

International Perspectives on Score Reporting in Credentialing: Best Practices for Providing Meaningful Feedback to Examinees

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Background

- Score reports are a critical point of contact between a testing agency and examinees
- Often, they are intended to serve multiple informational purposes, including
 - Report Performance / Status
 - Provide Context
 - Offer Action / Choices
- Depending on test purpose, of course

Reporting in Credentialing

- Candidates often expect more now:



This may spring from reporting systems used in educational settings (US and elsewhere), as much descriptive information is often provided to stakeholders

Professional Responsibility in Reporting

- *International Guidelines on Quality Control in Scoring, Test Analysis, and Reporting of Test Scores* (ITC, 2012)
- *The Standards for Educational and Psychological Testing* (AERA, APA, & NCME, 1999)
- *Code of Professional Responsibilities in Educational Measurement* (NCME, 1995)
- *Code of Fair Testing Practices in Education* (Joint Committee on Testing Practices, 2004)
- *ISO 17024* (ANSI, 2012)
- *Standards for the Accreditation of Certification Programs* (NCCA, 2009)

Aims

Today's focus is on reporting feedback:

1. Review approaches (including examples) for providing feedback to candidates
 - Numerical and Categorical approaches
2. Identify some potential issues/concerns
3. Advance a research agenda for reporting feedback in credentialing

This paper builds on recent work by van den Heuvel, Zenisky, and Davis-Becker (2014) advancing a process for report development in credentialing

What is feedback in credentialing reporting?

- Many different strategies and approaches are currently employed among various agencies
 - Content considerations
 - Psychometric considerations
 - Design and format considerations
- 20 credentialing reports surveyed
 - Not representative sample, but informative in aggregate

Elements of reporting subdomain performance

- List of subdomains
- Subdomain performance characterization
 - Results can be represented by numbers or by categories of performance
 - Various display formats are used
 - graphics, tables, text
- Other information
 - Exam weights / proportion of test per subdomain, normative data, number of items

Subdomain results: By the numbers

- An approach to reporting subdomains is by using numbers to communicate scores
 - Percent correct
 - Subscores

Examination Score Report

ISTQB Certified Tester Foundation Level

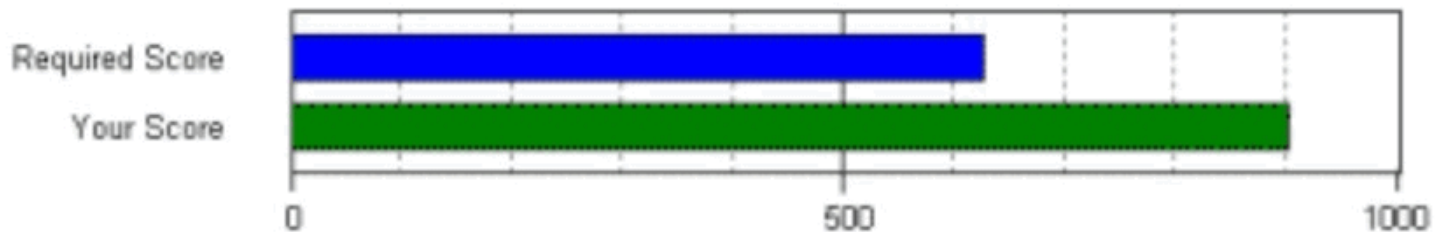
CANDIDATE: John A. Estrella

DATE: June 24, 2007

TIME: 7:37 PM

EXAM NUMBER:

ELAPSED TIME: 0 hr 2 min 47 sec



Passing Score: 625/1000

Your score: 900/1000

Grade: Pass

Section	Items	Percent Correct
1. Chapter 1: Fundamentals of testing	7	86%
2. Chapter 2: Testing throughout the software life cycle	6	100%
3. Chapter 3: Static testing	3	100%
4. Chapter 4: Test design techniques	12	92%
5. Chapter 5: Test management	8	75%
6. Chapter 6: Tool support for testing	4	100%

Subdomain results: Categories of performance

- Instead of numerical subscores, credentialing agencies use categories to report proficiency to candidates
 - Relative to an Absolute Criterion or Standard
 - Relative to Other Candidates
 - Relative to Test Items

Relative to an Absolute Criterion or Standard

- Categories here have an absolute meaning in context of performance and proficiency
- The category language seen here includes:
 - Proficient, Moderately Proficient, Below Proficient
 - Below the Passing Standard, At the Passing Standard, Above the Passing Standard
 - Poor, Borderline, Acceptable, Good

National Board of Osteopathic Medical Examiners, Inc.

