National Council on Measurement in Education

2012 Annual Meeting Program

Training Sessions, April 12-13 & 16

Annual Meeting, April 14-16

NCME
national council on measurement in education

74th Annual Meeting

April 12-16, 2012

Vancouver, British Columbia

NCME national council on measurement in education

National Council on Measurement in Education

2012 Training Sessions

April 12-13 & 16, 2012

2012 Annual Meeting

April 14-16, 2012

Vancouver, British Columbia, Canada

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NCME Information Table

The NCME Information Table is located in Regency Ballroom A Foyer at the Hyatt Regency Hotel. Stop by to pickup a ribbon or obtain your bib number for the fun run and walk!

The information table will be staffed at the following times:

Thursday, April 12 . . . . . 7:00 a.m.-5:00 p.m.
Friday, April 13 . . . . . 7:00 a.m.-5:00 p.m.
Saturday, April 14 . . . . . 7:00 a.m.-5:00 p.m.
Sunday, April 15. . . . . 7:30 a.m.-5:00 p.m.
Monday, April 16 . . . . . 7:30 a.m.-2:00 p.m.

Proposal Reviewers

Creating a high-quality program would not be possible without the dedicated help of proposal reviewers who we want to thank in particular for their hard work:

Cigdem Alagoz
Anthony Albano
Usama Ali
Jessica Allen
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Ou Zhang
Ying Zhang
Yu Zhang
Jiawen Zhou
Jiyun Zu
Bruno Zumbo

Future Annual Meetings

2013 Annual Meeting

April 26-30

San Francisco, California

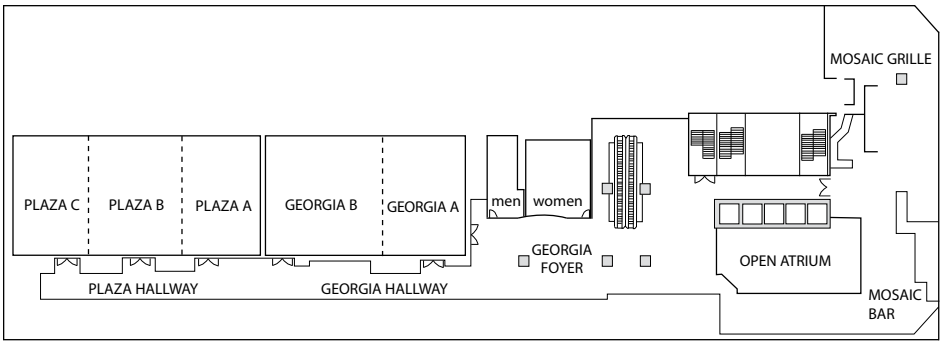
2014 Annual Meeting

April 2-6

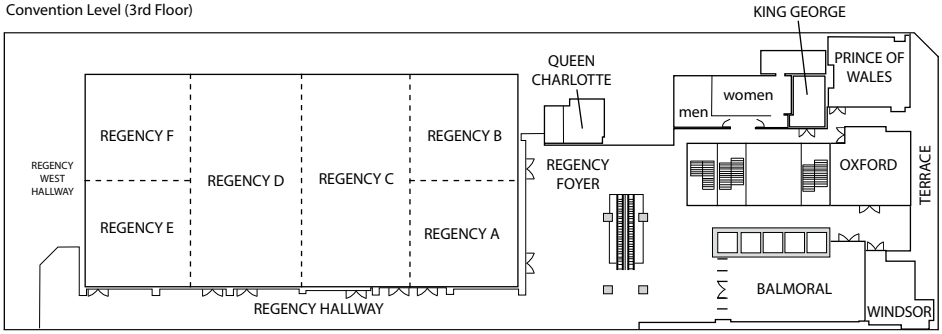
Philadelphia, Pennsylvania

Hyatt Regency Vancouver Floor Plans

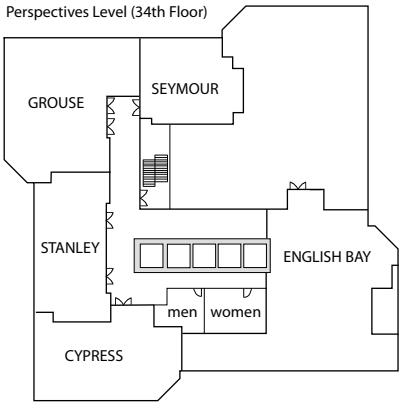
Plaza Level (2nd Floor)



Convention Level (3rd Floor)



Perspectives Level (34th Floor)



Pre-Conference Training Sessions

The 2012 NCME pre-conference training sessions will be held at the Hyatt Regency Hotel on Thursday, April 12, Friday, April 13, 2012, and Monday, April 16, 2012. All full-day sessions will be held from 8:00 a.m. to 5:00 p.m. All half-day morning sessions will be held from 8:00 a.m. to 12:00 noon. All half-day afternoon sessions will run from 1:00 p.m. to 5:00 p.m.

On-site registration for the pre-conference training sessions will be available at the Hyatt Regency Hotel for those workshops that still have availability.

Four of our training sessions will be webcast live to over 25 sites around the world. Several sessions were webcast last year and were very well received. We are happy to be able to try to improve and expand on this NCME initiative.

Thursday, April 12, 2012

Thursday, April 12, 8:00 a.m.-5:00 p.m., Plaza Ballroom A, AA
Bayesian Networks in Educational Assessment
Russell G. Almond, Florida State University; Robert J. Mislevy, Educational Testing Service; David M. Williamson, Educational Testing Service; Duanli Yan, Educational Testing Service

The Bayesian paradigm provides a convenient mathematical system for reasoning about evidence. Bayesian networks provide a graphical language for describing complex systems, and reasoning about evidence in complex models. This allows assessment designers to build scoring systems that have fidelity to cognitive theories about the domain and yet are mathematically tractable and can be refined with observational data. Topics covered in this tutorial are evidence-centered assessment design, basic Bayesian network representations and computations, available software for manipulating Bayesian networks, refining Bayesian networks using data, and example systems using Bayesian networks. It is recommended that participants bring a laptop to run sample exercises using the student version of Netica (http://www.norsys.com/).

Thursday, April 12, 2012

Thursday, April 12, 8:00 a.m.-5:00 p.m., Georgia Room B, BB
Diagnostic Measurement: Theory, Methods, and Applications
Laine Bradshaw, James Madison University; Jonathan Templin, University of Georgia

Diagnostic measurement is an emerging field of psychometrics, focused on ascertaining actionable information from tests and assessments. This workshop provides an introduction to the terms, techniques, and common methods used for diagnosing what students know, giving researchers access to a wealth of information that can be used to help design remediation paths for students needing help in a subject area. The course is taught from a semi-technical level, although participants are expected to have only a basic knowledge of statistics and psychometrics to enroll. Participants will be given the opportunities to gain hands-on experience with all aspects of diagnostic models (from test construction to statistical estimation, which is better facilitated by the use of laptop computers.

Thursday, April 12, 8:00 a.m.-5:00 p.m., Georgia Room A, CC
Cognitive Diagnosis Modeling: A General Framework Approach
Jimmy de la Torre, Rutgers, The State University of New Jersey; Chia-Yi Chiu, Rutgers, The State University of New Jersey; Jinsong Chen, Rutgers, The State University of New Jersey

The primary aim of cognitive diagnosis is to develop and analyze assessments that provide information with more diagnostic value compared to traditional approaches. Its main objective is to identify individual students' specific strengths and weaknesses in a particular domain. Using a general framework, this workshop aims to provide both the theoretical underpinnings and practical experience necessary for participants to use cognitive diagnosis modeling (CDM) in applied settings.

