ATP 2014

Innovations in Testing

Scottsdale, AZ

Insight Happens Here!

March 2 - 5

Westin Kierland Resort & Spa

#atpconference

Schedule-at-a-Glance / Table of Contents

Sunday, March 2

Registration and Information Desk Open **Kierland Ballroom Foyer**	02:00 PM - 07:30 PM
Speaker Lounge Open **Cushing B**	10:00 AM - 05:00 PM
First Time Attendee Reception and Remarks **Trailblazers A**	05:00 PM - 06:00 PM
Innovations in Testing Opening Reception **Marshall's Outpost Pavilion**	06:00 PM - 07:30 PM

Monday, March 3

Registration and Information Desk Open **Kierland Ballroom Foyer**	07:30 AM - 07:00 PM
Speaker Lounge Open **Cushing B**	07:30 AM - 05:00 PM
Breakfast with Exhibitors **Kierland Grand Ballroom**	07:30 AM - 08:30 AM
Education Division Breakfast Meeting **Tribal . . . . .** *ALL ARE WELCOME!*	07:30 AM - 08:15 AM
Opening Keynote **Herberger Ballroom**	08:30 AM - 09:45 AM
Workshops	10:00 AM - 12:00 PM
Lunch with Exhibitors **Kierland Grand Ballroom**	12:00 PM - 01:30 PM
Breakout Sessions	01:30 PM - 02:30 PM
Dessert with Exhibitors, Ignite Sessions and Remote Testing Demos **Kierland Grand Ballroom**	02:30 PM - 03:45 PM
Breakout Sessions	04:00 PM - 05:00 PM
Reception with Exhibitors and Innovation Showcases **Kierland Grand Ballroom**	05:00 PM - 07:00 PM

Tuesday, March 4

Registration and Information Desk Open **Kierland Ballroom Foyer**	07:30 AM - 05:00 PM
Speaker Lounge Open **Cushing B**	07:30 AM - 05:00 PM
Breakfast with Exhibitors **Kierland Grand Ballroom**	07:30 AM - 08:30 AM
ATP Security Committee Breakfast Meeting **Trailblazer C . . . . .** *ALL ARE WELCOME!*	07:30 AM - 08:15 AM
Workshops	08:30 AM - 10:30 AM
General Session and Awards Ceremony **Herberger Ballroom**	10:45 AM - 11:30 AM
Breakout Sessions	11:45 AM - 12:45 PM
Lunch with Exhibitors **Kierland Grand Ballroom**	12:45 PM - 01:45 PM
Certification/Licensure Division Lunch Meeting **Trailblazer C . . . . .** *ALL ARE WELCOME!*	12:45 PM - 01:30 PM
Asia-ATP Division Lunch Meeting **Trailblazer B . . . . .** *ALL ARE WELCOME!*	12:45 PM - 01:30 PM
Breakout Sessions	01:45 PM - 02:45 PM
Dessert with Exhibitors, Roundtable Discussions & Remote Testing Demos **Kierland Grand Ballroom**	02:45 PM - 04:15 PM
Breakout Sessions	04:15 PM - 05:15 PM
Sponsor Thank You and Debrief Reception **Sitgreaves**	05:30 PM - 06:15 PM
ATP Industrial/Organization Division Reception **Whipple . . . . .** *ALL ARE WELCOME!*	06:00 PM - 07:00 PM

Wednesday, March 5

Registration and Information Desk Open **Kierland Ballroom Foyer**	08:00 AM - 12:30 PM
Speaker Lounge Open **Cushing B**	08:00 AM - 12:30 PM
Breakfast with Closing Keynote **Herberger Ballroom**	08:00 AM - 10:00 AM
Europe-ATP Division Breakfast Meeting **Tribal . . . . .** *ALL ARE WELCOME!*	08:00 AM - 08:45 AM
Breakout Sessions	10:15 AM - 11:15 AM
Breakout Sessions	11:30 AM - 12:30 PM

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Download the Conference Guidebook App

Use your smart phone or your tablet to access the program, maps and exhibitor information throughout the conference.

1. Simply scan the QR code here:

2. Search for "Guidebook" in your App store, or go to www.guidebook.com/getit to download the Guidebook app.

3. Once downloaded, search Innovations in Testing 2014.

Program:
Browse the full conference schedule and click 'Add to My Schedule' to plan your conference experience.

Map:
Interactive hotel map helps you find that intriguing discussion or fun networking event quicker and easier.

To-Do List:
Create your own To-Do List to ensure you accomplish your personal and professional goals at Innovations.

Exhibitors:
Browse or search the exhibitor list for general information, booth numbers, and link to an exhibitor's website to learn more.

My Schedule:
Personalize your conference experience by adding sessions and events to the 'My Schedule' feature.

Welcome . . .

Dear 2014 ATP Conference Attendees,

On behalf of the Association of Test Publishers (ATP) Board of Directors and the Conference Planning Committee, welcome to ATP's 15th Annual Innovations in Testing Conference!

Since we last met, the Conference Planning Committee has been hard at work developing this dynamic and exciting program. Based on the enthusiastic response to organizing our program using tracks and topics, we have continued this practice for 2014 to guide you in selecting your sessions. And you will have plenty from which to choose among the many workshops, breakout sessions, showcases, ignite sessions and round table discussions, covering everything from standards and best practices to the latest innovations in testing. New this year – we're introducing Remote Testing Demonstrations. Take a look at these both Monday and Tuesday in the exhibit hall. You will be able to find all of the sessions and create your own schedule using our smartphone/tablet app. Of course, the conference would not be complete without the many opportunities we will offer you to network with your colleagues, starting with the First Time Attendees Reception and the Welcome Reception on Sunday evening.

Be sure to join us on Monday at 8:30 a.m. for our Opening Keynote Session with author and recognized futurist, Jim Carroll. World-leading industries rely on Jim to keep them connected and informed about the future trends and innovations to transform growth-oriented organizations into high-velocity innovation heroes.

On Tuesday, we'll take an opportunity to address important industry issues and challenges and provide you with ATP's perspective on our industry. We'll also recognize two industry professionals who have made a great impact in our testing community, in their overall career achievements, and in their contributions and service to testing.

And don't miss our Closing Keynote, Hilary Mason. Hilary is a Data Scientist in Residence at Accel, Scientist Emeritus at bitly, co-founder of HackNY, co-host of DataGotham, and member of NYCResistor. She was on the Forbes 40 under 40 Ones to Watch list and Crain's New York 40 under Forty list. Hilary has also been featured in Glamour, Fast Company, and Scientific American. So what does she do? Quite simply – Hilary makes sense of data.

As you enjoy all this conference has to offer, please thank our sponsors, without whom none of this would be possible. Their continued financial support and dedication to ATP enables us to offer leading-edge content and an enriching experience for participants. ATP truly remains the "intelligent voice for testing" due to the loyal support of its sponsors.

Once again, it is you in the industry who makes this conference such a success. From participation as a speaker, a volunteer, or a conference attendee sharing your expertise with others, you elevate this event to new heights each year.

We look forward to a great conference!

Best regards,

Eugene Burke
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Conference Program Overview

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Innovations in Testing 2014 is full of exciting events and opportunities to expand your knowledge of the testing industry and interact with colleagues.

Following is a brief overview of the program guide, events at the conference, and ways to take full advantage of your time here.

First Time at Innovations in Testing?

You won't want to miss the First Time Attendee Reception on Sunday from 5:00-6:00 pm in Trailblazer A, immediately before the opening reception. You will hear a brief overview of ATP and the conference, and get the chance to meet other first timers as well as conference veterans.

An Abundance of Networking Opportunities

Don't be shy! This is your chance to make lasting connections and learn from your colleagues. Interacting with other assessment professionals is often cited as the number one reason people attend Innovations in Testing. We have ample ways for you to get connected:

- Receptions so you can mingle with other assessment professionals in an informal manner. This is a friendly crowd eager to make connections.
- The exhibit hall is open on Monday and Tuesday. The hall is filled with assessment-related companies and experts in testing ready to talk with you.
- Breakfast and lunch are great times to introduce yourself to people you don't know and connect with them.
- Go online! We are promoting social networking more than ever as a way to learn from each other and stay connected throughout the year. During and after the conference, check out our discussion group on LinkedIn, Twitter, YouTube, Flickr, and now on Facebook! See the ad in this program book for specific links.

Informative Educational Sessions: Workshops and Breakouts

In addition to the main general sessions, you will see that we offer five types of education sessions – Workshops, Breakout Sessions, Innovation Showcases, Ignite Sessions and Round Table Discussions.

What is the difference between Workshops and Breakouts?
Workshops are longer and designed to go a little deeper or broader on the subject matter. They are also more interactive, engaging the audience for participation and learning. Breakouts are content rich but shorter and with a more narrow focus.

Who leads them?
Experts in the testing industry. The program has been designed from the ground up to provide expert speakers across a wide range of testing related topics.

How were they selected?
All sessions were selected through a rigorous blind review process, designed to ensure relevance, breadth of topics, expertise of the speakers, and clear outcomes.

Interactive Ignite Sessions and Fishbowl Discussions

Ignite Sessions encapsulate the Ignite motto "enlighten us, but make it quick." Each talk is exactly five minutes long. Ignite presenters share their personal and professional passions, using 20 slides that auto-advance every 15 seconds. These will take place on Monday afternoon in the Exhibit Hall, during the Dessert with Exhibitors.

See pages 37 and 39 for details.

Fishbowl Discussions are moderated open discussions on various topics that will allow you to learn in a format best for you – whether you like to contribute to the conversation, or listen to the dialogue and learn from the viewpoints of your colleagues. Each Fishbowl discussion will take place during a breakout timeslot.

New for 2014!

Remote Testing Demonstrations

Be a Security Sleuth at ATP this year...observe remote testing protocols during real time live lab situations set up throughout the exhibit hall. Hosted by the ATP Security Committee, this is a new opportunity to see security features from various remote testing providers in a demonstrative format. Grab a checklist at the front door as you enter the exhibit hall to keep track topics/features covered by the various vendors.

See pages 36 and 77 for details.

Innovation Showcases

The Innovation Showcases are your chance for one-on-one interaction with a variety of presenters while you enjoy a cocktail. Each Showcase is a chance for presenters to highlight a particular study, product, technology, or approach in an individual manner, sometimes using interactive media. We truly have a vast array of fascinating topics, specifically designated as Innovation Showcases to allow attendees to dig deep with the presenters in their areas of expertise.

See pages 48 - 51 for details.

General Sessions

The conference includes three all-conference general sessions. On Monday and Wednesday, there are exciting, recruited keynote speakers and on Tuesday, we will provide industry updates and showcase two industry awards. Each general session will be highly educational and worth your while.

Conference Program Overview

#atpconference

INVITED SESSIONS

These highlighted sessions have been invited by the 2014 ATP Program Committee to facilitate conversations about key issues in the testing industry. The sessions are presented by speakers identified by the ATP Divisions as industry experts in these topics.

Conference Tracks and Topics

We continue to offer world-class content that you have come to expect at the Innovations in Testing conference. The 2014 program offers attendees several choices of session types and subject matters, giving you more choices and more exposure to the content that matters most to you. Whatever your interest and learning style, the Innovations in Testing conference is the place to learn, share, and grow.

Conference Tracks

- Innovations
- Standards & Best Practices
- Business of Testing
- International

Conference Topics

- Item Types & Formats
- Psychometrics
- Test Administration & Delivery Models
- Informational and Educational Technologists
- Security
- Business Operations
- Government

ATP Division Areas

To help you navigate the program and identify sessions that align with your key areas of interest, you will see each session specify its associated division. ATP content related divisions include:

Certification/Licensure

Clinical

Education

Industrial/Organizational

Please Fill Out Surveys!

This conference is as good as it is because we listen to you! Make sure your voice is heard. You will be asked to fill out a survey for each session and for the conference as a whole. Our speakers and conference committee members are volunteers and greatly appreciate the feedback to help create even better sessions and conferences in the future… not to mention a nice pat on the back when appropriate!

Get to Know Our Sponsors – Industry Experts

This event wouldn't happen without our sponsors. They bring many industry experts to the conference who have the most up-to-date information on innovative ways to develop, deliver, manage and support your assessment needs. Please get to know them by visiting the exhibit hall.

Looking for Ways to Get Involved?

We are always looking for volunteers to serve in the divisions or on the conference committees. To find out more, please stop by the registration desk, speak with any of the committee members, or visit ATP's Innovation Showcase on volunteering. There is still time after the conference, go to the ATP website for more information about how you can help plan and shape future Innovations in Testing conferences.

For More Information:

- **Visit the ATP booth in the exhibit hall**
- **ATP Website: www.testpublishers.org**
- **Innovations in Testing Website: www.innovationsintesting.org**

These sites provide you with several ways to get connected, learn more about ATP, the conference, and what's happening in our industry.

Opening Day

SUNDAY, MARCH 2, 2014

Speaker Lounge Open

10:00 AM – 5:00 PM

Room: Cushing B

Are you presenting at the Innovations in Testing Conference?

Stop in to practice your presentation, collaborate with co-presenters, or just rest for a while. This room is open to all conference presenters.

Insight Happens Here!

First-Time Attendee Reception and Remarks

5:00 PM - 6:00 PM

Room: Trailblazer A

Is this your first ATP Conference?

Come to learn what to expect and how to navigate our many offerings.

OPENING RECEPTION

6:00 PM - 7:30 PM

Location:
Marshall's Outpost Pavilion

Please join your colleagues in the testing industry to celebrate the opening of ATP's 15th Annual Conference. Don't miss this opportunity to meet up with old friends, and make some new ones!

Registration/Breakfast/Keynote

MONDAY, MARCH 3, 2014
7:30 AM - 9:45 AM

Breakfast with Exhibitors

7:30 AM - 8:30 AM

Room: Kierland Grand Ballroom

ATP Education Division Breakfast Meeting

All are Welcome!

7:30 AM - 8:15 AM

Room: Tribal

The tasks that were on the Education Divisions slate are winding down or finished, allowing us to discuss the future. In particular in 2014:

> **What might the Education Division take on to strengthen the Division; and/or**
>
> **What might the Education Division take on to strengthen ATP?**

The Education Division meeting will take place at breakfast to allow time for associating with each other and reviewing the past year and what the Division might take on followed by a brief meeting and collection of ideas.

Speaker Lounge Open

7:30 AM – 5:00 PM

Room: Cushing B

Are you presenting at the Innovations in Testing? Stop in to practice your presentation, collaborate with co-presenters, or just rest for a while. This room is open to all conference presenters.

OPENING KEYNOTE

8:30 AM - 9:45 AM

Room: Herberger Ballroom

Rethinking Knowledge: The Future Belongs to Those Who Are Fast!

Presenter: Jim Carroll
Author, Columnist, Media Commentator, and Consultant

According to Jim Carroll, the future of "knowledge" will be the biggest challenge of the 21st century.

- What will the effect of how knowledge is acquired and utilized be on the labor force and on companies world-wide?
- Given that the knowledge is being refreshed and becomes outdated very quickly – how might the acquisition of this knowledge be measured in a way that's both timely and relevant?
- How do organizations and institutions of learning partner with testing organizations so that they are at the forefront of these changes in knowledge acquisition and application?

As the theme of innovation is embedded in the very "DNA" of ATP and this conference, the 2014 Opening Keynote, Jim Carroll, is justly described as an Innovation Guru. His books include such titles as **Ready, Set, Done: How To Innovate When Faster Is The New Fast, and What I Learned From Frogs in Texas: Saving Your Skin With Forward Thinking Innovation**. Jim has presented to global organizations such as Disney, NASA, and the Swiss Innovation Forum.

In a world where the future belongs to the fast, how do innovators stay ahead of fast paced change? Don't miss this chance to see what Jim Carroll has to say!

Enhancing Your Test Plan and Building Better Items

Room: **Trailblazer B**

Divisions:

Track: Innovations

Topic: Items Types and Formats

Educational assessment is fundamentally a means of gathering evidence to support decision making. The technology of computer-based testing opens up a myriad of possibilities regarding the design of assessments and items within assessments. This session will provide participants with a guided process for conducting a multidisciplinary content design workshop to define the specific needs of a program with regard to the assessment process. The content design workshop involves content development and technical, psychometric, and subject matter experts with the purpose of designing item prototypes for testing subjects such as higher-level thinking skills which are not adequately addressed by a current testing program. The premise of the content design workshop was built on two philosophical cornerstones:

1. The test construct and what is being measured are at the heart of well-designed test items; and

2. Items should be considered as the sum of component parts—including navigation, delivery, evaluation, selection, ordering, and presentation.

Using these two tenets, the content development workshop was delivered through the use of highly interactive activities, including brainstorming and storyboarding. The outputs of the content design workshop were detailed descriptions and prototypes of the newly designed innovative items, matched to the test blueprint. Using an adaption of the user story technique invoked to develop functional specifications in Agile product management methodology, participants in the workshop are guided through a series of activities that translate test blueprints into measurable tasks. These tasks are incorporated into prototype items. Next, content design workshop participants discuss and evaluate the component properties of the item, including selection, navigation, and scoring. With this method, an evidentiary pathway from the test construct to the interpretation of the test results can be created.

Presenters:
Kirk Becker, Pearson VUE
Belinda Brunner, Pearson VUE

Equating: Perils, Pitfalls, and Solutions!

Room: **Rainmakers A**

Divisions:

Track: Standards and Best Practices

Topic: Psychometrics

This session will introduce attendees to different methods of classical and item response theory (IRT) equating. Every time a new test form is developed for your program, you must decide how to ensure that candidate performance reported on one form of the test yields very similar performance results on another form of the test to show the results are consistent and reliable. You can either go through the expensive and time-consuming task of resetting cut scores each time you introduce a new form or perform some type of equating.

Equating is the statistical process of adjusting cut scores on different test forms to ensure that they can be used interchangeably and that the same scale scores reflect equivalent performance levels from one year to the next. It can be conducted either prior to the administration of a new test form (pre-equating) or after the administration of a new test form (post-equating). Depending on the size of your candidate population and the uses for the results, equating can be completed using either classical test theory or item response theory (IRT) methods.

This session will feature a discussion of the following methods of equating: classical methods, mean equating, linear equating, equipercentile equating IRT methods, common-item equating, and common-person equating. The session's facilitator will discuss both the advantages and disadvantages of each methodology depending on the size of your candidate population and the application of the results. The facilitator will also introduce potential scenarios in which you might find your program and will lead you through a discussion on making the proper equating decisions. Even though resetting cut scores is another way to ensure valid test forms, it is usually not a viable option because of the amount of money and time it requires. Equating is a much more feasible way to adequately align new test forms with previous ones, but without the proper equating procedures, test scores from one form to the next may not yield accurate and reliable results. Understanding the practicalities of the different equating methods will help you ensure that you choose the method that best suits your program's equating needs.

Presenter:
Canda Mueller, Questar Assessment, Inc.

Innovating Reports with Data Visualization

Room: **Trailblazer C**

Divisions:

Track: Innovations

Topic: Other

This session will provide attendees with an interactive opportunity to advance their skills in the innovative area of data visualization, the visual representation of information in order to communicate information clearly and effectively through graphical means and user engagement. The objective of this session is to improve attendees' skills with data visualization by engaging them in an evaluation of several visuals and reports within the testing industry. During the first part of the session, the facilitators will train attendees on data visualization design and evaluation. This section will include a brief presentation on the philosophies of the leading data visualization experts (including Edward Tufte and Stephen Few) and the various rules, tools, and techniques that are used in data visualization design. Tools and techniques will include color theory, data efficiency, information organization, chart-type selection, and attribute utilization. For the final segment, the group will apply the knowledge that they have gained about data visualization to evaluate actual reports used in the testing industry. Reports for evaluation will include examinee score reports, educational program performance reports, and regulator reports from a variety of different test sponsors within each of the major ATP Practice Area Divisions (e.g., certification, education, etc.). Each report will contain at least one data visualization.

The facilitators will begin the evaluation segment of the workshop by walking the group through an example in which a real testing report is shown, the strengths and weaknesses of the data visualization are presented, and suggestions are offered for improvement. Following this initial evaluation, the facilitators will present a series of actual testing reports, and attendees will work in small groups to evaluate each report and provide suggestions for improvement based on knowledge gained in the first part of the session. Each small group will also have the chance to discuss their findings with the whole group. Upon completion of the discussion, the facilitators will present revised data visualizations that incorporate the techniques presented earlier.

Presenters:
Brian Bontempo, Mountain Measurement, Inc.
Daniel Wilson, Mountain Measurement, Inc.

CLEAR

Accurate

10 Years Experience in Creating Exam and Assessment Content for Technology Companies

Measuring the Great Divide: Ensuring Item Performance Across an Exam Life Cycle

Room: **Rainmakers B**

Division:

Track: Standards and Best Practices

Topic: Psychometrics

You have developed a great exam and set expectations for test and item level performance, but even though the exam has launched, your job is not over. To ensure that the exam continues to have a healthy performance, you must now monitor and plan to update the exam as needed. In this plan, you will need to measure item performance, set criteria for retaining items, and identify ways to retire and refresh your item banks in a way that maintains quality and meets expectations. In this session, presenters from Cisco and the Project Management Institute (PMI), along with its strategic partner Prometric, will share strategies to evaluate the performance of individual items with the goal of maintaining the quality of the exam. The session will address topics such as how to incorporate new items and maintain previously set performance standards, how to measure performance of innovative item types such as lab exams and simulations, and what strategies are most beneficial to address item exposure. The presenters will share psychometric approaches, test development best practices, and lessons learned from some of the most popular IT Certifications from Cisco (CCIE and CCNA) and the gold standard credential for Project Management (PMP) from PMI.

Presenters:
Sierra Hampton, Project Management Institute
Yusuf Bhaiji, Cisco Systems, Inc
Ibidun Layi-Ojo, Prometric
Patrick Irwin, Cisco Systems, Inc

Raising Questions to Whole New Levels: Making Bloom's Taxonomy Work for You

Room: **Rainmakers C**

Divisions:

Track: Standards and Best Practices

Topic: Items Types and Formats

Writing exam questions seems like it should be easy—recruit some subject matter experts, review the course material, and use the material to write questions. Simple, right? WRONG! Writing exam questions that test a person's understanding of information rather than simple memorization can be one of the biggest challenges to exam development. Utilizing Bloom's Taxonomy, however, can help achieve just that. Bloom's Taxonomy provides a strong framework that can be used as a focus for question writing. Dividing questions into six levels helps enable exam writers to better identify questions that are simple memorization over questions that truly test candidates' understanding of a course. This interactive session is designed for intermediate and advanced exam developers.

The first half of the session will focus on introducing Bloom's Taxonomy. All stages will be reviewed, as well as how to categorize questions into each stage and which stages apply best to various exam levels. Techniques for training exam developers on writing questions to each level will also be discussed. The second half of the session will focus on enabling exam developers to apply their new learning in categorizing various exam questions. This will enable exam developers to have a clearer picture of applying Bloom's Taxonomy and make them feel more comfortable using this method on their own exams. By the end of the session, attendees will have a clear understanding of what Bloom's Taxonomy is, how it is used in exam development, how to classify questions according to the taxonomy, and how to train exam developers in the use of Bloom's Taxonomy. Attendees will have the tools necessary to feel confident in their ability to classify their own exam questions within the framework.