Comprehensive Osteopathic Medical Self-Assessment Examination Phase 1

PERFORMANCE PROFILE

Name:

Total Score:

Report Date:

Timing Mode:

	Poor Performance	Borderline Performance	Acceptable Performance	Good Performance
Patient Presentation				
Asymptomatic & General Symptoms			██████████	
Digestion- & Metabolism-Related			██████████	
Sensory Alteration-Related				
Motor Alteration-Related				
Human Sexuality- & Genitourinary-Related		██████████		
Respiration- & Circulation-Related				
Thermoregulation-Related				
Tissue- & Trauma-Related				
Human Development-Related				
Physician Task				
Health Promotion & Disease Prevention				
History & Physical				
Diagnostic Technologies		██████████		
Management				
Scientific Understanding of Mechanisms				
Health Care Delivery Issues				
Discipline				
Anatomy				
Physiology	██████████			
Biochemistry				
Pharmacology				
Pathology				
Microbiology				
Behavioral Sciences				██████████
Osteopathic Principles & Practice (OPP)				

Relative to Other Candidates

- Categories of performance are defined relative to how other candidates perform
 - Typically conceptualized as passing candidates
 - Weaker, comparable, stronger
 - Lower, borderline, higher
 - Level 1, Level 2, Level 3
 - Idea is that failing candidates may want to target their remediation in such a way as to align their performance profile to that of successful candidates

Dear Jane Doe,

On behalf of the CAIA Association, let me be the first to congratulate you on passing the CAIA Level I examination. Passing this CAIA exam is the first step towards earning the CAIA designation. Of those who sat for the exam in [the most recent administration], [X%] were successful in passing.

Candidate Performance Report

Jane Doe
jdoe@doe.com

CAIA Level I Examination
 [Most Recent] Administration

Overall Result: PASS

Below is a performance profile developed for you to aid in self-assessment by indicating your areas of relative strength and weakness compared to a reference group. This reference group is comprised of candidates who scored within the bottom quartile of those who passed the exam in [the most recent administration]. To create


Level I Examination Topic (Exam Weights)	Relative Performance Level*				
	Weak	Lower	Comparable	Higher	Outstanding
Professional Standards and Ethics (15%-20%)				✓	
Introduction to Alternative Investments (15%-20%)			✓		
Real Assets (5%-10%)				✓	
Hedge Funds (15%-20%)			✓		
Commodities (5%-10%)				✓	
Private Equity (5%-10%)				✓	
Structured Products (5%-10%)				✓	
Risk Management and Portfolio Management (15%-20%)			✓		

standard deviations of the average score of the reference group. For more information on the determination of these performance levels, see the [Grading FAQs](#) section of the CAIA website.

Examinations are analyzed by candidate number only and all results are kept confidential.

I hope that you will take the next step and register to sit for the Level II exam in the next administration. Please refer to www.caia.org for all the information you need to register and obtain the study materials.

Again, my congratulations and I look forward to your future participation in the CAIA program.



Nelson Lacey, Director of Examinations

Relative to Items

- Categories of performance are defined relative to how other candidates perform on content
 - Typically clustered around objectives or domains
 - Weaker, comparable, stronger
- Failing candidates often want to know which items they missed
 - Security concerns discourage individual items

ORACLE

CERTIFICATION PROGRAM

Examination Score Report Examinee Name

Oracle Testing ID: OC0825145

1Z0-144 Oracle Database 11g: Program with PL/SQL



Exam Date: 07/26/2013

Registration: 259575457

Center ID: 62710

Your Score: 91%

Passing Score: 65%

Result: Pass

Feedback on your performance is printed below. The report lists the objectives for which you answered a question incorrectly.

- Create triggers on DDL statements
- Describe and use conditional compilation
- List and describe various data types using the %TYPE attribute
- Manage triggers
- Use the DBMS_SQL package
- Work with procedures

If this is the final exam in your certification path, you are required to complete the following steps to ensure delivery of your Certification Success Kit.

- Visit certification.oracle.com and select your certification path to confirm you are aware of all certification requirements.
 - Please note some Certification tracks require Oracle training and the submission of the Course Submission Form.
- Check certview.oracle.com to confirm that all completed components (exams and training as applicable) are in your profile correctly.
 - If training is required and is not in your profile, you need to submit the Course Submission Form providing evidence that you have completed the required training.
 - If completed exams are not in your profile, you may have completed the exams under different Oracle Testing IDs.
 - Contact www.pearsonvue.com/oracle/idmerge to merge multiple IDs under one Oracle Testing ID. You will identify which Oracle Testing ID will be the surviving ID.
- Go to pearsonvue.com/oracle, select My Account, log in and select "Personal Info" to confirm that your address is correct
 - The address that is on file in Pearson VUE profile must be your CURRENT personal or business mailing address; Oracle does not ship to third party training organizations.