The theoretical component of the workshop will provide participants a comprehensive overview of CDM. Topics covered will include an introduction to the CDM paradigm and how it differs from traditional unidimensional frameworks, some commonly used cognitive diagnosis models and their relationships to each other, estimation of model parameters, evaluation of model-data fit, and model comparison and selection. The practical component of the training session will provide participants a hands-on experience on the different aspects of CDM through various exercises. Participants will learn how to identify and validate attributes, run and interpret result of codes for CDM, evaluate the appropriateness of cognitive diagnosis models, and empirically validate Q-matrices.

Thursday, April 12, 2012

Thursday, April 12, 8:00 a.m.-5:00 p.m., Plaza Ballroom B, EE
Assessing 21st Century Skills

Patrick C. Kyllonen, Educational Testing Service; Richard D. Roberts, Educational Testing Service; Jonas P. Bertling, Educational Testing Service

21st century skills are increasingly recognized as important determinants and reflections of success in education from K-12 through graduate and professional school. 21st century skills include critical thinking, communication skills, collaborative problem solving, creativity, leadership, work ethic, cultural sensitivity, lifelong learning, and others. In this training session we review the process of developing and evaluating new 21st century skills assessments. The session provides background theory and frameworks, and hands-on experience. Topics include:

- 21st century skills (21CS) frameworks, models, and theories
- Aligning common core state standards
- 21CS in higher education and the workforce
- Assessment methods (e.g., self-, others' ratings, situational judgment tests, anchoring vignettes, simulations)
- Preventing, detecting, and correcting for coaching, faking, and miscalibration
- Delivery platforms
- Psychometrics (factor analysis, polytomous IRT, measurement invariance, multilevel analyses, rank and choice methods)
- Special topics (creativity assessment, collaborative problem solving, cross-cultural assessment issues)
- Secondary analysis with large-scale assessments (e.g., PISA)
- Example assessments (21CS development for community college; open-ended collaborative problem solving, institutional monitoring for K-12; higher education admissions)

Thursday, April 12, 2012

Thursday, April 12, 8:00 a.m.-5:00 p.m., Plaza Ballroom C, FF
Multidimensional Item Response Theory: Theory and Applications and BMIRT, LinkMIRT, and SimuMIRT Software

Lihua Yao, Defense Manpower Data Center; Mark Reckase, Michigan State University; Yuan Hong, American Institutes for Research; Ying Cheng, University of Notre Dame

Theories and applications of the multidimensional item response theory model (MIRT) and MIRT linking are discussed. Software BMIRT, LinkMIRT, and SimuMIRT are demonstrated. BMIRT (Yao, 2003) is a computer program that uses the Markov Chain Monte Carlo (MCMC) method to estimate item and ability parameters in the multidimensional multi-group IRT framework; exploratory and confirmatory approaches are supported. LinkMIRT (Yao, 2004) is a linking software that links two sets of item parameters onto the same scale in the MIRT framework. SimuMIRT is software that simulates data for various MIRT models.

This session is intended for researchers, who are interested in learning and understanding MIRT and MIRT linking and their applications, who are working with dichotomous or polytomous data that is multidimensional in nature. BMIRT supports the three-parameter logistic model, generalized two-parameter partial credit model, graded-response, rater model, and testlet-effect models.

Data requirements and formats, and sample data and input files will be provided to participants prior to the workshop. Participants should bring laptop computers and any data they would like to use.

Friday, April 13, 2012

Friday, April 13, 8:00 a.m.-12:00 noon, Plaza Ballroom B, GG – Webcast
Standard Setting in the Real World

Michael Bunch, Measurement, Inc.
Webcast Moderator: Craig Deville

This half-day training session focuses on the practical aspects of standard setting. Participants will receive a set of files including PowerPoint presentations, spreadsheets, sample forms, and on-site calculation tips for several standard-setting procedures. Modules focus on the place of standard setting in the larger context, development of performance level labels and descriptors (PLLs and PLDs), how to plan and conduct a standard-setting session, and how to turn recommendations obtained at such a session into policy; i.e., adopted cut scores.

Friday, April 13, 2012

Friday, April 13, 8:00 a.m.-12:00 noon, Balmoral, HH
Tips for Graduate Students: Advice for Finishing School, Obtaining a Job, and Starting a Career

Deborah Harris, ACT, Inc.; Julio Sanclemente, CTB/McGraw-Hill; Andrew Ho, Harvard Graduate School of Education; Nathan L. Wall, eMetric, LLC

This session is designed to assist graduate students in measurement programs in completing their degrees and entering the profession, by addressing frequently asked questions, such as what types of coursework an employer looks for, what to expect during a job interview, how to negotiate a job offer, which dissertation topics would make a good job talk, and so on. Our session is designed to provide a diversity of advice and viewpoints.

The training session has three main components:

(1) Finishing up the Ph.D. including finding a dissertation topic, selecting a committee, and maximizing experiences while still a student;
(2) Obtaining a job including how to locate where jobs are available, how to apply for jobs (including targeting cover letters, references, and resumes), and the interview process (job talks, questions to ask, negotiating an offer); and
(3) Starting a career including adjusting to the environment, establishing a career path, publishing, finding a mentor, and balancing work and life.

Friday, April 13, 8:00 a.m.-5:00 p.m., Plaza Ballroom A, II
Test Equating Methods and Practices

Michael J. Kolen, University of Iowa; Robert L. Brennan, University of Iowa

The need for equating arises whenever a testing program uses multiple forms of a test that are built to the same content and statistical specifications. Equating is used to adjust scores on test forms so that scores can be used interchangeably. The goals of the session are for attendees to be able to understand the principles of equating, to conduct equating, and to interpret the results of equating in reasonable ways. Equating will be contrasted with related linking processes, traditional and IRT equating methodology will be described, and practical issues will be discussed.

The focus is on developing a conceptual understanding of equating through numerical examples and discussion of practical issues. Recent developments in equating and linking performance assessments and computer-based tests will be considered. The text for the session will be the co-directors' book Test Equating, Scaling, and Linking. Methods and Practices (Second Edition), a copy of which is included as part of the fee for the session.

Friday, April 13, 2012

Friday, April 13, 8:00 a.m.-5:00 p.m., Georgia Room B, JJ
Application of Evidence-Centered Design (ECD) in Large-Scale Assessment
Kristen Huff, Regents Research Fund; Maureen Ewing, The College Board; Amy Hendrickson, The College Board; Pamela Kaliski, The College Board; Sheryl Packman, Consultant

The cornerstone of evidence-centered assessment design (ECD) is an evidentiary argument that requires that each target of measurement (e.g., learning goal) for an assessment be expressed as a claim to be made about an examinee that is relevant to the specific purpose and audience(s) for the assessment. The observable evidence required to warrant each claim is also articulated. In turn, the claims and evidence shape the design of assessment opportunities for students to demonstrate what they have learned, whether that opportunity is a classroom activity or a multiple-choice item on a high-stakes assessment. Once identified, the characteristics of these assessment opportunities are referred to as task models, each capable of generating multiple assessment tasks. Taken together, the claims, evidence, and task models constitute the evidentiary argument.

Given the conference theme, Supporting Student Success in a Global Economy: Methods, Practices, and Policies for Assessment and Learning, the session will highlight how ECD can support the integration of standards into curriculum and assessment.

The objectives of the session are to provide participants (1) clear and detailed examples of the processes and outcomes of ECD (2) how ECD both compliments and differs from other assessment design approaches, and (3) an evaluation of the benefits and challenges of using ECD in a large-scale assessment program. Examples from a nationally administered large-scale assessment program will be used. In addition, participants will engage in hands-on work by approximating the development of a hypothetical exam using ECD.

