

CIH Review Course

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Preparation and Test Strategies



INTRODUCTIONS

- Why you're here
- Why I'm here
- Why we're here

Discussion Outline

- Generalities
 - How a credentialing exam is designed
 - Multiple Choice format: pros & cons
 - Insights from the cognitive taxonomy
 - Other M/C rules
 - How test questions are validated
 - The normative exam: how passing point is set

Discussion Outline

- Specifics
 - The CIH exam blueprint
 - Where it comes from
 - How it applies to exam content
 - How it applies to exam grading
 - The CIH exam structure
 - 250 M/C questions
 - Each with 4 choices
 - Mechanics of computer-based tests

Discussion Outline: Preparation Strategies

- What works for me
 - Sample questions
 - Getting the most out of them
 - Rote memorization
 - Flashcards
 - Short-term versus long-term memory
- Everyone learns differently
- What works for you?

Discussion Outline: Study Resources

- Texts
- References
- Software
- Other

Why You're Here?

- CIH candidates?
 - Approved to sit: CAIH?, COMP?
 - Planning to apply
 - Accruing required IH experience
- CIH continuing education credits?
- OTHER?

INTRO: Why I'm Here

- RRPT, CHP, MS, CIH, MBA, CHMM
- NOT csp, qep; 2 that I aspire to but never seem to get around to
- Similar prep courses I've benefited from
- Experience on 2 exam panels at national level
 - Things I've learned
 - “Insider” constraints

Exam Building 101

- Starting point: the Task Analysis and Role Delineation (JTA)
 - Typically compiled by some method of polling a cross-section of incumbents (IHs)
 - May also attempt to measure/weight knowledge factors
 - E.g., frequency of application or importance of decision outcome
 - Big challenge is to separate essential from trivial

Types of Examinations

Criterion-Based

Virtually all professional credentialing exams are of this type.

Measured against some pre-established “ideal”.

Theoretically, every candidate could pass.

Normative-Based

Graded on the curve.

Compare each candidate to the overall average performance.

ABIH uses this approach to assess M/C items but not candidates.

Multiple Choice Tests

ADVANTAGES

- Ability to sample very broad subject area
- Simple, powerful means to blueprint test content against JTA
- Lends itself to systematic and statistical study of item performance

DISADVANTAGES

- Design hinges heavily on the screening of “minimally qualified” applicants
- Challenges in setting of the cut-score
- Difficulty of measuring higher levels of cognitive taxonomy using the M/C format