Presenter:
Megan Welsh, Accenture

Strong Test Security Programs: The Cost vs. the Benefit

Room: **Trailblazer DE**

Divisions:

Track: Standards and Best Practices

Topic: Security

Exam integrity and test security have become the largest-growing focuses of the testing community over the last five years. However, many testing organizations still do no not have a dedicated security/exam integrity program to prevent loss and investigate exam integrity incidents. Many respondents to the ATP test security survey citied cost as a reason for not yet dedicating resources to this essential task. This session will bring together five experts from both the exam integrity and legal communities to discuss the cost vs. the benefit of creating and managing a test security program at an assessment organization. The session will accomplish this by examining both organizations that have dedicated security programs and those that assign existing staff to monitor exam integrity activities in addition to other responsibilities. Furthermore, this session will explore costs related to test security activities, including vendors, software subscriptions, and legal expenditures.

Presenters:
Aimee Hobby-Rhodes, CFA Institute
A. Benjamin Mannes, American Board of Internal Medicine
Marc Weinstein, Dilworth Paxson LLP
Layne Pethick, American Association of Medical Colleges

Ten Years of Test Security: The Road Traveled and the Road Ahead

Room: **Trailblazer A**

Divisions:

Track: Innovations

Topic: Security

In the past ten years, there have been incredible changes in test security, both good and bad. While new technologies have created ever-greater risks to reliable test results, other innovations have empowered test program leaders with new tools to better protect them. Looking ahead, the challenges will not only be different, but even tougher. Meeting these challenges will require creativity, technology, and funding to invent new methods and tactics in the ongoing battle for test results that matter. This session will explore answers to the question "What will test security look like in the coming years?" The session will feature a panel of test security veterans for a quick look back and a glimpse forward into the "crystal ball" of the future of test security. This session is a classic panel discussion with a twist. For each topic, the presenters will share their perspective, then the audience will break into small work groups, conduct breakout discussions on every subject, and present their conclusions to all participants, creating rich and informative discussions. Topics to be explored include:

1. How have security threats evolved in the past decade, and what are the most effective tactics to thwart those threats?

2. As an industry, where have the biggest strides been made in protecting exams? Where has progress lagged?

3. Looking ahead, how will security risks evolve? How can programs be protected from these risks?

4. Which new technologies will prove most damaging and which will prove most helpful?

5. Most importantly, what should future test security plans include that they may not currently address?

Presenters:
Steve Addicott, Caveon Test Security
Rachel Schoenig, ACT, Inc
Greg Cizek, University of North Carolina
Jim Wollack, University of Wisconsin- Madison

What Will Happen to Recruitment Testing in the Next Five Years?

Room: **Mapmakers**

Division:

Track: Innovations

Topic: Business Operations

There is plenty of evidence that major corporations like Expedia are trying to build their employer brand on social networking sites with a view to increase the quality of their applicant pools. The strategy often involves leveraging the data about their current employees on Facebook and LinkedIn to create an "employee brand" and maintaining a linked community of talented people who currently work for other companies but who alert their personal network to job vacancies at corporations whose reputations they admire. Some companies are reporting major savings on fees to professional recruiters by employing this methodology and are claiming a better match of recruits to job roles and company culture than they have typically experienced. As the focus of recruitment seems to be moving inexorably toward matching talented individuals to company culture, tools and methods for matching are now being sought more eagerly than ever before. Job candidates themselves are asking which cultures would best suit them and corporations are trying to articulate for themselves and others the nature of their current culture. Although many existing tools and methods for assessing individual differences could be used for matching, new ones will have to be devised and new data about organizations will have to be collected and validated. This session will review the work of pioneers in this space like Manageup and Glassdoor and will speculate about a world of recruitment based on Mozilla open badges and social networking but without job boards, applicant tracking systems, or psychometric tests.

Presenter:
Robert McHenry, OPP Ltd

DIVISIONS KEY: INDUSTRIAL/ORGANIZATIONAL CLINICAL CERTIFICATION/LICENSURE EDUCATION

Lunch / Breakouts

MONDAY, MARCH 3, 2014
12:00 PM - 1:30 PM

Lunch with Exhibitors

12:00 PM - 1:30 PM

Room: Kierland Grand Ballroom

Thank you to our 2014 Innovations in Testing Golf Sponsor

GENERAL DYNAMICS
Information Technology

“What’s in a Name?” That Which We Call a Pass May Not Be a Pass!

Room: **Mapmakers**

Divisions:

Track: Innovations

Topic: Security

How do you determine if a candidate has passed an exam? Is scoring at or above the cut score the only criteria considered? If so, do you discover after-the-fact anomalous results for some candidates that cause you to question whether or not the candidate had an unfair advantage when taking the test and whether the candidate really “passed”? Can you dramatically improve the value, relevance, and integrity of your credentialing program if you determine a “pass” based not only on performance against the cut score but also on the results of data forensic analysis? For decades it has been possible via computerized testing to provide a score report immediately after a candidate completes an exam. In a world of continually accelerating access to data and time frames to make decisions, programs that are not already providing immediate score reports are under increasing pressure to do so. However, immediate scoring programs often do not allow appropriate data forensic analysis to be performed until after the candidate has received a passing score report. This can result in the need to revoke an exam result and possibly a certification, which can be difficult, costly, and damaging to the program’s reputation.

This session will explore a shift in the scoring of computerized tests so that nearly real-time score reports and credentialing decisions can be made with the benefit of sophisticated data forensic analysis, thereby protecting the integrity and value of the credentialing program. Two certification programs will present how they have implemented this shift and changed the requirements of “passing” from meeting the cut score to meeting the cut score and satisfying data forensic thresholds. The programs will discuss how they gained stakeholder buy-in, benefits achieved, issues addressed, and tools used. Attendees will leave this session with a clear understanding of this new approach and how they might implement a similar approach in their credentialing programs.

Presenters:
Liz Burns, Juniper Networks
Brian Adams, Alpine Testing Solutions
Julie Huber, Teradata

INVITED SESSION

Assessing Competence in Medical Practice: Tasks, Simulations, and Standards

Room: **Trailblazer DE**

Divisions:

Track: Standards and Best Practices

Topic: Items Types and Formats

This session will focus on simulations used in medicine for assessing competence. The session will begin with the big picture for assessing competence from declarative knowledge to on-the-job performance, and will then shift to focus on medicine. Medical tasks such as surgery are interesting because of their significance to patients and because they require many different types of knowledge and skills perceptual and motor skills for tying knots, anatomy and physiology for knowing where and what to cut, and decision-making skills for diagnostics during surgery. For safety reasons, simulations are increasingly used for training and evaluation in medicine, but there are issues in deciding what and how to simulate and how to assess performance.

Such issues will be examined by presenting two task simulations in detail: Fundamentals of Laparoscopic Surgery (FLS) and the Objective Structured Clinical Examination (OSCE).

The FLS trainer is a perceptual-motor trainer for laparoscopic surgery, where long-handled tools are used to accomplish minimally invasive surgery. During such surgeries, the surgeon can only see relevant tissue through a small camera inserted into the body. The FLS trainer is a low-fidelity means of teaching eye–hand coordination and dexterity in the use of laparoscopic tools. Even though it is low-tech, FLS certification is required as a step toward licensure for general surgery. The FLS training protocol will be described along with the means by which the FLS tasks and cutoff scores were selected.

The OSCE is a series of medical simulations analogous to the assessment center used in the selection and development of business managers. Each trainee (typically a medical student) encounters a series of stations in which an actor portrays a patient with specific symptoms. The doctor-in-training encounters the patient and must render an initial diagnosis, a treatment plan, and/or additional tests. Faculty members observe the encounter and make evaluative ratings. The OSCE is often used for high-stakes examinations. The means by which simulations are selected and cutoff scores are set will be described. The role of job/task analyses for developing simulations for training and evaluation will be emphasized throughout.

Presenter:
Michael Brannick, University of South Florida

Beyond Crystallized Intelligence: Assessing Working Memory Capacity to Bolster Traditional Measures in Personnel Selection

Room: **Cushing A**

Division:

Track: Innovations

Topic: Items Types and Formats

Many large organizations, including the United States Armed Forces and the Canadian Armed Forces, use traditional multi-aptitude test batteries as primary personnel selection measures. Various tests of this nature, including the Armed Services Vocational Aptitude Battery (ASVAB) and the Canadian Forces Aptitude Test (CFAT), are thought to predominantly assess crystallized intelligence (i.e., acculturated knowledge) rather than fluid intelligence (i.e., reasoning ability). Importantly, fluid intelligence is a more salient factor with respect to psychometric g (general mental ability)—the single best predictor of training and job performance across a wide range of occupations. In recent research, working memory and fluid intelligence have been demonstrated to be very highly related constructs. Thus, a battery of working memory tests may serve to bolster traditional crystallized measures and enhance prediction in personnel selection. Moreover, computerized working memory measures offer a number of concomitant benefits for measurement, including the potential for culturally fair assessment, full recall response formats, dynamic stimuli, on-the-fly item generation, and adaptive difficulty. The Canadian Armed Forces is currently validating a series of computerized working memory measures, for a number of highly cognitively demanding occupations for which the CFAT does not provide strong prediction of performance. This session will present the theoretical rationale, current measures, and additional benefits of assessing working memory during personnel selection.

Presenter:
Colin Kemp, Department of National Defence

Essential Measurement Concepts for the Adoption of a New Assessment Program

Room: **Trailblazer A**

Division:

Track: Standards and Best Practices

Topic: Psychometrics

Over the next few years, it is likely that many schools, districts, and states will move forward with the adoption of the Common Core State Standards (CCSS). Assessments are and will be developed to support the Common Core initiative for many purposes including supporting effective teaching and learning and providing comparisons across students, schools, districts, and states. These high stakes use place a strong burden on choosing and implementing an assessment program that provides accurate, fair, and usable scores and information. The discussions of possible assessments will focus on topics such as alignment, linking, concordance, and equating. However, use of these terms in inexact ways can lead to significant confusion and to incorrect development, analyses, and choices. For example, a test labeled as “aligned” to a set of standards may not actually result in measuring a set of standards. Along the same lines, test scores that are described as “linked” represent a much weaker interpretation concerning the interchangeability of test scores that have been equated.

These four terms have very specific meanings and should not be used as substitutes for one another. Each of these methods can provide critical information to help administrators evaluate the most appropriate assessment program, but all of these methods also have critical weaknesses and limitations that should be considered when evaluating the most appropriate assessment program. Because of the high stakes use of the results of any assessment system chosen, it is critical that test users understand these terms during their evaluation of proposed testing programs. This session will focus on providing an overview of the four methods and their comparative uses, strengths, and limitations. A correct understanding of these terms will be critical for the successful adoption of any new assessment program.

Presenters:
Andrew Wiley, Alpine Testing Solutions
Gerald Melican, The College Board
Natasha Vasavada, The College Board

FISHBOWL SESSION: Do You See What I See? Policies and Practices in Test Program Transparency

Room: **Tribal**

Divisions:

Track: Standards and Best Practices

Topic: Business Operations

In today’s workforce-centered testing environments, test takers need a transparent process for preparing for and successfully completing high-stakes exams. This same transparent process is needed within the organization to develop learning resources that support these high-stakes exams. Transparency in the exam development process builds integrity, fosters collaboration, and increases confidence in a testing program. Letting test takers know an exam’s general framework sets expectations, provides for better test taker satisfaction, and permeates program loyalty. Providing internal resources with the same public-facing information solidifies the exam development process, increases program consistency, and helps to maintain accreditation standards. This interactive fishbowl session will provide a cross-industry perspective in looking at the topic of test development transparency with presenters from Microsoft, Western Governors University, and the National Fire Protection Association. Various models and best practices will be discussed. The panelists will facilitate an exchange of ideas about transparency during test definition, exam design, blueprinting, and candidate qualifications as well as transparency metrics. This session will be interactive. Attendees will be able to share best practices and participate in a question and answer period.

Presenters:
Mike Randall, Western Governor’s University
Greg Stephens, Microsoft
Leon Katcharian, National Fire Protection Association

DIVISIONS KEY: INDUSTRIAL/ORGANIZATIONAL · CLINICAL · CERTIFICATION/LICENSURE · EDUCATION

Incorporating an External Assessment Program into the Educational Continuum

Room: **Trailblazer B**

Divisions:

Track: Innovations

Topic: Other

As “lifelong learning” becomes the standard for today’s workforce, the way testing is viewed has changed. Today’s students and educators are starting to recognize the value of testing as an integrated part of the educational process instead of a final measure of learning gained. This session will share how an assessment program developed by a testing organization can be incorporated into an educational program offered by an outside educational provider, providing insight into opportunities for partnerships to support both testing and educational programs. In 2012, the American Registry for Diagnostic Medical Sonography (ARDMS) Innovation Task Force (ITF) partnered with the World Interactive Network Focused on Critical Ultrasound (WINFOCUS) in a pilot program offering three integrated assessments over six months to students of Basic Echo Focused Cardiac Ultrasound from around the globe. Lessons learned and insights gained will be shared from the ARDMS/WINFOCUS pilot program and possible ways of incorporating assessments and feedback will be provided by Edumatic.

Attendees will leave with an increased knowledge of points to consider when developing such a program. Incorporating an external assessment program into an existing educational continuum will become more common and more critical as “lifelong learning” becomes the new standard for education. While many educational providers incorporate assessments, the expertise and specific knowledge of a separate testing organization can increase the value of the assessments and document the value of the education provided for students and prospective students. The integration of high quality external assessments into an existing educational curriculum can provide benefits to students, faculty, and test developers. Ultimately, by including multiple assessments along the educational continuum, learner needs can be better met and course content needing emphasis can be identified, resulting in better educated learners and more targeted education.

Presenters:
Elizabeth Langston, ARDMS
Ellen Julian, ARDMS
Bert Wylin, Televic Education: Edumatic
Lori Goebel, ARDMS

Meeting in the Middle: A Tale of Changes Made by Two Large-Scale Licensure Examinations

Room: **Trailblazer C**

Divisions:

Track: Innovations

Topic: Test Administration and Delivery Models

When developing a test, there is a continuum of assessment tasks ranging from objective, automated scoring items to subjective, manually scored items. Settling on specific item types is a decision influenced by the particular nature of the test, the desired interpretations based on scores obtained, and the pros and cons of the use of each kind of item. Exam development at the AICPA focuses on objective scoring. This allows for quick calculation and release of scores to candidates. In contrast, CPA Canada uses items that are human scored. These items allow an emphasis on the justification of answers given, and they potentially give more insight into higher order thinking skills.

With an eye for continuing improvement in both exams, both organizations are considering changes to the way that their exams are structured. This session will discuss the balancing act between the types of items and scoring methods used to produce examinations that are most useful in assessing the skills of accounting and achieving maximum efficiency in calculating and releasing scores. Presenters will first discuss the practical considerations needed when stakeholders demand assessment of 21st century skills (and the necessity to deliver items that allow for SME assessment of subjective answers). The AICPA is preparing for a practice analysis in which they are investigating the possibility of using item types that require human raters to establish the appropriateness of the responses provided. Second, currently in the process of developing a new examination, CPA Canada is approaching this challenge from the other end of the spectrum.

Discussion will focus on the practical considerations when stakeholders increase the scope of a program and there is a need to relieve some of the burden of human scoring by using objectively scored accounting simulations similar to what the AICPA uses currently. Ultimately, this session will compare and contrast the concerns of the two organizations with different development and delivery models as they move toward exams with blended item types. Discussion will focus on major issues encountered and lessons learned. This session will be of interest to anyone concerned with developing exams that are efficiently scored and that measure the complex skills of a profession.

Presenters:
Joshua Stopek, AICPA
Kathy Letourneau, CPA Canada
Henrietta Eve, AICPA
Jylan Khalil, CPA Canada

INVITED SESSION

Personality Theory and Assessment: Predicting Career Success and Organizational Effectiveness

Room: **Rainmakers A**

Division:

Track: Standards and Best Practices

Topic: Other

Prior to the early 1990s, personality measurement was verboten in occupational psychology. In spite of his critics, Dr. Robert Hogan dedicated his career to uncovering how personality factors influence leadership effectiveness and predict job performance. In this preapproved invited session for the I/O Division, Dr. Hogan will discuss personality theory and assessment, identity versus reputation, and faking. He will reveal the reason why people are the most consequential and dangerous forces in our environment and, ultimately, why the critics are wrong about personality measurement.

Presenter:
Bob Hogan, Hogan Assessment Systems

Singing for Your Supper: Are Performance-Based Tests Worth the Price of Admission?

Room: **Rainmakers B**

Division:

Track: Innovations

Topic: Items Types and Formats

Credentialing (licensure and certification) programs are increasingly investing in performance-based testing, but does this expensive and "challenging to develop" item truly increase customer satisfaction and loyalty? Do these items improve the psychometric performance of the exam? Do they add value beyond face validity? Microsoft, CompTIA, and NCARB use performance-based testing across exam programs to enhance the perception that their exams test relevant and critical skills and to increase the overall value of the program.

Performance-based questions can take a variety of forms including authentic tasks, interactive items, simulations, and virtualized environments. While performance-based content may improve the perception of relevance, these items are more costly to create and maintain when compared with traditional selected response or text-based constructed response items. This raises the question, "are they worth the investment?"

In this session, the presenters will discuss three specific models for performance-based testing: interactive items (item types that enrich the test-taking experience by allowing a candidate to manipulate and interact with an item or replicate job-related processes), simulations, and virtualized environments. Specific attention will be placed on the return on investment in terms of measurement characteristics, candidate satisfaction, and loyalty that each has added to the respective testing program. This session will explore the potential costs of developing performance-based testing items and how to evaluate whether these items are delivering on that investment. Using psychometric, customer satisfaction, and customer loyalty data the presenters will explore whether performance-based items are achieving the objectives that justify their existence across two IT certification programs and a licensure program. Where positive influence of performance-based testing is found, the improved levels of satisfaction, loyalty, and psychometric performance will be compared to the relative costs of producing those items.

Presenters:
Liberty Munson, Microsoft
Ryan Misner, NCARB
Sara Rupp, CompTIA
Chad Buckendahl, Alpine Testing Solutions

INVITED SESSION

Uneducated Guesses: Three Examples of How Mistreating Missing Data Yields Misguided Educational Policy

Room: **Pathfinder**

Division:

Track: Standards and Best Practices

Topic: Psychometrics

This session will describe three educational proposals that only make sense if you say them fast. In each case, their validity relies strongly on the data that is missing to have a particular structure, and in each case, that assumed missing-data structure can be dismissed. The three proposals that will be examined are:

1. Make college entrance exams optional
2. Allow students to choose which test items they will answer
3. Evaluate teachers on the gains their students show in test scores

Presenter:
Howard Wainer, National Board of Medical Examiners

Work Ready Now! Using Assessment and Digital Micro-Credentials (Badges) to Support Learning in a Curriculum-Based International Work Readiness Program

Room: **Rainmakers C**

Divisions:

Track: Innovations

Topic: Other

The International Development Division of Educational Development Center, Inc. (EDC) has been increasingly involved in the development and management of work readiness and livelihoods development programs for youth, primarily ages 15–24. EDC uses the term “work readiness” to refer to specific work-related skills that young people and adults need in order to be successful as entry-level workers in any formal sector business or industry or in any informal sector livelihood. These skills are generally thought of as life skills with a strong work focus and include health and safety at work, work habits and conduct, personal leadership, communicating with others, teamwork and collaboration at work, rights and responsibilities of workers and employers, and customer service.

In most countries, EDC programs for out-of-school youth bridge the “divide” between micro-enterprise development and livelihoods-skills development programs (mostly concerned with the informal economy) and technical skills development programs that prepare youth for employment in the formal economy (workforce development programs). EDC’s programs prepare young people to strengthen existing family livelihoods, gain skills needed for formal employment, start a new small business, or return to formal education as a pathway to a career goal.

Working with Professional Examination Service (ProExam), EDC is creating a series of curriculum-based assessments to measure achievement by the students in its “Work Ready Now!” program. The assessments are multidimensional, including selected-response and situational judgment items. Success in the curriculum and on the assessments will result in the issuance of a digital micro-credential from ProExam. The ProExam Digital Micro-Credential is a secure, verifiable, and portable solution. Building on the concept of digital badges for learning in education and the workplace, the ProExam Digital Micro-Credential adds psychometric soundness, exacting assessment, and one-click verification in the open badges environment. This session will provide attendees with an overview of the Work Ready Now! program and the process by which EDC and ProExam are collaborating on the development of an innovative assessment program linked to the issuance of a digital micro-credential.

Presenters:
Walt Jimenez, Professional Examination Service
Nancy Taggart, Education Development Center
Nancy Chervin, Education Development Center

Breakout Sessions

MONDAY, MARCH 3, 2014
1:30 PM - 2:30 PM

Pearson VUE PLATINUM SPONSOR SESSION

Badges, and Tablets, and Webcams! Oh, My!

Room: **Merriam**

Innovations in learning and assessment technology are rapidly expanding the types of assessment possible and the ways in which credentials can be earned and shared. New web and mobile technologies are creating exciting opportunities in such diverse areas as: clinical observational assessment, remote proctored testing, and web-enabled credentials. What is possible as a result of these technologies, and how might they be adapted to the needs of different programs? We are often told that innovation is the only way forward, but there are many options available and programs must understand the benefits of each option and then make careful decisions about what to invest in. Join Pearson VUE and a panel of industry experts, as we discuss these opportunities and challenges and respond to your questions. Plus... you will leave with a way to experience web-enabled credentials first hand by earning your very own badges while at the conference!

Presenters:
Mark Poole, Pearson VUE
Jarin Schmidt, Pearson VUE

Internet Testing Systems PLATINUM SPONSOR SESSION

What's New at ITS - Win an iPad Mini

Room: **Lowell**

Did you know that ITS delivers over five million online exams each year? At this session we'll present an update on our technologies and the solutions we've created to enable this. The session will include an interactive demo of our online item banking system. Bring your laptop and have the opportunity to write an item in real time. We'll show you how to rate items and the best performing item will win an iPad mini!

Presenters:
Pat Ward, Internet Testing Systems
Cabell Greenwood, Internet Testing Systems

DESSERT WITH EXHIBITORS, IGNITE SESSIONS & REMOTE TESTING DEMONSTRATIONS

Room: **Kierland Grand Ballroom**

Enjoy dessert with the industry leading vendors in the exhibit hall while soaking up more content through pioneering Remote Testing Demonstrations and fast paced Ignite Sessions.

Remote Testing Demonstrations

Ignite Sessions

Be a Security Sleuth at ATP this year... observe remote testing protocols during real time live lab situations set up throughout the exhibit hall. Hosted by the ATP Security Committee, this is a new opportunity to see security features from various remote testing providers in a demonstrative format. Grab a checklist at the front door as you enter the exhibit hall to keep track topics/features covered by the various vendors.

Key questions for consideration and you compare various technologies:

- Intellectual Property Theft: How do you prevent IP theft in this dynamic setting?