Friday, April 13, 2012

Friday, April 13, 8:00 a.m.-5:00 p.m., Plaza Ballroom C, KK
An Introduction to Student Growth Percentiles: Concepts, Calculation, Visualization and Use

Damian W. Betebenner, National Center for the Improvement of Educational Assessment; Adam Van Iwaarden, University of Colorado, Boulder

With the availability of longitudinal data from large-scale assessments combined with the requirements of programs like Race to the Top requiring states to use student growth in judgments of educator/education quality, the interest in student growth models has never been greater. One student growth methodology currently being used as part of states efforts to incorporate student growth is the Student Growth Percentile methodology developed by Dr. Damian W. Betebenner in his work with the state of Colorado in the development of their state growth model. Student Growth percentiles are in various stages of use (ranging from preliminary investigation to full scale adoption) in more than 20 states. In this training session, participants will be introduced to student growth percentiles and shown how to use the open source R software package to calculate student growth percentiles with large (e.g., state-level) longitudinal datasets and construct data visualizations from the student growth percentile results. Topics covered will include a conceptual overview of student growth percentiles, data preparation and student growth percentile calculation and graphical representation followed by numerous real-world examples of how the results of such analyses can be used as part of state and federal accountability systems to inform discussions about educational quality.

Friday, April 13, 8:00 a.m.-5:00 p.m., Georgia Room A, LL
Language in Assessment—Approaches for Distinguishing and Addressing Construct-Irrelevant and Construct-Relevant Language: Research-Based Applications of Linguistic Modification and Academic English Language

Edynn Sato, WestEd; Rachel Lagunoff, WestEd; Pamela Yeagley, WestEd

For English learners (ELs) and non-ELs who fail to achieve proficiency on state ELA assessments, language can be a construct-irrelevant factor that interferes with student performance on academic content assessments and negatively impacts the valid interpretation of test results. Consequently, uses of test results for instructional and accountability purposes could fall short of the goal of improving these learners' academic achievement. Given our heightened accountability context for students, teachers, and schools, we are challenged with appropriately distinguishing between and addressing construct-irrelevant language and the language students need to achieve academic content and succeed in college and careers (academic English language). Session trainers

Friday, April 13, 2012

will present research and guide participants through the application of research-based strategies associated with (1) linguistic modification as a method for addressing construct-irrelevant language and (2) a framework for addressing academic English language in assessments. Measurement professionals, educators of students developing proficiency in English, graduate students interested in test development and language issues in assessment, and policy makers wanting to ensure fair, inclusive, and valid student measures are encouraged to participate.

Friday, April 13, 1:00 p.m.-5:00 p.m., Plaza Ballroom B, MM – Webcast
Issues and Advances in Constructed-Response

James Carlson, Derrick C. Higgins, Educational Testing Service; Catherine McClellan, Educational Testing Service; Jean C. Williams, Educational Testing Service; Richard D. Schwarz, Educational Testing Service
Webcast Moderator: Richard Schwarz

Constructed-response items are an integral part of many accountability programs and ongoing educational reforms. This session will consolidate findings and innovations concerning constructed-response that will appeal to a large community of researchers, students or educational decision-makers. This training session on constructed-response surveys their technical properties such as minimizing rater effects, rater agreement statistics or scaling and equating. Issues pertaining to reliability and validity such as dimensionality will be presented.

A central problem concerns rater errors and methods for minimizing them. Rater protocols are reviewed and rater agreement statistics and models are surveyed. Methods for scaling and equating constructed-response are reviewed and the associated problems are discussed. Rater effects modeling is also introduced. Extensive coverage is given to the emerging field of automated scoring. Various technical approaches for automated scoring are presented. Selected statistical procedures will be demonstrated using the R open source software program. Participants are encouraged to download the package. Participants will also be provided with a copy of the manuscript Constructed-response.

Friday, April 13, 2012

Friday, April 13, 1:00 p.m.-5:00 p.m., Balmoral, NN
A Graduate Student's Guide to the Presentation and Publication Process
Steven Wise, Northwest Evaluation Association; Brian French, Washington State University; André A. Rupp, University of Maryland; Susan Brookhart, Brookhart Enterprises LLC

This training session has four main components:

(1) Choosing the Topic, including how to choose research topics that are relevant to the field, aligned with student interests, and likely to contribute to a larger body of research.
(2) Writing the Conference Proposal, including tips on how to get proposals accepted and dos and don'ts of the writing process.
(3) Planning and Delivering the Presentation, including how to create and give effective presentations.
(4) Converting the Conference Paper into a Publication, including how to revise the conference paper in order to target a new audience and tips from an experienced journal editor.

Monday, April 16, 2012

Monday, April 16, 8:00 a.m.-12:00 noon, Plaza Ballroom C, OO – Webcast
IRT-Based Test Linking in R
Jonathan Weeks, Educational Testing Service; Benjamin Domingue, University of Colorado at Boulder
Webcast Moderator: Benjamin Domingue

IRT-based linking methods are widely used to place the results from two or more tests onto a common scale. With the increased use of R for psychometric analyses there is growing interest in using the software for test linking. This session will be conducted as a highly interactive lecture combined with hands-on data analysis in two parts. The first part will provide an overview of unidimensional test linking within an IRT framework including a discussion of terminology, linking designs, fundamental equations, properties/assumptions, and calibration methods. The second part will focus on the implementation of separate calibration methods in R using the plink package. Participants will learn how to import item/ability parameters from commonly used IRT estimation software, conduct the linking for two or more tests, and interpret results. Examples will be presented using a step-by-step approach with single-format and mixed-format tests.

Monday, April 16, 2012

Monday, April 16, 1:00 p.m.-5:00 p.m., Plaza Ballroom C, QQ – Webcast
A Generalized Linear Mixed Model Approach to IRT Measurement Issues

Paul De Boeck, University of Amsterdam; Sun-Joo Cho, Peabody College of Vanderbilt University
Webcast Moderator: Robert Zwitser

Generalized linear mixed models (GLMM) provide a broad framework for modeling binary data and under certain assumptions also polytomous data. The lmer function of the lme4 package in R (Bates & Maechler, 2009) is a general-purpose tool for the estimation of GLMMs, and therefore also for item response model (IRT) estimation. The training session focuses on the following measurement issues: measurement invariance, local dependence, and multidimensionality, in multiple group designs and longitudinal designs. The lmer function is a very flexible tool to approach these measurement issues within the GLMM framework. Learning to use the lmer function also gives deeper insight in IRT and its relationships with analysis of variance, regression analysis, and factor analysis, as well as with newer approaches such as multilevel analysis, structural equation modeling, and growth curve modeling. The training session is part of a course that has been taught at several universities in the US and in Europe by the two presenters. Participants are expected to bring a laptop with R downloaded, so that the lme4 library can be used.

Friday, 4:00 p.m.–7:00 p.m., Seymour Room

NCME Board of Directors Meeting

Members of NCME are invited to attend as observers.

Saturday, 8:15 a.m.–10:15 a.m., Plaza Ballroom A, A1

Setting Academic Preparedness Standards for Job Training Programs: Are We Prepared? – Coordinated Session

Organizer

Susan Loomis, National Assessment Governing Board

Moderator

Susan Loomis, National Assessment Governing Board

Presenters

Jeremy Kilpatrick, University of Georgia
The Standard for Minimal Academic Preparedness in Mathematics to Enter a Job Training Program

Michael Kamil, Stanford University
The Standard for Minimal Academic Preparedness in Reading to Enter a Job Training Program

Luz Bay, Measured Progress, Inc.
Preparing Job Trainers to Describe Knowledge, Skills, and Abilities Measured in an Academic Assessment

Susan Loomis, National Assessments Governing Board
A Study of "Irrelevant" Items: Impact on Bookmark Placement and Implications for College and Career Readiness

Discussant

Barbara Dodd, University of Texas, Austin

Saturday, 8:15 a.m.–10:15 a.m., Plaza Ballroom B, A2

CAT and Multi-Stage Testing: Lessons from Practice – Paper Session

Moderator

Marty McCall, Northwest Evaluation Association

Presenters

Yi Zheng, University of Illinois, Urbana-Champaign, Yuki Nozawa, ACT, Inc., Xiaohong Gao, ACT, Inc., Hua-Hua Chang, University of Illinois, Urbana-Champaign
Multistage Adaptive Testing for a Large-Scale Classification Test: The Design, Heuristic Assembly, and Comparison with Other Testing Modes

