



2014 CCA NORTH AMERICAN BOARD MEETING

EXAMS AND PROCEDURES

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CCA EXAM AND PROCEDURES

- ◎ What are we going to talk about today?
 - ◎ Goals and Objectives for the CCA Exam program.
 - ◎ Procedures as we move forward.
 - ◎ New ideas and working together.
 - ◎ Exam software.
- ◎ What is my role?



DAWN GIBAS

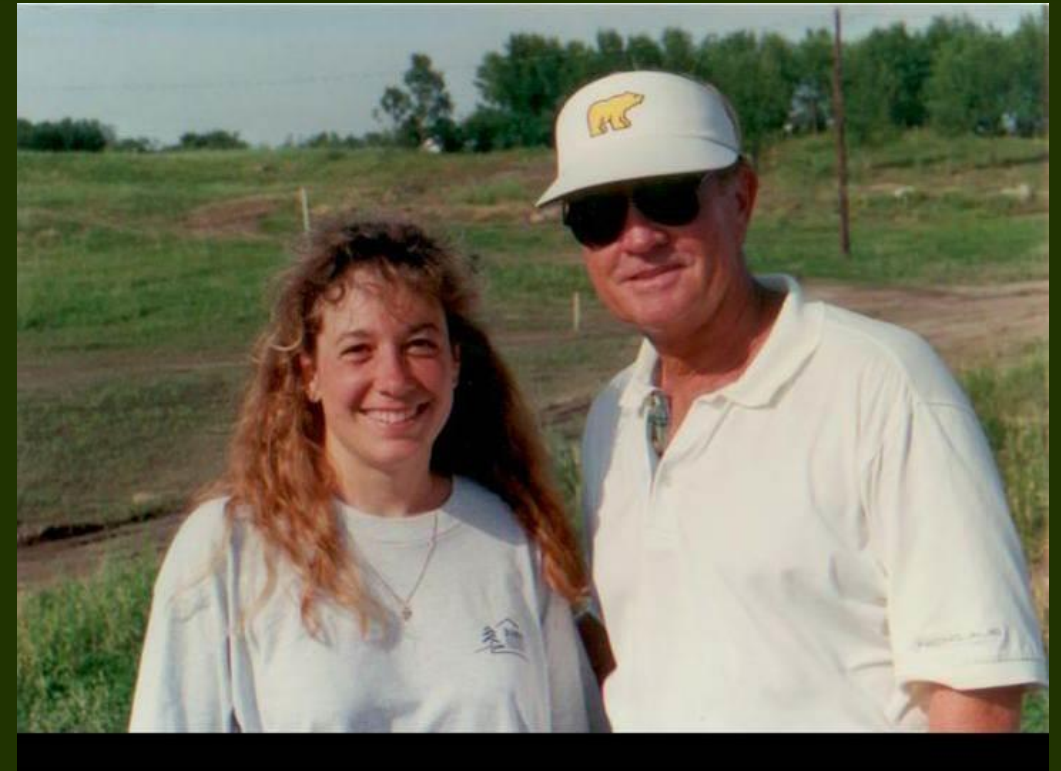
- ◎ B.S., University of WI – Madison, Soil Science (originally from WI)
- ◎ M.S., University of MN – Soil Physics
- ◎ Ph.D., University of MN – Forest Hydrology

- ◎ Certified Professional Soil Scientist since 1994
- ◎ Licensed Soil Scientist (MN) since 1998
- ◎ MN Licensing Board Member
- ◎ Chair of the CSSE for a number of years



DAWN CONTINUED

- © Environmental Consulting
- © County Government
- © Academia
- © ASA/SSSA – responsible for all credentialing exams, some ed., and misc. other things.





ICCA EXAM PROGRAM

- ◎ International Certified Crop Adviser Exam.
 - ◎ Written and maintained by the EPC.
 - ◎ 150 Multiple Choice Questions
 - ◎ Based on – and linked to – Performance Objectives. Can also be referred to as the general state of the practice.
- ◎ Local Board Exams (30)
 - ◎ 100 Multiple Choice Questions (new standard)
 - ◎ Tests specific State, Province or Regional knowledge.



CCA EXAMS

- ◎ ICCA is meant to be the “base” exam. Tests fundamental concepts, knowledge and application of agronomy.
- ◎ Local board exams should test more specific knowledge of a state/province or region.
- ◎ Exams are developed/written to protect the public by determining competence or testing to the minimally qualified CCA.



