


Considerations for Online Assessment Program Design

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Considerations For Online Assessment Program Design

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- Introduction
- Understanding Online Assessment Programs
- Understanding Test Development & Psychometricians
- Q&A



Considerations for Online Assessment Program Design


Understanding Online Assessment Programs

Mika Hoffman




Overview

- Types of academic assessment
- The stakes involved
- Validity
- Test planning
- Proctoring and identity verification
- Example—how Excelsior does it



Types of academic assessment

- Diagnostic assessment
 - Placement in sections/courses
 - Identification of strengths and weaknesses
- Formative assessment
 - Provides feedback to students
 - May shape lesson plans
 - Identification of strengths and weaknesses
- Summative assessment
 - Assesses outcome of learning



The stakes involved

- Low stakes
 - Quizzes with little impact on grade
 - Self-assessments
 - Assessments in non-credit courses
- Mid stakes
 - Tests with substantial impact on grade
 - Challenge exams to bypass requirements
- High stakes
 - Summative assessments determining all or most of grade
 - Credit by examination
 - Entrance exams (e.g., SAT, GRE, GMAT)



Validity

- In academic testing, we can say that a test is valid if it gives us reasonable assurance that a person claiming to know the relevant academic material actually does know it.
- Need to establish
 - What is the knowledge?
 - Is it relevant to the academic subject?
 - Who has the knowledge?



Test Planning

- Deals with what knowledge is being tested **and** whether it's relevant to the academic subject and the purpose of the assessment
 - For tests that are for "all the marbles," the test plan is the equivalent of a syllabus and learning objectives
 - Even for quizzes, it's good to know what the quiz is expected to accomplish



Test Security

- Not just about proctoring
 - Need to know that the test has been secure throughout development
- Security is related to validity
 - If students get a good score because they saw the material and memorized it ahead of time, what are you testing?



Proctoring and Identity Verification

- Need to verify that the people taking the test are who they say they are
- Need to verify that the people taking the test are using their knowledge of the subject, not other aids (references, friends, the Internet)
- Need to ensure that the test content is secure



Example


- Excelsior College's exams are high stakes, "all the marbles" exams: designed to stand alone as the equivalent of a 3-credit course
- Test Plans are written by a committee with testing experts and instructors of the subject taken from around the country
- Practice exams delivered online with username/password verification
- Proctoring and identity verification done in person at Pearson VUE testing centers




Considerations for Online Assessment Program Design

Understanding Test Development & Psychometricians

Lawrence M. Rudner





Overview

-  Building a quality test
-  Marks of quality
-  Sources of error

Question for our attendees

Why should we worry about test quality?



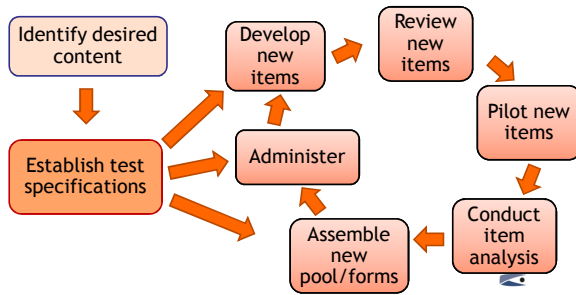
Quality



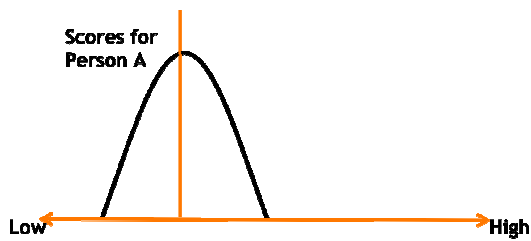
- Test takers are entitled to assurance that no examinee enjoys an unfair advantage
- Testing organizations have an obligation to provide, or use its best efforts to provide, only valid scores
- Organizations have the right to protect their own reputation by assuring the reliability of the information they provide.