- Proxy Testing: How do you identify and monitor candidates?

- Cheating: What are the proactive measures you take to prevent cheating and what are the measures you take during an exam session?

This is designed to help you learn more about remote testing – so use the time and opportunity to learn all that you can!

IGNITE SESSION 1: A Framework for Automatically Scoring Technology-Enhanced Items

Division:

Track: Innovations

Topic: Items Types and Formats

Education reform efforts are calling for increased use of technology for instruction and assessment to improve learning, meet college and career readiness goals, and address 21st century skills. Technology can now deliver new functionality that allows assessment of higher-order cognitive skills and standards, a reality not possible using simple multiple-choice and constructed-response items. In addition, new technology holds the promise of being able to automatically score more items, provide a quicker turnaround for data, and reduce scoring costs.

Technology-enhanced items (TEIs) are computerized test items requiring specialized interactions for collecting responses from test takers. For example, TEIs can ask test takers to place a group of scattered objects in their correct order, adjust the shapes of graphs so that they match a particular function, or test a hypothesis in a virtual science lab. There are emerging taxonomies for classifying TEIs based on the actions a student is asked to take. TEIs are explicitly designed to obtain more accurate information about what test takers know and can do, but there is no consensus on how to score the variety of responses that can emerge from new item types. This session will present a general framework to fill that void.

The session will present a broad range of TEIs as well as traditional item types and will provide a basis for automatic partial credit (polytomous) scoring of TEIs, while still allowing for right–wrong (dichotomous) scoring. This session is intended for those responsible for developing innovative items or designing scoring algorithms for TEIs and others interested in learning about procedures for maximizing information obtained from complex tasks. Attendees should be familiar with complex item types and basic psychometric concepts. The objectives of this session are to: 1) introduce participants to the concept of item score-code types and a framework for describing them, 2) show how score-code types can be applied to select sample items, and 3) report results of a proof-of-concept study applying the score-code framework to real student responses. As a result of this session, attendees will be able to apply the concept of a score-code type to understand how to score some TEIs automatically.

Presenter:
William Lorié, Questar Assessment, Inc.

IGNITE SESSION 2: How Everyone Wins with Badges

Divisions:

Track: Innovations

Topic: Business Operations

Open Badges, an open standard developed by Mozilla for communicating achievements and skills, have been discussed within the credentialing market primarily as either an “opportunity” or a “threat.” However, with the impressive momentum of badge adoption in both K–12 education and higher education, it is clear that badges have the potential to disrupt how achievement is represented, and the time has come to shift our focus primarily on the opportunity. In this session, attendees will learn the trends that are contributing to a badge economy, recognize the difference between a badge and a credential, and develop an understanding of what Mozilla’s community-driven standard offers. Attendees will gain the knowledge necessary to leverage badges for increased customer satisfaction, market recognition, and brand value. Attendees will discover how to provide new opportunities to augment or diversify their existing credential.

Presenters:
Jarin Schmidt, Pearson VUE
Peter Pascale, Pearson VUE

IGNITE SESSION 3: Leveraging Social Media to Protect Your Intellectual Property

Divisions:

Track: Standards and Best Practices

Topic: Security

This session will address two problematic trends regarding infringing content available online. Proxy test takers are now advertising to take exams for test candidates, commonly under the guise of "tutors." In this session, attendees will learn how to identify proxies and what actions to take to shut them down. This session will also detail how to spot advertisements for the sale of test content on some of the newer, less obvious social media channels. Content thieves are not always blatantly advertising that they are selling test content; this session will help attendees learn how to make sense of it all and realize that even a small breach of Intellectual property can quickly spiral out of control and become a major compromise to a testing program.

Presenter:
Skyler Weisenburger, Caveon Test Security

IGNITE SESSION 4: Six Teenage Tablet Pioneers Test the Test

Division:

Track: Innovations

Topic: Test Administration and Delivery Models

In an effort to address the realities of increasing mobile device usage society, schools, states, and districts are taking steps to expand testing to an array of new devices. As in the (still ongoing) transition from exclusively paper-and-pencil testing to computer-based assessment, this endeavor brings challenges of disentangling device familiarity and quality of adaptation from student performance. The bring-your-own-device (BYOD) movement attempts to remove lack of device familiarity as a potentially negative factor in student performance. By arguing that the conventions and capabilities available on students' everyday devices are simply part of the arsenal of tools that they bring to bear on school tasks, proponents of BYOD can make a case for expanding testing to virtually any device that a student regularly uses. Students who like and are very familiar with the device on which they test resemble the BYOD ideal. As for quality of adaptation, porting a higher-stakes assessment from one medium to another requires careful steering between the twin dangers of excessive adherence to features bound up with the source medium and so much alteration that the construct is swept up in the process. As the transition to computer-based testing has shown, adapting tests to new media must honor the established tools and conventions of those media and eventually, in fact, take them for granted.

This session will report on a case study of six "tablet pioneers" who provided feedback on assessment tasks presented on a tablet for an assessment program that is moving to expand testing on tablets. The six students were part of a larger group of 73 participating in cognitive labs in which feedback on a variety of items were tested on three different devices in three content areas. The six students all participated in a tablet-based cognitive lab and reported that they "like tablets," "prefer to test on a tablet," "like using onscreen keyboards," and "prefer using an onscreen keyboard to an external one" (a relatively unusual preference). This session is intended for those considering adapting testing programs for tablet devices and/or those who are responsible for designing interfaces for successful adaptation. The objectives of this session are to: explain what "tablet pioneers" reveal about adaptation quality for tests adapted to a tablet, show how "tablet pioneers" provide—relative to their peers—a different level of information about quality of adaptation, and provide tablet-pioneer-based recommendations regarding tablet adaptations.

Presenters:
William Lorié, Questar Assessment, Inc.
Lei Yu, Questar Assessment, Inc.
Les Sewall, Questar Assessment, Inc.

Are Disposable Item Pools Practical? Exploring an Innovative Way to Enhance Exam Security

Room: **Trailblazer A**

Divisions:

Track: Innovations

Topic: Psychometrics

The disposable pool model is a new, highly innovative approach to creating a secure test form, even when operational items have been compromised. Presenters in this session will demonstrate the assembly process and the underlying conceptual components of the model, provide replication data, and outline underlying assumptions and operational requirements. This work has tremendous relevance to all types of high-stakes testing programs as it addresses a serious problem in testing: how to ensure the integrity of test scores when operational items may have been compromised. In this interactive session, results based on actual data from a high-stakes exam will be presented and implications on pass/fail decisions will be discussed.

Presenters:
Joy Matthews-Lopez, National Association of Boards of Pharmacy
Paul Jones, National Association of Boards of Pharmacy

INVITED SESSION

Assessment and Testing for the Public Sector: The "Poor Relation"? Not Anymore!

Room: **Pathfinder**

Division:

Track: Standards and Best Practices

Topic: Test Administration and Delivery Models

Today, the public sector as a whole faces two main challenges—austerity and the impending retirement of the baby boom generation—with the enormous depletion of expertise and experience that this implies. In light of this, the challenge to attract the best at a time when the public sector is sometimes seen as being the cause of the current economic problems rather than the solution will be difficult to overcome. The public sector, whose strength has traditionally been in its absorption capacity rather than its agility, will increasingly have to deal with a VUCA world: Volatile, Uncertain, Complex, and Ambiguous. Against a background of rapid change and loss of experience, public services will have to compete in an ever-tougher war for talent.

At the same time, many elements of the traditional public sector attraction package are being questioned or increasingly seen as outdated and irrelevant by Generation Y and the Millennial Generation. If the public sector is able to attract and select the brightest and best, it will have to focus on, in the words of President Obama, "how we can make it cool again." Part of that enormous challenge will fall to the testing community. Rather than lagging behind, the public sector needs to become the leader in using technologies such as video, animation, and serious gaming if it is to have attractive, modern, efficient, accountable, fair, and cost-effective procedures. This session will address the major challenges as well as the windows of opportunity that the private sector presents to the testing community.

Presenter:
David Bearfield, European Personnel Selection Office

Creating Innovation In Your Testing Program: The Experiences of Some Who Have "Been There"

Room: **Trailblazer B**

Divisions:

Track: Innovations

Topic: Business Operations

How do you develop and implement innovative testing solutions for an ongoing high-stakes testing program? Managing an innovation development process involves some unique challenges for testing organizations, including business planning, budgeting, and candidate communications. This session will describe how three different high-stakes testing organizations have been able to create and apply innovation in their existing testing programs. These programs are in various stages of their innovation development work from just beginning the process to having implemented the innovation in a live testing program in 2012. This session will present the steps, techniques, and decision making required to actually develop innovation in an ongoing program. Representatives from the American Registry of Radiologic Technologists, the Graduate Management Admissions Council, and the National Council of State Boards of Nursing will discuss their progress and outcomes for the key questions, concepts, and decision points in the innovation process.

Presenters:
Ashok Sarathy, GMAC, Graduate Management Admission Council
Lauren Wood, American Registry of Radiologic Technologists (ARRT)
Phil Dickison, National Council of State Boards of Nursing (NCSBN)

Drive Awareness and Growth: Proven Solutions for Any Size Program or Budget!

Room: **Rainmakers A**

Division:

Track: Business of Testing

Topic: Business Operations

In this session, attendees will learn how to drive program awareness and growth using available marketing budgets, both large and small. Presenters will share proven marketing strategies that engage outside influencers to drive program growth, increase candidate confidence, and inform stakeholders of new professional opportunities. Attendees will learn three tactical program growth ideas that they can leverage within their own programs—identifying the most effective marketing vehicles to drive program awareness, creating targeted messaging to attract candidates when they are most receptive, and utilizing candidate influencers to drive volume growth via pull-through marketing tactics. This session will provide attendees who manage long-standing programs as well as those launching new credentials with valuable strategies that can be used to engage new audiences or reignite interest in their program.

Presenters:
Jill Liles, VMware
Kathleen Tandy, VMware
Kelly Goeke, Pearson VUE

Engaging and Assessing RNs in Jurisprudence: On-line Gaming Meets Psychometrics

Room: **Trailblazer DE**

Divisions:

Track: Innovations

Topic: Test Administration and Delivery Models

In the spring of 2013, the College and Association of Registered Nurses of Alberta (CARNA), RocketFuel (an educational game design studio), and Yardstick partnered on a unique project to teach and assess ethics and jurisprudence knowledge for registered nurses (RNs) in Alberta, Canada. The goals for this project and the associated online tool were threefold: to create a highly engaging method for RNs to learn about ethics and jurisprudence in Alberta, to support learners in attaining the required knowledge using formative assessment, and to represent a rigorous method of assessment that satisfies defensibility requirements for the College. One of the truly unique aspects of this project is the so-called 'gamification' environment in which the tool is being built. Gamification allows for key aspects of the video game environment—such as narrative structure, animation, and interactivity—to be used to create rich opportunities for learning as well as novel media for assessment.

Presenters:
Gillian Lemermeyer, College and Association of Registered Nurses of Alberta
Jason Suriano, Rocketfuel Games
Greg Sadesky, Yardstick

Government and Department of Defense Driving Military Credentialing Initiatives: Stories from the Front Line

Room: **Rainmakers B**

Division:

Track: Standards and Best Practices

Topic: Government

With a record number of armed services members transitioning to the civilian workforce, state and federal governments are making efforts to help this important population. One avenue of assistance is the enactment of legislation and policy enabling armed services members and veterans to receive government reimbursement for certification and licensure exams. Additionally, government and Department of Defense leaders are actively working with task forces, such as the White House Information Technology Training and Certification Pilot, to use credentialing to combat current high unemployment rates and accelerate veterans' successful transitions back to the civilian workforce. Attaining civilian certifications has been identified as key to translating armed services members' and veterans' military training and experience to civilian jobs. Military occupations have been matched to over 1,000 different civilian certifications—less than half have been accredited. With the increased reliance on certification for armed services members and veterans, accreditation of certifications could become a standard for government reimbursement. As awareness of credentialing opportunities grows, credentialing bodies can help improve the prospects of employment for veterans by mapping their credentials to military careers and gaining approval for government funding of their exams.

In this session, a panel of industry leaders will explain this process and share their experiences with mapping civilian certifications to military occupations, working with military programs designed to promote credentialing, and advocacy efforts for continued and expanded federal funding of credentialing programs for active-duty and transitioning armed services members and veterans.

Presenters:
Lisa Lutz, SOLID, LLC
Jeffrey Lavender, American Medical Technologists
Steve Gonzalez, The American Legion
Sue Jackson, Pearson VUE

DIVISIONS KEY: INDUSTRIAL/ORGANIZATIONAL CLINICAL CERTIFICATION/LICENSURE EDUCATION

Moving with the Cheese: Building a New Business Model Around Structured Support

Room: **Cushing A**

Divisions:

Track: Innovations

Topic: Business Operations

Educational paradigms are in a state of flux. New technological and pedagogical methods of assessment are being developed, and innovative resources such as MOOCs and OERs are being quickly adopted. Assessment developers can either acknowledge this change and adapt to it, or assume these changes will adapt to them. In this session, presenters will discuss why they believe that the former is correct and why the latter is a road to extinction. They will also propose a response to these changes. The rapidly changing educational environment is a direct result of rapid technological and cultural changes. MOOCs and OERs provide educational content outside of the classroom. The extensive availability of Internet access has globalized the education process, and the implications of new, rapidly developing hardware and software are becoming clearer. Adaptive learning has risen to the forefront of changes within learning applications and assessments. The challenge facing assessment providers is how to use these changes for better student outcomes. Structured support is the answer to that challenge.

This session will describe the concept of structured support for students to achieve their goals. Students with a limited education budget are essentially on their own to navigate the educational system. They are forced to work unsupported, from participating in online content through final assessment. Structured support is the mechanism that bridges the gap between the online world and credit by examination as a means to access higher education. To that end, Excelsior College and Edu Founder International are working in close collaboration to provide that access and support.

Presenters:
Mark Michalisin, Excelsior College
Frank Zaverl, Excelsior College

Situational Judgment Tests: Made to Measure?

Room: **Rainmakers C**

Division:

Track: Innovations

Topic: Psychometrics

This session will address key themes in the deployment of situational judgment tests relating to engaging candidates through the selection process, defining and measuring “fit” to a role by assessing key behaviors linked to performance, and demonstrating the measurable impact of situational judgment tests. The presenters will discuss their approach to designing situational judgment tests and provide evidence from case studies where this has been applied with clients in the retail, banking, and hospitality industries globally. Situational judgment tests are becoming ever more popular because they:

1. Are face valid, providing realistic job previews to applicants;
2. Can be deployed in text-based or more innovative video-based formats to reflect a company brand; and
3. Are valid, fair, and reliable (if designed carefully).

There are many factors to consider in situational judgment test development, especially—what do situational judgment tests measure? Writing realistic work-based assessments can be straightforward, but doing so in a way that follows best practice test construction, ensures assessment integrity, and meets value requirements is another matter. Why is this important in the context of innovations in testing and talent management? Today’s job market is competitive, so an organization must set itself apart from its competitors by being a unique place to work that offers great opportunities to its employees. If an organization invests more in its staff, how does it ensure return on investment in its people? The answer: organizational and role fit are key. Situational judgment tests can help to solve part of this puzzle.

Presenters:
Hannah Ablitt, CEB
Claire Fix, CEB

INVITED SESSION

Using Automated Procedures to Generate Test Items: A Progress Report

Room: **Mapmakers**

Divisions:

Track: Innovations

Topic: Items Types and Formats

Changes to the design and development of assessments are resulting in the unprecedented demand for a large and continuous supply of content-specific test items. One way to address this growing demand is with automatic item generation. Automatic item generation is the process of using item models to create test items with the aid of computer technology. This session will describe and illustrate a three-step template-based method for generating test items.

1. First, test development specialists create a cognitive model in order to identify and structure the test content.

2. Next, an item model is created; an item model is like a mold or rendering that highlights the features in an assessment task that must be manipulated to produce new items.

3. Finally, features in the item model are systematically manipulated with computer algorithms to generate new items.

Using this method, hundreds or even thousands of new items can be generated with a single item model. Select applications will also be provided to demonstrate how distractors can be generated, and the way in which this method can be used for multilingual test development will be explained.

Presenter:
Mark Gierl, University of Alberta

You Asked for It, Now Here It Is: Data on Remote Proctoring!

Room: **Trailblazer C**

Division:

Track: Innovations

Topic: Test Administration and Delivery Models

Recent developments in technology have opened the door for remote proctoring, an innovative test delivery model in which examinees are monitored by a proctor who is not located at the test delivery location. This session will address the strengths and weaknesses of this test delivery model, the candidate experience, and the integrity of exams that are delivered in this manner. The strengths and weaknesses will be presented by test sponsors that have been using remotely proctored testing kiosks in a worldwide testing program and in state regulatory testing programs. These exams are taken by thousands of candidates per year, and because of the convenience and ease of use, candidates are choosing the testing kiosk over traditional testing centers.

The motivations for pursuing a remotely proctored delivery model will be addressed as well as considerations for implementation. A comparison of the security methods, test performance, and the candidate and site experience of each delivery model will also be discussed. The integrity of exams delivered using remote kiosks will be addressed. This session will also compare the proctoring features of a traditional test center and a remotely proctored kiosk. This comparison will include the examinee check-in process, the exam delivery process, requests for support or assistance, the checkout or exit process, the customer experience, and a review of security methods used in each test delivery model.

Presenters:
Ruben Garcia, Innovative Exams, LLC
Ron Rodgers, Continental Testing
Randolph Russell, Red Hat

Alpine Testing Solutions
PLATINUM SPONSOR SESSION

A Tale of Two Migrations: Taking the Fear out of Replacing Legacy Credential Management Systems

Room: **Merriam**

Is the fear of migration preventing you from replacing a legacy credential management system? What would you do if your program could reap the benefits of replacing a legacy system without having to fear the migration process? In this session, two programs will share their experiences migrating from legacy credential management systems. Each program will discuss the evaluation process that lead to the decision to replace their legacy systems, the migration process, the lessons learned during the migration, and lessons learned after the roll out of the new system. Topics covered are:

1. Identifying your requirements
2. Evaluating vendors
3. Planning for success
4. Performing the migration
5. Identifying and mitigating risks along the way
6. Dealing with hurdles
7. Evaluating the success of the migration
8. Moving from migration to operations

Through the experiences of these two programs – one which required a two-year migration plan and the other which required only five months – you might discover that it is possible to take the fear out of migration and reap the benefits of replacing a legacy credential management system.

Presenters:
Liz Burns, Juniper Networks
Ryan Misner, NCARB

Prometric
PLATINUM SPONSOR SESSION

Detecting Changes in Item Performance: DIF and DRIFT - How Can It Improve Your Assessments and Help When Expanding Your Testing Program Across Borders

Room: **Powell**

Expanding your testing program can bring positive benefits to your organization with increases in membership and candidate populations. Expanding beyond your home country requires not only embracing diverse cultural and language differences. There is also a need to be cognizant of and accountable for potential adverse effects of cultural and language differences among test-taking populations. The increased potential for item exposure and item harvesting also needs to be addressed. With regard to cultural and language issues, idiomatic phrases well-known in one culture can be problematic for another. One of the goals in test development is to always remove elements of the testing experience that could detract from the purest possible measurement. Differential Item Functioning (DIF) is a statistical means to assess test items for systematic differences in performance across cultures and languages.

Join us as we discuss this often overlooked, but important, step toward better measurement. Do you reuse items from one form to another? Do you have items in your item bank that were initially written and reviewed several years ago? The item bank is one of the major assets a test publisher possesses, and any threat to the security of the item bank poses a great financial risk. When items are used on multiple forms or over a period of years, we find that the performance may drift in either positive or negative directions. Being able to detect item drift can be a major assistance to the test publisher. This session will also look at how drift analysis is used and how it can facilitate program improvement.

Presenter:
Julia Leahy, Prometric

Professional Examination Service
PLATINUM SPONSOR SESSION

ProExam Vault: Enabling Secure Digital Credentials

Room: **Lowell**

This session will include a demonstration of ProExam Vault, ProExam's secure, web-based platform for issuing, storing, sharing, and validating digital credentials represented as industry-standard Open Badges. The demonstration will show how ProExam Vault fits into the broader professional credentialing value chain by focusing on the benefits it delivers to credentialing organizations and their stakeholders, including the following:

1. Organizations benefit by reducing fulfillment costs when converting paper credentials to digital, by quickly being able to update the status of an individual's credential, and by extending the organization brand across the web

2. Credentialed individuals benefit by having an easily verified credential that they can display on LinkedIn, Facebook, and other career and networking sites, or include in an email or digital resume to a potential employer

3. Employers benefit by streamlined and secure verification of earned credentials

The demonstration will also show how ProExam Vault can help credentialing organizations to address the following questions: 1.) How can we increase candidate volume?; 2.) How can we add value for our credential holders?; 3.) How can we leverage social media in support of our organizational goals?; and 4.) How can we increase credentialing program revenue or reduce costs?

Presenters:
Robert Block, Professional Examination Service
Kenneth Doucet, Professional Examination Service

RECEPTION WITH EXHIBITORS AND INNOVATION SHOWCASES

Room:
Kierland Grand Ballroom

SHOWCASE 1 Connecting with Exam Candidates: Building Deep and Rich Connections with Your Community

Divisions:

Track: Innovations

Topic: Business Operations

With increased competition in many industries, building connections with stakeholders and growing a community of individuals interested in earning and maintaining certifications has become critically important to many programs. If done correctly, building these communities can provide many benefits. For example, engaged communities represent a loyal customer base who evangelize your certifications. This community can be leveraged to provide feedback on new ideas, programmatic changes, or innovations in exam design and delivery, and to advocate these changes. How do you effectively interact with the right people at the right time to create a community of engaged stakeholders who are passionate about your certifications? With a plethora of social media outlets, it is easier to connect with your stakeholder.

But what sets your organization apart from other certifying bodies who are using the same outlets and perhaps competing for the same group of potential certification holders? This session will explore how Microsoft Learning has been exploring ways to leverage social media in new and innovative ways to engage its community. Microsoft Learning's "Ask a Certification Expert" series has started paving the way to a more interactive, immersive, and transparent view into the world of Microsoft certifications through innovative uses of social media. To evaluate the effectiveness of this approach, the creators of the series monitored the number of views and comments, comment sentiment, and the usefulness of the comments in driving additional videos and ideas for future engagement activities. They also added a "First Look Forum" showcasing innovations made to exam development, design, and content and even created a superhero series, "The ACE Chronicles," to investigate candidate questions and provide up-to-date information about Microsoft's certifications, exams, and programs.

In this session, members of the Microsoft Learning team will showcase some of their most engaging approaches to blogs, videos, tweets, promotions, etc. In the instant world of social media, creatively leveraging these resources is key to building strong and impactful relationships with stakeholders. This session will also provide a peek into how Microsoft Learning is staying on top of technology trends to drive community engagement and evangelize its certification program.

