

# The Uniform CPA Examination Alert

Fall 2009

## CBT-e Launch is Scheduled for January 1, 2011

When CBT-e is implemented on January 1, 2011, the CPA Examination will be transformed! New Content and Skill Specifications (CSOs/SSOs) will go into effect, new question formats will be introduced, and the examination section structure, section time allocations, and the percentage value of examination components will change. And that isn't all! CBT-e changes will be significant, they will be numerous, and they will happen pretty much at the same time. The launch of CBT-e will, in effect, be the launch of a new CPA Examination.

"CBT-e – the next generation of the CPA Examination – represents a significant advancement," says Colleen Conrad, Chair of the AICPA Board of Examiners. "More than a series of examination improvements, CBT-e is a leap into a more advanced technological environment – an environment that is necessary in order to enhance the operational and psychometric quality of the CPA Examination, improve the candidate experience, and provide a platform for further innovation."

### CBT-e Overview

In the fall of 2007, the AICPA Board of Examiners (BOE) decided to synchronize previously approved projects – such as the practice analysis then in progress – with several recommended examination changes. At BOE's request, an Invitation to Comment (ITC) on Proposed Examination Improvements was issued in October 2007 in order to elicit input on the suggested changes from accountancy boards and other stakeholders. Eighty-two ITC responses were received. After considering all of them, the BOE made decisions on the recommended changes in March and April 2008 – approving some for implementation and postponing or removing others. The combination of BOE-approved projects came to be known as CBT-e. (CBT stands for Computer-Based Testing and the "e" for evolution.)

*(continued on page 3)*

### Also In This Issue

|  |      |
|--|------|
| Uniform CPA Examination® Security: Chasing Cheating . . .                          | p. 2 |
| A CPA Vote of Confidence in the Computerized CPA Examination . . . . .             | p. 4 |
| CPA Volunteers Needed to Write Questions for the Uniform CPA Examination . . . . . | p. 4 |
| Focus on AICPA Psychometricians . . . . .  | p. 5 |
| CBT: Five Years and a Million Testing Events . . . . .                             | p. 7 |
| Meet the 2008 Sells Award Winners . . . . .  | p. 8 |
| Upcoming Events . . . . .  | p. 9 |
| Acknowledgments . . . . .  | p. 9 |



### The Vice-President's Desk

#### Update from Craig N. Mills

*Vice President – Examinations*

Our exciting news is **January 1, 2011** – the date just approved by the BOE for the implementation of all CBT-e changes and the new Content and Skill Specifications. This date will mark the introduction of a new generation of the CPA Examination – a major event for candidates, all examination stakeholders, and the profession as a whole. We look forward to the launch of CBT-e with much anticipation and are making every effort to ensure that the transition will be as smooth as it can be. The CBT-e article in this issue provides the latest information about the changes to come.

In its short history, the computerized CPA Examination has enjoyed remarkable success. CBT was launched in April 2004, reached a million sections administered in July 2009, and now there's CBT-e on the horizon. In between, there have been significant improvements – among them changes to the research task format and revised candidate performance reports. There is an article in this issue about the CBT launch and the lessons we have learned since 2004. I think you will enjoy it as CBT has been an interesting journey.

We often mention psychometricians and the impact of psychometrics on the examination, but many people don't know what psychometricians do or why they do it. It occurred to us that an article about AICPA psychometricians would be a good opportunity to provide information about the profession and its licensure examination role, while also introducing the group of psychometricians who work on the CPA Examination. Believe it or not, psychometrics is a fascinating field!

In view of the importance of CPA Examination security, the AICPA, NASBA and Prometric devote much time and effort to the protection of examination data. We were pleased that our constant vigilance paid off recently, when two cases involving unauthorized disclosure of CPA examination questions were favorably resolved. We are gratified to have won these victories and happy to share the information with you.

And one of my favorite topics – the Elijah Watt Sells awards. This issue contains information about the 2008 winners – ten remarkable individuals who are being recognized for their outstanding performance on the

*(continued on page 2)*

## Uniform CPA Examination® Security: Chasing Cheating

Identifying threats to Uniform CPA Examination data and preventing theft or unauthorized disclosure of examination content are among the most important responsibilities of Uniform CPA Examination partners – the AICPA, NASBA, and Prometric. Security requires constant vigilance, strict enforcement of security measures, and the flexibility to adapt to new challenges as they emerge. The considerable resources needed to maintain this major effort are part of the comprehensive Uniform CPA Examination security program now in effect.

