

REPORT OF THE CPA EXAMINATION REVIEW BOARD

on the 2022 - 2023 Uniform CPA Examination and International Qualification Examination



CPA EXAMINATION REVIEW BOARD

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REPORT OF THE CPA EXAMINATION REVIEW BOARD

To the Boards of Accountancy of the Fifty-Five Jurisdictions of the United States of America:

We have evaluated the significant adherence with policies and procedures utilized in the preparation, grading and administration of the Uniform CPA Examination and the International Qualification Examination for the licensing of certified public accountants from October 1, 2022, through the date of this report. Our procedures included observation of processes, inquiry, and inspection of pertinent records.

Based on our evaluation, nothing came to our attention that would prevent the Boards of Accountancy from relying on the Uniform CPA Examination and the International Qualification Examination in carrying out their licensing responsibilities.

This report is intended solely for the information and use of the Boards of Accountancy and is not intended to be used by anyone other than the specified parties.

CPA Examination Beriew Board

CPA Examination Review Board September 30, 2023

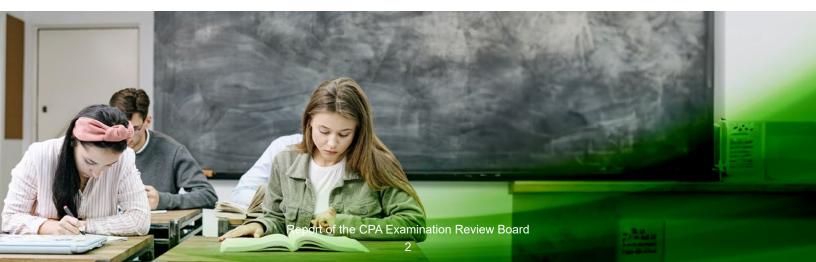
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CPA EXAMINATION REVIEW BOARD

Creation & Purpose

Few Boards of Accountancy have the resources to evaluate the psychometric quality and content of a licensing examination or to review its preparation, scoring and administration. Moreover, few Boards of Accountancy have the resources to evaluate the security and integrity of the electronic architecture and data communications surrounding a computer-based test (CBT). Because such evaluations and reviews are highly technical and time-consuming activities, they can be performed more effectively by a single agency acting on behalf of all Boards of Accountancy. Recognizing this need, the CPA Examination Review Board (ERB) was established as a committee of NASBA with the following charge.

Committee Charge

The ERB shall review, evaluate and report on the significant adherence with the policies and procedures utilized in the preparation, grading and administration of the Uniform CPA Examination and the International Qualification Examination used by the Boards of Accountancy for the licensing of certified public accountants to include observation, inquiry and inspections of pertinent records and report annually on the ongoing reliability of such examinations for the licensing of certified public accountants.

UNIFORM CPA EXAMINATION

The Uniform CPA Examination (Examination) is administered pursuant to a contract among the National Association of State Boards of Accountancy (NASBA), on behalf of its constituent members (Boards of Accountancy), the American Institute of CPAs (AICPA), and Prometric.



NASBA acts as the central clearinghouse to which all Boards of Accountancy or their designee submit information on eligible candidates and from which all Boards of Accountancy receive advisory scores and other Examination data.

The AICPA determines the content of the Examination, prepares the items/simulations, determines the method of scoring the Examination (including the choice of psychometric model), performs and coordinates the scoring of all test item formats including simulations and constructed response exercises, provides all quality control systems for test scoring, prepares advisory scores, and conducts statistical analyses of Examination results.



Prometric operates a network of computer-based test centers where candidates take the Examination and is responsible for Examination delivery at authorized test centers.



DESCRIPTION OF EXAMINATION REVIEW BOARD PROCEDURES



DEVELOPMENT

The Examination is developed by the AICPA Examinations Team (Examinations Team) in accordance with blueprints established by the AICPA Board of Examiners (BOE). The blueprints used in the 2022 and 2023 Examinations are based on the 2019 Practice Analysis. Examination content is reviewed and modified by the Content Preparation Subcommittees, given approval by the Content Committee, and given final approval by the BOE. We reviewed and evaluated the development of the Examination. Our review included conferences with members of the Examinations Team, observations of the activities of the BOE, its Content Committee and Content Preparation Subcommittees, and interviews with the Examinations Team leadership and staff. We reviewed and evaluated systems security controls and compliance with certain administrative policies and procedures.

We compared test items to the blueprints to determine compliance with the approved guidelines.