Presenters:
Briana Roberts, Microsoft
Liberty Munson, Microsoft

SHOWCASE 2 Developing Innovative Assessments: New Technologies that Support the Assessment of the Common Core Standards and the Identification of Talent

Divisions:

Track: Innovations

Topic: Items Types and Formats

The US Department of Education's Race to the Top assessment program and the introduction of the Common Core State Standards has resulted in the creation of two multi-state consortia. These federally funded organizations are developing assessment systems to build a pathway to college and career readiness by 2014–2015. The drive toward online assessment has allowed for the introduction of complex "technology enhanced" item types that allow students to both demonstrate a mastery of a wide range of skills and engage with theoretical concepts in a more applied and personalized manner. Standards-based diagnostic reporting in conjunction with formative assessment allows educators to identify areas of academic strength and weakness and to take the appropriate measures to address these issues. In addition, sophisticated online infrastructures that support the development and delivery of a range of item types are supporting best practices in item development and reporting within testing organizations and educational institutions. In this session, attendees will view a range of technology-enhanced question types being introduced in the US and discuss how Australian testing organizations and education providers are already implementing and benefiting from these item types. In addition, this session will provide attendees with information on how adaptable and modular testing platforms can be used to cope with state-by-state variability.

Presenters:
Gavin Cooney, Learnosity
Stella Gibbs, Pacific Metrics

SHOWCASE 3 E-commerce Advances in Certification and Licensure Contexts: It Can be Ethical, Possible, and Profitable!

Division:

Track: Business of Testing

Topic: Test Administration and Delivery Models

In this innovation showcase session, presenters will discuss how they have worked with several Canadian regulators and certification organizations to help them make their practice tests available online. The presenters will also detail how they helped clients price their practice tests competitively in the marketplace. The session will also include a discussion of how regulations according to the NCCA for selling practice exams in the United States differ from those in Canada. The session will feature live examples of customer exam sites and a psychometrician on hand to answer questions.

Presenter:
Mark MacDonald, Yardstick

SHOWCASE 4 How Testing is Changing in the 21st Century

Divisions:

Track: Standards and Best Practices

Topic: Test Administration and Delivery Models

Distance learning continues to grow at a rapid rate and as institutions transition to the online world, significant challenges arise. While certification and licensure programs are trying to keep pace with the technological demands of online instruction, some organizations are struggling to offer realistic and secure approaches to online examinations. In remote parts of the world, a testing center can be hours away. The associated travel is often unrealistic, inconvenient, and expensive for many examinees. As online testing has become more prominent, various remote online proctoring services have entered the fray. Some use the record-and-review model, a method of proctoring that creates a video recording of the entire examination session which is later reviewed by an official. This is in stark contrast to the live-proctoring methods that can prevent an integrity breach in real-time and save hours of post-exam review. This session will discuss proven strategies to alleviate the testing center burden on clients and secure alternatives for institutions.

Presenter:
Don Kassner, Andrew Jackson University/ProctorU

SHOWCASE 5 The Evolution of a Market-Driven Assessment Product

Division:

Track: Innovations

Topic: Business Operations

The creation of a market-driven assessment product is not a novel idea, but how does a publisher know that the end product will truly be embraced by its customers? And with the ever-changing technology landscape, assessment developers do not have the time or resources once allotted for extensive market research. Today, assessment developers must be nimble, flexible, and responsive to their customers need for change and customization. Publishers need to recognize how and when to move forward with development that will be welcomed by their customers.

This session will examine the steps in this evolution. First, how early work with key stakeholders in various organizations leads to the creation of a competency-based personality assessment model as the basis for an initial off-the-shelf assessment report. Then, when this is met with enthusiasm, but also questions about modifications, the next step is working with organizations to customize their competencies: two case studies on how listening to customers and responding to their needs resulted in success will be shared. However, with technologies available today, customers want more results and in a shorter span of time; they wanted to work with the competencies themselves and have the opportunity to choose based on internal job analyses, so that the candidate fit could be more precise for each position and ultimately lead to the hiring of successful employees. In addition, they wanted it to be web-based, easy to use, and cost effective. Therefore the final step was to take the internal work processes and export it to a web-based product designed to help customers choose the appropriate competencies themselves for use in evaluating the best fit among job candidates.

Presenters:
Pamela Becker, IPAT (Institute for Personality & Ability Testing)
Penny Moyle, OPP

DIVISIONS KEY: INDUSTRIAL/ORGANIZATIONAL CLINICAL CERTIFICATION/LICENSURE EDUCATION

SHOWCASE 6 English to English – Developing Exams for International Takers

Divisions:

Track: International

Topic: Test Administration and Delivery Models

What do you do when some or many of your exams are taken overseas? What happens if English is many of your candidates' second language? Is it worthwhile to translate exams? How do you make sure the exams are non-offensive to different cultural groups? These are just a few of the questions that arise when building exams for international candidates. Building exams for takers in one's own country or culture is easy as items such as cultural references and sentence difficulty do not need to be taken into large account. When one has to broaden the candidate pool, however, exam development gains a new level of difficulty. This breakout session will work to enable exam developers to better navigate exam development for international audiences. Some of the topics to be discussed will include:

1. Avoiding cultural pitfalls: dos and taboos of exam development with particular attention to question voice, naming people, and the use of pictures and audio in exams

2. Question structure: how to write questions that are understood by all audiences

3. Leveraging the international workplace: how to use international SMEs to help write global exams

4. Translation: looking at the pros and cons of translating tests as well as how to identify if an exam warrants translation.

By the end of this session, exam developers of all levels (beginner, intermediate, advanced) should have a better understanding of common failings in exams for international audiences, as well as how to recognize and mitigate problems to ensure a strong exam is developed that can be taken by anyone around the world.

Presenters:
Megan Welsh, Accenture

SHOWCASE 7 How to Volunteer for an ATP Conference Committee

Divisions:

Thought about volunteering for ATP but were not sure of what the opportunities might be or how the process might work? Stop by to discuss volunteering. It is a great way to contribute to the profession and to network with colleagues throughout the testing industry.

Presenter:
Scott Arbet, Arbet Consulting Inc.

SHOWCASE 8 Tips and Insights for Submitting Sessions for ATP

Divisions:

ATP continues to attract great sessions for its conferences, and we would like yours to be among those selected! Whether you have had sessions submitted, or you are thinking about submitting an abstract for 2014, this showcase presentation will walk you through the steps required to develop and submit acceptable sessions. You will learn how to write a great abstract, write learning ojectives, from your session around the theme of Innovations in Testing, as well as get tips for navigating through the submission process.

Presenter:
Ashok Sarathy, Graduate Management Admission Council

SHOWCASE 9 Mobile Testing System – Make Testing Simpler: A case study on Cambridge Young Learner Exam global implementation

Divisions:

Mobile Testing System (MTS) is a cloud based mobile solution for Learning Oriented Assessment (LOA); designed specifically for easy digital learning and test contents deployment. MTS enables tests to be taken place securely in any exam location with little setup time; test takers on the other hand can choose to bring their own mobile devices. Planning for test administrations has never been easier; that is why MTS has also been called Make Testing Simpler.

Presenters:
Alex Tong, Vice President, ATA
Representative of Cambridge English Language Assessment

SHOWCASE 10 uCertify TEST: Effortlessly create, sell & deliver practice or proctored tests online

Divisions:

How do you create, sell and deliver a practice or proctored test online and on mobile devices that is both highly secure and highly configurable? How do you deliver a test using innovative item types and hands-on activities? How do you integrate your test with the proctoring and badging service of your choice? How do you configure your test program to follow your processes and not the other way around? In this session we will attempt to answer these questions and showcase uCertify TEST.

Specifically, we take a hands-on and in-depth look at security, integration, proctoring, badging, process configuration, item banking, item writing, e-commerce, reporting and customization possible with uCertify.

Presenters:
Manish Gupta, uCertify
Nancy Kesharwani, uCertify

DIVISIONS KEY: INDUSTRIAL/ORGANIZATIONAL CLINICAL CERTIFICATION/LICENSURE EDUCATION

Registration/Breakfast

TUESDAY, MARCH 4, 2014
7:30 AM - 8:30 AM

Breakfast with Exhibitors

7:30 AM - 8:30 AM

Room: Kierland Grand Ballroom

ATP Security Committee Breakfast Meeting

All are Welcome!

7:30 AM - 8:15 AM

Room: Trailblazer C

Join the ATP Security Committee leadership to hear about recent progress, current and future initiatives, and the many ways to get involved with the committee. This is a great chance to learn more!

Facilitators:
Beth Holst and **Nikki Shepherd Eatchel**,
ATP Security Committee Co-Chairs

Speaker Lounge Open

7:30 AM – 5:00 PM

Room: Cushing B

Are you presenting at the Innovations in Testing?
Stop in to practice your presentation, collaborate with co-presenters, or just rest for a while. This room is open to all conference presenters.

SPONSOR GIVEAWAYS!

Join many of the Innovations in Testing sponsors in the Exhibit Hall at the stage area on Tuesday at 3:45 PM for prize drawings.

Don't miss out . . .
You could be a lucky winner!

Accessibility 101: Considerations When Trying to Develop and Deliver an Accessible Test While Protecting the Integrity and Validity of the Exam

Room: **Trailblazer C**

Divisions:

Track: Standards and Best Practices

Topic: Items Types and Formats

Accessibility is about fostering a testing experience for test takers so that the test measures what it is intended to measure, rather than measuring the effects of a person's disability. Many of the accessibility features of computer-based assessments actually enhance accessibility for non-disabled test-takers as well, which is the essence of universal design. There are a number of practical considerations that must be kept in mind when developing tests and test content so that accessibility is enhanced and test takers with disabilities have access to the material. On the other hand, providing accommodations on tests may alter the validity of the test scores. The legal obligations of the ADA must be balanced with the fundamental objectives of the test—a balance that can be difficult to achieve.

This session will introduce attendees to the world of accessibility as it pertains to the psychometric and practical considerations of test development and test delivery. The session will focus on key areas to consider when innovating and developing certification exams with accessibility in mind, including a description of commonly used accessibility software tools that may enhance access for test takers with disabilities, and the practical considerations of developing test content so that candidates can utilize this software. We will include case examples of test publishers and testing organizations that have tackled these topics when designing their next-generation assessments. In addition, this session will include a discussion of psychometric concerns that may be raised about the validity of tests that are delivered with accommodations. Relevant research in this area will be discussed as well. Finally, attendees will be invited to discuss the prospect of balancing legal requirements with ensuring that the fundamental nature of the test is not altered.

Presenters:
Briana Roberts, Microsoft
John Hosterman, GED Testing Service

Exam Security Processes and Procedures: Multidisciplinary Strategies for Success

Room: **Trailblazer DE**

Divisions:

Track: Innovations

Topic: Security

Now more than ever, test sponsors seek guidance on how to best organize and manage internal and external resources to improve exam security programs in response to increasing risks to exam integrity. During this session, panel members will facilitate an interactive forum to discuss a multidisciplinary approach to exam integrity that test sponsors can implement to identify and prioritize security risks, allocate internal and external resources to address those risks, and identify and respond to specific exam integrity incidents through an organized, consistent, fair, and predictable process that is clearly communicated to the test sponsor's stakeholders. Attendees will learn about successful strategies to help them:

1. Identify data that should be collected and analyzed to detect breaches in exam integrity

2. Identify other evidence that should be collected and preserved in the course of an exam integrity investigation

3. Determine who inside and/or outside the organization will be responsible for the collection and analysis of data and other evidence and who will make decisions related to an investigation and any resulting consequences

4. Pan and manage the internal process for making decisions about the extent of each investigation and any resulting legal or administrative action against persons who were found to have engaged in wrongdoing

5. Communicate with internal and external stakeholders relating to an investigation and any related legal process

6. Understand and manage the potential legal and/or organizational consequences of an investigation for the test sponsor, stakeholders, and/or other persons who were found to have engaged in wrongdoing

Following a brief presentation to introduce key concepts, the panel will lead participants through 3 activities relevant to the learning objectives. These activities will consist of small-group discussions of case studies related to the key concepts. The activities will require participants to decide which incidents to investigate and what resources to allocate to the investigation; decide whether to pursue enforcement action against wrongdoers, formulate candidate/examinee sanctions, and devise a communication timeline; and generate a key lesson learned from the activities.

Presenters:
John Fremer, Caveon Consulting Services, Caveon LLC
Lorin Mueller, Federation of State Boards of Physical Therapy
Marc Weinstein, Dilworth Paxson LLP
Benjamin Mannes, American Board of Internal Medicine

How to Identify, Develop, and Implement Innovative Items

Room: **Trailblazer A**

Divisions:

Track: Innovations

Topic: Items Types and Formats

In the last few years, interest in using innovative item types has flourished. Many smaller exam programs that have been invested solely in multiple choice items are now considering a fundamental change in their assessment. This growth in interest is fueled by the availability of innovative item types as part of existing CBT software and by their successful use in larger exam programs. However, there is no guarantee that just because an alternative item type has been used successfully, it will continue to be successful every time. When exam programs add innovative items without sufficient preparation, the quality of the new items can be inadequate and may contribute to an unfortunate decrease in the quality of the exam. Therefore, a thoughtful, well-planned approach to development is the best way to reduce the risks associated with new item types and to increase the likelihood that the potential benefits they offer will be realized.

This session will provide attendees with a plan for designing and developing innovative item types. The session content will be aimed at measurement professionals who are new to the use of these item types. The innovative item types to be covered are: multiple response, hot spot, drag-and-drop, short answer, audio, and video. The information will be accompanied by small group activities structured around the development of these six innovative item types. These item types were selected because they are often available in CBT-vendor software and have demonstrated a high utility across a range of content areas. However, every item type by nature has certain strengths and weaknesses, and each is typically most suited for measuring specific content areas and addressing specific cognitive levels. The item types will be discussed in terms of their relative advantages and disadvantages.

Session attendees will engage in the development of innovative items and will have the opportunity to discuss their experiences openly through facilitated group discussion. By the end of the session, attendees will have a strong understanding of all six innovative item types presented during the session. Attendees will also gain a more complete understanding of the development process for innovative item types, as well as ideas for how to select and implement them within their own examination programs.

Presenters:
Cynthia Parshall, CBT Measurement
Adrienne Cadle, Professional Testing

How to Respond to a Test Security Incident

Room: **Trailblazer B**

Divisions:

Track: Standards and Best Practices

Topic: Security

Procedures that prevent or deter test security incidents are vital to a successful testing program. But no matter how careful we are, every testing organization will face a test security incident at some point in time. How you respond to the security incident is just as vital. Your response (or lack of response) can affect the experience of your test takers, the integrity of the exam, and the reputation of your testing organization. This session will introduce the idea of developing overarching principles that should be considered when drafting a response to a test security incident. With these principles in mind, the session will identify the key factors that go into developing a crisis response plan for test security incidents, as well as the key stakeholders that should be involved in the development of this plan.

The session will address four common test security incidents: the proxy tester, the item harvester, the missing exam materials, and the nefarious test prep organization. Attendees will be asked to work in groups to develop a checklist that outlines a response to these incidents. All attendees' work will be captured during the session and distributed to everyone before the end of the conference, along with guideline checklists developed by the session's presenters. The session will conclude with a discussion about developing an overall crisis response plan for your organization.

Presenters:
Aimee Hobby-Rhodes, CFA Institute
Rachel Schoenig, ACT
Bob Whorton, NCEES

Workshops

TUESDAY, MARCH 4, 2014
8:30 AM - 10:30 AM

Maintaining Test Form Comparability in an Era of Constant Change

Room: **Rainmakers A**

Divisions:

Track: Innovations

Topic: Psychometrics

To keep pace with technological advances in occupations and with growing societal expectations, testing agencies are finding it increasingly necessary to introduce changes to their testing programs on a frequent basis. Whether the changes represent subtle revisions to item formats or major modifications in test delivery, testing agencies need strategies to effectively manage the psychometric challenges that surface in the face of change. Some of the questions that may arise include:

1. Can useful pretest data be collected if examinees recognize the item formats as new?
2. Will previous item calibrations still be valid after enhancements to the testing interface or to test delivery procedures (e.g., hypertext, timing, and administration mode)?
3. Can minor changes be made to items without having to re-pretest or recalibrate?
4. Will existing score scales retain their original meanings and properties after introducing new constructs or skills to an existing exam?
5. As a testing program transitions to universal design to produce assessment tasks accessible to all examinees, will there be implications for scoring and scaling?

The purpose of this session is to identify some of the more common change-related challenges and to offer sound but practical solutions based on the panel's experience. To accomplish this, the session will be organized into three parts. Part one will provide an overview of the types and qualities of changes commonly encountered by testing agencies (e.g., editorial changes, construct changes, introduction of multimedia, changes in user interface, and new delivery mode) and will summarize research on the impact of these types of changes. Gaps in knowledge (i.e., issues yet uninformed by research) will also be identified. In part two, panel members will describe specific challenges that they have encountered while implementing changes to their testing programs and will outline the strategies for managing those challenges. Specific attention will be given to pretesting new content or formats in a high-stakes environment; implementing changes in test administration procedures; and the impact of change on calibration, scaling, and equating. In particular, panel members will describe specific strategies they have found useful for managing these challenges in their own programs. In part three, attendees will be invited to participate by identifying the types of changes in test development and delivery that they have experienced or will encounter in the future and then describing how they managed or plan to manage those challenges. The panel will offer suggestions for change management and conclude the session by summarizing the issues discussed and the strategies proposed.

Presenters:
Mark Raymond, National Board of Medical Examiners
Scott Oppler, Association of American Medical Colleges
Elizabeth Azari, National Board of Medical Examiners
Lawrence Fabrey, Applied Measurement Professionals

Plan Twice, Cut Once: Considerations When Developing Performance Items

Room: **Rainmakers B**

Divisions:

Track: Standards and Best Practices

Topic: Items Types and Formats

Performance items can offer measurement opportunities beyond those of standard, selected-response item types. This session will focus on the appropriate use of performance items, as well as the key considerations for the development of these item types. These considerations include testing strategies and delivery methods (i.e., how to address domain-specific measurement requirements with appropriate performance measurement strategies and item types), scoring models and rating processes (e.g., how to approach the judgment of a candidate work product or process), and technological innovations (e.g., how new technological developments might afford new approaches to the delivery and scoring of performance items).

Attendees will gain perspectives on the use of performance items from representatives of an actual testing program that is currently employing them. Additionally, attendees will be invited to participate in an interactive exercise in which they will be presented with fictitious performance item use cases and then asked to apply the discussed concepts in order to provide an informed evaluation and suggest appropriate measurement strategies. This session is intended to provide insight into the considerations related to performance item development through conceptual training, demonstrated applications in actual use cases, and conceptual self-application in a practice exercise. This session is intended for testing program administrators, representatives, and developers in certification, licensure, and educational testing programs.

Presenters:
Scott Russell, Alpine Testing Solutions
E.W. Looney, BrightLink
Bob Albert, National Dental Examining Board of Canada
Jack Gerrow, National Dental Examining Board of Canada

Psychometric Rules of Thumb that Every Credentialing Manager Should Know

Room: **Rainmakers C**

Division:

Track: Standards and Best Practices

Topic: Psychometrics

In this session, three psychometricians will discuss five important psychometric rules of thumb that every credentialing manager, testing program/business manager, and executive should know. The psychometric rules of thumb presented here have been derived through nearly 75 years of combined experience in balancing the necessity for sound measurement, fairness, and business operations (e.g., project and resource management). Each rule of thumb will be discussed in light of evidence from the measurement literature as well as practical applications in organizations and will be discussed at an introductory level.

This session will feature a panel discussion that will cover rules of thumb related to sample size requirements, number of items/forms for an exam, item analysis in classical test theory, item exposure, and test administration fairness. In discussing sample size, the presenters will describe each major activity of a typical test development cycle and the recommended sample size requirements for each activity (e.g., how many subject matter experts are necessary for a job analysis or standard setting?). Second, the presenters will discuss the number of items (scored and unscored) that should be included on an exam form to ensure reliable and valid measurement of the content domain, how many forms are required, and why. Third, they will discuss the accepted criteria for flagging items using classical test theory (e.g., item difficulty, point biserial, distractor analysis, etc.) and the recommended sample sizes needed to draw conclusions from these results. Next, the panel will discuss item exposure—how many times can an item be delivered before it loses its effectiveness and why organizations should care? Finally, the session will conclude with rules of thumb related to the fairness of exam delivery (e.g., setting exam completion times).

Each discussion will include both a review of the measurement literature as well as the practical reality of applying and integrating the rule of thumb into business operations. Attendees will be encouraged to ask questions throughout this interactive panel discussion. Each psychometrician included in the panel will provide concrete examples that attendees can leverage and apply as appropriate in their organizations. Although the answer might be "it depends," they will provide clear guidance on the conditions upon which the decision "depends," resulting in actionable rules of thumb.

Presenters:
Manfred Straehle, International Credentialing Associates (ICA)
André De Champlain, Medical Council of Canada
Ada Woo, National Council of State Boards of Nursing

Performance Testing 101: Promises and Pitfalls

Room: **Mapmakers**

Divisions:

Track: Innovations

Topic: Test Administration & Delivery Models

Considering going beyond multiple-choice? This interactive session will provide participants with a framework for consideration of performance item formats for their testing programs. The presenters will provide guidance about defining the skills of your field to inform the selection of appropriate item formats and a checklist to evaluate different formats. Participants will be exposed to a variety of novel formats, have the opportunity to conceptualize items using those formats for their own content, and participate in group review and critique of one another's work. The focus will be the promise of applying technology appropriately to enhance test validity and avoiding the pitfalls of integrating technology for its own sake.

Presenters:
David Foster, Caveon
Craig Mills, AICPA
Josh Stopek, AICPA
Jeff West, AICPA

General Session and Awards

TUESDAY, MARCH 4, 2014
10:45 AM - 11:30 AM

Room:
Herberger Ballroom

This year is a record year for attendance at Innovations, the ATP's flagship event. So, why has attendance grown so strongly? In this session, we'll explore the strong ties that define us as a community of testing professionals and where the ATP is headed next. Here's a hint: ATP is local and global in its reach as the Intelligent Voice in Testing.

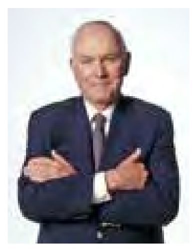
Don't miss this opportunity to join us in recognizing and celebrating two leaders within the testing industry for the 2014 ATP Career Achievement Award and the 2014 Award for Professional Contributions and Service to Testing Award Presentations.

ATP Business Meeting presented by:

Eugene Burke
Chair,
2014 ATP Board of Directors

and

William G. Harris,
Chief Executive Officer,
Association of Test Publishers (ATP)

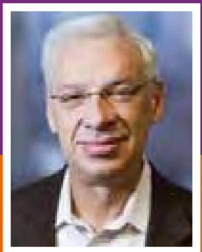


2014 ATP CAREER ACHIEVEMENT AWARD

Robert Hogan, Ph.D.
President, Hogan Assessment Systems

Robert Hogan, Ph.D., president of Hogan Assessment Systems, is an international authority on personality assessment, leadership, and organizational effectiveness. He was McFarlin Professor and Chair of the Department of Psychology at the University of Tulsa for 14 years. Prior to that, he was Professor of Psychology and Social Relations at The Johns Hopkins University. He has received a number of research and teaching awards, and is the editor of the Handbook of Personality Psychology and author of the Hogan Personality Inventory. Dr. Hogan received his Ph.D. from the University of California, Berkeley, specializing in personality assessment.