M/C Item Scrutiny

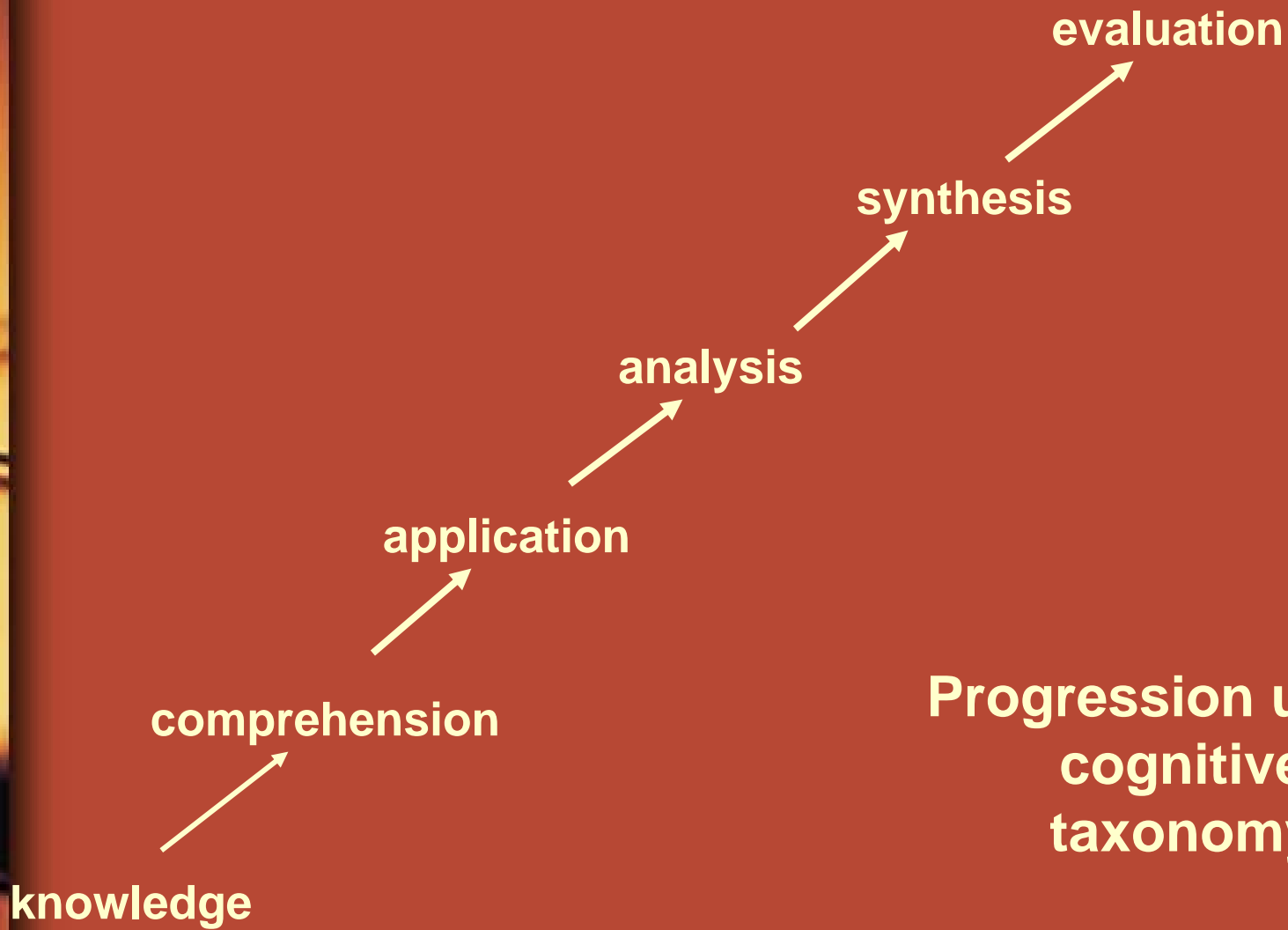
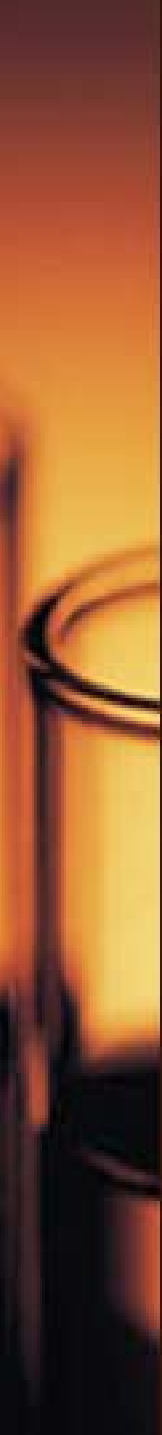
- Psychometrics – 25 cent word for test design, construction, implementation
- Reliability – Stability; consistency of measure
- Validity – Prediction; how well it forecasts IH capability
- Discrimination – Does it differentiate between those deemed competent and otherwise

Question Writing 101

- avoid negative stems
- avoid proactive inhibition
- avoid convergence theory
- avoid word form repetition
- avoid grammatical clues
- none of “ _____ of the above”

Cognitive Taxonomy

- Knowledge
- Comprehension
 - Application
 - Analysis
 - Synthesis
 - Evaluation



**Progression up the
cognitive
taxonomy**

Example Infinitives

Knowledge

- To define terms
- To distinguish meaning
- To identify sources
- To recall properties
- To recognize devices

Application

- To apply principles
- To relate effects
- To develop procedures
- To classify effects
- To choose methods