Why is examination security such an important undertaking? According to Craig N. Mills, Vice President – Examinations, “Security is worth a significant coordinated effort because it is essential to the integrity and fairness of the Uniform CPA Examination. Maintaining examination security ensures that the value of passing the Uniform CPA Examination remains high and that all candidates have an equal opportunity to demonstrate their knowledge and skills.”

Security procedures to safeguard examination content are in effect throughout the examination process – while items are developed, reviewed, pretested, transmitted to test centers, in operational use, and in storage. Similarly, procedures to preserve the confidentiality of candidate data, including scores, are also in effect. In addition, there is a program of surveillance to detect unauthorized disclosure of examination content. These measures have recently produced results.

### Indictments of Guilt Issued In Korea For Violation of AICPA Copyright

In January 2009, the Seoul Central District Prosecutor’s Office in South Korea issued summary indictments of guilt for violation of copyright against a professor and the coaching school that employs him. The issuance of the indictments was the culmination of a significant effort by AICPA to address the infringement of examination materials in South Korea. “We view this as a major victory for the Uniform CPA Examination,” says Craig Mills. “We also believe that it sends an important message – that we are vigilant and will take strong measures to prevent, identify, and stop examination security violations.”

The event that led to the criminal prosecution and issuance of the summary indictments was the discovery of notes left behind by a candidate at a test center located in Guam. The notes were linked to the coaching school and included Uniform CPA Examination questions. The AICPA determined that some of the examination questions in the notes were “live” – currently on the operational examination – while others were disclosed questions. The AICPA discloses a number of retired Uniform CPA

Examination questions every year to review course providers who have entered into licensing agreements with the AICPA. Neither the coaching school nor the professor is a party to such a licensing agreement and, therefore, neither was entitled to use disclosed questions. Needless to say, AICPA considered the school’s disclosure of “live” examination questions as an even more serious matter.

In order to learn more about the school’s practices – in print, online, and in the classroom – the investigation was extended to Korea. Eventually, criminal charges were filed. On January 28, 2009, the Prosecutor’s Office issued the summary indictments of guilt against the professor and the school. Fines were levied against each party for copyright violation. The existence of the summary indictments means both the school and the professor now carry a criminal record and will face even greater criminal penalties for any future unlawful activity.

Following the issuance of the summary indictments, it has been determined that the professor does not hold a CPA license although he holds himself out to the public as being a CPA. It appears that he has represented himself as a CPA on the sole basis that he previously passed the Uniform CPA Examination. Meanwhile, the coaching school has appealed the summary indictment issued against it, and the appeal is pending. The professor did not appeal his summary indictment.

### “Cease and Desist” Order Against PassingCPA Website

Earlier this year, the AICPA learned that Uniform CPA Examination questions were being posted on the PassingCPA website. Upon investigation, AICPA determined that a large number of the questions on the site were disclosed Uniform CPA Examination questions. In other words, they were the retired questions provided to review course providers who are parties to licensing agreements with the AICPA. However, PassingCPA had no such licensing agreement and was not permitted to make use of the disclosed questions.

Following AICPA’s issuance of a “cease and desist” demand letter to the PassingCPA website and its web host (PowWeb), PassingCPA stated its agreement to comply with the demand and cease its unlicensed and unauthorized use of Uniform CPA Examination materials. “This is another victory for the Uniform CPA Examination,” says Craig Mills. “It is also further evidence of our determination to protect Uniform CPA Examination content and maintain a fair testing experience for all candidates.”

### The Vice-President’s Desk *(continued from page 1)*

CPA Examination. Please join us in congratulating them for their extraordinary achievement.

As you will note, AICPA members have recently participated in a test-taker belief survey to find out what CPAs think about computerized testing and licensure examinations. Preliminary results show that the attitude of CPAs toward the examination experience is overwhelmingly positive. We plan to share the final survey results with you when they become available.

The excellent progress we have been able to make on CBT-e and other projects is mainly due to the continuing close collaboration we enjoy with NASBA and Prometric. Much more CBT-e information will follow in the next few months. Stay tuned! Meanwhile, you will be happy to know that the success of the CPA Examination continues, with the number of examinees still increasing. As always, I invite you to contact me at [cmills@aicpa.org](mailto:cmills@aicpa.org) with your comments.

## CBT-e Launch is Scheduled for January 1, 2011 *(continued from page 1)*

Once the scope of CBT-e was defined by the BOE, work to meet CBT-e goals began in earnest and continues to this day. CBT-e tasks are being carried out by the AICPA Examinations Team under the oversight of the CBT-e Sponsor Group, consisting of four BOE members. "It's been a lot of hard work but CBT-e is now on schedule for launch on January 1, 2011," says Ken Clark, Chair of the CBT-e Sponsor Group. "While a good deal remains to be done, much that is crucial to the success of CBT-e has already been accomplished, and we can be confident of our progress toward CBT-e launch."