Dr. Hogan is the author of more than 300 journal articles, chapters and books. He is widely credited with demonstrating how careful attention to personality factors can influence organizational effectiveness in a variety of areas — ranging from organizational climate and leadership to selection and effective team performance. Dr. Hogan is a fellow of the American Psychological Association and the Society for Industrial/Organizational Psychology.



2014 ATP AWARD FOR PROFESSIONAL CONTRIBUTIONS AND SERVICE TO TESTING

Wayne Camara, Ph.D.
Senior Vice President of Research, ACT

Wayne J. Camara is Senior Vice President of Research at ACT, responsible for all areas of research across the education and workplace continuum of assessments and services, as well as psychometrics, job profiling, industrial psychological services, and data, reporting and analytic services. Prior to joining ACT in the fall of 2013, he served as Vice President for Research & Development, responsible for managing research and assessment development for programs including the SAT and AP for 19 years. He played a major role in many major developments including the design and release of the current version of the SAT, and expansion of AP through the original research on AP Potential. His vision and leadership were key to attracting talent to build a world-class research department which increased from 3 to over 75 professionals.

Wayne is a fellow of APA, APS, AERA and SIOP, and past president of NCME. He is currently vice president of AERA Division D (Measurement and Research Methodology). He is past president of APA's Division of Evaluation, Measurement & Statistics, past chair of the Association of Test Publishers, and served as an associate editor or on the editorial board of journals in education and industrial psychology. He has served on technical groups including the Department of Defense ASVAB Committee (chair), Common Core State Assessment consortium (PARCC), the NCAA research committee, Achieve, NAGB Post-Secondary Research and the Department of Education's National Technical Advisory Committee. He currently serves in technical advisory panels for three states, the AICPA (CPA examination), USC's Center for Enrollment Research and personnel and licensing testing programs in industry. Additional, he has provided consultative services to other national assessments programs operated by AAMC and LSAC. His research and publications focus on higher education outcomes, college readiness, large-scale assessment, admissions and placement testing, ethical and professional issues in assessment and test validation. Most recently he has published on empirical standard setting and college and career readiness.

Before joining the College Board, he directed scientific affairs at APA, overseeing policy, federal funding and advocacy for behavioral sciences. At APA he iniated and directed the revision of the 1999 Joint Standards and currently serves as chair of the management committee for the current revision of the Standards. He has often testified before Congree and state legislatures on assessment issues and served as an expert witness in testing cases (e.g., Gratz v. Bollinger). Dr. Camara was a research scientist at HumRRO, faculty at George Washington University and received his Ph.D. in psychology from the University of Illinois at Urbana-Champaign.

21st Century Accommodations for 21st Century Assessments

Room: **Trailblazer DE**

Divisions:

Track: Innovations

Topic: Test Administration and Delivery Models

Over the last decade, the millennial generation has been entering the workplace, attending school, and obtaining certifications after completing courses. They are called digital natives because they are very comfortable with technology. Test sponsors are increasingly turning to technology to reach out to this generation through social media, mobile platforms, and even the assessments themselves. As such, online testing is seeing dramatic growth. Yet the industry is still playing catch-up when it comes to providing accommodations on assessments to test takers with disabilities. These test takers have adapted to a changing world to be technology-savvy as well, but they are provided with human readers whom they have to trust to accurately read test questions so that they can respond accurately. There is a widening chasm between the accommodations that these individuals receive in their education and workplace and the accommodations that they are receiving on assessments. In an attempt to bridge this gap, a test sponsor is taking steps to integrate a high-stakes computer-based test with two technologies that low-vision and blind test takers are familiar with in their daily lives: ZoomText and JAWS.

This session will discuss how three organizations have worked to make an assessment accessible using these technologies. The session will address the challenges faced during item authoring and test packaging, publishing, and delivery as well as how these challenges were overcome to enhance access to the test. Finally, the session will address how the disability community has been engaged in the development of such a solution.

Presenters:
Ashok Sarathy, Graduate Management Admission Council
John Hosterman, GED Testing Service
Ginger Hopkins, ACT, Inc.
Kendra Johnson, Graduate Management Admission Council

Bending Space and Time: Lessons Learned in Item Development

Room: **Trailblazer A**

Division:

Track: Standards and Best Practices

Topic: Business Operations

In the quest to continue building item banks that include high quality, relevant items, organizations need to adopt creative approaches to item development. Cisco has met this challenge by expanding their development team to include more external experts. However, working with external SMEs brings new challenges. How do you get busy experts to collaborate and develop items when their time and availability is limited? Likewise, how do you maximize your output with limited face-to-face time? Cisco has partnered with an external consultant to pilot approaches leveraging best practices from lessons learned in synchronous and asynchronous development sessions. Similarly, the Project Management Institute (PMI) must also continuously generate items to meet item requirements and quality needs. To meet this need, PMI uses region-based, large development workshops around the world.

This session will present best practices, tips, and tricks from both programs to help bend space and time with SMEs. Attendees will emerge with new skills and strategies to get the most out of their SMEs and develop high-quality items in record times.

Presenters:
Sierra Hampton, Project Management Institute
Rory McCorkle, Internatioanl Credentialing Associates
Vikas Wadhwani, Cisco Systems, Inc
Mary Kate Webber, Project Management Institute

Breakout Sessions

TUESDAY, MARCH 4, 2014
11:45 AM - 12:45 PM

FISHBOWL SESSION:
Identifying and Managing Stakeholder Expectations across the Spectrum of the Certification Industry: Who Are the Stakeholders and How Do You Prioritize and Manage Their Expectations?

Room: **Tribal**

Division:

Track: Business of Testing

Topic: Business Operations

A certification program will engage multiple organizations who each have a vested interest in the success of the program. The program sponsor, in addition to each of their partners, all have program managers (PMs) assigned to the program who will work together to identify, prioritize, and manage the collective stakeholders' expectations. A risk to a program is that the stakeholders identified by each PM will include both common (stakeholders common to all PMs engaged in the program) and unique stakeholders (stakeholders who are not common to all PMs engaged in the program). In addition, each PM will likely place different priorities on the needs of common stakeholders. This can threaten the success of a program unless the PMs for each organization work together to prioritize and manage the needs of the collective stakeholders for the program.

A Guide to the Project Management Body of Knowledge (PMBOK® Guide) defines a stakeholder as a person or organization that is actively involved in the project; has interests that may be positively or negatively affected by the performance or completion of the project; and may exert influence over the project, its deliverables, or its team members. The stakeholders for a certification program could include the CEO of an organization, the sponsor or the partner, subject matter experts (SMEs), organizations hiring certified employees, and candidates taking the exam, just to name a few. As PMs are handling the triple constraints of a project (scope, cost, and schedule), they must actively engage the stakeholders and communicate with them to monitor their expectations throughout the life of the project. The PMs will be more successful if they have a shared understanding of the needs and priorities of the collective stakeholders.

This session will present case studies from three PMs (a certification sponsor, a delivery provider, and a test development and psychometric services provider) who will identify their stakeholders while formulating a new project, recognize the common and unique stakeholders, and discuss strategies for coming to a shared understanding of the stakeholders' needs and priorities to balance expectation with action. Session attendees are encouraged to bring examples from their work of overcoming obstacles to identify, prioritize, and manage the expectations of stakeholders.

Presenter:
Jessi Mielke, Esri

I Told It to the Judge, But S/He Didn't Listen

Room: **Trailblazer B**

Divisions:

Track: Standards and Best Practices

Topic: Security

In this session, experts who have testified and prepared legal briefs will share tips for presenting data forensics evidence in hearings and court cases. Eventually, no matter how careful you are with candidate communications and statistical methodology, some individuals will challenge your organization's right to invalidate test scores when they are not trustworthy. This session will give attendees tools so that they can present statistical data of potential test fraud to managers, arbitrators, judges, and hearing examiners in a clear, concise, and compelling manner. Specific illustrations will be provided for collusion, answer copying, unusual gains, Trojan horse questions, and erasures. In addition to illustrations, the experts will discuss pitfalls and traps that could damage your case that you should avoid at all costs.

Presenters:
Dennis Maynes, Caveon Test Security
Jennifer Semko, Baker & McKenzie LLP
Camille Thompson, ACT, Inc.

Looking to the Skies: The Case for Cloud-Based Assessment

Room: **Pathfinder**

Division:

Track: Innovations

Topic: Test Administration and Delivery Models

Cloud-based assessment (assessment as a service) has advanced to the point where assessment can be viably delivered via a web browser. Advances in technology and system infrastructure have made cloud-based testing ideal for formative assessment, in light of the implementation of the Common Core State Standards, it is also being seriously considered as a solution for high-stakes, state, and national assessment. In this session, the presenters will share their experiences with delivering cloud-based assessment on four continents. The presenters will share some of the challenges and successes that they and their clients have faced in implementing such systems in the US, Europe, Australia, and Asia. The session will focus on the following topics:

1. The experience of cloud-based assessment for exam takers
2. The extensive benefits that cloud-based assessment offers in terms of administration and reporting
3. The use of innovative, technology-enhanced items (TEIs), adaptive testing models, and associated authoring processes
4. Pace of system evolution and adaptivity
5. Ease of integration compared with other computer-based testing methods
6. Shifts in pricing and distribution models that the presenters have seen with many of their clients as they have moved to browser-based testing
7. Some of the factors which are typically seen as barriers to using cloud-based assessment for high-stakes exams, such as test security and academic probity

In all of the above cases, the presenters will discuss cloud-based testing within the specific context of the Common Core State Standards and how it may help states, testing companies, and educational publishers to adapt.

Presenter:
Gavin Cooney, Learnosity

DIVISIONS KEY: INDUSTRIAL/ORGANIZATIONAL CLINICAL CERTIFICATION/LICENSURE EDUCATION

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INVITED SESSION

Mobile Testing for Employment: Design, Professional, and Legal Considerations for Future Innovation

Room: **Rainmakers A**

Division:

Track: Innovations

Topic: Test Administration and Delivery Models

The US is experiencing a paradigm shift away from the traditional desktop computing model to an era dominated by mobile computing devices. This shift is already well underway, and its endpoint is not necessarily the literal "death of the PC," but rather a computing environment which is far more heterogeneous in terms of devices and connectivity and also one in which everyone will be increasingly connected all the time. In developed countries, most people will have a choice of devices including desktops, laptops, tablets, and smartphones. The developing world is already seeing a computing environment where many people rely solely on smartphones. At the same time, virtually all publishers have deployed their tests for employment, education, and clinical purposes online through websites accessed using a browser or an app. It's inevitable that these assessments are being increasingly completed using mobile devices. Mobile devices differ from traditional desktop computers in many respects such as screen size, user interface features, and connectivity. These features may well impact the comparability of scores on employment assessments and other measures.

This session will review the existing literature to describe what is already known about mobile testing (e.g., comparability of scores from mobile testing to scores from other modalities and designing assessments for mobile testing). Empirical findings will be integrated with a review of current practice in mobile testing to dissect considerations for mobile testing strategies and to propose best practices regarding mobile testing. This session will also address questions which are unanswered at the current time and make predictions about how mobile testing will evolve over the next 5–10 years. Employers and other assessment stakeholders should also be concerned about broader organizational impacts of mobile testing. Does supporting mobile testing increase efficiency and reduce costs? Does it lead to higher quality (or lower quality) candidates? Are there legal risks associated with mobile testing? If so, can these risks be mitigated? Does being "mobile friendly" during the employment process lead to an organization being viewed more positively by applicants? The session will explore these questions and describe the current state of the art in our knowledge about these equally important matters. We will distill, organize, and integrate the current empirical understanding of mobile testing; share best practices and critical practical considerations for mobile testing; present research questions which the industry must address; and speculate about areas that hold particular promise for future innovation.

Presenters:
Alan Mead, Illinois Institute of Technology
John Jones, General Dynamics Information Technology
Robert McHenry, OPP, Ltd.
Gary Behrens, General Dynamics Information Technology

Multiple Approaches to Building a Personality Assessment Using a Multinational Data Set

Room: **Rainmakers B**

Division:

Track: Innovations

Topic: Psychometrics

A recent revision of a well-known personality assessment encompassing dozens of translations and widespread international data collection offered the opportunity to examine a large data set using different analysis approaches with the intent of validating a somewhat uncommon method of scoring personality assessments—latent class analysis (LCA). To be thorough and investigate the possibilities of using LCA, the publisher had three independent analysts pursue the task of building a four dimensional, normal personality assessment from the same data. One analyst focused on classical test theory (CTT), one focused on item response theory (IRT), and one focused on LCA. In this breakout session, these analysts, along with a discussant, will describe their work, particularly the criteria that they used to evaluate items and scales under the three approaches. For instance, CTT provided analyses and benchmarks that students of basic psychometrics could recognize and evaluate, such as internal consistency. IRT was helpful in selecting items that maximized scale-level information around the midpoint of the theta distribution, where accuracy was most wanted in the current application. LCA, meanwhile, placed more emphasis on measurement equivalence and removal of items with high bivariate residuals to eliminate redundancy in item content.

This session will present the advantages and disadvantages of each approach, and to what extent the three approaches yielded similar conclusions. In brief, results showed that using multiple analysis techniques provided significant insight into the functioning of items and scales compared to any single analysis approach. The three techniques also converged to identify a similar set of best items in the pool, and that the best items tended to work across cultures. These outcomes validate the use of LCA and demonstrate that the scales built using LCA will also be evaluated positively when viewed through other analytic lenses.

Presenters:
Michael Morris, CPP, Inc.
John Kulas, St. Cloud State University
Jay Magidson, Statistical Innovations
Richard Thompson, CPP, Inc.

DIVISIONS KEY: INDUSTRIAL/ORGANIZATIONAL CLINICAL CERTIFICATION/LICENSURE EDUCATION

So You Found a Suspicious Website—Now What Do You Do?

Room: **Rainmakers C**

Divisions:

Track: Innovations

Topic: Security

Where do you go from here? You have just discovered a suspicious website, and you are worried that they will (or have) exposed your test items. You are also concerned that—at this early juncture—your analysis of the site and the decisions that you make about whether or not to proceed with the case will one day hold up in a court of law. Learn from the experiences of one company, that has analyzed over 200 suspicious cases, how to quickly determine whether you should be worried or whether you can set the matter aside (for now). Learn the significance of a "smoking gun" and the "red flags" that signal that you should swing into action immediately. Examples from case law will be provided.

Presenters:
Lauren Wood, American Registry of Radiologic Technologists
Shari L.J. Aberle, Dorsey Whitney LLP

Taking Off with LOFT: Lessons Learned from an Operational Program

Room: **Mapmakers**

Divisions:

Track: Innovations

Topic: Test Administration and Delivery Models

A major challenge for many programs is delivering valid and secure tests and having a robust item bank to support this initiative. Concerns about item harvesting and security necessitate thinking about using alternate test delivery formats that present equivalent test forms to all candidates but limit the exposure of items. Linear-on-the-Fly Testing (LOFT) offers organizations the option of implementing a process that makes more efficient use of an item bank while controlling item exposure. LOFT test design provides a mechanism for delivering equivalent and unique test forms to all candidates from a pool of calibrated items.

This session will present a discussion of LOFT from a panel of experts representing the only global testing provider who has designed and delivered many LOFT testing programs over the past several years. LOFT has been implemented for programs not only in the US, but also in Canada and India. With actual experience in delivering LOFT, the panel will discuss issues related to item development, bank management, and control of item sets, while sharing lessons learned. This expertise can only emerge from real-world experience across multiple programs. This session will present a description of the LOFT testing method and will be useful to organizations considering an alternative delivery method other than fixed forms using classical item statistics or computer adaptive testing that requires extremely large item banks.

Presenters:
Julia Leahy, Prometric
Yves LaFortune, Medical Council of Canada

INVITED SESSION

Trends in Clinical Assessment Research, the DSM 5, Patient Outcomes, and Special Needs in Validation: Conflicts and Some Resolutions for Test Development and Publishing

Room: **Cushing A**

Divisions:

Track: Innovations

Topic: Other

In this invited address session, Dr. Reynolds will briefly review current trends in clinical assessment research submitted to the APA Journal Psychological Assessment; the potential impact of DSM 5 on clinical assessment practice and third-party payer policies; and the at-times conflicting needs of patients, clinicians, and test developers/publishers. Problems and benefits of current trends will be noted and some potential solutions presented. Special validation needs that may resolve some of the coming issues will be noted and significant questions will be posed to stimulate professional debate within the test development and publishing environment.

Presenter:
Cecil Reynolds, Texas A&M University

Walking the Line Between Security and Convenience: Using Online Proctors

Room: **Trailblazer C**

Divisions:

Track: Standards and Best Practices

Topic: Test Administration and Delivery Models

How can you be sure that someone taking an exam on the other side of the world is adhering to the guidelines put in place by your instructional staff? This session will demonstrate how instructors can prevent or catch cheating and ensure a secure environment for employees or students taking online tests in their homes, offices, and other locations.

Thomas Edison State College is one of the oldest schools in the country designed specifically for adults. With 20,650 students spread all over the world, many of whom are active-duty military personnel, the college offers a variety of distance learning courses. Exams administered in connection with these courses, as well as stand-alone tests that enable students to test out of a subject, are administered by third-party proctors who are not affiliated with the college or the student. This session will explain how online monitoring works and demonstrate techniques for verifying a test taker's identity and observing activity during the test. It will also explore policies and strategies for reducing incidents of dishonesty online. Attendees will be invited to discuss how to balance the convenience of taking tests online with the need for security and integrity and how to determine which situations are suitable for using online monitors.

Presenters:
Maureen Fohey, Epic Systems Corporation
Jarrod Morgan, ProctorU

Kryterion
PLATINUM SPONSOR SESSION

The Test Administration Continuum: A Solutions-Based Approach to Designing the Optimal Delivery Models for Your Testing Program

Room: **Merriam**

Test sponsors are no longer restricted to one or two possible delivery models. In fact, the virtual explosion in possible options has made selecting the right model, or models, for a particular testing program rather daunting. This "abundance of choice" often means that the status quo is maintained long after much more suitable alternatives have been developed. This session will inventory all of the available delivery models, critically analyze them for their relative strengths and weaknesses, and propose some techniques you can use to identify your own solutions on the test administration continuum.

Presenter:
David Meissner, Kryterion

Certification Management Services
PLATINUM SPONSOR SESSION

Technology Tools and Identification of Process Complexity

Room: **Powell**

This session discusses how technology tools should not only be used to address process needs, but also to help identify complexities in business processes. CMS will demonstrate how to use technology to identify complexity in processes, clarify the cost of complexity, prepare for shifts in current processes, and design and implement changes in the organization to build understanding, streamline efforts and recapture costs.

Presenter:
Scott Thayn, Certification Management Services (CMS)

The College Board
PLATINUM SPONSOR SESSION

Fair Selection Practices

Room: **Lowell**

This session will be a discussion of what defines a fair selection practice. We will cover some of the steps that can be taken to improve the quality and equity of tests; however, these processes alone cannot ensure fair test use. We will use real examples to illustrate some of the complex issues involved.

Presenters:
Gerald Melican, The College Board
Rosemary Reshetar, The College Board
Michael Walker, The College Board

DIVISIONS KEY: INDUSTRIAL/ORGANIZATIONAL CLINICAL CERTIFICATION/LICENSURE EDUCATION

Lunch with Exhibitors

TUESDAY, MARCH 4, 2014
12:45 PM - 1:30 PM

Lunch with Exhibitors

12:45 PM - 1:45 PM

Room: Kierland Grand Ballroom

ATP Certification/Licensure Division Luncheon

All are Welcome!

12:45 PM – 1:30 PM

Location: Trailblazer C

Join the Certification/Licensure Division leadership as we share our recent progress, as well as future initiatives, related to recertification, innovative items, accessibility, value of certification, and globalization.

Facilitator:
Liberty Munson
ATP Certification/Licensure Division Chair; Microsoft

Asia-ATP Division Lunch Meeting

All are Welcome!

12:45 PM – 1:30 PM

Location: Trailblazer B

Join the Asia-ATP Division leadership as we discuss recent accomplishments, current and future initiatives, and the various ways to get involved.

Facilitator:
Alex Tong
Asia-ATP Division Chair; ATA

INVITED SESSION

ADA Compliance in the Era of Common Core Standards and Assessments

Room: **Trailblazer A**

Divisions:

Track: Standards and Best Practices

Topic: Other

State and district testing-accommodations policies for paper-and-pencil tests have been a work in progress for many years. Now that most states are implementing the Common Core content standards and assessments, focusing on college and career readiness, and moving toward computer-administered assessments, they need to revise their testing accommodations policies to reflect their new goals, implementation of new technology, and new uses for student test results. This session will address the challenges that states and districts are facing in creating legally and psychometrically defensible testing accommodations policies that are consistent with consortia guidelines and Americans with Disabilities (ADA) requirements.

Presenter:
Susan Phillips, Consultant

Assess the Underlying Statistical Structure of Your Test in Order to Optimize Design and Scores

Room: **Trailblazer B**

Divisions:

Track: Standards and Best Practices

Topic: Psychometrics

To meet the challenge of providing evidence that a measure is valid, psychometricians must document that the scores reflect variations in an unobservable attribute such as reasoning or employability. One of the most important forms of such construct evidence is the agreement between the underlying statistical structure of the test and the intended psychological or cognitive structure. This information is crucial for optimizing test design and developing section and total scores.

Using multidimensional data from two independent administrations of a new examination, this session will concentrate on approaches to assessing the structure underlying a test. Emphasis will be placed on concepts and generalizability to other examination programs; underlying mathematics will be kept to a minimum. Evidence gathering will start with a model of how the various content areas relate to each other and the intended purpose.

In this session, five quantitative, three verbal, and one combined content area will be hypothesized and discussed. Lawrence Rudner will present the model, the data used in all the studies, and the need for replication. Eileen Talento-Miller will discuss factor analysis, the traditional and most widely used approach to assessing dimensionality. She will detail the philosophies behind the use of confirmatory and exploratory factor analysis, the options for their implementation, and the results of their applications with this data. The one combined content area, the newest addition to the GMAT examination, will be assessed using four different item types. Fanmin Guo will present an analysis to determine the relationship between these new items and the historical structure of the examination. In recent years, structural equation modeling (SEM) has been a popular choice when a test consists of multiple complicated factors. SEM extends the possibility of relationships among the latent variables and can be viewed as a combination of factor and regression analysis. Kyung Han will introduce real examples in which conventional factor analysis is infeasible or inappropriate, discuss technical obstacles that researchers often face when dealing with adaptively administered test data, and then share the framework and results of using SEM to evaluate latent structure. As the discussant for this session, Lawrence Rudner will highlight the findings of the various presentations and their implications for practice.