Eileen Talento-Miller, Graduate Management Admission Council, Lawrence Rudner, Graduate Management Admission Council, Kyung Han, Graduate Management Admission Council, Fanmin Guo, Graduate Management Admission Council
Analysis of Embedded Pretest Items by Position

Daniel Segall, Defense Manpower Data Center, Kyoko Ito, Human Resources Research Organization
An Evaluation of a New Termination Criterion for Variable-Length Computerized Adaptive Proficiency Tests

Jie Lin, Pearson, Hua Wei, Pearson
Using Out-of-Level Items in Computerized Adaptive Testing

Steven Wise, Northwest Evaluation Association, Lingling Ma, Northwest Evaluation Association
Setting Response Time Thresholds for a CAT Item Pool: The Normative Threshold Method

Katrina M. Crotts, University of Massachusetts, Amherst, April Zenisky, University of Massachusetts, Amherst, Stephen Sireci, University of Massachusetts, Amherst
Estimating Measurement Precision in Reduced-Length Multistage-Adaptive Testing

Discussant

Duanli Yan, Educational Testing Service

Saturday, 8:15 a.m.–10:15 a.m., Plaza Ballroom C, A3

Beyond Essay Scoring: Test Development through Natural Language Processing – Coordinated Session

Organizer

Kirk Becker, Pearson

Moderator

Kirk Becker, Pearson

Presenters

Mark Gierl, University of Alberta, Hollis Lai, University of Alberta, Krista Breithaupt, Medical Council of Canada
Using Automatic Item Generation to Create Items for Medical Licensure Exams

Kirk Becker, Pearson, James Olsen, Olsen Consulting
Generating Enhanced Item Writing Materials with Natural Language Processing

Dmitry Belov, Law School Admission Council, David Kary, Law School Admission Council
A Heuristic-Based Approach for Computing Semantic Similarity between Single-Topic Texts

Feiming Li, National Board of Osteopathic Medical Examiners, Linjun Shen, National Board of Osteopathic Medical Examiners
Can Enemy Items be Automatically Identified?

Robert Cook, University of Massachusetts, Su Baldwin, National Board of Medical Examiners, Brian Clauser, National Board of Medical Examiners
An NLP-Based Approach to Automated Scoring of the USMLE® Step 2 CSE® Patient Note

Pamela Pollak, United Airlines and Illinois Institute of Technology, Alan Mead, Illinois Institute of Technology
Personality Scale Creation Using Latent Semantic Analysis as an Item Analysis Methodology

Discussant

Peter Foltz, Pearson

Saturday, 8:15 a.m.–10:15 a.m., Georgia Room A, A4

Linking and Equating: Lessons from Practice (I) – Paper Session

Moderator

Amy Hendrickson, The College Board

Presenters

Jiyun Zu, Educational Testing Service, Gautam Puhan, Educational Testing Service
Pre-Equating with Empirical Item Characteristic Curves: An Observed-Score Pre-Equating Method

Nathan Wall, eMetric, LLC, Qing Yi, Pearson, Xiaohong Gao, ACT, Inc., Deborah Harris, ACT, Inc.
Invariance of Equating Functions across Different Subgroups of Examinees Taking a Science Achievement Test Revisited: Is it Just a Sampling Issue?

Shalini Kapoor, University of Iowa, Won-Chan Lee, University of Iowa
"Classification Equity" Property of Equating

Benjamin Andrews, Educational Testing Service, Michael Kolen, University of Iowa, Won-Chan Lee, University of Iowa
Assessing First- and Second-Order Equity for the Common-Item Nonequivalent Groups Design Using Multidimensional IRT

Jason Meyers, Pearson, Stephen Murphy, Pearson, Joshua Goodman, Pearson, Ahmet Turhan, Pearson
The Impact of Item Position Change on Item Parameters and Common Item Equating Results under the 3PL Model

Sonya Powers, Pearson, Ahmet Turhan, Pearson, Salih Binici, Florida Department of Education
Population Invariance of Vertical Scaling Results

Discussant

Anne Fitzpatrick, Willow Farm

Saturday, 8:15 a.m.–10:15 a.m., Georgia Room B, A5

Item Development and Analysis – Paper Session

Moderator

Erika Hall, Pearson

Presenters

Andrew Wiley, The College Board, Aaron Douglas, The College Board, Mark Gierl, University of Alberta
Development of a Taxonomy of Test Item Features and Components: The Foundation of a More Efficient Assessment Design Process and Prediction of Item Performance

Chris Coleman, James Madison University, Pamela Kaliski, The College Board, Kristen Huff, Regents Research Fund
Examining the Relationship Between Opportunity to Learn and Difficulty Statistics on Exams Implementing Evidence-Centered Design

Pei-Hua Chen, National Chiao Tung University, Kuan-Yi Li, National Chiao Tung University
Optimizing Balanced Incomplete Block Designs Test Assembly for a Nationwide Educational Assessment in Taiwan

Xiao Luo, University of North Carolina, Greensboro, Richard Luecht, University of North Carolina, Greensboro, Kelly Godfrey, The College Board, Kevin Sweeney, The College Board, Gerald Melican, The College Board
On the Technical Treatment of Guessing Behaviors in the Context of Formula-Scoring Instructions

Dries Debeer, University of Leuven, Rianne Janssen, University of Leuven
Modelling Item-Position Effects Within an IRT-Framework

Ian Hembry, University of Texas, Austin, Laurie Davis, Pearson, Daniel Murphy, Pearson, Mark Rosenstein, Pearson, Karen Lochbaum, Pearson
Evaluating an Automated Essay Scoring Engine for High-Stakes Consideration: Validity Evidence and a Generalizability Approach for Disaggregating Error

Discussant

Patrick Kyllonen, Educational Testing Service

Saturday, 8:15 a.m.–10:15 a.m., Balmoral, A6

Performance Assessment – Paper Session

Moderator

Joshua Goodman, Pearson

Presenters

Emily Lai, Pearson, Michaela Viering, Pearson
Assessing 21st Century Skills: Integrating Research Findings

Karen Barton, CTB/McGraw-Hill, Mary Lou Schmidt, CTB/McGraw-Hill, Beth Klein, CTB/McGraw-Hill, Ping Wan, CTB/McGraw-Hill, Lara Osleson, CTB/McGraw-Hill
An Investigation into the Development and Scoring of the Multi-Part Constructed-Response (MPCR) Item

William Skorupski, University of Kansas, Karen Baron, CTB/McGraw-Hill, Anne Springhorn, CTB/McGraw-Hill
A Comparison of Approaches for Scaling Multi-Step Performance Events

Terrence Moore, Ohio Department of Education, Lauren Monowar-Jones, Ohio Department of Education
Can We Count on Teachers for Scoring of Performance Assessments?

Huaping Sun, University of Memphis, John Harris Jr., Medical Directions, Inc.
Optimization of the Script Concordance Test: Should Deviant Responses or Deviant Items Be Removed?

Walter D. Way, Pearson, Leslie Keng, Pearson, Daniel Murphy, Pearson
The Case for Performance-Based Tasks without Equating

Discussant

Mark Shermis, The University of Akron

Saturday, 8:15 a.m.–10:15 a.m., Oxford, A7

Missing Data across Measurement Contexts – Paper Session

Moderator

Yao Wen, University of Wisconsin, Milwaukee

Presenters

Johnny Lin, University of California, Los Angeles, Peter M. Bentler, University of California, Los Angeles
A Probability-Based Test for Missing Completely at Random Data Patterns

Michael Custer, Riverside Publishing, Sid Sharairi, Riverside Publishing, David Swift, Riverside Publishing
A Comparison of Scoring Options for Omitted and Not-Reached Items through the Recovery of IRT Parameters

Chen-Wei Liu, The Hong Kong Institute of Education, Wen-Chung Wang, The Hong Kong Institute of Education
Modeling Nonignorable Missing Data in Unfolding IRT Models

Zhenqiu (Laura) Lu, University of Georgia, Zhiyong (Johnny) Zhang, University of Notre Dame, Allan Cohen, University of Georgia
Latent Growth Curve Models with Non-Ignorable Missing Data: Bayesian Inference and Model Selection Criteria

Weiling Deng, Educational Testing Service, Lora Monfils, Educational Testing Service, Tammy Trierweiler, Educational Testing Service
Long-Term Effects of Sampling Stringency and Treatment of Missing Responses on Capturing Growth under IRT Equating

Discussant

Holmes Finch, Ball State University

Saturday, 10:15 a.m.–12:05 p.m., Regency Ballroom A, B1

Opening Plenary Session

Moderator

Gregory J. Cizek, University of North Carolina, Chapel Hill

Presenter

John Easton, Director of the Institute of Education Sciences
How Can the Testing Community Help Advance Education Policy and Practice?