### New Content and Skill Specification Outlines (CSOs/SSOs)

At its May 15-16, 2009 meeting, the BOE approved Content and Skill Specification Outlines (CSOs/SSOs) for the Uniform CPA Examination with guidance on the testing of International Financial Reporting Standards (IFRS). The CSOs/SSOs consist of updated statements of the knowledge and skills that will be measured by the CPA Examination, beginning on the CBT-e implementation date, January 1, 2011.

The newly released CSOs/SSOs are an updated version of the CSOs/SSOs approved by the BOE in October 2008, when the BOE stipulated that the extent to which IFRS have become part of entry-level practice be determined and reflected in additional CSO/SSO language. The Examinations Team staff explored this issue with the help of a group of IFRS experts and submitted its recommendations to the Content Committee. After considering the staff recommendations at its meeting in early May, the Content Committee presented revised CSO/SSO versions for consideration by the BOE. The BOE approved the changes recommended by the Content Committee on May 15, 2009 and the CSOs/SSOs became available in final form.

The release of the CSOs/SSOs brings a monumental effort to a successful conclusion. The new CSOs/SSOs are a product of the practice analysis study, undertaken in 2006 to maintain the validity and legal defensibility of the CPA Examination. They represent the contributions of many professional organizations, accounting firms, as well as thousands of individual CPAs.

"We are very grateful for the excellent cooperation extended to us by CPAs in all segments of the profession," says Craig Mills, Vice President - Examinations. "Their input has been essential to the development of CSOs/SSOs that accurately represent current entry-level practice and will become the new CPA Examination blueprint."

The AICPA is currently in the process of developing IFRS questions for inclusion on the CPA Examination. Since the May 2009 BOE approval of the updated CSOs/SSOs with guidance on the testing of IFRS, the AICPA has held two IFRS item writing workshops that resulted in several hundred new test questions. Additional IFRS item writing workshops are planned in 2009 and 2010.

### The Promise of CCMS

One of the most exciting recent CBT-e developments has been the successful debut on June 23, 2009 of the Complex Content Management System (CCMS) – a new item bank designed to meet CPA Examination requirements. But CCMS is much more than an item bank. It represents

the beginning of what will eventually become a seamless automated process for all activities from item development through scoring.

CCMS, an AICPA product, is probably the most advanced item management system currently available in testing. When fully implemented, it will house both multiple-choice questions and simulations – with all the required coding – in one database. It will permit online item development, simplify the "authoring" process which translates questions from Word documents to the required examination format, manage work flow, impose version and quality controls at every step in the item development process, and facilitate the creation of new examination versions.

CCMS represents a major step forward but, at this point, it is still in the early stages of implementation with stops for testing along the way. It will be some time before CCMS is fully functional and all of its benefits are realized. However, it has met all requirements so far and its improvements are already being felt.

"We are very pleased with the development of CCMS," says Craig Mills. "It has the potential to move us into the next operational phase with much improved efficiency and more effective use of technology. CCMS will help us meet CBT-e goals and then take us beyond CBT-e to further innovations."

### Examination Section Structure

When CBT-e is implemented, examination section components will be rearranged, as illustrated in the following tables:

| <b>Auditing and Attestation (AUD)<br/>Financial Accounting and Reporting (FAR)<br/>Regulation (REG)</b> |  |
|---|--|
| <b>Current Section Structure</b>  | <b>CBT-e Section Structure</b>   |
| Three Multiple-Choice Question (MCQ) Testlets   | Three Multiple-Choice Question (MCQ) Testlets  |
| Two Written Communication Tasks   | NO Written Communication Tasks   |
| Two Simulations - in current (long) format  | One testlet containing six-seven short task-based simulations (TBS); research question in NEW format |

| <b>Business Environment and Concepts (BEC)</b> |   |
|--|---|
| <b>Current Section Structure</b>               | <b>CBT-e Section Structure</b>                  |
| Three Multiple-Choice Question (MCQ) Testlets  | Three Multiple-Choice Question (MCQ) Testlets   |
|  | Three Written Communication Tasks on BEC topics |

Changes in section composition will result in time allocation adjustments for some sections. However, the total testing time for four sections (14 hours) will not change.

