

2014 Report to the North American CCA Board

CCA Exam Program

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Report Overview: This report provides a brief overview the goals and objectives of moving forward with the CCA Exam Program. I will provide additional detail and will be available for discussion and to answer questions at the meeting in Sacramento.

- A letter was sent to Local Board Exam contacts in April 2014 that outlined changes.
 - Goals for the CCA Exam Program:
 - Consistency and Standardization Across All Exams,
 - Compliance with Accepted Standards for Credentialing Exams, and
 - Operate and Maintain an Exam Program that is Legally Defensible.
 - Start now, move forward to attain compliance with program.
- Authorize Exam Software
 - We are now using an exam development software called Authorize.
 - This tool will be instrumental in keeping current with Performance Objectives (POs) and the associated exam questions. The software is set up using your POs (called the blueprint in Authorize). Exam questions are then entered into the software under each PO. As a result, each exam will, by default, have a current PO list and exam questions linked to those POs. The software also provides a secure platform for exams.
 - As exam questions accumulate over time, a bank of questions is built as well as a record of when those questions were used in an exam and what number in the exam that question was.
 - Exam statistics are linked to questions over time and can be used to support exam scoring from a psychometric standpoint.
 - Authorize will streamline what you do for your exam programs.
 - Currently we have each Local Board's most recent blueprint (or POs) entered into Authorize for you as well as (at a minimum) the questions from your February 2013 Exam. If I have additional information or updates, I have or will be entering that data.
 - A short demonstration of the Authorize exam software will be presented in Sacramento.

A number of the Local Boards have contacted us and we have begun to assess those programs and are working on a variety of things, dependent on the specific board/exam needs. I have been looking at the information that I have on all of the programs and will be contacting everyone to discuss working together as outlined below.

- Obtaining consistency across the entire CCA exam program will require that everyone follows the same procedures.
 - Updating POs on a set schedule.
 - Conducting a Job Task Analysis (also called End User Surveys), which is something we will facilitate for you.

- Performing an Angoff analysis every 4 to 5 years to help set a defensible cut score for each exam.
- Standardizing the number of questions for local exams to 100.
- Using only one exam form per calendar year i.e., no changes in exams for the August exam if one is given). This will help in strengthening exam statistics and will keep the program costs lower. This change was effective this year.
- Scores are reported in the same format for everyone; this is proposed as Pass/Fail, which the EPC discussed and supported at their July 2014 meeting and is consistent with standard procedures for credentialing exams. A detailed explanation of the Pass/Fail rationale is provided below.
- Consistent in how the exam statistics are analyzed and maintained.
- Updating the Policy and Procedures Manual to reflect this standardized process, so the document can also act as a reference for local boards, as well as for the International Exam.

Summary of Workflow for Local Boards (and the EPC for the ICCA Exam)

- Update Performance Objectives.
- Perform a Job Task Analysis (formerly known as an End User Survey).
- Determine number of questions asked in each exam section, competency area, and objective.
- Update exam.
- Perform an Angoff analysis to set a cut score.
- Determine equating items for use in setting cut scores between Angoff sessions.
- Training in Authorize.

2017 Goal of Computer Based Testing.

- We would be able to export the exam forms from this software directly to a testing center.

Training Local Boards in Authorize

- Dependent upon the Local Board Exam committee.

Beta 2016 Computer Based Exams

- Will need volunteers, but will be dependent upon the Local Board exam being up to date with the required workflow items.

Pass/Fail Rationale

Certification exams are designed and built for the distinct and express purpose of determining whether an examinee is either above or below a single ability level, which is represented as the cut score. No other inference or conclusion can be made from the scores of the exam. Regardless of how high or low an examinee scores on the exam, only one valid conclusion can be made: that the examinee either does or does not possess the minimally-acceptable knowledge, skill, and abilities for the content covered by the exam. Reporting actual scores for the exams leads to invariable comparison of scores and the attempt to draw meaning beyond which the exam was designed to provide. These exams are specifically designed to maximize the information at the cut score, so the validity and reliability is maximized at that score. However, while some information is available above and below that score, no reliable inferences can be made. If two scores are both above the cut score, the design of the test provides a high level of confidence and reliability in the decision to pass both examinees. However, there is simply not enough information built into the exam to draw any conclusion about whether the

ability of the higher-scoring examinee is actually higher than the lower-scoring examinee. Yet this is precisely what people are inclined to do with test score information. Therefore, since the only valid decision that can be reliably made from the test scores is either a pass/fail decision that is the only result we report on the exams.

Please be patient as we work through this process; there are 30 Local Board exams, so it will take us a while to update everyone, but the goal is to have everyone updated and ready for the goal of computer based exams in 2017.

I look forward to working with each Local Board to take our exams to the next level, reach those standards that will make the exams legally defensible, and comply with accepted standards for credentialing exams. Please feel free to contact me at any time at dgibas@sciencesocieties.org or at either of the numbers listed below.

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