Presenters:
Lawrence Rudner, Graduate Management Admission Council
Kyung (Chris) T. Han, Graduate Management Admission Council
Eileen Talento-Miller, Graduate Management Admission Council
Fanmin Guo, Graduate Management Admission Council

Challenges in Identifying and Recruiting the Talent that will Meet the Challenges Facing the Public Sector in the 21st Century

Room: **Rainmakers A**

Division:

Track: Standards and Best Practices

Topic: Government

At a time of significant uncertainty economically, socially, and politically along with a substantial change in the influence of technology in the recruitment and selection of employees, this session will focus on how major public sector organizations are securing the talent they need. This session will showcase some of those recruitment and selection tools and methods in the process. The session aims to look at how to both identify and assess talent in order to focus on the question of what good practice looks like in terms of the talent an organization needs. Examples of effective assessment tools and strategies will be provided. Presenters David and Martha Helena will look at implementing assessment strategies, share some of their own examples of the steps taken in establishing an infrastructure for an effective talent acquisition process, and finally explore how to manage large scale processes including issues such as language in international programs. Finally, this session will endeavor to demonstrate how to show and communicate value to the full range of stakeholders, from candidates to those responsible for the delivery of programs to end clients such as government departments, as well as political stakeholders with responsibility for oversight and funding.

The European Personnel Selection Office (EPSO) selects staff for the European Union Institutions, testing some 60,000 candidates each year in 24 languages. Since 2008, EPSO has implemented a far-reaching modernization of its selection procedures, which now include comprehensive computer-based testing using an item bank of over 80,000 test items and competency-based assessment centers. The new employer brand, EU Careers, has risen dramatically in national and European rankings. The United Nations General Secretariat selects professionals from around the world for a wide variety of demanding posts at all levels, sourcing talent in a truly global context.

This session will draw on the presenters' experience and that of the first International Public Sector Assessment and Recruitment Conference, which was organized together with ATP in 2012.

Presenters:
David Bearfield, European Personnel Selection Office
Martha Helena Lopez, United Nations

Combining the Science of Assessment with Technology Innovation to Create Best in Breed Test Development Solutions

Room: **Pathfinder**

Divisions:

Track: Business of Testing

Topic: Other

Have you faced challenges integrating the use of easy-to-use technologies into your test development process? Are there areas in your process where you know technology could enhance the quality of the content and the exams that you develop? This session will feature a discussion about the process of integrating the science of assessment with advancements in technology throughout the test development life cycle. Attendees will learn how not one singular solution, but a series of easy-to-use applications designed to improve the usability and effectiveness of test development processes, when combined with industry best practices, make the test development life cycle better, faster, and less expensive. The session will include a brief demonstration of a set of user-friendly technology-based tools that have been developed to address these challenges.

Presenters:
Steven Winicki, Prometric
Gary Schmidt, Competency and Credentialing Institute
James Stobinski, Competency and Credentialing Institute

Enhanced Video Surveillance Pilot

Room: **Rainmakers B**

Divisions:

Track: Innovations

Topic: Security

GMAC®, in partnership with Pearson VUE, conducted a pilot of cloud-based, managed video surveillance technology in a number of test centers in international high-risk locations to assess the extent to which such technology may mitigate a number of security and operational challenges compared to its current video surveillance solution. These challenges included:

1. Central management of remote, third-party video installations to monitor ongoing operational stability, status monitoring, recording and retention, and data protection compliance

2. Enforcing correct configuration, proper use of each system, and detecting attempted misuse, disabling, tampering, and other interference by remote site personnel

3. Central access to live video

4. Efficient and centralized search, retrieval, review, packaging, and distribution of video

In this presentation, the 90-day pilot will be evaluated from a technical as well as security-features standpoint in relation to the challenges described above.

Presenters:
Daniel Eyob, Graduate Managment Admission Council (GMAC)
Mark Poole, Pearson VUE

Expanding Your Credentialing Program to Meet Changing Needs

Room: **Cushing A**

Divisions:

Track: Business of Testing

Topic: Business Operations

After successfully implementing a generalist certification and recertification program for over 30 years, a healthcare certifying organization was presented with the challenge of developing a credential for its certificants who have increasingly become more focused in specialty areas of practice. This session will describe the process utilized to develop this new credential, including ways to develop strategic alliances with the specialty organizations, how to determine which specialties should be included in the program, and how the test administration vendor can contribute to the success of the initiative.

Presenter:
Sheila Mauldin, National Commission on Certification of Physician Assistants (NCCPA)

FISHBOWL SESSION: Leader2Leader: Addressing Challenges in Running a Certification Business

Room: **Tribal**

Division:

Track: Business of Testing

Topic: Business Operations

With continued escalation of pressure from boards of directors and other stakeholders who are seeking credentialing programs to be profit centers, how can credentialing program leaders still serve their certificants and the public? This session will feature a fishbowl discussion focusing on the challenges of maintaining a quality credentialing program while managing constraints. The questions posed by the moderator will focus on the topics of:

1. Staffing, budgetary, and other resource constraints and how they affect operations

2. Justifying spending on resources to maintain quality with the bottom line in mind

3. Managing expansion and leveraging efficiencies

4. Analyzing deficiencies in a program's operations and identifying the causes

5. Incorporating good product management processes into certification management operations

The panelists for this session have managed certification programs and have dealt with these operational concerns on a daily basis while expanding the programs in numbers and global reach—both in established and new credentialing products. This session will provide credentialing organizations with tactics to address such difficulties through the expertise of the panelists and learning from the other leaders sharing their expertise in the discussion.

Presenters:
Rory McCorkle, International Credentialing Associates (ICA)
Dania Eter, Cisco Systems, Inc
Jennifer Naughton, ASTD

Information Integration Theory: A New Method for Standard Setting

Room: **Rainmakers C**

Divisions:

Track: Innovations

Topic: Psychometrics

Standard setting has been around in high-stakes testing for over half a century, and numerous methods of it have been introduced, modified, and combined. The wild card in this item rating practice is the subjectivity and varied backgrounds of the subject matter experts (SMEs). This session will discuss a new standard setting methodology using Item Integration Theory (IIT). IIT is based on the work of cognitive psychologist Norman H. Anderson. His model integrates information from two or more stimuli to make a cohesive judgment. In a standard setting model, it provides a cognitively consistent method for integrating item difficulty and performer expertise.

The session will begin by defining and describing the IIT standard setting process and its foundations for use as a standard setting model. Case studies in both high-stakes education and IT certification settings will then be presented. Panelists will describe how this new standard setting process worked, describing its advantages, challenges, and the quality of the cut scores attained. New standard setting methods such as IIT use more objective measures for item evaluation and can provide a coherent, quantitative response for setting cut scores.

Presenters:
Jiten Pradhan, Excelsior College
Chris Foster, PI Worldwide
Karen Petrini, Hewlett Packard

Online vs. In-Person Item Review: Does It Make a Difference?

Room: **Trailblazer C**

Division:

Track: Innovations

Topic: Other

The ARDMS conducted a study to evaluate the impact of in-person group reviews of items. Once items have been edited and approved through the online review process, do the additional edits inevitably performed during group review further enhance the quality of the items? Items across three examination programs were reviewed, edited, and approved using the "three-thumbs-up" approach to online item review and were then taken to an in-person group Item Development Workshop (IDW) where additional edits were made. Version 1 of the item was post online review, and version 2 was post IDW. In the summer of 2012, the two versions of each studied item were included as pretest items on different forms of the three ARDMS examinations, and the performance of version 1 was compared to the performance of version 2 for each item. The versions were compared for p-value, point-biserial, Rasch item difficulty, and item response time to determine which version performed better on exams. It was statistically demonstrated that the IDWs (i.e., in-person item review) did not enhance the quality of the items produced. The majority of the paired items performed equivalently in their two versions. This suggests there is not a need to have in-person peer review sessions to enhance the quality of the item pools. This session will discuss the results of this study in detail.

Presenters:
Ellen Julian, ARDMS
Lori Goebel, ARDMS

INVITED SESSION

The Future of Psychometrics: Emerging Trends and Paradigm Shifts

Room: **Trailblazer DE**

Divisions:

Track: Innovations

Topic: Items Types and Formats

As education enters a new world defined by interactive simulations, intelligent tutoring systems, educational games, and other technology-driven innovations, test makers need to understand how to synthesize advances in technology, statistics, and the learning sciences to support the creation of a new generation of assessments. This session will present some of the specific gaps that need to be filled in order for the promise of new forms of assessment to be realized. These gaps include:

1) Psychometric models appropriate for data collected from simulations, educational games, and intelligent tutoring systems

2) Statistical models that integrate cognitive science with psychometrics for the analysis of process data collected from complex assessment tasks

3) Data mining techniques and dynamic models for "big data." Examples of current projects and initiatives at Educational Testing Service (ETS) that address these gaps will be mentioned

The presentation will close with a more detailed examination of one of the challenges for the new assessments: measuring individual cognitive skills through collaborative problem-solving tasks. It is generally recognized that working well with others is a key 21st-century skill, but what are the appropriate psychometric models for assessments of cognitive skills as inferred from collaborative problem solving? This research focus is exemplified by a new project underway at ETS, the Tetralogue. The Tetralogue is a science assessment package that consists of traditional assessment components and a simulated science task that allows for both human-to-human and human-to-computer agent interactions. The Tetralogue also includes a noncognitive (personality) measurement instrument. This project aims to fill the gaps mentioned above. This session will present some preliminary results of this research.

Presenter:
Alina von Davier, Educational Testing Service

What We are Looking for in the Selection of Item-Bank System Vendors: One Medical Licensure Board's Perspective

Room: **Mapmakers**

Division:

Track: Standards and Best Practices

Topic: Business Operations

Given the exponential advancement of technology and its impacts on testing formats and delivery, many testing sponsoring organizations have found that their legacy item bank systems cannot keep up with their assessment development and management needs. Factors such as cost, expertise, and time may inhibit some organizations from updating their outdated item banks. As a value-added alternative, some organizations have chosen to contract services with external item-bank system vendors that offer new features such as remote item writing and reviewing, integration of innovative items with images, video and audio clips, automatic assembly of test forms based on item content specifications, and psychometric measures stored in the item bank. This session will share one medical licensure board's systematic processes in evaluating and selecting an appropriate item-bank system vendor. Their experiences will shed light on important factors in selecting an item bank system for peer organizations as well as for item-bank system developers.

Presenters:
Melissa Turner, NBOME
Hao Song, NBOME
Dot Horber, NBOME

ACT PLATINUM SPONSOR SESSION

An Interim Model for Monitoring Career Readiness in Early K-12

Room: **Lowell**

Most states have adopted the Common Core State Standards and are now transitioning their current assessment systems to new systems in order to help more students graduate from high school as "ready" for college and careers. Although "college ready" is defined differently across multiple organizations, the consensus definition seems to center on the ability to earn passing grades in credit-bearing courses delivered by accredited two- and four-year postsecondary institutions. No such consensus exists for defining "career ready." In the future, longitudinal data systems will use results from next-generation assessments to track student outcomes from grade 3 through secondary and postsecondary coursework and into employment. Until this data is available, how will stakeholders determine whether students are on track to being career ready? This session presents an interim model for monitoring student readiness. It includes gathering information about entry-level requirements for different levels and types of jobs, relating the requirements to college and career ready assessments delivered at the high school level, and back mapping target scores down to grade 3. The methodology, interpretation of results, and presentation of results to stakeholders are discussed.

Presenters:
Wayne Camara, ACT
Deborah Harris, ACT

PSI Services LLC PLATINUM SPONSOR SESSION

The Service Differentiator as a Marketplace Innovation

Room: **Merriam**

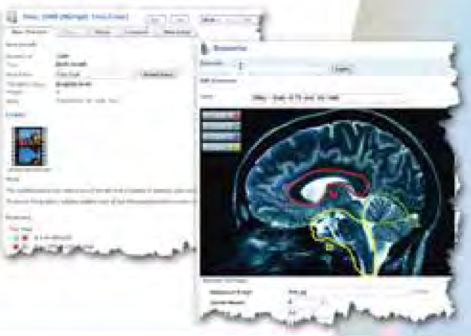
This session will incorporate a roundtable discussion among Association leaders and assessment experts to explore innovation and advances in assessment services that are yielding better assessment quality and value in the marketplace. In recent years, testing technology has led to new capabilities in the development and delivery of assessments, setting the stage for increasingly better and more robust service from assessment providers and Professional Associations. Each Professional Association will give a quick overview of their program and highlight specific challenges that they uniquely overcame to achieve successful growth. We will explore how we harness technological advances to serve our markets and guide individual development for career growth and public protection.

Presenters:
Greg Becker, PSI Services LLC
John Weiner, PSI Services LLC

EXAM STUDIO

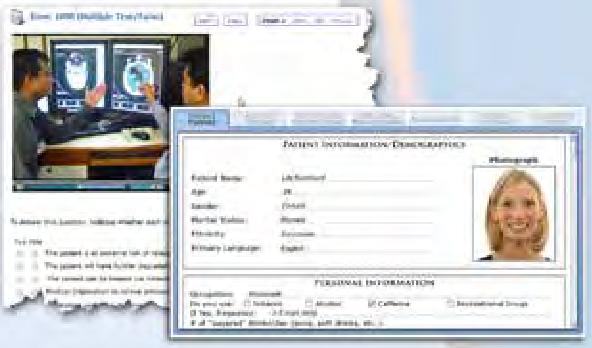
The Solution

- Fully web-based test production & delivery system
- Secure, robust, scalable and fast
- Advanced simulations
- Customizable



Item Banking

- Item authoring and banking
- Management of multimedia content
- Custom workflow design
- Advanced item support



Test Development

- Create and publish forms/exams
- Review exams online
- Score or import result data
- Generate or import statistics

Advanced Web Delivery System

- Deliver exams with advanced items on Windows, Mac, iPads, iPhone & Android
- Support for HTML5 item types
- Built-in scoring system

High stakes Web Delivery

- Proctor your own exams with our onsite proctor console
- ExamStudio Internet Based Test Delivery available at large third party testing networks
- Remote Proctoring

Low stakes practice exam delivery

- Deliver practice exams
- Create practice exam store front in 5 minutes

Advanced Item Type Support

- Leaders in advanced item technology
- Hotspot
- Drag and Drop
- Create interactive Cases
- Custom 2D/3D items and simulations
- True performance-based testing
- HTML5 advanced items

ZOOMORPHIX SYSTEMS

RedPandaX Advanced Items

Glass3D ADVANCED ITEMS

Website: www.zoomorphix.com
Email: sales@zoomorphix.com
Phone: +1 703 791 1734

Melbourne, Australia   Minnesota, USA   Singapore

DESSERT WITH EXHIBITORS, REMOTE TESTING DEMONSTRATIONS & ROUND TABLE DISCUSSIONS

Room: **Kierland Grand Ballroom**

Enjoy dessert with the industry leading vendors in the exhibit hall while soaking up more content through pioneering Remote Testing Demonstrations, or learn and share with your peers during one of the many Round Table discussions.

Remote Testing Demonstrations

Be a Security Sleuth at ATP this year... observe remote testing protocols during real time live lab situations set up throughout the exhibit hall. Hosted by the ATP Security Committee, this is a new opportunity to see security features from various remote testing providers in a demonstrative format. Grab a checklist at the front door as you enter the exhibit hall to keep track topics/features covered by the various vendors.

Key questions for consideration and you compare various technologies:

- Intellectual Property Theft: How do you prevent IP theft in this dynamic setting?
- Proxy Testing: How do you identify and monitor candidates?
- Cheating: What are the proactive measures you take to prevent cheating and what are the measures you take during an exam session?

This is designed to help you learn more about remote testing – so use the time and opportunity to learn all that you can!

Round Table 1
ADA Candidates and Security

This roundtable will discuss and define security practices for special needs candidates. Do accessibility services need different security practice applications? If so, what are they and how are they being implemented?

Round Table 2
Standards and Best Practices: Why and How?

The AERA/APA/NCME Standards are in final throes of development and acceptance. Join this theoretical discussion of the (a) need for Standards and (b) how they are viewed and have been used in the profession and legal processes.

Round Table 3
Open Badges

Open Badges, a new open standard being led by the Mozilla Foundation to recognize and verify learning are being both avoided and embraced in the credentialing industry. What is your take on this new emerging standard for representing credentials online?

Round Table 4
Crowd Sourcing as an Approach to Assessment

Some massive open online courses (MOOC) are talking about using crowd sourcing as a means of assessing competence among student test-takers. LinkedIn now promotes “endorsements” of a member’s skills and experience by another member. Is this meaningful or just a quick and dirty credential?

Round Table 5
Identifying the “Just-Qualified” Candidate in Standard Setting

Creating an image of the just qualified candidate in the mind of each standard setting judge is key to a valid procedure. It can be time consuming however and may not get due attention. What are the most effective means for generating discussion and creating a concept of this candidate?

Round Table 6
Bridging the Gap Between New Common Core TEIs and Legacy Testing Systems

The implementation of the Common Core State Standards (CCSS) has mandated the introduction of “technology enhanced” item types which enable students to demonstrate evidence of complex skills and knowledge. In this discussion, we’ll explore the challenges that testing companies and publishers face in aligning their digital products with the CCSS requirements.

Round Table 7
Sharing Sensitive Test Security Issues Safely

How can we share “best practices” for sensitive test security issues without negatively impacting our testing programs by sharing information that may be helpful to others who wish to “game the system”?

Round Table 8
The Value of Certification: The Industry Perspective

The licensure and certification SIG has been busy this past year researching what certification means to industry specific sectors. Does the finance industry value certification differently than the IT industry? Come review the results and join in the conversation at this lively roundtable discussion.

Round Table 9

Mobile Assessment Applications: What are some Best Practices for Adaptation and Innovation?

Job candidates are already completing assessments via mobile devices even though many assessment delivery systems are not designed for mobile assessment delivery. Yet there are some concerns related to mobile assessment fairness, cheating, and inappropriateness of using mobile devices for employment testing. Can/should other types of tests (e.g., certification exams, education tests, personality tests, counseling/clinical tools) be made available on mobile devices? How would psychometrics be addressed (e.g., equivalence, norms, etc.)? What about impact of user experience? Accommodations?

Round Table Discussions

TUESDAY, MARCH 4, 2014
2:45 PM - 4:15 PM

Round Table 10
Innovative Assessment Methodologies: Where does I/O Psychology fit in?

More and more testing programs have incorporated innovative assessment methodologies into their exam programs. For example, script concordance assessments as well as computer-based simulation are currently being used in licensure and certification programs. How can I/O psychology keep up with innovations in the testing industry? What can I/O psychologists offer in terms of examining the psychometric properties of these new item types? Should selection tests begin to incorporate the new assessment methodologies used by many licensing/certification programs?

Round Table 11
Big Data Research and Business Payoffs: Let’s Get Real!

Everyone talks a good game about using big data sets to drive stronger business results. Not everyone actually has figured out how to make it pay off yet. How can we make it happen? What are organizations that successfully use big data doing to leverage their own data bases in smart ways?

Round Table 12
ATP Clinical Division Discussion: Updates on initiatives and ways to get engaged

Members of the Clinical Division have an interest in tests that enhance clinical, diagnostic or therapeutic decision making by qualified professionals. Whether you are an ATP member or non-member, join this discussion to learn how you can get involved.

Addressing Security Concerns through Psychometrics: How Differential Person and Item Functioning Can Identify Suspect Examinees and Aid in Item Development

Room: **Trailblazer C**

Division:

Track: Innovations

Topic: Security

Given security concerns due to exposed item pools, it is necessary for credentialing testing programs to develop monitoring systems by which suspect examinees' scores can be identified. To deal with these threats to validity, many testing programs have applied various statistical methods to detect potential cheating on examinations. Presenters in this session will extend commonly used techniques, such as total exam performance by total exam time, to show how differential person functioning (DPF) and differential item functioning (DIF) can be incorporated into a comprehensive security plan. Data to illustrate the application of these methods come from two information technology certification exams with item exposure issues.

In this session, presenters will discuss how practitioners can use DPF to aid in identifying suspect examinees' scores and DIF to inform item development and exam maintenance. In terms of security analysis, DPF is based on the comparison of a test taker's performance on a small set of seeded, constantly refreshed (i.e., unexposed), unscored items to the exposed, scored content. Test takers' ability measures are estimated on each subset of items and a probability is calculated for each test taker that indicates the likelihood of a particular combination of scores, from which examinees' scores are flagged as suspect or not. The extension of DIF to item development is based on a comparison of items' difficulty measures when classifying examinees into two groups (i.e., assumed cheaters and assumed non-cheaters) to determine the extent to which items have been exposed and aid in the selection of the most appropriate items for an anchor set for equating. The incorporation of DPF and DIF into a testing program with known exposure issues will be discussed from both psychometric and policy perspectives, covering topics such as the benefits of using these probability-based approaches for test taker enforcement as well as applications for item development, selection, assembly, and equating. These methods can enhance a program's ability to develop a validity argument for test takers' scores, provide evidence to build cases against particular examinees, determine the extent of item exposure, and evaluate the appropriate next steps for particular items within an item pool.

Presenters:
Sara Rupp, CompTIA
Russell Smith, Alpine Testing Solutions
Lisa O'Leary, Alpine Testing Solutions

Beyond Psychometrics: Other Metrics for Evaluating the Quality of Exams

Room: **Pathfinder**

Divisions:

Track: Innovations

Topic: Other

To evaluate the quality of exams and items, testing programs rely heavily on psychometrics, but these statistics only tell part of the story. Relying solely on psychometrics to evaluate the quality of exams and items can limit an organization's ability to drive improvements that may be needed to maintain value for key stakeholders. In industries in which programs compete for candidates, understanding candidate perceptions of the quality of content is crucial to remain competitive. After all, a psychometrically sound item or exam doesn't guarantee that candidates think that it is a "good" one.

This session will explore what role face validity plays in the overall determination of exam quality. Testing programs have several opportunities to gain insight into candidate perception of the quality of their exams. For example, surveys completed by candidates after completing an exam provide insight into candidate perceptions. The key to successfully leveraging survey research to drive improvements is asking the right questions. What makes a "good" exam or item from a candidate's perspective—relevancy, accuracy, clarity, or something else? What attributes of items or exams lead to candidate satisfaction and, more important, loyalty? How do you determine if you're hitting the mark? Survey data will help to validate that an exam meets a candidate's expectations and, by extension, that the public will generally accept the exam result as a good measure of the candidate's knowledge and skills. Other sources for evaluating exam and item quality include information obtained from social media outlets, comments provided during the exam, comments provided by those completing the exam satisfaction survey, and item challenges. This session will also explore examples of how to evaluate this type of qualitative feedback and integrate it with quantitative survey and psychometric data. In this session, representatives from four companies—Microsoft, Citrix, GBCI, and Autodesk—will describe how they evaluate the quality of their content beyond psychometrics and will share approaches for when the "voice of the customer" data is inconsistent with psychometric data. They will discuss their research related to evaluating candidate satisfaction with exams and how these results have been used to drive changes, improvements, and innovations into their testing programs.