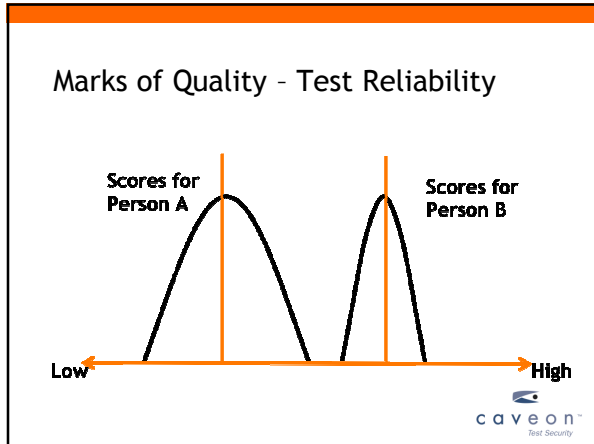


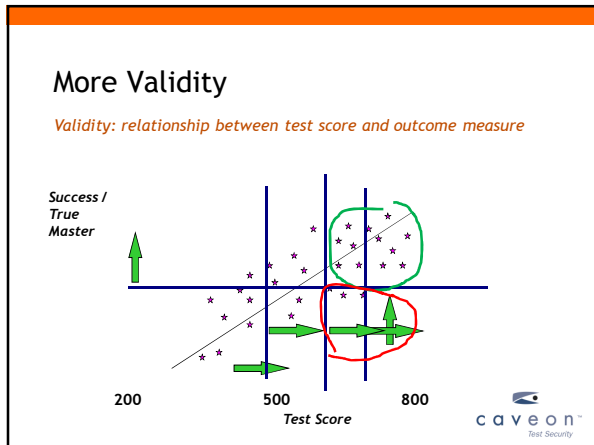
Test Development Process

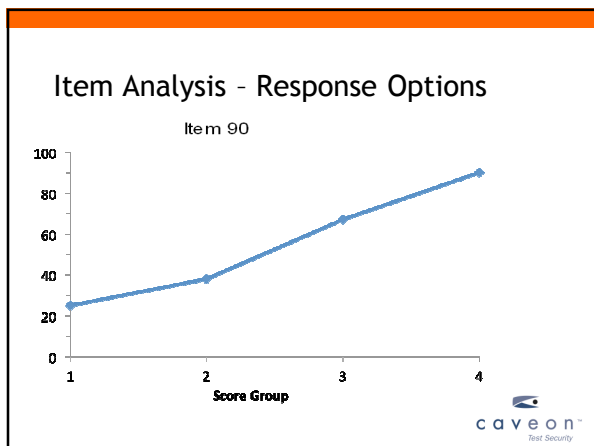


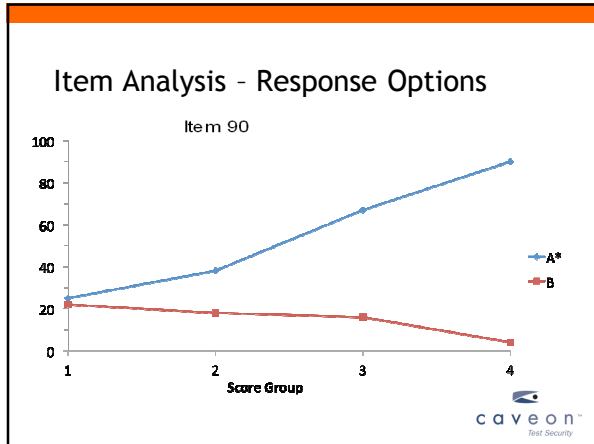
Marks of Quality - Test Reliability

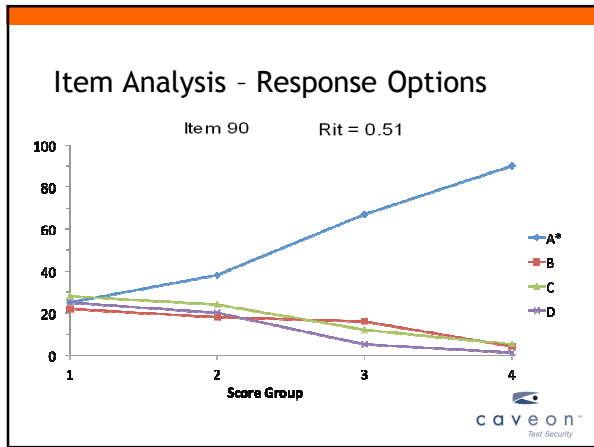


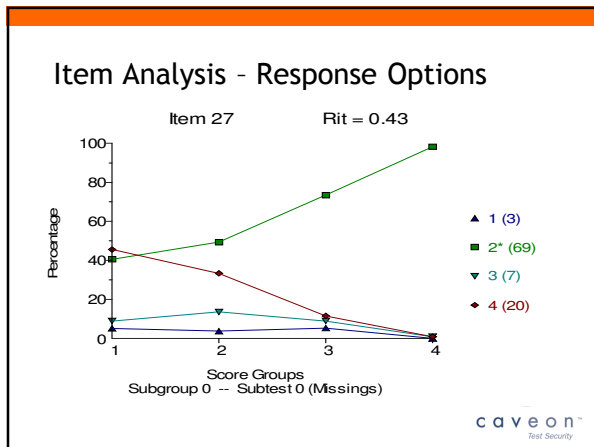