John Easton will describe efforts inside the Institute for Education Sciences to make education research and evaluation more useful and relevant to practitioners and policy makers, while simultaneously building better theories of school improvement and the systems needed to support school improvement. He will ask how the psychometric and testing community can contribute to this work.

John Q. Easton, the President's nominee for *Director of the Institute of Education Sciences* (IES), was confirmed by the Senate on May 21, 2009, for a term of six years. Dr. Easton came to IES from Chicago, where most recently he was Executive Director of the *Consortium on Chicago School Research at the University of Chicago*. He had a long association with the *Chicago Public Schools* (CPS), serving in several research capacities, including as the Director of the *Department of Research, Analysis, and Assessment*. Dr. Easton also served a term (2003-2007) on the *National Assessment Governing Board*, which sets policies for NAEP.

In 2008, he was awarded a presidential citation from AERA for "research leadership and evaluation studies focused on improving the nature and quality of education in a large urban city." Dr. Easton holds a Ph.D. in measurement, evaluation, and statistical analysis from the University of Chicago; a master's degree from Western Washington University; and a bachelor's degree from Hobart College. He is the author or coauthor of numerous reports and articles, as well as two books: (1) *Charting Chicago School Reform: Democratic Localism as a Lever for Change, which was published by Westview Press in 1999*, and (2) *Organizing Schools for Improvement: Lessons from Chicago*, which was published by the University of Chicago Press in 2010.

Saturday, 12:25 p.m.–1:55 p.m., Plaza Ballroom A, C1

Cognitive Diagnostic Assessment: Lessons from Practice – Paper Session

Moderator

Jacqueline Leighton, University of Alberta

Presenters

Cong Chen, University of Illinois, Urbana-Champaign, Jinming Zhang, University of Illinois, Urbana-Champaign
Q-Matrix Optimization in the Cognitive Diagnostic Assessment

Catherine Close, University of Minnesota, Mark Davison, University of Minnesota
An Exploratory Technique for Finding the Q-Matrix in Cognitive Diagnostic Assessment: Combining Theory with Data

Hongli Li, Georgia State University, Peggy Van Meter, The Pennsylvania State University, Charles Hunter, Georgia State University
Constructing and Validating a Q-Matrix for a Biology Test Using the Generalized-DINA Model

Angela Broaddus, University of Kansas
Modeling Student Understanding of the Foundations of Slope: An Application of the Attribute Hierarchy Method

Marty McCall, Northwest Evaluation Association, Jody Clarke-Midura, Harvard University
Analysis of Data From a Game-Based Assessment From AHM And IRT Perspectives

Discussant

John Poggio, University of Kansas

Saturday, 12:25 p.m.–1:55 p.m., Plaza Ballroom B, C2

Beyond Unidimensional IRT: Advances in Modeling – Paper Session

Moderator

Frank Rijmen, Educational Testing Service

Presenters

Chun Wang, University of Illinois, Urbana-Champaign, Hua-Hua Chang, University of Illinois, Urbana-Champaign
Reducing Bias in MIRT Trait Estimation

Youngmi Cho, University of Maryland, Hong Jiao, University of Maryland, George Macready, University of Maryland
Simultaneous Effects of Different Item Discrimination Profiles and Item Difficulty Profiles in Mixture 2PL Models

Fu Liu, University of North Carolina, Greensboro, Terry Ackerman, University of North Carolina, Greensboro, Jie Zhou, Coastal Carolina University
Skewed Logistic Multidimensional Item Response Models: A Simulation Study Involving Bayesian MCMC Estimation Approach

Xue Lan Qiu, The Hong Kong Institute of Education, Wen-Chung Wang, The Hong Kong Institute of Education
The Multilevel Random-Effect Rating Scale Model for Subjective Judgment in Rating Scales

Nazia Rahman, Fordham University, Peter Pashley, Law School Admission Council, Charles Lewis, Fordham University
Searching for Samejima Items and Finding a Paradox

Discussant

Mark Reckase, Michigan State University

Saturday, 12:25 p.m.–1:55 p.m., Plaza Ballroom C, C3

AWARDS COMMITTEE
Award-Winning Research from the 2011 NCME Award Recipients – Invited Symposium

Organizer

Deborah Harris, ACT, Inc.

Presenters

Brian Lukoff, Harvard University
Brenda H. Loyd Outstanding Dissertation Award: The Design and Validation of an Automatically Scored Constructed-Response Item Type for Measuring Graphical Representation Skill

Lydia Liu, Educational Testing Service
Jason Millman Promising Measurement Scholar Award: Outcomes Assessment in Higher Education: Current Situation and Future Research

Werner Wothke, American Institutes for Research
Bradley Hanson Award for Contributions to Educational Measurement: Developments of OpenIRT

Sun-Joo Cho, Vanderbilt University, Allan Cohen, University of Georgia, Seock-Ho Kim, University of Georgia, Brian Bottge, University of Kentucky
Annual Award: Modeling Quantitative and Qualitative Change in the Math Skills of Low-Achieving Adolescents Using Latent Variable Models

Saturday, 12:25 p.m.–1:55 p.m., Georgia Room A, C4

Beyond Consensus: The Changing Face of Validity – Coordinated Session

Organizer

Paul E. Newton, Cambridge Assessment

Moderator

Yeow Meng Thum, Northwest Evaluation Association

Presenters

Paul E. Newton, Cambridge Assessment (UK), Stuart D. Shaw, Cambridge International Examinations (UK)
We Need to Talk About Validity

Stuart D. Shaw, Cambridge International Examinations (UK), Paul E. Newton, Cambridge Assessment (UK)
Cracks in Construct Validity Theory

Stephen G. Sireci, University of Massachusetts, Amherst
De-"Constructing" Test Validation

Suzanne Lane, University of Pittsburg
The Interplay Among a Theory of Action, Validity, and Consequences

Discussant

Gregory J. Cizek, University of North Carolina, Chapel Hill

Saturday, 12:25 p.m. - 1:55 p.m., Georgia Room B, C5

ASSESSMENT POLICY AND PRACTICE COMMITTEE
The Use of Test Scores to Evaluate Educators – Invited Symposium

Organizers

Kristen Huff, Regents Research Fund
Scott Marion, Center for Assessment

Moderator

Judith Koenig, Board on Testing and Assessment, National Research Council

Presenters

Henry Braun, Boston College
Welcome to the Land of Magical Thinking

Drew Gitomer, Rutgers, The State University of New Jersey
The Devil is in the Details: Collisions of Assumptions and Reality

Lorrie Shepard, University of Colorado, Boulder
Best- and Worst-Case Scenarios for Test-Based Teacher Evaluation

Discussants

Derek Briggs, University of Colorado, Boulder
Doug Harris, University of Wisconsin, Madison

Saturday, 12:25 p.m.–1:55 p.m., Balmoral, C6

Using Assessments to Optimize Learning and Educational Resource Availability – Coordinated Session