Presenters:
Kpayah Tamba, Citrix
Philip Koneman, Autodesk
Elisa Kahn, GBCI

Changing "Wait and See" to "Must See": Validating a New Test Section

Room: **Trailblazer A**

Divisions:

Track: Standards and Best Practices

Topic: Psychometrics

When a new section is added to a test, the most common response of test users is to wait and see before using the section to make decisions. Rightfully so, users want convincing evidence that the new section is valid for their intended use. This is exactly what happened when the Graduate Management Admission Test (GMAT) added a new section on integrated reasoning (IR) in 2012. Neither the test takers nor the schools who use GMAT scores knew quite what to do with it. What they were hoping for was evidence that the new IR score had validity for predicting graduate school performance. However, that evidence would have to wait until examinees took the new section, applied and were accepted to graduate schools, and received grades in the core subjects. This would be two years or longer after the section's launch. Or would it?

This session will describe how validity evidence has been collected to support the use of the IR scores for graduate management program admission. The session will include how user feedback was used to design the section, what examinees think of the section, and the design of concurrent validity studies to inform the predictive potential of scores. The session will also share how the results of the study were used to entice test users to participate in predictive studies to strengthen the validity argument for the scores.

Presenter:
Eileen Talento-Miller, Graduate Management Admission Council

Combating Innovative Infringement

Room: **Mapmakers**

Divisions:

Track: Standards and Best Practices

Topic: Security

This session will examine current security issues related to Certification Exams, as well as enforcement techniques that can be used to combat the ever-adapting infringers. The panel will address the growing concern related to infringement via mobile apps, the continued use of foreign internet service providers, and varying efforts to "redraft" copyrighted content by infringers in an effort to avoid detection and/or liability. The panel will provide an overview of enforcement strategies ranging from app store takedowns to targeted litigation focused on seeking the seizure of domain names and the turnover of online financial accounts. The panel will also counsel attendees on assessing "substantial similarity" (a prerequisite for copyright infringement) in the context of "redrafted" certification exam-related materials. This session is appropriate for all attendees, whether novice or experienced, and the panelists will entertain questions and comments about specific situations and/or best practices.

Presenters:
Gerald Pia, Roche Pia LLC
Brian Roche, Roche Pia LLC
Kerri Davis, Microsoft Corporation

Creating and Maturing a Culture of Quality in a Testing Organization

Room: **Trailblazer B**

Divisions:

Track: Standards and Best Practices

Topic: Business Operations

In the testing industry, it is crucial for every organization to consider how it assures the highest level of quality all along the value chain to maintain the confidence of test takers, test score users, regulators, and the public. While most testing organizations pride themselves on producing high-quality products and services, they may not be using the most efficient tools, practices, and standards to enable them to maximize process efficiency. In this session, leaders from ETS's Office of Quality will discuss how the introduction and application of such tools have strengthened and invigorated ETS's culture of high quality, allowing it to grow its business with confidence. The session will address such key questions as:

1. How do you define quality across a testing organization?

2. How can you think about the process of producing a test in a more structured and disciplined way?

3. How can the concept of a process framework help to identify and control risks more efficiently and effectively?

4. What is a quality management system, and how does it help an organization meet client expectations in the most cost-effective manner?

5. How can you best implement and use a quality management system to provide quality assurance and optimize standardization and use of best practices?

6. What are some of the roadblocks to watch out for when implementing such a system, and what are some strategies for overcoming these roadblocks?

A leader from ETS's R&D/Psychometrics area will then present a case study of how the implementation of a process framework and a quality management system has affected the way in which work in the analysis area is conducted. All three panelists will discuss how the standards provided by the International Organization for Standardization (ISO) and the American Educational Research Association, American Psychological Association, and the National Council of Measurement in Education come into play in terms of establishing and maturing a quality organization.

Presenters:
Amy Schmidt, Educational Testing Service
Marlene Wolf, Educational Testing Service
Jane Borden, Educational Testing Service

Enhancing the Relevance of Credentialing Examinations to Practice

Room: **Cushing A**

Division:

Track: Innovations

Topic: Test Administration and Delivery Models

This session will present the results of the American Board of Emergency Medicine's recently completed five-year process to identify changes to the emergency medicine practice, identify KSAs and standards, and make its multiple-choice questions and oral examinations better reflect the practice. The process included a series of steps to identify changes to the practice over the past 20 years including undertaking a practice analysis, the creation of hierarchical scales and standards, and the use of technology to make the oral examination better reflect the practice by introducing real-time vitals, video, moving images, a PAC-like system, and other innovations.

Presenter:
Robert Korte, American Board of Emergency Medicine

INVITED SESSION

FISHBOWL SESSION: What Does the Future Hold for Credentialing?

Room: **Tribal**

Divisions:

Track: Business of Testing

Topic: Other

None of us has a crystal ball which will accurately predict the future of credentialing, but our collective wisdom may provide fascinating insights into things to come. In this provocative session we'll discuss the future of a broad array of credentials, including academic degrees, certificate programs, certifications, and badges. What role will MOOCs play in degree programs? Will "perishable" certifications replace the traditional certification model? What impact will badges have on the field of credentialing? How are disintermediation and disruptive technologies changing the business of credentialing? These are just some of the topics we'll debate together. Bring to the session your questions about the future of credentialing, share your insights about "what might be" and leave the session ready to brainstorm with your team about how you can begin today to prepare for the future of credentialing.

Presenter:
Lenora Knapp, Knapp & Associates International, Inc.

DIVISIONS KEY: INDUSTRIAL/ORGANIZATIONAL CLINICAL CERTIFICATION/LICENSURE EDUCATION

Identifying and Actioning Talent Needs for European Organizations: Leveraging the Value of Test Data

Room: **Rainmakers A**

Divisions:

Track: International

Topic: Other

This session will speak directly to the focus of the conference by describing the talent challenges that European organizations are facing and how those organizations can gain an edge through testing. In today's volatile environment, the C-suite and no less than the CEO want answers to such questions as, "Are our talent attraction strategies effective compared to our industry and the geographies we operate in?" and "How do I size the risk in making the next round of senior appointments in my business?" These questions about people flag the broader strategic value of test data. Yet a clear challenge to the industry is how to communicate that value to those who lack a strong background in testing. This session will address that challenge by sharing recent engagements across Europe and showing how to demonstrate the value of test data to the C-suite. This session will first feature a short orientation to the data, the models, and the displays deployed. Next, two short case stories will be presented. The first addresses the effectiveness of a graduate hiring program for a leading retail brand; the second looks at post-hire capabilities and optimizing the workforce in the telecoms industry. Next, presenters will provide a summary of the questions that over 50 client reports have addressed to provide a frame for how to deploy test data to address talent strategy questions. Finally, the session will conclude with a facilitated dialogue with attendees to draw out thoughts on how to communicate the value of assessment data to senior stakeholders in organizations.

Presenters:
Eugene Burke, CEB
Tom Gibbs, CEB
Emily Hill, CEB

Investigating Test Speededness in Accommodated Exam Forms

Room: **Rainmakers B**

Divisions:

Track: Standards and Best Practices

Topic: Psychometrics

Test speededness can have serious implications for the validity of score interpretations. Specifically, speeded test conditions can introduce construct-irrelevant variance, compromise the dimensionality of an exam, affect item pretesting and calibration, and result in content underrepresentation. As most achievement and certification/licensure exams are classified under the classic definition of power tests, the degree to which these exams are speeded as a result of necessary administration time constraints must be investigated as a piece of an exam score validity argument.

This session will explore test speededness within the context of ADA-accommodated test forms, specifically, focusing on examinees receiving extra time and/or frequent breaks during their testing session. The joint Standards (APA, AERA, & NCME, 1999) require ongoing research and investigation to ensure that accommodated test form scores and interpretations reflect the intended construct, rather than evidence of a disability or accommodation. The fairness, equity, and validity of exam scores may become compromised if prescribed accommodations are ineffective in eliminating speededness for examinees with disabilities when compared to examinees without disabilities.

This session will present methods that will aid testing professionals in examining and teasing out the possible effects of speededness in accommodated testing contexts. Increasing requests for testing accommodations and the ongoing responsibility of testing bodies to validate scores render this presentation timely and informative. Data from a national certification organization will serve as a case study to demonstrate graphical approaches allowing for visual inspection of speededness and statistical approaches, including methods utilizing Item Response Theory (IRT) frameworks. The methods presented can be used to triangulate results and ascertain whether speededness exists and to what extent. Simulated data will be used to further illustrate how speeded conditions could manifest. A background into the effects of speededness, accommodations, and how these topics interact with the construct will also be included in the session.

Presenters:
Robert Furter, UNCG
Scott Arbet, Arbet Consulting

Protecting the Keys to Your Kingdom from Online Cheats

Room: **Rainmakers C**

Divisions:

Track: Innovations

Topic: Security

Computerized testing has become one of the fastest, most efficient ways to deliver high-stakes exams to test takers. However, with efficiency comes risk—increased vulnerability to test theft and cheating, resulting in Internet brain dumping. A testing program's hard work can be gone in the blink of an eye. In this session, attendees will learn about strategies and technologies to effectively prevent and retaliate against test center item theft. A case study will describe a new integrated technology testing model that reduces item exposure at the time of test delivery. As a result, tests and their items are used longer in the testing cycle, thereby reducing the need for resources to revise and replenish the testing bank. This session will describe how this model secures test content in a way that directly results in fewer test items lost and how those savings are measured. The collaboration, metrics, advantages, and shortcomings will also be discussed. As a result of this session, attendees will be able to describe a model for integrating technology-based test delivery, generate ideas for establishing a program's ability to integrate secure test delivery solutions, and define metrics for determining the reduction of stolen test content.

Presenters:
Karen Petrini, Hewlett-Packard
Faisel Alam, Law School Admissions Council
Krista Ketchmark, Pearson VUE

The Impact of Digitization in the Education and Certification/Licensure Credentialing Markets

Room: **Trailblazer DE**

Divisions:

Track: Innovations

Topic: Business Operations

This session will feature a moderated panel discussion to explore the real and/or potential impact of digitization in the education and certification/licensure credentialing markets. Drawing on actual case studies involving e-transcripts and digital credentials (represented as open badges), panel members will illustrate how organizations are leveraging the digitization of historically paper-based operations to generate operational efficiencies and cost savings, enhance value for both individual and institutional stakeholders, and enable practices not currently possible without digital technologies. Panel members will also discuss other likely sources of digitization on the horizon and their potential impact. Panel members will explore, through an interactive dialogue, digital strategies and/or solutions that might be brought to bear in support of actual problems posed by attendees.

Presenters:
Frank Catalano, Professional Examination Service
Matthew Pittinsky, Parchment
Sunny Lee, Mozilla Foundation
Robert Block, Professional Examination Service

Cito
PLATINUM SPONSOR SESSION

Mirror Mirror on the Wall, Who has the Best Assessment of Them All? Presenting a New Approach for the Online Evaluation of Assessments

Room: **Lowell**

Is your assessment up to standard? Would you be able to present all the relevant sources of information necessary to evaluate the quality of your tests? And would it be of convenience when both psychometric and content related sources of supporting evidence are combined into one online quality portfolio? The online Quality Evaluation Application might fit this purpose.
The assessment industry is interested in building fair and valid tests. A problem that arises, however, is in order to demonstrate the fairness and validity of our tests we have to provide a lot of documentation and research reports. In this interactive session, an innovative online system is presented that can be used to build quality management portfolios. The system aims at guiding test developers and researchers in evidencing the quality of their product (Wools, 2012). It is designed from a theoretical framework that rests on the argument-based approach to validation (e.g. Kane, 2006). This framework creates the possibility to show the quality of a test for a specific purpose by building quality arguments. Furthermore, it supports both formative evaluations of test quality to guide further development as well as summative evaluations of test quality performed by an independent auditor. In this interactive session we will show the online application and elaborate on the theoretical framework that is incorporated. Furthermore, we will demonstrate how quality-arguments are built and evaluated. During the demonstration of the application the audience is invited to participate in evaluating the evidence that is collected to support the quality of tests. Furthermore, we will discuss the usability of the application and the theoretical framework for the evaluation of quality of assessments.

Presenters:
Saskia Wools, Cito

learndirect
PLATINUM SPONSOR SESSION

Overcoming the Challenges of Implementing Large-Scale E-Assessment and Learning Solutions

Room: **Merriam**

Through a series of case studies, this session will explore the challenges faced when implementing large-scale e-assessment and learning solutions. It will highlight the operational efficiencies that need to be in place to set-up a large network to support the candidates and learners, as well as putting in place high security measures to ensure the integrity of the content and assessment.

Presenters:
Ben Hancock, learndirect
Amanda MacGregor, learndirect

Thank You and Receptions

TUESDAY, MARCH 4, 2014
5:30 PM - 7:00 PM

SPONSOR THANK YOU AND DEBRIEF RECEPTION

5:30 PM - 6:15 PM

Room: **Sitgreaves**

All sponsoring organizations are invited to join ATP for cocktails as we debrief 2014 and look ahead to 2015.

ATP INDUSTRIAL/ ORGANIZATIONAL DIVISION RECEPTION

ALL ARE WELCOME!

6:00 PM – 7:00 PM

Room: **Whipple**

Join the I/O Division for this casual networking reception as you meet the Industrial/Organizational division leadership, learn more about the current initiatives and find out how to get involved.

BREAKFAST WITH CLOSING KEYNOTE

Breakfast
8:00 AM - 9:00 AM

Keynote
9:00 AM - 10:00 AM

Room
Herberger Ballroom

Presenter
Hilary Mason
Data Scientist in Residence, Accel Partners. Former Chief Scientist, bitly

Engineering Our Data-driven Future

We're seeing a shift from developing systems that generate data as a side-effect to using data to make better decisions. Don't miss this Keynote Presentation as Hilary explains what this means for technologists, why it's happening now, and what the opportunities look like.

Our industry relies on information, measurement and the power of data. Hilary has distinguished herself as an innovator and entrepreneur who understands the importance of data and data visualization. She serves on Michael Bloomberg's Technology and Innovation Advisory Council, and has been written up in Fast Company and Scientific American for her work on making sense out of massive data sets.

Her understanding of how information can change our decisions and our world will help you to realize we should be analyzing big data in our everyday practice.

European ATP Division Breakfast Meeting

All are Welcome!

8:00 AM - 8:45 AM

Room: Tribal

Join the European Division of ATP as we discuss the current plans and initiatives in place for 2014 and beyond. Bring your thoughts and ideas as new ideas are encouraged.

Speaker Lounge Open

8:00 AM – 12:30 PM

Room: Cushing B

Are you presenting at the Innovations in Testing?

Stop in to practice your presentation, collaborate with co-presenters, or just rest for a while. This room is open to all conference presenters.

Content Alignment for Computerized Adaptive Tests

Room: **Rainmakers A**

Division:

Track: Standards and Best Practices

Topic: Other

Alignment reviews provide evidence to support the validity of assessment systems. Alignment refers to the degree of consistency between test items and tasks and content that the test purports to measure. The results provide evidence that the assessment represents the full range of content and measures student knowledge in the manner and level of complexity specified in content standards. Alignment review methods were developed for fixed form tests which have a limited number of test forms and a relatively small number of items. Since every item on each form is seen by students, reviewers can evaluate content coverage and assess task appropriateness for all items in a reasonable amount of time. For adaptive assessments, where item pools are large and there is no single “form,” complete reviews of forms and items are impractical. It is inappropriate to base alignment evidence on a single student’s “set” of items, as this would be a small and unrepresentative sample. It is equally inappropriate to base alignment evidence on the full item pool, since no student will actually take the full pool—leading to an inflation of the results. Neither of these options would provide useful information about current test validity or future improvement. Adaptive alignment methods entail examination of a sample of items in simulated and actual test forms, an evaluation of pool adequacy for support of the test design and a method of summarizing fidelity to the test blueprint.

This session will examine the alignment plan for the Smarter Balanced assessments including the requirements of sampling participants, items, and simulated forms for students at different ability (theta) levels. Modifications and alternate criteria for conducting alignment studies for computer adaptive tests (CAT) will be discussed, such as comparing simulated forms to intended blueprints. A discussion of the process for developing item plans by contractors and individual states will be included in the alignment study. Finally, plans to disaggregate these data and results to inform the sustainability of a model that includes item development by vendors and individual states will be presented. This session is intended for anyone who needs to evaluate the content validity of an adaptive test.

Presenters:
Marty McCall, Smarter Balanced Assessment Consortium
Sunny Becker, HumRRO

Effective Quality Exam Development Using Virtual Worldwide SMEs

Room: **Rainmakers B**

Division:

Track: Standards and Best Practices

Topic: Other

Quality exams rely on quality subject matter expertise. This session will present the biggest challenges in working virtually with SMEs located across the globe, including: how to find SMEs with the right level of expertise, incentivizing SMEs to commit their time and skills to a project, when to use synchronous (i.e., live) versus asynchronous approaches to getting exam development work done, and how to keep SMEs engaged in remote workshops lasting several hours or taking place across several days. This session will also share the results of a 2013 IBM Tivoli Certification Program survey with over 900 individual SMEs that includes feedback such as: why do some SMEs participate in exam development while others do not, what barriers must be overcome for them to participate, and what exam process improvements do they recommend to make the most effective use of their time?

Presenters:
Kristin Gibson, IBM
Susan Farago, Farago Enterprises, LLC

Ensuring Validity and Fairness of Credentialing Examinations: Legal and Psychometric Considerations

Room: **Rainmakers C**

Divisions:

Track: Standards and Best Practices

Topic: Other

Assessments provide valuable insight into candidate competencies, capabilities and characteristics, serving a range of societal functions such as professional and educational credentialing, and organizational talent acquisition and management. Assessment instruments must be valid and fair in order to ensure that they yield results that are accurate, reliable and unbiased. Requirements for demonstrating validity and fairness are not always consistent between the legal and scientific communities, which poses a challenge to test publishers and users who seek to implement best practices that will withstand legal challenges. The presenters in this session will explore key considerations in addressing legal and professional guidelines and standards, as well as recent case law affecting test use. Drawing from case studies and practical examples, the session will highlight implications for test development and use in a variety of assessment applications, with an emphasis on credentialing.

Presenters:
John Weiner, PSI Services LLC
Jim Sharf, Employment Risk Advisors

Equating Versus Standard Setting for Maintaining an Equivalent Passing Standard

Room: **Trailblazer C**

Divisions:

Track: Innovations

Topic: Psychometrics

When a new test form is introduced, it is critical that test takers are not unfairly advantaged or disadvantaged by taking a form that is easier or harder than previous forms. Ideally, test equating would be used to ensure the fair treatment of all candidates. When a testing program has a limited number of examinees available for equating purposes, however, the decision of how to best maintain equivalence across forms becomes a difficult one. In reality, there are several options used by practitioners for maintaining equivalence when limited samples are available for equating. This session will share the results of an empirical study designed to evaluate 3 common approaches and 1 not-so-common approach:

1. To equate with small samples
2. To perform identity equating
3. To “reset” the passing standard through a new cut-score study
4. To “rescale” the passing standard through a combination of equating and standard-setting methodologies

Presenters:
Anna Kurtz, North Carolina State University
Andrew Dwyer, Castle Worldwide

FISHBOWL SESSION: Practice Exams: The Ugly Stepsister of Test Development

Room: **Tribal**

Divisions:

Track: Business of Testing

Topic: Other

If Cinderella is the perfect item, then the practice test item is her ugly stepsister. Practice tests provide a necessary function in the assessment process. They can assess readiness, provide a window into new test content and item formats, and can direct focused areas of study. However, the role of the practice test can often be diminished by the use of less-than-desirable test items that make up its framework. Many practice tests consist of items not worthy of making it to the real exam—they will never fit into the proverbial glass slipper. However, testing organizations do have different models, strategies, and uses for practice tests. This interactive fish bowl session will explore the various approaches and methodologies behind practice test use. Panelists and attendees will discuss test preparation strategies, methods for practice test item development, item quality measurement, and practice test delivery models.

Presenters:
Stephen Luebke, Law School Admissions Council
Joy Matthews-Lopez, National Association of Boards of Pharmacy
Erika Johnson, Caveon
McKenzie Myers, Western Governors University

Making the Hours Count: Operationalizing the Experience Requirement

Room: **Pathfinder**

Divisions:

Track: Innovations

Topic: Other

This session will present a large-scale, international credentialing body’s efforts to operationalize the hours-of-experience requirement established for two different certification programs—moving it from simple quantification of time spent on the job to the evaluation of actual behaviors on the job. Through the implementation of a panel review process, subject matter experts (SMEs) review candidate essays describing specific examples of their experience within areas of responsibility defined through a role delineation study. This process authenticates the candidate’s eligibility as an experienced practitioner prior to granting the privilege of sitting for the examination.

This session will provide attendees with insight from several perspectives including the credentialing sponsor’s policy decision to implement an experience verification process via panel review, a volunteer panel reviewer’s unique perspective on evaluating essays, and a testing services partner’s efforts in developing a psychometrically defensible decision-making system.

Presenters:
Jacqueline Siano, Professional Examination Service
Victor Carter-Bey, Project Management Institute
Simona Fallavollita, Project Management Institute
Mark Rogers, Consultant for NCR Corporation

Results of a Data Visualization Competition to Report Item Performance Statistics

Room: **Trailblazer A**

Division:

Track: Innovations

Topic: Psychometrics

Any certification program that uses multiple-choice questions often has to review item performance statistics reports. To communicate the results more clearly, the presenters of this session introduced a data visualization competition open to the public to visualize Classical Test Theory item performance statistics using commonly used or open-source software. To accomplish this, the presenters worked closely with a data visualization expert (one of the presenters) on the development, process, and evaluation of the competition entries.

The presenters will detail the rules and requirements of the competition including the data set provided to the contestants. In addition, the presenters will discuss the rubric developed to evaluate the entries including rubrics on data visualization best practices and operational and implementation considerations. Some of the entries will be shared and discussed. Finally, the latter part of the session will present possible applications for other credentialing and testing organizations and lessons learned, concluding with questions from attendees.

Presenters:
Manfred Straehle, International Credentialing Associates (ICA)
Alexandra Kassidis, International Credentialing Associates (ICA)
Stephanie Evergreen, Evergreen Evaluation

The Best of Both Worlds: A Comparison of NCCA and ANSI Standards

Room: **Trailblazer DE**

Division:

Track: Standards and Best Practices

Topic: Other

This session will provide an overview of the NCCA and ANSI standards for professional certification. Attendees will gain the knowledge necessary to evaluate the appropriateness of each accreditation for their testing program. The presenters will begin by defining relevant terms such as standards, accreditation, and best practice guidelines. The purpose of each type of document will be provided. The role of standards will be discussed along with their value to regulators, test makers, test takers, test users, and the public. To set the stage, the AERA/APA/NCME Standards for Educational and Psychological Testing will be briefly summarized, and the way in which this document relates to the NCCA and ANSI standards will be discussed.

The second part of the session will provide attendees with an outline of the NCCA and ANSI standards. This will include the philosophical framework for each set of standards, the target audience, the history of the standards, and the process by which the standards are developed. The accreditation process for each will be described, and the similarities and differences between the NCCA and ANSI standards and accreditation processes will be explored. The presenters will focus their discussions on important common topics such as validity, reliability, and fairness. The presenters will provide insight into the ways in which standards promote innovation and provide ideas as to how innovation can be made in a manner that meets the standards. This part of the session will include a brief overview of equivalency studies, external review, and third-party testing. Ultimately, the presenters will discuss how the standards can be used by attendees to improve program quality, increase program value, and provide evidence to support the psychometric soundness and defensibility of their programs.