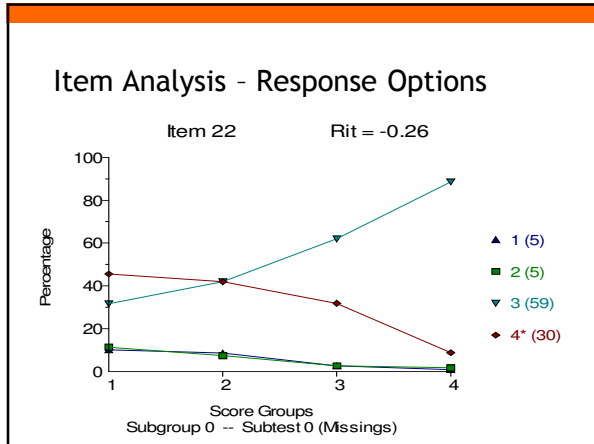


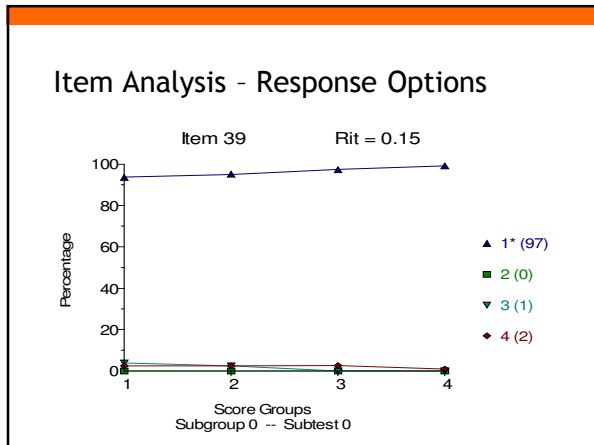


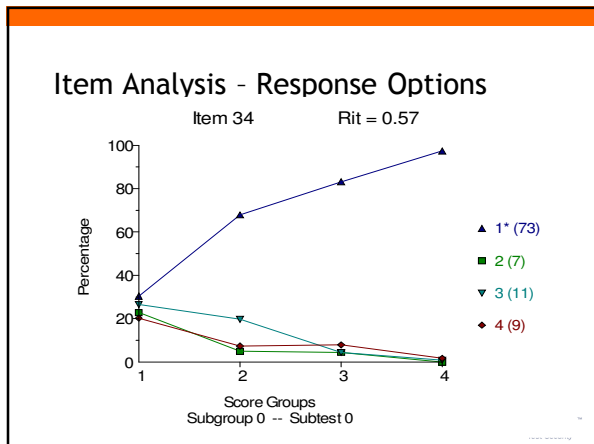












Item Analysis - Item discrimination

Question 19

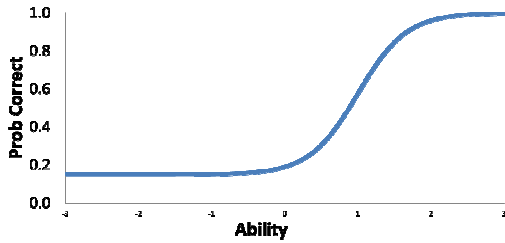
Score	R/W
80	1
70	1
65	0
60	1
50	0
30	0
20	0