Example Infinitives

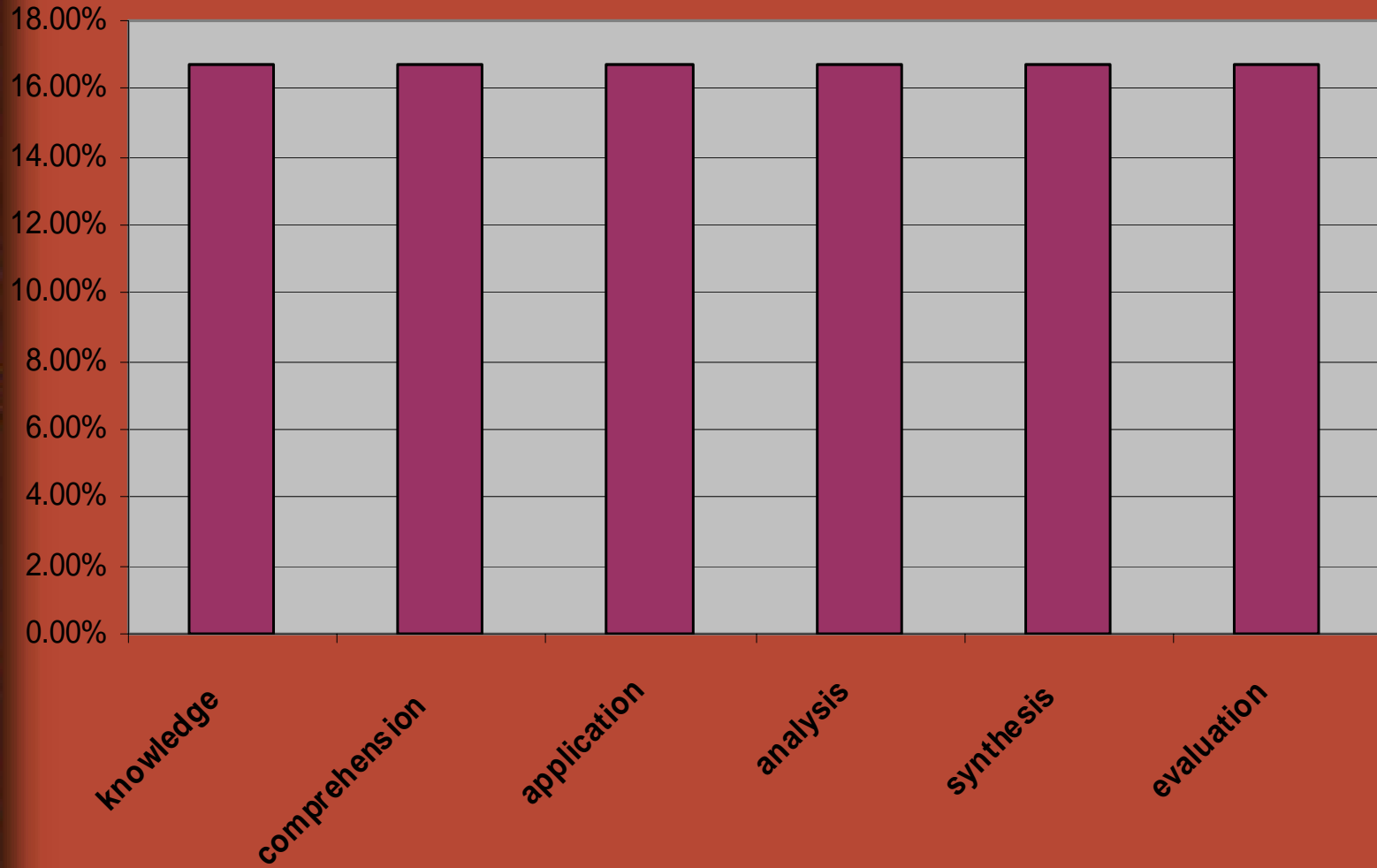
Synthesis

- To propose plans
- To deduce relationships
- To develop schematics
- To organize theories

Evaluation

- To judge consistency
- To argue alternatives
- To contrast economy
- To appraise reliability
- To consider utility

Cognitive Level Balancing



The Ideal versus the Reality

- Literature says the test items should be evenly distributed through the taxonomic levels
- Arguably favoring higher cognitive levels would better discriminate the expert I/As; or equal discrimination could be achieved with fewer questions
- Lower cognitive levels are easy to construct M/C items around
- As you go higher it gets harder; lots harder
- Almost impossible to target the highest cognitive levels with M/C question
- Serial M/C is one strategy

Setting the Passing Point – The Angoff Process

- Assemble cross-section of subject matter experts (usually some threshold number as minimum)
- Review criterion for “minimally qualified candidate”
- Each judge assesses each question as to how minimally qualified candidate would score

Setting the Passing Point – The Angoff Process

- Can disregard high and low.
- Have high and low explain rationale .
- Following this discussion, each judge given opportunity to change score.
- Average over all judges and all items becomes passing-point for overall exam.

Insights for Test Takers

- Lots goes into exam formulation => CIH is worthwhile.
- Rote memorization and simple application of formulas will take you through a large proportion of the questions.
- Don't stress or expend inordinate amount of test time on tough Synthesis and Evaluation questions – there won't be many.
- For the IH disciplines in which you have limited experience, some basic knowledge review will take you farther than you think.

The ABIH Exam Blueprint

- Derived from Role Delineation which is in-turn built from incumbent surveys; periodically re-validated.
- Exam content then aims to closely match the blueprint (mainly via stem/premise but some content is present in the distractors)
- Grading of CIH is NOT content-weighted; single passing-point/cut score.

CIH Comprehensive Exam

- 250 Multiple-choice questions
- Each with 4 choices (answer plus 3 distractors)
- Two (morning & afternoon) time slots of 3.5 hours each
- Mechanics of Prometric computer-based testing

Preparation Strategies

- Study (problem solving) groups
- Flash cards: both writing and reviewing
- Working Sample questions
- Writing sample questions

Getting the most from sample questions – an example

- Look up the basis for the right answer whether or not you knew it.
- Re-write the stem/premise to make each of the other distractors into the correct answer.
- Reflect on what makes the distractors distracting – why are they effective?

Other Strategies

- Visual Learners need pictures, charts, graphs... (diagramming - as a question comprehension aid - relates to this)
- Teaching is often the most effective means to learn...
- Leveraging peer pressure / accountability.
- Other approaches?

Study Resources

- Texts
- Handbooks
- Sources of study questions
- Software
- Other