

NTTCHP



Setting Performance Standard

(NOTE: Due to the interactive nature of the presentation, it will only be viewable via the FD course site: vle.upm.edu.ph)

Central Question: How do you determine your passing score for a test?

Performance standards as will be used here apply to an individual, not group of individuals

Key concept would be "minimum competency testing"

- to some, may refer to the absolutely imperative skills that an individual must have in order to function satisfactorily in a society, or
- may refer to the minimum skills that educators (or citizens) are willing to accept as satisfying one of the requirements for, say, college graduation.

Major Factors in Setting Performance Standards

Analysis of Decision Context	<ul style="list-style-type: none"> • Standard setters must have a thorough understanding of just what's at stake if an individual fails to achieve the standards they are going to set. • Problem of false-positives and false negatives. (Is it more serious to advance erroneously a student who hasn't mastered a competency than to hold back erroneously a student who has?)
Clarity of Target Competencies	<ul style="list-style-type: none"> • Should be defined by your written objectives • The more precise your statement of objectives, the easier for you to clarify your targets
Relevant Performance Data	<ul style="list-style-type: none"> • Standard setters must rely on some sort of experience in deciding on expectations • Useful performance data could come from individuals who have been: <ul style="list-style-type: none"> ○ uninstructed ○ just instructed ○ previously instructed
Preferences of Others	<ul style="list-style-type: none"> • Consult various concerned groups regarding preferences regarding standards <ul style="list-style-type: none"> ○ parents ○ business ○ instructional specialists



© 2015

NTTCHP



Alternative Standard Setting Procedures	
Performance Based	
Informed Judgment model	<p>Five steps:</p> <ol style="list-style-type: none"> 1. Analyze the decision context 2. Clarify the competencies 3. Acquire relevant performance data 4. Gather pertinent preference data. 5. Set standards based on this information
Borderline – Group Model	<p>Steps:</p> <ol style="list-style-type: none"> 1. Identify judges who are familiar with the student population involved. 2. Have judges discuss what constitutes minimally acceptable performance. 3. Have judges identify borderline students. 4. Administer test. 5. Compute median performance
Contrasting Group Model	<p>Steps:</p> <ol style="list-style-type: none"> 1. Identify judges who are familiar with the student population involved. 2. Have judges discuss what constitutes minimally acceptable performance. 3. Have judges identify students who are definite masters or non-masters of the competency. 4. Administer test to both groups. 5. Plot performance curves for both groups. 6. Set the performance standard based on the intersection of the two curves.
Item-Based	
Nedelsky's Method	<p>Steps necessary to implement the Nedelsky scheme.</p> <ol style="list-style-type: none"> 1. Appoint judges familiar with both the competency and student's typical mastery of it. 2. Have judges consider the distractors (wrong-answer choices) for each item, and identify those distractors which a minimally competent student would recognize as being incorrect. 3. For each item, convert the responses not eliminated in step 2 (correct response plus un-eliminated distractors) to a "correct-by-guessing" probability. 4. Sum these per-item "correct-by-guessing" probabilities for each judge, then average them across judges to obtain a standard of performance for minimally competent students.
Angoff's Method	<p>Note: Angoff's adaptation was created to be used with any sort of test items, MCQ or not.</p>



© 2015

NTTCHP



Alternative Standard Setting Procedures

	<ol style="list-style-type: none"> 1. Essentially similar to Nedelsky's approach except that judges are directed to make estimates of the likelihood that each item will be answered correctly by minimally competent student, without considering the individual distractors in each item. 2. If the judge thinks that the item is simple and almost certain that students would be able to answer it correctly, then probability of 1.00 may be assigned to the item. If on the other hand, the item is judge to be so difficult that it would be unlikely that a minimally competent student would answer correctly, then low probability of, for example, 0.33 may be assigned to the item. 3. Judge sum all the probabilities for all items (and to average these sums if more than one judge is involved), then use the quantity as the passing standard. <p>Reminder: Since this method can also be used with MCQ items, a judge should never assign an item a lower probability than would result from raw chance based on number of options in the MCQ item (for example, in a three option MCQ test, the assigned probability should never be lower than 0.33).</p>
Ebel's Method	<ol style="list-style-type: none"> 1. Classify questions into groups according to: <ol style="list-style-type: none"> 1.1. Relevance levels: essential, important, acceptable, questionable. 2. Determine the percent (%) probability that the borderline student can answer each group of questions correctly. This constitutes the MPL for each group (e.g. essential and easy group, essential and moderated group, important and hard group. etc.) 3. Compute for the MPL of whole test by using this formula. (MPL for test - (MPL for each group X no. of items in group.

Collated by:

Nemuel S. Fajutagana, MD, MHPed



© 2015