PRACTICE ANALYSIS

The Practice Analysis Oversight Group established by the BOE designed and carried out an updated Practice Analysis, which was completed in 2019 as a basis for the blueprints used in the version of the Uniform CPA Examination launched in July 2021. In connection with our evaluations completed from October 1, 2022 through the date of this report, we monitored and reviewed each major stage of the Practice Analysis, including the overall framework for this update and its oversight, the technical research design of the study, the sampling procedures used including defining the target population and the sampling frame, the design and use of the matrix sampling methods, the planning and execution of the computer-based survey, and the statistical analysis of the survey results and reporting thereof.

We evaluated the statistical quality indices for the results, such as the standard errors of the ratings, for the main sample and additional subsamples. We monitored and reviewed the work of the Content Committee, which used the Practice Analysis results to recommend revisions and additions/deletions to the blueprint. Finally, we reviewed the work of the BOE in finalizing the updated content and skill statements based on all this empirical and judgmental Practice Analysis work.



STANDARD SETTING

The AICPA conducted passing score studies to establish new standards for the Examination launched in 2017. In determining the new passing scores, the AICPA used sound scientific standard setting methods based on solid research; the methods used have a long history of use by high stakes testing agencies and had no obvious bias. The data were collected systematically, and statistical analyses were performed by psychometricians to ensure the standard-setting data were accurate and reproducible. The panel of experts who participated in the studies recommended a passing score for each section to the BOE. The BOE thoroughly discussed the panelists' recommendations and approved new passing scores.

The ERB performed a review of the standard setting process during the 2017 review. We reviewed the standard setting plan and design, observed the structure of the process, attended several standard setting panel discussions as well as the BOE deliberations and approval of the new passing scores. In addition, we reviewed the standard setting technical report in support of the passing scores.

DESCRIPTION OF EXAMINATION REVIEW BOARD PROCEDURES



NATIONAL CANDIDATE DATABASE

NASBA receives candidate information from Boards of Accountancy, or their designee, authorizing the candidate to test, and maintains such information in the National Candidate Database (NCD). We reviewed and evaluated the security policies and procedures related to the NCD and the Gateway System. Our procedures begin with testing the accuracy of the database processes and receipt of information into this database and end with the release of the advisory score.



DELIVERY

The Examination is delivered at Prometric test sites located throughout the jurisdictions of the Boards of Accountancy as well as selected international locations. We reviewed and evaluated Prometric policies, procedures and security controls relative to the Examination. We reviewed and evaluated security controls and compliance with administrative policies and procedures.



SCORING

We reviewed and evaluated the policies and procedures followed in the scoring and reporting of results of the Examination; we performed procedures related to the scoring of a selected sample. In addition, the psychometric consultant reviewed and evaluated the validity evidence for the Examination, including psychometric data from the tests, quality control policies and procedures, and statistical analyses of the Examination results.



PSYCHOMETRIC ASSESSMENT

A psychometric consultant assisted us in reviewing and evaluating the policies and procedures employed by the Examinations Team in preparing and scoring the Examination. We evaluated the psychometric model used to calibrate and score the computer-adaptive tests and many other important psychometric characteristics of the Examination such as the psychometric properties of simulations, candidate ability routing through adaptive testlets, the standard setting methods utilized by the BOE, and the passing scores established thereby. We also reviewed the rater reliability of those constructed response written communication exercises which were scored by human raters, the accuracy and consistency of the computer scoring of these written communication exercises, the correlations among test sections and item formats, and many other sources of validity evidence of the Examination. The psychometric consultant also assisted us in reviewing and evaluating the policies, procedures and controls for the Examination.



TECHNOLOGY ASSESSMENT

ERB technology assessment relied upon consultant reports prepared by third-party vendors on behalf of NASBA, AICPA, and Prometric. Reports included but were not limited to SOC 2, AT101, and ISO 270001.

INTERNATIONAL QUALIFICATION EXAMINATION

The purpose of the International Qualification Examination (IQEX) is to facilitate the U.S. CPA qualification process for those accounting professionals from other countries whose professional bodies have entered into Mutual Recognition Agreements (MRAs) with the U.S. accounting profession and to provide reasonable assurance to Boards of Accountancy that those who pass the



examination possess the level of technical knowledge and skills necessary for licensure to protect the public interest.