*(continued on page 4)*

## CBT-e Launch is Scheduled for January 1, 2011 (continued from page 3)

### The New Authoritative Literature Component of CBT-e

Although not originally scheduled to be part of CBT-e, the redesign of the authoritative literature platform has recently been accelerated to accommodate the codification of FASB Accounting Standards as well as server software upgrade requirements. “The new platform now being developed will facilitate authoritative literature updates and improve the efficiency of the entire process, says Michael Decker, Director of Operations and Development. “Although it will also require the introduction of a new research task format, we are making every effort to make the new format as candidate-friendly as the one now in use.”

In March 2009, the BOE decided that authoritative literature changes should be included in CBT-e to ensure simultaneous implementation. This means that when CBT-e is launched, candidates will be presented with a new research task format as well as updated authoritative literature text, including codified FASB Accounting Standards. Information about the new research task format will be provided in advance and revised tutorial and sample tests will be made available in time to enable candidates to become familiar with the new functionality.

### Information About CBT-e Changes

The Content and Skill Specifications (CSOs/SSOs) with guidance on the

testing of IFRS, approved by the BOE in May 2009 and scheduled for implementation on January 1, 2011, are now available on the CPA Examination website, [www.cpa-exam.org](http://www.cpa-exam.org).

As to other CBT-e changes, much more information is yet to be released. Over the next several months, a series of announcements will be widely distributed and posted on the CPA Examination website, [www.cpa-exam.org](http://www.cpa-exam.org). Among the topics to be covered will be the following:

- Changes in the weights of examination components
- New section time allocations (given the changes in section structure)
- Descriptions and illustrations of the new research task format and information about the launch of a new tutorial and sample tests
- Information about planned revisions to the candidate performance report
- Information about the standard-setting process and timeline. Standard-setting is scheduled to take place as part of the effort to set a new passing score – a requirement in view of the significant changes that CBT-e will bring to the CPA Examination.

General information about CBT-e is provided in the Fall 2008 and Spring 2009 issues of this publication. All previous issues of *The Uniform CPA Examination Alert* are posted on the CPA Examination website, [www.cpa-exam.org](http://www.cpa-exam.org).

## A CPA Vote of Confidence in the Computerized CPA Examination

What do CPAs think about the experience of taking the computerized CPA Examination and about computer-based testing (CBT) in general? Are licensure and certification examinations fair? Are they necessary? Are scores earned on such examinations an accurate reflection of knowledge and skills? And what are examinee perceptions about question formats, test security measures, and examination scores as predictors of professional success?

The opportunity to obtain views of examinees on these and other related topics was recently provided by the Test-Taker Belief Survey offered under the sponsorship of Questionmark™ in collaboration with the University of British Columbia. Invitations to participate in the survey were extended to several licensure and certification programs – both in the U.S. and other countries. The AICPA Examinations Team took advantage of this excellent opportunity to learn about the attitudes of CPAs to the CPA Examination and the computer-based testing experience.

In June, the online Test-Taker Belief Survey was completed by more than 3,000 AICPA members, most of them recently qualified CPAs who took the CPA Examination in computerized format. Among the views they expressed on various topics, the majority stated that they prefer computer-based examinations to those in paper-and-pencil format, that they believe CPA Examination scores are an accurate reflection of the knowledge of examinees, and that licensure examinations are necessary to ensure professional competence.

Responses to all 35 Test-Taker Belief Survey questions are currently being analyzed and the results will be posted on the CPA Examination website, [www.cpa-exam.org](http://www.cpa-exam.org) by the end of this year. In addition, a report summarizing the responses of all professional certification and licensing programs participating in the Test-Taker Belief Survey will be made available. This report will make it possible to compare the beliefs of CPAs about the CPA Examination with the views of other professionals about their certification or licensure examinations.

### CPA Volunteers Needed to Write Questions for the Uniform CPA Examination

The AICPA Examinations Team is looking for volunteers to write multiple-choice questions for the CPA Examination. To qualify, volunteers must have a current CPA license, a minimum of three years of experience as licensed CPAs, and expertise in one or more areas covered by the examination. In addition, any of the following kinds of experience is highly desirable – supervision of entry-level CPAs or familiarity with the workplace responsibilities of entry-level CPAs or teaching accounting students. AICPA membership is required. Affiliation with any CPA Examination review course is **not** permitted.

Volunteers are given question writing training by ACT or PES (AICPA's official vendors for multiple-choice questions). A small honorarium is paid for each question accepted by the AICPA. To apply, send an e-mail stating your background and expertise to Timothy Habick at [thabick@aicpa.org](mailto:thabick@aicpa.org)

Make an important contribution to the profession! Volunteer today!

## FOCUS ON AICPA PSYCHOMETRICIANS

Psychometricians are experts in the technical aspects of test development and scoring. Their expertise is essential to the credibility of examinations – especially those examinations that are used for licensure purposes in the service to a profession and in the protection of the public interest. The Psychometrics and Research group at the AICPA consists of five psychometricians – all of them with earned doctorates – whose job it is to maintain the high psychometric standards of the Uniform CPA Examination.