Organizer

Wim van der Linden, CTB/McGraw-Hill

Moderator

Wim van der Linden, CTB/McGraw-Hill

Presenters

Michelle Barrett, CTB/McGraw-Hill
A System to Optimize Learning and Educational Resource Availability

Wim van der Linden, CTB/McGraw-Hill
Key Methodological Concepts in the Optimization of Learning and Educational Resource Availability

Jie Li, CTB/McGraw-Hill
Modeling Optimal Learning and Educational Resource Availability

Qi Diao, CTB/McGraw-Hill, Wim van der Linden, CTB/McGraw-Hill
Using Computer Simulations to Stress Test a System to Optimize Learning and Educational Resource Availability

Discussant

Richard Luecht, University of North Carolina, Greensboro

Saturday, 12:25 p.m.–1:55 p.m., Oxford, C7

Special Populations: English Language Learners – Paper Session

Moderator

Anne Davidson, Alpine Testing Solutions

Presenters

Joni Lakin, Auburn University
Evaluating Adequate Yearly Growth for ELL Students: Implications for Measurement and Accountability Policies

Alvaro Arce-Ferrer, Pearson, Rense Lange, Illinois State Board of Education, Changjiang Wang, Pearson
Effects of Linguistic Accommodations on Mathematics Test Scores and Reported Skills Diagnostic

Jinok Kim, American Institutes for Research and Center for Research on Evaluation, Standards, and Student Testing/University of California, Los Angeles, Joan Herman, Center for Research on Evaluation, Standards, and Student Testing/University of California, Los Angeles
When to Exit ELL Students: Monitoring Subsequent Success and Failure in Mainstream Classrooms after ELLs' Reclassification

Teresa King, Educational Testing Service, Joni Lakin, Auburn University
Accessibility Considerations for Students with Disabilities and ELLs for Innovative Computer-Delivered Mathematics Assessments

Maria Martiniello, Educational Testing Service, Neil Dorans, Educational Testing Service, Sandip Sinharay, Educational Testing Service
Examining the Invariance of Equating Functions for English Language Learners in K-12 Assessments: Score Equity Assessment and Test Score Fairness

Discussant

Guillermo Solano-Flores, University of Colorado, Boulder

Saturday, 2:15 p.m.–3:45 p.m., Plaza Ballroom A, D1

The Structure of Writing Ability across Languages from the Perspective of Automated Scoring – Invited Symposium

Organizer

Anat Ben-Simon, National Institute for Testing & Evaluation

Moderator

Anat Ben-Simon, National Institute for Testing & Evaluation

Presenters

Yigal Attali, Educational Testing Service
Factor Structure of the E-Rater Automated Essay Scoring System

Paul Deane, Educational Testing Service
What Automated Analyses of Corpora Can Tell Us About Students' Writing Skills

Anat Ben-Simon, National Institute for Testing & Evaluation, Yael Shafran, National Institute for Testing & Evaluation
Factorial Structure of Written Hebrew and its Application to Automated Essay Scoring

Yoav Cohen, National Institute for Testing & Evaluation, Yael Shafran, National Institute for Testing & Evaluation
Indices of Lexical Density for Automated Essay Scoring

Discussant

Randy Bennett, Educational Testing Service

Saturday, 2:15 p.m.–3:45 p.m., Plaza Ballroom B, D2

Scale Stability and Item Parameter Drift – Paper Session

Moderator

Litong Zhang, CTB/McGraw-Hill

Presenters

Craig Wells, University of Massachusetts, Amherst, Allan Cohen, University of Georgia, Athens, Ronald Serlin, University of Wisconsin, Madison, Louise Bahry, University of Massachusetts, Amherst
Detecting Consequential Item Parameter Drift Using the Range-Null Hypothesis

Hongling Wang, ACT, Inc., Dongmei Li, ACT, Inc., Deborah Harris, ACT, Inc.
Factors Affecting Scale Stability

Qing Yi, Pearson, Meichu Fan, Pearson
Impact of Item Parameter Shifts on Score Estimates in Computerized Adaptive Testing

Anna Topczewski, University of Iowa
Effect of Calibration on Vertical Scaling

Timothy O'Neil, Pearson, Alvaro Arce-Ferrer, Pearson
Empirical Investigation of Anchor Item Set Purification Processes in 3PL IRT Equating

Discussant

Lisa Keller, University of Massachusetts, Amherst

Saturday, 2:15 p.m.–3:45 p.m., Plaza Ballroom C, D3

CAT: Beyond Unidimensional IRT – Paper Session

Moderator

Bob Dolan, Pearson

Presenters

Lihua Yao, Defense Manpower Data Center
Multidimensional CAT Item Selection Methods for Domain Scores and Composite Scores with Item Exposure Control and Content Constraints

Haiyan Lin, University of Illinois, Urbana-Champaign, Hua-Hua Chang, University of Illinois, Urbana-Champaign
Item Selection Methods in Multidimensional Computerized Adaptive Testing Adopting Polytomously Scored Items Under Multidimensional Generalized Partial Credit Model

Feifei Li, Educational Testing Service, Tsung-Han Ho, Educational Testing Service
Using Information Correction Method in Testlet Selection for Computerized Adaptive Testing

Hsu Chia-Ling, The Hong Kong Institute of Education, Wang Wen-Chung, The Hong Kong Institute of Education
Variable Length Computerized Adaptive Testing in the Higher-Order DINA Model

Hanwook Yoo, Educational Testing Service, Ronald Hambleton, University of Massachusetts, Amherst
Evaluating Several Multidimensional Adaptive Testing Procedures for Diagnostic Assessment

Discussant

Richard Luecht, University of North Carolina, Greensboro

Saturday, 2:15 p.m.–3:45 p.m., Georgia Room A, D4

Test and Assessment in China: Reform on Score Reporting, Interpretation, and Utilization – Invited Presidential Session

Moderator

Mary Pitoniak, Educational Testing Service

Presenters

Guangming Li, NEEA
New Comer, Old Test: A Brief Introduction to NEEA and GaoKao in China

Ning Han, NEEA
The Balanced Score: Constructing a Criterion Referenced Score Interpretation to a Norm Referenced Test Battery

Lei Wang, NEEA
Efforts to Analyze High Stakes Testing in China as Means to Ensure Accountability

Tao Xin, Beijing Normal University, Jiahui Zhang, Beijing Normal University
Cognitive Diagnosis-Based Local Equating of Observed Score

Qungsi Liu, NEEA
EduRator – An Automated Scoring System for PETS Spoken Responses

Discussant

Fanmin Guo, Graduate Management Admission Council

Saturday, 2:15 p.m.–3:45 p.m., Georgia Room B, D5

Recruitment and Training of Measurement Professionals – Innovative Format Session

Organizer

Deborah Bandalos, University of Georgia

Moderator

Carol Barry, The College Board

Presenters

Sara Finney, James Madison University, Dena Pastor, James Madison University
Recruitment of Measurement Professionals

Deborah Bandalos, University of Georgia, Jason Kopp, James Madison University
Teaching Introductory Measurement

Discussant

Barbara Plake, University of Nebraska, Lincoln

Saturday, 2:15 p.m.–3:45 p.m., Balmoral, D6

On the Structure of Latent Variables: New Conceptual and Empirical Perspectives – Invited Symposium

Organizer

David Torres Irribarra, University of California, Berkeley

Moderator

Ronli Diakow, University of California, Berkeley

Presenters

Andrew Maul, University of Oslo
On the Ontology of Latent Variables

Benjamin Domingue, University of Colorado, Boulder
Are Educational Scales Plausibly Interval?