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To review Certification requirements and find out about Oracle University's recommended training to prepare for Certification Exams, visit <http://www.oracle.com/education/certification>

To view your Exam and Certification history, and verify your Certification to third parties, visit <http://certview.oracle.com>

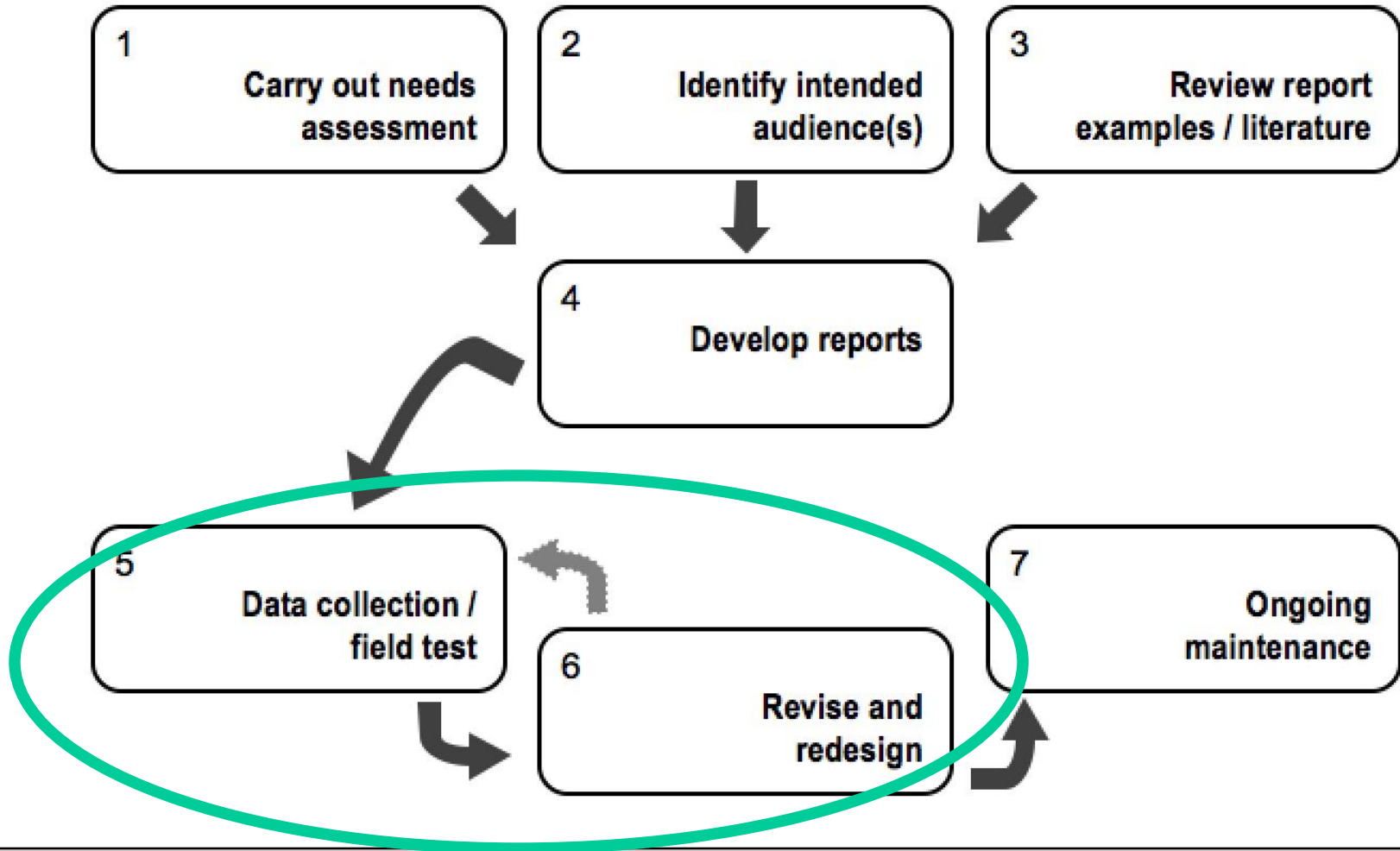
To opt-in to receive the Oracle Certification E-Magazine, visit <http://www.oracle.com/admin/account/>

To view the Oracle Certification Program blog, visit <http://blogs.oracle.com>

Summary: Subdomain Reporting Approaches

Numerical	Categorical
<ul style="list-style-type: none">• Percent Correct• Subscores<ul style="list-style-type: none">- Raw or Scale Score	<ul style="list-style-type: none">• Absolute Criterion/Standard• Other Candidates• Test Items
<p><i>Potential Issues seen:</i> Limited context/information Often multiple scales in place Lack of weights/proportions Inclusion of precision info</p>	<p><i>Potential Issues seen:</i> Lack of weights/proportions Density of text Complexity of results relative to reference group</p>

That's a question for RESEARCH!



Concluding Questions

- Many strategies for reporting candidate feedback
 - What approaches facilitate understanding?
 - What approaches are most useful?
- Some agencies field test reports, but quantitative and qualitative work remains to be done to help agencies provide meaningful feedback

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