“We are lucky to have a very strong team of psychometricians with the depth of expertise and breadth of experience needed for innovation,” says Krista Breithaupt, Director of Psychometrics and Research. “The CBT-e project provides many opportunities for new and creative solutions but we are already thinking beyond CBT-e – about meeting the challenges posed by emerging trends in the accounting profession and testing technology. To prepare for such challenges, we maintain a strong research program under the guidance of members of our advisory body, the Psychometric Oversight Committee (POC) of the Board of Examiners (BOE), who have international reputations as contributors to modern methods and theories of testing.”

### What is the Role of CPA Examination Psychometricians?

In the broadest sense, the role of AICPA psychometricians is to ensure the psychometric integrity of the CPA Examination. What does that mean in practice? According to John Mattar, “the key concepts are reliability and validity – and an examination must have both in order to have psychometric integrity. Reliability refers to how precise examination scores are. It focuses on determining the level of measurement error – and every examination has some measurement error – and minimizing that error. Validity refers to the meaning of scores in relation to the purpose of the examination – in other words, ensuring that the CPA Examination measures what an entry-level CPA needs to know in order to protect the public interest.”

“Test validity has many aspects,” explains Michael Finger, “including construct validity (whether the examination measures what it is intended to measure), content validity (whether the questions cover all of the required topics), and criterion validity (whether examination scores correlate with other quantitative measures of the same knowledge or skills). Evidence of a test’s validity always goes beyond appearances and relies on quantitative, empirical data for support.”

“Psychometric integrity is an important factor in the credibility and reputation of the CPA Examination program,” says Krista Breithaupt. “The program is designed to meet international standards against which licensure and certification examinations are evaluated. These standards refer to how examination content is developed and validated, how examinations are constructed and scored, how the passing score is determined, and how decisions based on test scores are linked to each step in the process. Ultimately, conformity with the required standards is what makes an examination legally defensible and valid.”

### What Do CPA Examination Psychometricians Do?

Operations and research are the main responsibilities of members of the Examinations Psychometrics and Research team. Operations involves

work on the examination currently being offered – constructing new test versions in accordance with content and psychometric requirements, analyzing item and test data and, of course, scoring. “Scoring is a very important part of our work,” says John Mattar. “We go to great lengths to ensure that every candidate’s responses are scored with complete accuracy. From the time tests are assembled to the time scores are released, we apply quality control measures to verify the accuracy of every step in the process.”

Research is the mainstay of psychometric activity and an ongoing responsibility of psychometricians. Research topics are prioritized to meet specific project goals – to answer important questions about emerging trends, and to evaluate different approaches to operational methods. At present, much of the Examinations research is focused on CBT-e – the new examination release that will bring major changes to the CPA Examination.

In preparation for CBT-e, AICPA psychometricians are working with the POC to develop a plan for a standard-setting study – one component of a process that will enable the BOE to establish a new passing score based on an evaluation of input from CPAs who will be asked to review test questions and candidate performance data. The CPA Examination passing score was last evaluated in 2004, when the computer-based examination was launched. In view of the changes that CBT-e will bring, the passing score needs to be reconsidered.

John Mattar is currently overseeing studies that will provide a foundation for CBT-e recommendations to the POC (and subsequently the BOE) on such topics as the amount of time to be allocated to each examination section, and the weight to be given to scores from different parts of the examination – multiple-choice questions, written communication tasks, and task-based simulations (TBS).

Oliver Zhang is working on Panel Optimization – an emerging area of testing that uses sophisticated mathematical algorithms to solve test design complexities. “Panel Op,” as it is known, is used to create examinations by automated means in accordance with Content and Skill Specifications (CSOs/SSOs) and other design requirements. The challenge is to ensure that high quality tests are created for each examinee, and that high standards are sustainable over time. The re-engineering of the test assembly process has been undertaken to meet CBT-e requirements.

David Chuah is developing the IRT (Item Response Theory) calibration plan for CBT-e. Calibration refers to the method used to estimate item properties based on data collected from previous examinees. Even small changes in test content and format result in changes to the statistical properties of items, making re-calibration essential. The plan being developed will ensure that correct information about test content is used when CBT-e goes into effect.