EXAMS

- ◎ Both the ICCA and Local Board exam must be passed to be certified as a CCA.
- ◎ Exams can (and are) taken more than once.
- ◎ Must pass the exam, not just sections.
- ◎ There will be changes in how results are reported starting in 2015.
- ◎ Moving towards computer-based testing in 2017.



PERFORMANCE OBJECTIVES

- ◎ Basic Sections of all CCA Exams
 - ◎ Nutrient Management
 - ◎ Soil and Water Management
 - ◎ Pest Management
 - ◎ Crop Management



PERFORMANCE OBJECTIVES

- © POs are free to download from the CCA website for all exams.
- © Major sections are divided into competency areas, with objectives within each competency area.
- © This structure is important to understand with respect to the exam software – Authorize.



CCA EXAMS: GOALS AND OBJECTIVES

- ◎ Consistency and Standardization across all exams.
- ◎ Compliance with Accepted Standards for credentialing exams.
- ◎ Operate and Maintain an Exam Program that is Legally Defensible.



HOW DO WE GET THERE?

- ◎ Start now, from wherever you are.
- ◎ We are interested in moving forward from this point.
 - ◎ This is a partnership and we will be working together with everyone to update procedures within and across programs.
- ◎ First step is to assess where each program is and move forward from there.



WORKFLOW FOR EXAMS

- ◎ Update Performance Objectives
- ◎ Perform a Job Task Analysis (JTA)
- ◎ Determine exam partitioning from JTA
- ◎ Update exam
- ◎ Perform an Angoff analysis to set a cut score
- ◎ Work with and learn item statistics
- ◎ Training in Authorize



UPDATE PERFORMANCE OBJECTIVES AND PERFORM A JOB TASK ANALYSIS

- ◎ Performance Objectives (POs) should be updated periodically.
 - ◎ “state of the practice”
- ◎ Need to provide opportunity for feedback from CCAs in the state/region/province with a Job Task Analysis (JTA).
- ◎ We will facilitate the JTA.

USE JTA INFORMATION TO UPDATE EXAMS

- © The JTA will provide feedback on the percent of the exam that should be covered in each major area and also competency areas.
- © Results of the JTA are approved by the Local Board prior to updating the exam.
- © Upon approval, the exam is updated using the new POs and results of JTA.

LEGALLY DEFENSIBLE EXAMS

- ◎ Use the Angoff analysis to set a cut score for the updated exam.
- ◎ We will lead this process, supported by our psychometrician.
- ◎ Completed every 4-5 years.
- ◎ Equating statistics used in-between.
- ◎ Learn to use item statistics to make decisions.



CONFIDENTIALITY AND EXAM SECURITY!





LOCAL EXAM COMMITTEE FUNCTION

- ◎ PO process.
- ◎ Exam development and writing.
- ◎ Finalize exam administration working with the staff (Dawn) to
 - ◎ review the item analysis
 - ◎ approve or set cut scores
- ◎ Other duties as needed.
 - ◎ Example: Angoff analysis



AUTHORIZE

- © Moving forward, all exam questions are written, edited and maintained in Authorize.
- © Exam Committee members need to work with this software throughout the year.
- © The software allows us to more easily write and maintain questions, their links to POs, metadata, and sets us up for computer based testing in the future.