David Torres Irribarra, University of California, Berkeley, Ronli Diakow, University of California, Berkeley
Impact of Instrument Quality on the Selection of a Latent Variable Model

Mark Wilson, University of California, Berkeley, David Torres Irribarra, University of California, Berkeley, Ronli Diakow, University of California, Berkeley
Evaluating Practical Implications of Alternative Latent Structures: Consequences for Interpretation

Discussant

Derek Briggs, University of Colorado, Boulder

Saturday, 2:15 p.m.–3:45 p.m., Oxford, D7

Cognitive Diagnostic Assessment: Technical Advances (I) – Paper Session

Moderator

Robert Henson, University of Michigan, Ann Arbor

Presenters

Wenyi Wang, Jiangxi Normal University, Shuliang Ding, Jiangxi Normal University, Lihong Song, Jiangxi Normal University, Yan Liu, Shenzhen Seaskyland Technologies Co., Ltd.
The Application of FCA for Aiding Identifying Attributes in Cognitive Diagnostic Assessment

Yan Huo, Rutgers, The State University of New Jersey, Jimmy de la Torre, Rutgers, The State University of New Jersey
Estimating a Cognitive Diagnostic Model for Multiple Strategies via the Expectation-Maximization Algorithm

Hollis Lai, University of Alberta, Mark Gierl, University of Alberta, Ying Cui, University of Alberta
Item Consistency Index: An Item-Fit Index for Cognitive Diagnostic Assessment

Yun Jin Rho, Pearson, Rasil Warnakulasooriya, Pearson
Exploring How Skill Mastery Criteria Affect Classification Accuracy: A Bayesian Approach

Discussant

John Willse, University of North Carolina, Greensboro

Saturday, 4:05 p.m.–6:05 p.m., Plaza Ballroom A, E1

Alternate Assessments for Students with Disabilities – Paper Session

Moderator

Patricia Almond, University of Oregon

Presenters

Michelle Vanchu-Orosco, University of Denver
A Meta-Analysis of the Effects of Testing Accommodations on Large-Scale Assessments for Students with Disabilities

Jose Palma, University of Minnesota
The Think Aloud Method for the Validation of Item Modifications to Improve Test Accessibility

Elizabeth Stone, Educational Testing Service, Tim Davey, Educational Testing Service
Item-Bundle Analysis to Investigate Problematic Item Types for Students with Disabilities Taking Computer-Adaptive Tests

Chunmei Zheng, University of Kansas, Amy Erickson, University of Kansas, Noonan Pattie, University of Kansas
Psychometric Properties of the Arc's Self-Determination Scale for Students with Disabilities: Bifactor Approach

James Ingrisone, Pearson, Joshua Levy, Pearson, Xia Mao, Pearson
Item Modification Analysis of Alternate Assessments Based on Modified Achievement Standards

Tyler Lonczak, Measured Progress, Inc., Jenn Dunn, Measured Progress, Inc., Louis Roussos, Measured Progress, Inc., Tia Sukin, Measured Progress, Inc.
Evaluating the Validity of the Item Complexity Assumption of an Alternate Assessment

Discussant

Edynn Sato, WestEd

Saturday, 4:05 p.m.–6:05 p.m., Plaza Ballroom B, E2

Computerized Adaptive Multistage Testing: From Design to Implementation – Coordinated Session

Organizer

Richard Luecht, University of North Carolina, Greensboro

Moderator

Richard Luecht, University of North Carolina, Greensboro

Presenters

John Willse, University of North Carolina, Greensboro, Terry Ackerman, University of North Carolina, Greensboro, Richard Luecht, University of North Carolina, Greensboro
An Overview of ca-MST: From Panel Configurations to Test Assembly

Richard Luecht, University of North Carolina, Greensboro
Computerized Adaptive Multistage Design Considerations

Xinrui Wang, University of North Carolina, Greensboro, Lauren Fluegge, University of North Carolina, Greensboro, Richard Luecht, University of North Carolina, Greensboro
A Large-Scale Comparative Study of the Accuracy and Efficiency of ca-MST Panel Design Configurations

Andrew Dallas, University of North Carolina, Greensboro, Robert Furter, University of North Carolina, Greensboro, Richard Luecht, University of North Carolina, Greensboro
Conditional Exposure and Comparative Accuracy of IRT vs. Number-Correct Routing Strategies for ca-MST

Thomas Proctor, The College Board, Gerald Melican, The College Board
Design, Implementation and Maintenance of an Operational ca-MST System Based on Existing Paper and Pencil Exams and Item Banks

Discussant

April Zenisky, University of Massachusetts, Amherst

Saturday, 4:05 p.m.–6:05 p.m., Plaza Ballroom C, E3

Fairness Issues and Practices in Automated Scoring of Constructed Response Items – Coordinated Session

Organizer

Chaitanya Ramineni, Educational Testing Service

Moderator

Chaitanya Ramineni, Educational Testing Service

Presenters

Jennifer Kobrin, The College Board, Emily Shaw, The College Board
Essay Features and Performance of Non-Native English Speaking Students on the SAT Essay

Christina Schneider, CTB/McGraw-Hill, Bryan Waters, CTB/McGraw-Hill, Wendi Wright, CTB/McGraw-Hill
The Stability of an Automated Scoring Engine Across Time and Subgroups When Student Ability Changes

Fanmin Guo, Graduate Management Admission Council
Does an Automated Scoring System Score Subgroups Differently in the GMAT AWA?

Andrew Mroch, Pearson, Christopher Moore, Minnesota Department of Education, Peter Foltz, Pearson, Karen Lochbaum, Pearson
Automated Scoring of Constructed Response Science Prompts Using Intelligent Essay Assessor

Mo Zhang, Educational Testing Service, Florian Lorenz, Educational Testing Service, F. Jay Breyer, Educational Testing Service
Development of Subgroup Index of Model Fit (SIMF) for Automated Essay Scoring Systems

Chaitanya Ramineni, Educational Testing Service, Chen Li, Educational Testing Service, F. Jay Breyer, Educational Testing Service
Understanding Mean Score Differences Between Automated and Human Scores Using Classification and Regression Tress

Discussants

Stephen Sireci, University of Massachusetts
Mark Shermis, The University of Akron

Saturday, 4:05 p.m.–6:05 p.m., Georgia Room A, E4

Linking and Equating: Lessons from Practice (II) – Paper Session

Moderator

Anne Fitzpatrick, Willow Farm

Presenters

Chunyan Liu, ACT, Inc., Michael Kolen, The University of Iowa
Evaluating Smoothing in Equipercentile Equating Using Fixed Smoothing Parameters

Chi-Wen Liao, Educational Testing Service, Samuel Livingston, Educational Testing Service
A Search for Alternatives to Common-Item Equating

Eunjung Lee, University of Iowa, Won-Chan Lee, University of Iowa, Robert Brennan, University of Iowa
Exploring Equity Properties in Equating

Yanxuan Qu, Educational Testing Service, Lixiong Gu, Educational Testing Service
Estimating Standard Error of Equating and Equating Bias for Double Linking Equating With a Nonequivalent Group Anchor Test Design by the Bootstrap Method

Jiahe Qian, Educational Testing Service
Updating the Empirical Target Population in Weighted IRT Equating

Xia Mao, Pearson
A Comparison of Pre-Equating and Post-Equating with Less Than Optimal Samples in the Large-Scale State Assessment Context

Discussant

Deborah Harris, ACT, Inc.