Presenters:
Brian Bontempo, Mountain Measurement, Inc.
Lynn Webb, Testing Consultant
Anjali Weber, Institute for Credentialing Excellence
Vijay Krishna, American National Standards Institute

The Impact of Identifying Fundamental Competencies in a Profession

Room: **Trailblazer B**

Divisions:

Track: Innovations

Topic: Other

There is an increased focus on identifying the fundamental competencies within a profession. This session will present a case study that explores the short- and long-term consequences of refining a profession's description of practice; that is, moving from a static description of one practitioner's roles and responsibilities to a dynamic description of how a variety of practitioners at different levels and in different lines of service all work together to perform unique and overlapping activities. The case study will describe the integration of descriptions of practice for two current credentialing programs that license and certify long-term care administrators. The case study will also articulate procedures required to be inclusive of at least three potential practice areas, thereby being responsive to changes in the workforce and the need to create both career ladders and enhanced professional mobility. The session will describe key transitions and decision making regarding:

1. Policies and procedures underlying numerous aspects of two current credentialing programs
2. The revision of education accreditation mechanisms
3. The road to obtaining regulatory approvals for the modification of current programs and/or the implementation of new programs
4. Item development and item banking efforts related to the implementation of shared and unique banks
5. New examination construction activities required to support a generic core examination and specialty examinations as well as a capstone competency-based examination designed to assess a practitioner's qualifications in a highly mobile work world

Finally, the session will address issues related to "protection of turf" and the desire to be "ahead of the curve."

Presenters:
Randy Lindner, National Association of Long Term Care Administrator Boards
Keith R Knapp, Christian Care Community
Sandra Greenberg, Professional Examination Service

Using Standards to Create Best-of-Breed Assessment Solutions: Theory and Practice

Room: **Cushing A**

Divisions:

Track: Standards and Best Practices

Topic: Items Types and Formats

Standards such as QTI (Question and Test Interoperability) and LTI (Learning Tools Interoperability) have been around for some time, but they have yet to be adopted more broadly by customers and vendors alike. This can be explained by a lack of understanding of what these standards mean from a user perspective, but also by the fact that these standards are not entirely free from ambiguity. This session will explain the problems created in the process of making assessment tools from different vendors interoperable and the barriers that need to be overcome. Based on their own experience with these standards, presenters from Cito and Open Assessment Technologies S.A. will propose a blueprint for implementing QTI and LTI and demonstrate how a coordinated implementation between vendors opens the door to a wide range of new features. In addition, attendees will learn how separate products can be integrated at the application level to provide extra value at little or no incremental cost between: 1) separate, open-source and closed-source testing software—exemplified by TAO and Questify—for low-stakes to high-stakes assessment planning and 2) open-source learning management and testing software (LMS and CBT)—exemplified by Moodle and Sakai—for a seamless integration of learning and testing methods.

Presenters:
Thibaud Latour, Open Assessment Technologies, S.A.
Mark Molenaar, Cito

Workforce Credentials: What Do They All Mean?

Room: **Mapmakers**

Divisions:

Track: Business of Testing

Topic: Business Operations

A multitude of factors has resulted in the rapid growth of workforce credentials including: the cost of obtaining an undergraduate degree; the growth of technician level jobs; the need for worker retraining; the decline of union training programs; and the need to fill an acknowledged "skills gap" both in the US and internationally. This trend is likely to continue in the US (and perhaps in other countries) as more US-based manufactures look to "reshore" manufacturing jobs.

Workforce credentials come in a wide variety of types: badges, industry-sponsored training and certifications, educational program credentials, and trade association certifications. They all, however, have one thing in common: they focus on outcomes used in labor markets. The rapid growth of such credentials, and the need for verification and authentication both of the credentials and the individuals possessing them, has led to significant confusion in the marketplace.

This session will examine workforce credentials, and the challenges occasioned by their rapid growth. Included is a case study that highlights the issues confronting a large international oil and gas company to implement and validate global work practice guidelines through credentials. This session is meant to be interactive and participation by the audience is encouraged. Attendees will also learn how ATP is reacting to these developments.

Presenters:
Steven Peluso, Law Office of Steven T. Peluso
Dan Rinn, National Technology Transfer
Alan Thiemann, Law Office of Alan J. Thiemann

An Innovative Way to Measure Classification Consistency and Accuracy for Linear on-the-Fly Testing (LOFT)

Room: **Trailblazer A**

Divisions:

Track: Innovations

Topic: Psychometrics

Linear on-the-fly testing (LOFT) is a form of computer-based testing (CBT). LOFT generates a pool of parallel test forms according to the same content and statistical specification and then delivers different forms to different candidates. The fundamental idea of LOFT has been known for a while and has been discussed by van der Linden as a model of automated test assembly (ATA) for multiple test forms. Because LOFT is an ATA, it can be implemented using several different methods. Some popular implementation methods are to use deterministic optimization algorithms such as simplex method or interior point method; both of these algorithms are implemented in several commercial and free optimization packages such as CPLEX and lp_solve. Although algorithmic aspects of LOFT are well known and have been thoroughly studied in several contexts of CBT, there are few studies on the psychometric aspects of LOFT. Most notably, there is no known method to compute classification consistency (CC) and classification accuracy (CA) in LOFT, which are important pieces of validity evidence for the technical quality of any licensure or certification exam. In psychometrics, classification consistency refers the degree to which candidates are classified into the same category over multiple administrations of the same measuring instrument. Classification accuracy refers to the degree to which observed classifications agree with true classifications. There are numerous procedures for computing classification accuracy and classification consistency. However, all these methods cannot be applied directly to LOFT. This session will address the following issues:

1. The reason why traditional methods to compute CC and CA cannot be directly applied to LOFT
2. The statistics developed by Rudner, Guo, Martineau, Wyse, and Hao
3. A new procedure to calculate CC and CA in LOFT using these statistics
4. Conceptual differences between new and traditional CC/CA statistics in LOFT

Presenter:
Seonho Shin, Test Development Solutions

Assessing Computer Literacy: Lessons Learned for Testing in a Rapidly Changing Content Domain

Room: **Pathfinder**

Divisions:

Track: Innovations

Topic: Items Types and Formats

Computer literacy is required for all manner of occupations, making the assessment of this set of skills increasingly relevant in education, credentialing, and employment settings. This session will compare and contrast two major programs by examining their assessment goals and approaches, how they manage to maintain relevant exams that assess this rapidly changing content domain, and their challenges in creating assessments that meet the needs of different settings.

First, representatives from Microsoft will present the design, development, and implementation of a certification program that they recently launched called the “Microsoft Technical Associate.” It is geared toward students, technology educators, and other academic audiences and is designed to validate foundational knowledge needed to begin building a career using Microsoft technologies. As a result, it is considered an entry point into IT certification. By passing an MTA exam, candidates earn a certification that validates their understanding and core knowledge of IT fundamentals.

Next, representatives from the Department of Defense will present an assessment it has developed (through the US Air Force) known as the “Cyber” test, which supplements the cognitive ability and information tests that have traditionally comprised the Armed Services Vocational Aptitude Battery. The test uses information/knowledge-based items that conform to the selected response format of the ASVAB test platform. The Cyber test is designed to help select enlisted personnel for various military occupations. The Air Force currently uses the test as an alternate means of qualification for entry into the cyber-related fields. Broader use of the test across the US armed services is anticipated as additional R&D work is conducted.

During this session, the representatives from both programs will share the challenges of and lessons learned from creating assessments for computer literacy and extrapolate how this translates to maintaining certifications and assessments in other rapidly changing content areas. In addition, the presenters will discuss the challenges of engaging new, younger-generation audiences in the assessment process despite various operating constraints. Finally, the presenters will discuss what can be learned from each other through cross-discipline (e.g., credentialing, education, and employment) collaboration. This will be an interactive discussion in which attendees will be encouraged to ask questions as they apply ideas to their own testing programs.

Presenters:
Deirdre Knapp, HumRRO
Holly Dickson, Microsoft
Matthew Trippe, HumRRO

Exam Inoculation and Other Crazy Ideas to Stop Cheaters from Passing Exams

Room: **Trailblazer B**

Divisions:

Track: Innovations

Topic: Security

Piracy is a significant problem for many certification programs, and many exams are compromised in some way. What can you do when it is very likely that your test items have been compromised? Must you discard all exam results and require that all test takers (including those who didn't cheat) retest? Is it possible to administer tests even when some of the test takers may have unfairly accessed the exam content? Although IT programs have dealt with this for years, other industries and certification programs have recently begun to encounter these challenges. Most of the measures that testing programs use to combat piracy are reactive—happening after the exam has been delivered and the candidate has engaged in bad behavior (e.g., identifying proxy testing, brain dump use, and collusion; shutting down test centers; banning candidates; etc.). What, if anything, can testing programs do to take a more proactive approach in preventing those test takers seeking gains through unfair means from passing exams? While data forensics and delayed score reporting offer possible solutions to this dilemma, many testing organizations do not have the luxury of taking advantage of these options because of programmatic constraints.

In this session, three IT certification program managers will discuss research and techniques for thwarting individuals who may have accessed live test questions improperly (e.g., by using brain dumps). The three areas of research that will be discussed are:

1. The use of item decoys to confuse brain dump users

2. The use of embedded verification tests to detect brain dump users

3. The use of exam publication tactics to infuse immunity or to inoculate exams against brain dump users

In this session, attendees will learn the effectiveness of these techniques obtained from experiments where non-scored items were published on live exams.

Presenters:
Beverly Van de Velde, Symantec
Dennis Maynes, Caveon Test Security
Liz Burns, Juniper Networks

Item Development and Delivery in an Interoperable World

Room: **Raimmakers A**

Division:

Track: Innovations

Topic: Items Types and Formats

As K–12 testing moves into new computer-delivered environments, ensuring that assessments remain accessible to all students has become an increasingly high priority. Public policy, industry groups, and assessment vendors have all impacted the development of requirements for item attributes and other assessment metadata to ensure that assessments and items can be moved from one system to another. Computer-adaptive environments also require additional item attributes to provide information for test-assembly algorithms and the generation of alternate accessible renderings. This session will provide examples of item development and delivery in this environment that are also applicable to other programs that provide assessments to diverse populations. This session will provide:

1. An overview of public policy and emerging industry interoperability standards as they impact assessment development in the K–12 market

2. A description of the operational application of these standards for the development of computer-adaptive assessments, including item attribute definition and accessibility attributes

3.A demonstration of computer-administered items with associated item attributes

Recent market trends, including those initiated by the RTTT assessment consortia, leverage capabilities and capacities across the vendor community by awarding contracts to collaborations of vendors.

This requires the sharing of item content and data across development, delivery, and psychometric vendors. This trend is supported by industry and public policy on interoperability to ensure that item fidelity is maintained across service providers and platforms.

Presenters will provide a brief overview of current policy guidance and industry standards and how these policies can be operationalized in a high-stakes assessment. Session attendees will have an opportunity to review a set of item attributes defined for cross-contractor collaboration for a large national testing program and discuss the implications for item development. Once items have appropriate attributes and metadata, innovative items can be created and delivered in a variety of accessible formats. Session presenters will demonstrate innovative item types that incorporate embedded accessibility features and discuss challenges associated with development and delivery.

Presenters:
Sally Valenzuela, CTB/McGraw-Hill
Kevin Dwyer, American Institutes for Research

Mass Customization of Complex Performance Tasks

Room: **Trailblazer C**

Divisions:

Track: Innovations

Topic: Items Types and Formats

The AICPA has been working for years to refine and improve upon the utility of complex performance simulations in the Uniform CPA examination. Gaining tangible benefits from this work requires a comprehensive, principled approach that continuously refines and reworks both assumptions and practical concerns. Specifically, the AICPA has achieved success in the use of templates (item blueprints) to direct item development using models of the tasks they wish to create. Item templating can be seen as an iterative, confirmatory method for item development and refinement. This session will detail how templates are developed and refined in light of empirical data.

The session will be of interest to practitioners who want easily replicable, highly controlled templates that aid item writing to achieve consistent measurement of knowledge and skills. This session will also detail the benefits of using templates to allow for the efficient production of a large number of items. Once an item template is built, multiple versions of that template can be produced quickly and easily, which has a direct impact on item exposure and security issues. Additionally, the session will show how using multiple instances of items created from a template allow for a much finer-grained understanding of item functioning that offers mechanisms for directly controlling item development. If the multiple versions of the item all tap the content and skills in the same way, it is expected that the items will function similarly. If so, then the instances can be used interchangeably. If not, it allows for the refinement of item writing guidelines or the development of new items that tap a different aspect of that skill/content combination. Analyzing the instances is critical to gaining tighter control over item development as well as formulating a better understanding of the construct of interest.

This session will demonstrate the methods used to engage in the practice of templating items. The session will also present the general types of items that the presenters believe will be amenable to the successful implementation of templating processes and will demonstrate how attendees might do the same work with their examinations. Specific lessons learned from implementing this approach at the AICPA will be described in detail with specific examples using publicly disclosed items.

Presenters:
Joshua Stopek, AICPA
Henrietta Eve, AICPA

Section-Level Exam Development in Response to Rapidly Changing Content Domains

Room: **Trailblazer DE**

Division:

Track: Innovations

Topic: Psychometrics

Information technology (IT) certification programs are often faced with rapid content overturn due to technological innovations, in addition to a movement away from versions based on comprehensive redevelopment to more continuous releases. The traditional IT certification exam development cycle is often too static to accommodate for this dynamic environment. Test sponsors need mechanisms for exams to stay relevant and aligned with the knowledge, skills, and abilities associated with minimally qualified candidates in their content domains. One approach to address exam development in the context of rapidly changing content is developing section-level testlets rather than exam-level forms. Section-level development enhances the ability and timeliness of a test sponsor's responses to content shifts as exam development and maintenance can be targeted to specific testlets rather than the entire exam. While this increases flexibility by reducing the time and cost associated with conducting more regular whole exam updates, it does introduce a unique set of considerations and challenges.

This session will present the practical and psychometric implications of converting from exam-level to section-level exam development from both the test sponsor and exam developer perspectives. It will outline the benefits and challenges at each stage of the development cycle as well as considerations for budget, resources, and timing. Topics covered will include:

1. Assessing program needs
2. Exam development schedules, with forethought to upcoming changes
3. Exam maintenance, including tolerance for consistent content review, routine small-batch item writing, frequent republication, and regular item, section, and form-level analyses
4. More frequent (albeit shorter) engagement of subject matter experts
5. Number of items needed to maintain target reliability and ensure appropriate content representation in testlet assembly
6. Continuous administration of operational form(s) with scored and unscored items to allow for collection of item statistics in changing testlets "on the fly"
7. Exam structures and blueprint scopes necessary to ensure adequate section distribution and item counts
8. Options for scoring (compensatory or conjunctive), equating cut scores, and score reporting
9. Definitions and approaches to certification nomenclature, retake/ recertification policies, and credential management

Presenters:
Lisa O'Leary, Alpine Testing Solutions
Jessi Mielke, Esri

The Business of Psychometrics: Good Measurement Decisions Equal Good Fiscal Decisions

Room: **Rainmakers C**

Divisions:

Track: Business of Testing

Topic: Psychometrics

Assessment organizations often address limited funding with policy and business decisions that may appear to be cost-effective in the short-term but can negatively impact the validity of the program in the long-term. This session will outline key psychometric decisions that can help create strong assessments and ensure fiscal integrity.

One key decision area is item development. Proper analysis and evaluation of current item banks can help guide targeted, efficient item development processes, reducing the overall number of items that need to be developed each year. Appropriate bank evaluations lead to more accurate forecasting of item development needs.

A second key decision area is equating. Assessment organizations often select equating methods based on practical business considerations such as cost and length of time between testing, but certain psychometric issues should also be considered, such as item drift. Any time a test form is reused, item parameters might drift toward the middle of the acceptable statistical range, shortening the shelf-life of an item. Because the cost of developing items is high, assessment organizations should choose equating methods that increase the life of the items within an item bank.

A third key decision area is resetting standards. Changes to test blueprints, curriculum standards, and item types often necessitate resetting test standards, which can be a substantial and costly process. Assessment organizations should be informed of the various methods available as well as the full gamut of changes made in the assessment so that the most appropriate, valid, and cost-effective policy decisions can be reached. A final area of consideration is data forensics, which is often viewed as an ancillary service that is not critical for testing programs. However, allegations of misconduct can cost assessment organizations a great deal of time and money. Proactive identification of potential scoring issues can reduce the resources spent on responding to unwarranted allegations. Assessment organizations must maintain strict vigilance when making policy decisions based on budgetary and political constraints, and considering the psychometric issues described during this session can help strengthen assessment programs and maintain cost-effective processes.

Presenters:
Canda Mueller, Questar Assessment, Inc.
Nikki Shepherd Eatchel, Scantron Corporation

The Math Garden: A New Computer-Adaptive and High Frequency Progress-Monitoring System

Room: **Rainmakers B**

Division:

Track: Innovations

Topic: Psychometrics

This session will present an innovative computerized progress-monitoring system for measuring arithmetic learning and development in primary education. This web-based monitoring system, the Math Garden, contains a challenging web environment in which children can practice arithmetic skills. Children are free to choose between over 15 different practice domains, in which items are matched to their current ability level. The system is driven by advanced psychometric algorithms to simultaneously track the development of arithmetic abilities of the children, and to track the development of items in the item bank. Calculations are performed in real-time, and new items are calibrated on the fly. The availability of current estimates gives the system a lot of flexibility to, for example, adapt to changes in curriculum or to changes in the population of pupils. Currently, about 500,000 responses are processed every day, summing up to a total of over 215 million responses in the database. While the system provides both feedback and virtual incentives to the children, the teachers at the same time are provided with up-to-date detailed information on the performance of the individual children and of the aggregated performance of the entire class. Teachers can use such performance reports to evaluate and adapt classroom teaching or to steer remedial teaching to specific pupils.

In this session, presenters will give a demonstration of the Math Garden and elaborate on its design and on the psychometric algorithms that drive it. In addition, presenters will discuss methodological challenges, current developments, and new insights into children's learning and development.

Presenters:
Marthe Straatemeier, Oefenweb / University of Amsterdam

The O*Net-Based Best Practice Testing Solution for the Healthcare Industry

Room: **Cushing A**

Division:

Track: Standards and Best Practices

Topic: Business Operations

Trinity Health is the fourth largest healthcare provider meeting the healthcare needs of over 1% of all Americans. Trinity Health's transformational change objective was to utilize enterprise-based selection procedures in the pursuit of talent excellence. O*NET job descriptions were combined to define 25 job families describing the skill and ability taxonomy for over 90% of all jobs in the healthcare industry. The extensive O*NET online library was leveraged to build the foundation for fair, job-related assessments meeting the generally accepted principles and practices of contemporary industrial psychology. ACT's WorkKeys were used to assess cognitive skills; Hogan's personality battery was used to assess critically important safety and customer service skills; SkillSurvey was used to compile behavioral online reference checks. Further, O*NET job descriptions were the basis of subject matter experts' structured interviews for each job family. Continuous improvement toward meeting the enterprise objective of reducing first-year turnover was achieved using feedback loops of independent exit interviews conducted by The Benchmark Partners and termination analysis by the Trinity Health talent-acquisition staff. The combination of these professional best practices are the empirical foundation for Trinity Health's evidence-based selection procedures, potentially the new industry best practice for healthcare. Opinions from attendees will be solicited on a survey questionnaire.

Presenters:
James Sharf, Employment Risk Advisors, Inc.
Tom Karel, Trinity Health
Bill Guest, Metrics Reporting, Inc.

Speaker Index

ATP Member List

ACT, Inc.
Academic Therapy Publications
A&D Resources
AICPA
Alpine Testing Solutions
American Association of Medical Assistants
American Institutes for Research (AIR)
American National Standards Institute (ANSI)
American Printing House for the Blind
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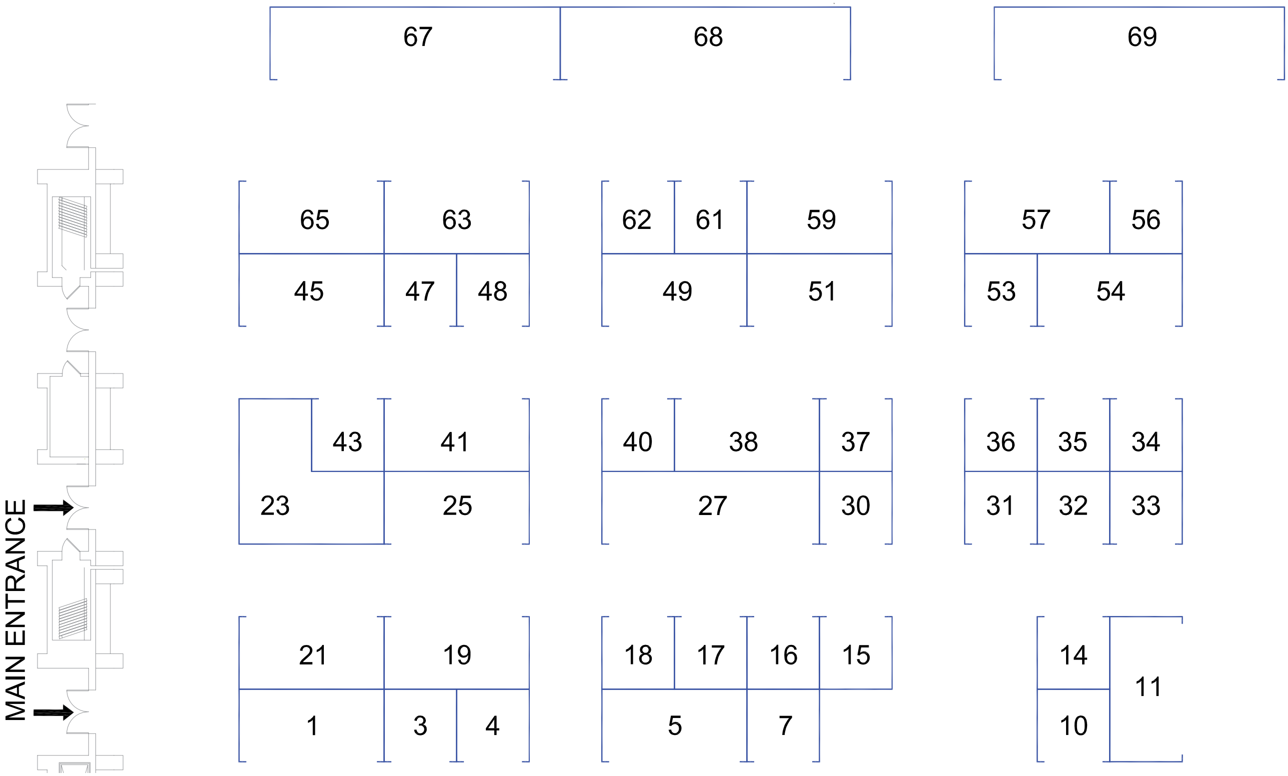
Exhibit Hall Map & Exhibitors



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