AUTHORIZE DEMO

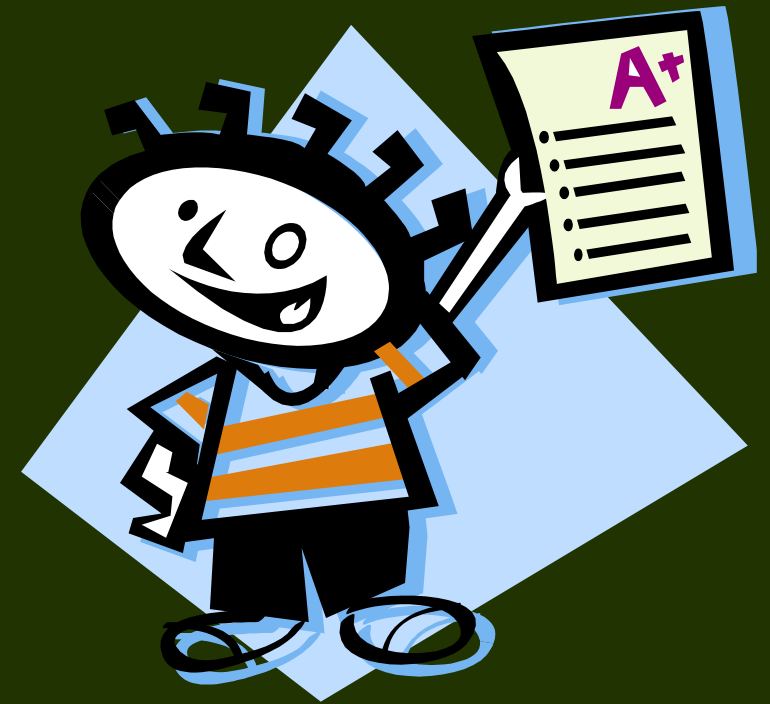


HOW DO WE SCORE THE EXAMS AND REPORT SCORES?



ESTABLISHING EXAM SCORES

- ©The CCA program uses a psychometrician to aid us in the statistical analysis and legal defensibility of our exams.
- ©We use the modified Angoff analysis or process to determine cut scores for our exams.





REPORTING EXAM SCORES

- ◎ Starting in 2015
 - ◎ Exam scores will be reported as Pass/Fail
 - ◎ This will pertain to all exams, both CCA and Soils
- ◎ Rationale was included in the information for the conference and on the next slide.
- ◎ Can include category feedback to examinee when:
 - ◎ Value is less than 50% correct in any category.



REPORTING EXAM SCORES

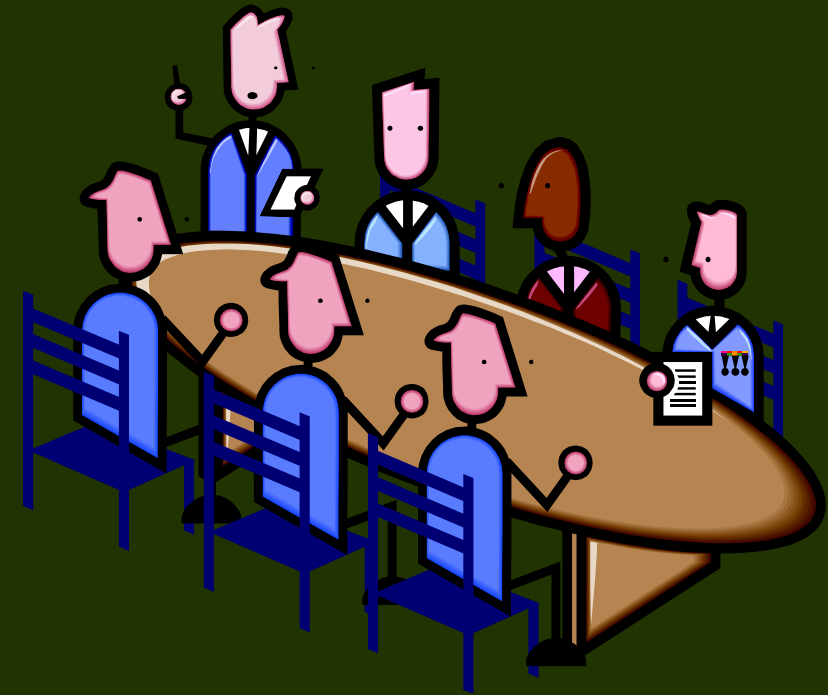
- ◎ Starting in 2015 Pass/Fail
 - ◎ The only valid inference of a cut score is whether an examinee will pass or fail the certification exam.
 - ◎ Reporting scores has caused issues and provides confusion as to what the scores mean.
 - ◎ The exam is only designed to measure competence. Statistically, the only valid representation is a pass/fail, nothing more can be inferred.



WORKING AS PARTNERS

Changes to be aware of:

- ◎ Local Board Exams should consist of 100 questions.
- ◎ Only one exam form per year – no changes on the August exam (if you give one).
- ◎ Questions must be input to Authorize to be available for exam use – moving towards 2017.





MOVING FORWARD...

- © I look forward to working with you.
- © Contact me at any time with questions: dgibas@sciencesocieties.org



QUESTIONS?