This is just some of the research currently in progress. The full scope of ongoing research is much larger and has tactical as well as strategic goals. As Krista Breithaupt says, “Among our current projects, we are working on the development of new item types to assess targeted skills on the CPA Examination, the software systems and databases needed to create and store those items, and methods to score new tasks by automated means. We have an ongoing field-testing and usability program to pilot innovations that are being considered for future use on the

*(continued on page 6)*

## Focus on AICPA Psychometricians *(continued from page 5)*

examination. We are also looking at testing programs that emphasize communication, ethics, and media-based tasks on their examinations. These initiatives are aligned with an overall strategic plan for the CPA Examination.”

### What Do the Other Psychometricians in Examinations Do?

In addition to the five members of the Psychometrics and Research group, there are two psychometricians in Examinations who have different responsibilities. Craig N. Mills, a prominent psychometrician and computer-based testing pioneer, is Vice President of Examinations. Elaine Rodeck, a psychometrician and a CPA (as well as Canadian CA), is Director, Examinations Strategy. Her unique combination of expertise makes her “bilingual” – equally conversant with both accounting and psychometric issues.

### The Psychometricians on the Examinations Team

The psychometricians working on the CPA Examination have a sense of purpose and find much satisfaction in the work they do. As David Chuah says, “My job as a psychometrician is to make sure that the examination is fair and there is a logical basis for the form that it takes. We may use a lot of complicated mathematics and apply many complicated theories, but that does not change the underlying purpose – the fairness of the examination.”

Psychometricians are a scholarly group. Those working in Examinations regularly publish in journals, write book chapters, and give presentations

at professional meetings and conferences – in and outside the U.S. Most recently, all were selected for contributions in the program of the April 2009 Annual Meeting of the National Council on Measurement in Education (NCME).

Surprisingly, all Examinations psychometricians came to the profession from other academic disciplines. As undergraduates, they majored in such subjects as linguistics (Oliver Zhang), psychology (Krista Breithaupt, Michael Finger, David Chuah), education (Craig Mills) and economics (John Mattar), and did not learn about the field until they met psychometricians – usually faculty members – who encouraged them to enter the profession. Elaine Rodeck met the psychometrician who introduced her to psychometrics while taking a sailing lesson on Lake Michigan!

The psychometricians in Examinations are:

Krista Breithaupt, Director, Psychometrics and Research (Ph.D., University of Ottawa)

David Chuah, Psychometrician (Ph.D., University of Illinois)

Michael Finger, Psychometrician (Ph.D., University of Minnesota)

John Mattar, Senior Psychometrician (Ed.D., University of Massachusetts)

Craig N. Mills, Vice President – Examinations (Ed.D., University of Massachusetts)

Elaine Rodeck, Director, Examinations Strategy (Ph.D., University of Nebraska)

Oliver Zhang, Senior Psychometrician (Ph.D., University of Delaware)



Left to right: John Mattar, Elaine Rodeck, Craig Mills, Krista Breithaupt, Michael Finger, Oliver Zhang, David Chuah

## CBT: FIVE YEARS AND A MILLION TESTING EVENTS

On April 5, 2009, the computerized Uniform CPA Examination celebrated its fifth birthday. “Celebrated” is probably the wrong word to describe this landmark moment because there were no parties, or speeches, or fanfare of any sort. But the birthday did not pass unnoticed. In Examinations, many took time to consider how far the CPA Examination has come since then and what lessons have been learned along the way. Those who were on staff on April 5, 2004 reminisced about the excitement of the launch.

“I remember CBT launch as a day of truly remarkable achievement,” says Krista Breithaupt, Director of Psychometrics and Research. “It was especially impressive because the computerized CPA Examination was introduced in all jurisdictions all at once. Of course, it took several years and an enormous amount of work – on the part of the AICPA, NASBA, Prometric, and boards of accountancy – to make computerized examination delivery a reality, but the effort was well worth making. The launch was as smooth and uneventful as we all hoped it would be.”

### The Launch of the First Examination

The first computerized CPA Examination was launched at 8:00 a.m. on Monday, April 5, 2004 on Guam. Because of the time difference, it was then 6:00 p.m. on Sunday, April 4 on the East Coast of the U.S. mainland. Senior management staff from the AICPA, NASBA, and Prometric were on a conference call with Penny Vernon, the manager of the then brand new NASBA Guam Computer Testing Center, waiting with great anticipation for word about the first launch.

Penny Vernon, now Manager of NASBA’s Candidate Care Department, says “I remember the day of CBT launch very well. When the first candidate entered the center, I began to provide a ‘play-by-play’ description of his every action to those assembled on the conference call. I had to whisper into the phone as the candidate went through the check-in process, was shown to his work station, and entered his section ID number. When I announced that the examination had started, I heard cheers and the clinking of glasses on the phone. Meanwhile, all of us at the test center were exchanging silent ‘high-fives’ and ‘thumbs-up’ signs. After many years of preparation and anticipation, the computerized examination was a success!”