$r = .70$



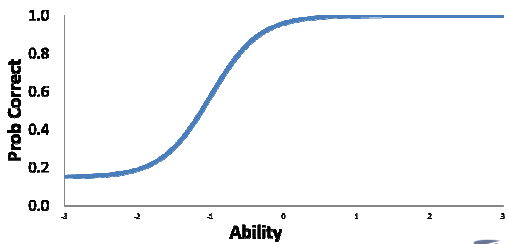
Item Analysis - Item discrimination

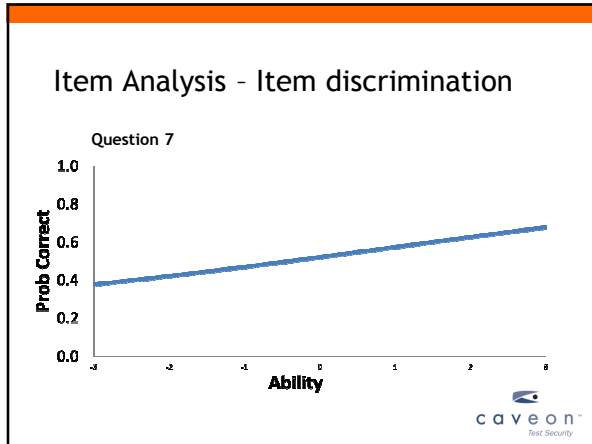
Question 7



Item Analysis - Item discrimination

Question 19





- ### Constructing a quality test
1. Good representation of content
 2. Good, proven test questions
 3. Enough test questions
 4. Equivalent alternate forms
- caveon
Test Security

Our Gifts To You!

Online Item Writing Training	30 minute needs analysis
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URL: training.caveon.net
Code word: online14

<http://testing-assessments.excelindia.com/consultation.html>

- Internet-based training - 1 hour of training, code good for 2 weeks!
- ExcelSoft will provide you with a 30-minute consultation, at no cost, for assessing your testing development and delivery needs
 - Looking to implement or make change to your test delivery platform

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Test Security

Helpful Resources

LinkedIn Group - "Caveon Test Security" Join Us!
 Follow us on twitter @Caveon
www.caveon/resources/webinars - slides & recordings
 Cheating Articles at www.caveon.com/citn
 Caveon Security Insights blog - www.caveon.com/blog
 CSI Newsletter - Contact us to get on the mailing list!



Thank You!

Special Thanks to:

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 for feedback or a copy of the slides



Upcoming Events

- Please visit our sessions and our Caveon booth #209 at ATP's Innovations In Testing - February 3-6, 2013
- Steve Addicott presenting at SeaSkyLand Conference in ShenZhen - February 2013
- John presenting at TILSA meeting February 7th in Atlanta.
 - Other presenters include John Olson, Greg Cizek.
- Release of TILSA Test Security Guidebook - Visit our booth to discuss it with John Fremer at ATP!
- Handbook of Test Security - *To be published March 2013*
- CCSSO Best Practices meeting in June 2013



Caveon ATP Sessions

- Tell it to the Judge! Winning with Data Forensics Evidence in Court
 - Steve Addicott - 2/4/13 - 10 am
- Data Forensics: Opening the Black Box
 - John Fremer & Dennis Maynes - 2/4/13 - 2:45 pm
- A Synopsis of the Handbook of Test Security
 - David Foster & John Fremer - 2/4/13 - 5 pm
- From Foundations to Futures: Online Proctoring and Authentication (Kryterion session)
 - David Foster - 2/5/13 - 11 am
- Make, Buy, or Borrow: Acquiring SMEs
 - Nat Foster - 2/5/13 - 1:15 pm



ATP Sessions of our presenters

- Free Tools to Nail the Brain Dumps
 - Monday 2/4/2013 4:00 PM - 5:00 PM
 - Lawrence Rudner
- The Game's Afoot: Sleuths Match Wits
 - Tuesday 2/5/2013 11:00 AM - Noon
 - Lawrence Rudner & Dennis Maynes
- Online Education - How Can We Make Sure Students are Really Learning?
 - Tuesday 2/5/2013 11:00 AM - Noon
 - Jamie Mulkey
 - Mika Hoffman



We hope to "See You" at our next sessions!

- Caveon's Lessons Learned from ATP
 - To be held: Feb 20, 2013
- The next webinar in the Online Education series:
 - Designing Assessments for the Online Education Environment
 - To be held: March 20, 2013