The International Qualification Appraisal Board (IQAB), a joint body of the AICPA and NASBA, is charged with overseeing, on behalf of the U.S. accounting profession, the preparation of MRAs with the accounting profession in countries seeking mutual recognition of accounting qualifications. Education, examination, and experience are the principal elements considered in granting a professional accounting designation to perform the attest function. In preparing an MRA, IQAB reviews the education requirements, the required body of knowledge, and the required standards of professional practice with respect to the granting of the professional accounting designation.

IQAB has currently established MRAs with the following professional bodies:

- Chartered Accountants Australia and New Zealand (CAANZ)
- CPA Australia (CPAA)
- Chartered Professional Accountants Canada (CPAC)
- Chartered Accountants Ireland (CAI)
- Institute of Certified Public Accountants in Ireland (CPA Ireland)
- Instituto Mexicano De Contadores Públicos (IMCP)
- Institute of Chartered Accountants of Scotland (ICAS)
- South African Institute of Chartered Accountants

The intent of IQEX is to test the differences between the Federal Taxation, Business Laws, and Ethics practices of the United States and the relevant practices of the MRA countries. Accounting professionals from the MRA countries have already demonstrated competence in the areas that are the same in the candidate's home country and the United States by virtue of meeting the requirements outlined in the MRA and remaining a Member in Good Standing with the professional accounting body in the candidate's home country.

IQEX PROCEDURES

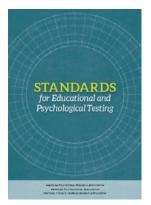
Beginning with the November 2012 administration, the IQEX transitioned to a new format that uses an administration of the Uniform CPA Examination's Regulation section as the required examination. As part of the transition, the IQEX no longer has a dedicated content specification outline (CSO) and instead adopts the content outlined in the Regulation section of the Uniform CPA Examination Blueprint. Therefore, we reviewed and evaluated the same procedures for IQEX as we did for the CPA Examination. We also reviewed and evaluated the IQEX candidate application and approval process, which is performed by NASBA, and the 2022 IQEX technical report, which was prepared by NASBA to provide validity evidence for the use of IQEX.



REVIEW AND EVALUATION FRAMEWORK OF THE CPA EXAMINATION REVIEW BOARD

The "Twelve Components for Effective Test Development" as described in the Handbook of Test Development (Lane, Raymond, & Haladyna, 2016) provide the framework for our review and evaluations. The "Twelve Components for Effective Test Development" are based on the Standards for Educational and Psychological Testing (AERA, APA, & NCME, 2014). These components are described in detail in Exhibit 1.

"The Standards for Educational and Psychological Testing (AERA, APA, & NCME, 2014) represent the consensus opinion concerning all major policies, practices, and issues in assessment. This document, revised every decade or so, is sponsored by three North American professional associations concerned with assessment and its application and practice: The American Educational Research Association (AERA), the American Psychological Association (APA), and the National Council on Measurement in Education (NCME)".



12 COMPONENTS BASED ON STANDARDS FOR EDUCATIONAL AND PSYCHOLOGICAL TESTING

- 1. Overall Plan
- 2. Content Definition and Claims Statement (Practice Analysis)
- 3. Content Specifications
- 4. Item Development
- 5. Test Design and Assembly
- 6. Test Production
- 7. Test Administration
- 8. Scoring Test Responses
- 9. Establishing Passing Scores (Standard Setting)
- 10. Reporting Test Results
- 11. Test Security
- 12. Test Documentation

MEMBERS OF THE CPA EXAMINATION REVIEW BOARD



Ruben Davila, CPA, CFF, Esq. is a professor at the University of Southern California's Marshall School of Business and Leventhal School of Accounting. Davila was elected Vice Chair of CalCPA Society's Education Foundation Board of Trustees. He has served on the

California State Board of Accountancy (CBA), the AICPA Board of Examiners (BOE), the BOE FAR Content Subcommittee, AICPA/ NASBA International Qualifications Appraisal Board (IQAB), NAS-BA's Nominating, State Board, Global Strategies and Education Committees. He is actively involved in university and corporate governance, having served on the executive board of the PAC 12 Academic Leadership Coalition and the USC Academic Senate. Davila is passionately involved with DEI issues and has developed multiple events for young professionals and students in partnership with universities, community colleges, high schools, professional societies and local communities. He developed a forensic accounting practice and served as a consultant and expert witness on several high-profile cases. Davila also co-starred in the 2021 Oscar-nominated short-film written by his daughter, "Please Hold".