And then the first CBT examinee fell asleep at his work station. The Guam test center staff were all new and did not know what to do. Should they wake him up or let him sleep? They rushed to their manuals for instructions. Before they could find the relevant procedure, the candidate woke up and resumed testing. All in all, April 5, 2004 was a memorable day.

### The First Lesson Learned

The CPA Examination was probably the first testing program to provide access to professional databases during testing. Making authoritative literature available on the examination was a major CBT innovation. It was also a difficult task. The huge size of the files and inconsistent formats presented many technical challenges. However, by the time of

CBT launch, all technical issues were resolved. New research task formats – made possible by the introduction of authoritative literature – were developed and ready to be introduced on the examination.

But the implementation of research task formats came with some surprises. Almost as soon as testing began in April 2004, it became clear that it would not be possible to score many candidate responses to research questions by automated means because candidates proved to be more innovative than anyone expected them to be in a testing environment.

The early research questions required candidates either to type in their responses or to copy selected authoritative literature text into the response area. In typing their responses, some candidates failed to follow required format, and in copying text, some copied too much, some not enough, and some created responses by combining several excerpts. Automated scoring could not cope with these variations as it was based on a word-for-word comparison of the correct answer and the response. As a result, in order to give candidates credit for correct responses expressed in incorrect format, CPAs in Examinations had to spend many hours reviewing individual candidate examination records.

“The launch of the first research task formats taught us some important lessons,” says Richard DeVore, Simulation Development Leader. “In fact, every subsequent research task release has proved to be another very valuable learning experience. We now know how important it is to circumscribe response options in such a way as to make it very difficult – if not impossible – for candidates to deviate from the desired format. More importantly, perhaps, we have come to appreciate the infinite inventiveness and ingenuity that candidates bring to task of responding to examination questions.”

### The CPA Examination – 2004-2009

In the first five years of CBT, the CPA Examination has grown in stature to become a state of the art computerized licensure examination. It has maintained its operational stability and psychometric integrity, even while improvements were introduced – many of them intended to enhance the candidate experience. Above all, the CPA Examination has grown in size. The number of examinees has increased every year since launch – from about 44,500 in 2004 (there were only three testing windows that year) to more than 85,000 in 2008. The 2008 total is higher than the estimated number of candidates who tested in the last pre-CBT year.

### The Millionth Examination Administration

In July 2009, the CPA Examination experienced another landmark event, when the millionth examination section was administered. “The fact that computerized examination administrations have become such a routine occurrence is in itself evidence of CBT success,” says Craig N. Mills, Vice President of Examinations. “But a million administrations raises success to a higher level. It is no less than a testament to the operational stability of the Uniform CPA Examination and the consistency of its excellent performance.”

## Meet the 2008 Sells Award Winners

The recent announcement of the Elijah Watt Sells award winners for 2008 has turned the spotlight on another ten remarkably talented individuals who are being recognized for their outstanding performance on the Uniform CPA Examination. Their extraordinary achievement is that they earned the highest cumulative scores on the CPA Examination after passing all four examination sections on their first attempt. Given the fact that there were about eighty-five thousand examinees in 2008, the performance of the 2008 Sells Award winners is truly impressive.

The AICPA established the Elijah Watt Sells award program in 1923 to recognize outstanding performance on the Uniform CPA Examination. The number of Sells awards granted annually has varied over time but, under the current criteria, ten candidates are honored by the Sells Award program every year. The ten 2008 Sells Award winners are identified below. Please join us in congratulating all of them on their remarkable achievement!



**Jennifer Renee Clifton (VA)** received a Bachelor of Science in Commerce (May 2008) and Master of Science in Accounting (December 2008), both from the University of Virginia. She is currently working at KPMG, LLP in Washington, DC as an audit associate specializing in federal government agencies. Ms. Clifton is a member of the Blue Ridge Mountain Rescue Group and serves on the Board of Directors of the Appalachian Search and Rescue Conference.



**Christopher Michael Leon (MO)** earned two degrees from the University of Missouri – St. Louis – a Bachelor of Science in Accounting and a Bachelor of Science in Business Administration (both in 2007). He is currently employed as a consultant for several small businesses in the St. Louis area. He also volunteers for LSS Volunteer Money Management Program and Basket of Hope. Mr. Leon plans a career in consulting.



