinois.gov with the number of participants that will be attending from your system to. Space is limited so please get your registration in by September 11, 2014.

If you have any questions regarding the workshops please feel free to get in touch with me.

Sincerely,

Stu Thompson
EMS-Testing and Education Coordinator