Faye D. Miller, CPA, has served on the CPA Examination Review Board since 2021. Miller has been a Director-at-Large of NASBA's Board of Directors, Central Region Director, chaired NASBA's Audit and Communications Committees and was a member of

NASBA's Administration and Finance, Relations with Member Boards and CPE Committees. She has also served on the AICPA Board of Directors, was a Council Member-at-Large and member of the AICPA Audit and Political Action Committees. Miller served on the North Dakota State Board of Accountancy and North Dakota CPA Society Board of Directors. She is currently the Chief Auditor of Basin Electric Power Cooperative, in Bismarck, North Dakota.



Dolly Lalvani, CPA, is a director within the tax practice at PwC US Tax LLP. Lalvani has previously held several positions in public accounting at KPMG, Ernst & Young, and multiple local firms during her 30-year career. She was previously chair of the

Pennsylvania State Board of Accountancy. Lalvani is a member of the American Institute of CPAs and the Pennsylvania Institute of CPAs. She has also previously held the treasurer position at the Girls Scouts in the Heart of Pennsylvania and assistant treasurer at the Foundation for Enhancing Communities. She is currently on the Board of Trustees at Harrisburg University, a council member of the Pennsylvania Society and an executive board member at the United Way of the Capital Region. She

is a resident of Harrisburg, PA, formerly of Laredo, Texas, Lalvani earned a Bachelor of Business Administration from Texas A&M International.



A. Carlos Barrera, CPA, served as the chair of NASBA for 2020-2021. Barrera previously served as Southwest Regional Director, Director-at-Large, and Board Treasurer. He is a former chair of NASBA's

Administration and Finance Committee, Board Effectiveness and Legislative Support Committee, CPE Committee, Global Strategies and Standard-Setting and Professional Trends Advisory Committee, Nominating Committee, Past Chair Advisory Council, and Awards Committee. He also served on the AICPA's Professional Ethics Executive Committee from 2014-2019. A retired audit partner of the firm Carr, Riggs & Ingram, LLC, Barrera is a member of the American Institute of CPAs and the Texas Society of CPAs. From 2007-2013, he served on the Texas State Board of Public Accountancy, with two years as treasurer and two years as presiding officer. A resident of Dripping Springs, TX, Barrera earned a Bachelor of Business Administration degree from the University of Texas at Austin and a master's degree from the University of Texas at San Antonio.



Raymond N. Johnson, CPA, Ph.D., is a retired Oregon CPA and taught auditing concepts and practices, financial statement analysis, and a case course focused on developing students critical thinking skills at Portland State University for 35

years. He is an author on an auditing textbook, Auditing, a Practical Approach with Audit Data Analytics, published by John Wiley and Sons. He was the first recipient of the Harry C. Visse Excellence in Teaching Fellowship.

Johnson is now a professor emeritus from Portland State University. He also taught auditing and accounting at the University of Guam, Bond University, The University of Queensland, the Australian National University, and Southampton University.

Johnson currently chairs the Laws and Rules Committee for the Oregon Board of Accountancy, serves on the NASBA CPA Examination Review Board, and NASBA Standard Setting and Professional Trends Advisory Committee. He is the Immediate Past Chair of the International Accounting Education Standards Board's Consultative Advisory Group. Previously, Johnson served on the NASBA Board of Directors for seven years and previously chaired NASBA's Education Committee and the NASBA Ethics and Strategic Professional Issues Committee. He is the recipient of the 2020 NASBA Distinguished Service Award. Johnson also served on an AACSB Task Force, which was responsible for the most recent update to AACSB Accounting Accreditation rules. Over a three-year term, he served on AICPA Professional Ethics Executive Committee, which sets ethical standards for CPAs in the U.S. He is a former member of NASBA's Standard Setting Advisory Committee and served for seven years on the NASBA/AICPA International Qualifications Appraisal Board. Johnson also chaired the PSU Accounting Advisory Board.

Previously, Johnson served on the Oregon Board of Accountancy for seven years and he was chair of the board for two years. He is a past president of the Oregon Society of CPAs. Johnson previously served as staff to the U.S. Auditing Standards Board and has written numerous academic and professional articles.

CPA EXAMINATION REVIEW BOARD STAFF



Julie James, CPA, CISA, is Director of Risk and Compliance and the former CPA Examination Review Board Manager at NASBA. As the staff liaison for the CPA Examination Review Board, she is involved in planning, supervising, and conducting the ERB review. Julie has

over 18 years of experience in risk advisory, financial reporting, and management consulting services within various industries.