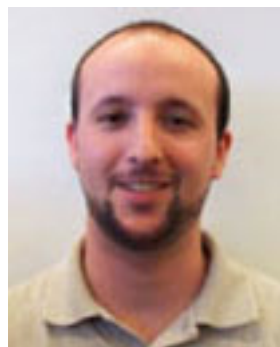
**Stanley J. Gordon Jr. (UT)** holds a Bachelor of Science in Accounting (August 2004) from Utah Valley State College and a Master of Accountancy (August 2005) from Brigham Young University. Prior to earning degrees in accounting, Mr. Gordon was awarded a Bachelor of Arts in Spanish Translation from Brigham Young University. He is currently employed as an auditor for Wisan, Smith, Racker & Prescott, LLP in Salt Lake City.



**Jennifer Rachel Luchs (WI)** holds a Bachelor of Science in Business Administration with majors in Accounting and International Business from Marquette University (May 2008). She is currently working for Deloitte Tax LLP in Milwaukee, WI. Ms. Luchs also serves as a volunteer with the Marquette University's Office of International Education. She plans to continue working in public accounting.



**Brad Hocking (NC)** holds a Bachelor of Science in Business Administration (May 2008) from the University of South Carolina with a major in accounting and finance. He is currently working for Deloitte & Touche LLP in Charlotte, NC. Mr. Hocking was a member of the University of South Carolina baseball team, and while in Columbia SC, coordinated food drives for the Harvest Hope Food Bank. He plans to remain in public accounting.



**Clint Presley (TX)** earned a Bachelor of Science in Accounting and a Bachelor of Science in Finance (May 2003), both from McNeese State University, and a Master of Education in Sports Administration (May 2005) from Wichita State University. Prior to 2005, when he began working for Moore, Reichl & Baker, P.C. in Houston, TX, Mr. Presley held internships with the Houston Astros ticket department and baseball operations, and with an accounting firm in Louisiana. He plans to continue working in public accounting.





**Leslie Johnson Rezgui (CO)** graduated Magna Cum Laude from Yale University (May 1989) with a Bachelor of Arts in Fine Arts, and later earned a Masters of Accounting and Financial Management (August 2008) from DeVry University. She often studied for the CPA Examination at the ice rink during her son's hockey practice. Ms. Rezgui is a co-owner of a boxing and kickboxing business and expects to receive a Master of Business Administration degree this year. She is currently employed at The Spectranetics Corporation in Colorado Springs, CO.



**Sheriann Wirkkala (VA)** earned a Bachelor of Business Administration with a major in Accounting (2007) and a Master in Accountancy (2008) from Gonzaga University. She held internships with KPMG and the Government Accountability Office prior to accepting her current position in the Federal Audit Practice of KPMG LLP in Washington, DC. Ms. Wirkkala plans to remain at KPMG and may explore teaching opportunities in the future.



**Gabriel Vaughan (TX)** received a Bachelor of Science in Business Administration (2002), Master of Business Administration (2004) and Master of Science in Accounting and Information Management (2005) – all from the University of Texas at Dallas. He has worked as an accountant in the real estate industry for several years and is currently employed at FelCor Lodging Trust, Inc. in Irving, Texas. Not sure about his ultimate career path, Mr. Vaughan wants to be challenged and to continue learning.



**Tyler S. Wright (MO)** graduated Summa Cum Laude with a Bachelor of Science in Business Administration (2007) and earned a Master of Accountancy (2008), both from Missouri State University. He currently works for KPMG LLP in Kansas City, MO. Mr. Wright plans to continue building his career at KPMG and may pursue a Ph.D. in Accounting at some point in the future.

## Upcoming Events

November 1-4, 2009  
 NASBA Annual Meeting  
 (Phoenix, AZ)  
 Contact: Lori Curd (615) 880-4241

November 20, 2009  
 AICPA IQEX  
 Conference Call  
 Contact: Steven Petti (609) 671-2050

December 3, 2009  
 AICPA Content Committee Meeting  
 (Princeton, NJ)  
 Contact: Elaine Rodeck (609) 671-2059

January 8-9, 2010  
 AICPA Board of Examiners Meeting  
 (TBD)  
 Contact: Martin Crabtree (609) 671-2917

## Acknowledgments

The AICPA acknowledges the sources of authoritative literature used on the Uniform CPA Examination. They are:

- *Internal Revenue Code*, Treasury Regulations, and IRS Publications provided courtesy of Thomson Reuters/RIA, 195 Broadway, New York, NY 10007.
- *FASB Original Pronouncements* provided courtesy of the Financial Accounting Standards Board, 401 Merritt 7, P.O. Box 5116, Norwalk, CT 06856-5116
- *AICPA Professional Standards* provided courtesy of the American Institute of Certified Public Accountants, 1211 Avenue of the Americas, New York, NY 10036.