James has consistently committed her time and talent to public service organizations and the accounting profession. James currently serves as a member of the Tennessee Society of CPAs (TSCPA) Nashville Chapter Board of Directors, Advisory Council, and Student Outreach, Advancement and Recruitment Speakers Bureau. She has participated in the development of diversity, equity and inclusion CPE, various student panel discussions, and accounting career awareness programs.

James was selected as a 2020 CPA Practice Advisor "40 Under 40" honoree. Most recently, she was honored by the TSCPA as a recipient of the 2023 TSCPApex Impact Award.



Bottom row, left to right: Raymond Johnson, Ruben Davila and Carlos Barrera. Top row, left to right: Julie James, Dolly Lalvani, Faye Miller and Colleen Conrad.

CONSULTANT

Providing Support to the CPA Examination Review Board



Suzanne Lane, Ph.D. has been the psychometric consultant to the ERB since 2015. She is Professor Emeritus in the research methodology program at the University of Pittsburgh's School of Education. Lane is a former president of the National Council of Measurement in Education (NCME) and former vice president of Division D (Methodology and

Measurement) of the American Educational Research Association (AERA). She is member of AERA, American Psychological Association (APA), and National Council on Measurement in Education (NCME) Joint Committee for the Revision of the Standards for Educational and Psychological Testing (1993-1999).

Lane is a Management Committee member for the Revision of the 1999 Standards. Her work has been published in journals, including Educational Measurement, Applied Measurement in Education, Educational Assessment, and Educational Measurement: Issues and Practice. Lane is also an Editorial Board member for the Journal of Educational Measurement, Applied Measurement in Education, Educational Assessment, Educational Researcher, and Educational Measurement: Issues and Practice. She is a past chair of the AICPA Psychometric Oversight Committee and a Technical Advisory Committee member for the College Board, ETS, PARCC, PSI, U.S. Department of Education, NCEO and state assessment programs (DE, KY, NJ, NY, PA, SC, TN, TX). Lane is a member of the National Assessment Governing Board (NAGB).

EXHIBIT 1: TEST DEVELOPMENT PROCESS

Test Development Components	Test Development Recommendation	Example Relevant Standards
1. Overall Plan	Develop a detailed plan for the entire test development project, including information on all test components, a rationale for each component, and the specific methods to be used to evaluate the validity of all intended test score interpretations and uses and the psychometric quality of the test.	1.0, 2.0, 3.0, 4.0, 5.0, 11.1, 12.2, 13.4
2. Domain Definition and Claims Statement	Name and define the domain to be measured. Provide a clear statement of the claims to be made about examinee knowledge, skills, and abilities (KSAs).	1.0, 4.1, 11.2, 11.3, 11.13, 12.4
3. Content Specifications	Develop content specifications to guide item development, form assembly, score reporting, and other activities.	4.1, 4.2, 11.3, 12.4
4. Item Development	Identify suitable item formats and materials. Develop items and obtain validity evidence to support item use.	3.2, 4.7 -4.14
5. Test Design and Assembly	Design and create test forms based on test specifications; attend to issues related to test content, format, scoring rules, scaling and equating.	4.3, 5.0, 5.1-5.20, 11.15, 12.11, 13.2
6. Test Production	Produce a clear, accurate, and accessible test form.	4.0
7. Test Administration	Administer the test in a standardized way. Avoid threats to validity that may arise during administration.	3.0, 3.4, 4.3, 4.15- 4.17, 6.1-6.7, 12.16
8. Scoring	Establish a quality control policy and procedures for scoring and tabulating item responses. Ensure accurate and consistent scoring where judgment is required.	4.3, 4.18-4.23, 6.8- 6.9
9. Cut Scores	Establish defensible cut scores consistent with the purpose of the test.	2.16, 5.21-5.23, 11.16
10. Test Score Reports	Develop accessible and understandable test score reports.	2.0, 2.3-2.4, 2.13- 2.14, 5.1-5.5, 6.10 - 6.16, 8.7-8.8, 12.18
11. Test Security	Establish policies and procedures for ensuring test security during test development and administration.	6.7,6.14, 6.16, 7.9, 9.0, 8.5-8.6, 8.9- 8.12, 9.0, 9.21-9.23
12. Test Documentation	Prepare technical reports and other documentation supporting validity, fairness, and the technical adequacy of the test.	4.0, 7.0, 7.1-7.14, 12.6