Saturday, 4:05 p.m.–6:05 p.m., Georgia Room B, E5

Educational Measurement & NCME: Past, Present, and Future (75th Anniversary Kick-off Session) – Invited Presidential Session

Moderator

Wayne Camara, The College Board

Presenters

Ronald Hambleton, University of Massachusetts, Amherst
Past Developments

Suzanne Lane, University of Pittsburg
Present Developments

Mark Reckase, Michigan State University
Future Developments

Discussant

Barbara Plake, University of Nebraska, Lincoln

Saturday, 4:05 p.m.–6:05 p.m., Balmoral, E6

Hierarchical Data Structures: Technical Advances – Paper Session

Moderator

Leslie Rutkowski, Indiana University

Presenters

Aaron Douglas, The College Board
Consequence of Ignoring the Clustering of Complex Samples of Students during Item Calibration for Large-Scale Educational Assessments

Zhan Shu, Educational Testing Service, Andreas Oranje, Educational Testing Service, John Donoghue, Educational Testing Service
The Impact of Matrix-Sampling on Item Estimation and Plausible Value

Frank Rijmen, Educational Testing Service, Minjeong Jeon, University of California, Berkeley, Matthias von Davier, Educational Testing Service, Sophia Rabe-Hesketh, University of California, Berkeley
Higher Order Item Response Theory Models for Large-Scale Educational Assessment Surveys

Chalie Patarapichayatham, University of Oregon, Akihito Kamata, University of Oregon
Effects of Differential Item Discriminations between Individual-Level and Cluster-Level Under the Multilevel Item Response Theory Model

Minjeong Jeon, University of California, Berkeley, Frank Rijmen, Educational Testing Service, Sophia Rabe-Hesketh, University of California, Berkeley
Gaussian Variational Approximation for Estimating Generalized Linear Mixed Models with Crossed Random Effects

Shelby Haberman, Educational Testing Service, Jiahe Qian, Educational Testing Service
Effects of the Departure of Stratum Weights on Jackknifed Variance Estimation

Discussant

Paul De Boeck, University of Amsterdam

Saturday, 4:05 p.m.–6:05 p.m., Oxford, E7

Dimensionality Assessment: Theory & Practice – Paper Session

Moderator

Steffen Brandt, University of Kiel

Presenters

Jinming Zhang, University of Illinois, Urbana-Champaign
DETECT Beyond Approximate Simple Structure

Dubravka Svetina, Indiana University
Assessing Dimensionality of Noncompensatory MIRT with Complex Structures

Minhee Seo, Oakland University William Beaumont School of Medicine, Onder Sunbul, Mersin University, Turkey
Performance of Test Statistics for Verifying Unidimensionality

Weiyi Cheng, The Pennsylvania State University
Examining the Dimensionality of EARLI Numeracy Skill Scores

Discussant

Brian Habing, University of South Carolina

Saturday, 6:15 p.m.–8:30 p.m., Hyatt Regency Hotel, Regency Ballroom A

NCME and AERA Division D Joint Welcome Reception for Current and New Members

Members of NCME and AERA Division D are invited to attend the NCME and AERA Division D Joint Welcome Reception for Current and New Members. Hors d'oeuvres and a cash bar will be available.

One free drink ticket for graduate students and new members of AERA Division D and NCME will be available at the desk near the entrance to the room. New members will wear blue ribbons on their conference badges. Please extend a welcome to them.

The reception is sponsored by:

ACT, Inc.
Alpine Testing
American Institutes for Research
Applied Measurement Professionals, Inc.
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Pacific Metrics Corporation
Pearson Educational Measurement
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Questar Assessment, Inc.
Riverside Publishing

Sunday, 8:00 a.m.–9:30 a.m., Hyatt Regency Hotel, Regency Ballroom A

NCME Breakfast and Business Meeting

Theater style seating will be available for those who did not purchase a breakfast ticket but wish to attend the Business Meeting.

Sunday, 9:30 a.m.–10:15 a.m., Hyatt Regency Hotel, Regency Ballroom A

NCME Presidential Address

Message by NCME President Linda Cook.

Sunday, 10:35 a.m.–12:05 p.m., Plaza Ballroom A, G1

Methodological Advances in Large-Scale Assessments – Coordinated Session

Organizer

Jonas Bertling, Educational Testing Service

Moderator

Patrick Kyllonen, Educational Testing Service

Presenters

Matthias von Davier, Educational Testing Service, Frank Rijmen, Educational Testing Service, Sophia Rabe-Hesketh, University of California, Berkeley, Minjeong Jeon, University of California, Berkeley
When is a Dimension a Dimension? Analysis of TIMSS Data with MTMM and Bi-Factor IRT Models

Petra Lietz, Australian Council for Educational Research, Mollie Tobin, Australian Council for Educational Research
Interest in Mathematics – Improving its Measurement across Countries by Using an MTMM Approach

David Kaplan, University of Wisconsin, Madison, Alyn Turner, University of Wisconsin, Madison
Statistical Matching of Large-Scale Assessments: A Case Study of PISA and TALIS

Svenja Vieluf, German Institute for International Educational Research (DIPF), Jan Hochweber, German Institute for International Educational Research (DIPF)
Longitudinal Multilevel Modeling of LSA Data – Classroom Effects on Gender Differences in Reading Achievement

Discussant

Richard Patz, CTB/McGraw-Hill

Sunday, 10:35 a.m.-12:05 p.m., Plaza Ballroom B, G2

Cognitive Diagnostic Assessment: Large-Scale Applications – Paper Session

Moderator

Laine Bradshaw, James Madison University

Presenters

Dong Gi Seo, Michigan Department of Education, Adisack Nhouyvanisvong, Naiku
Strength Profiles in Large-Scale Assessment: Comparison of the Accuracy and Consistency Using the Rasch and the DINA Diagnostic Classification Models

Yu-Lan Su, ACT, Inc.
Cognitive Diagnostic Analysis Using Hierarchically Structured Skills

Yi-Hsin Chen, University of South Florida, Claudia Guerere, University of South Florida, Chunhua Cao, University of South Florida
Cross-Cultural Validation of the Hypothesized Construct of the TIMSS-2007 Mathematics Test: A DIF Approach

Robert Fay, University of South Florida
How to Apply the LCDM Framework of Cognitive Diagnostic Modeling in the Analysis of Mathematics High Stakes Test Items

Discussant

Enis Dogan, Achieve, Inc.

Sunday, 10:35 a.m.–12:05 p.m., Plaza Ballroom C, G3

Linking and Equating: Mixed-Format Assessments – Paper Session

Moderator

Marc Kroopnick, Association of American Medical Colleges

Presenters

Jaime Cid, Educational Testing Service, Gautam Puhan, Educational Testing Service, Ilyse Spitalny, Educational Testing Service
Investigating the Effect of Language on the Equating Functions of Mixed-Format Tests

Thomas Proctor, The College Board, Rosemary Reshetar, The College Board, Priyank Patel, The College Board
An Investigation of Small Sample Equating Methods for Mixed Format Exams with Non-Representative Anchors

Anthony Fina, University of Iowa, Tawnya Knupp, ACT, Inc., YoungWoo Cho, ACT, Inc.
Issues Related to Classification Indices When Equating Scores from Mixed-Format Tests

Hua Wei, Pearson, Qing Yi, Pearson
Mixed-Format Test Equating in the Presence of Multidimensionality and Rater Severity Variations

Wei Wang, University of Iowa, Won-Chan Lee, University of Iowa, Michael Kolen, University of Iowa
Standard Errors of Equating Using the Common-Item Nonequivalent Groups Design for Mixed-Format Tests

Valerie Link, Educational Testing Service
Impact of Using Mixed Items Types as Anchors in Mode Comparability Equatings as Online Assessment are Phased In

Discussant

Lihua Yao, DoD Data Center

Sunday, 10:35 a.m.–12:05 p.m., Georgia Room A, G4

Model-Data Fit Assessment – Paper Session

Moderator

Min Liu, University of Hawaii, Manua

Presenters

Shiqi Hao, Michigan Department of Education, Dong Gi Seo, Michigan Department of Education, Steven Viger, Michigan Department of Education
Scale Comparability for Accommodated Forms Using lz Person-fit

Muhammad Naveed Khalid, University of Cambridge ESOL Examinations, Ardeshir Geranpayeh, University of Cambridge ESOL Examinations
Assessing Item Fit in Bayesian Framework

Ardeshir Geranpayeh, University of Cambridge ESOL Examinations, Muhammad Naveed Khalid, University of Cambridge ESOL Examinations
Robustness of Cheating Indices in Language Assessment

Dmitry Belov, Law School Admission Council
Detection of Test Collusion via Kullback-Leibler Divergence

Fei Zhao, University of Kansas, Wenhao Wang, University of Kansas, Neal M. Kingston, University of Kansas
On the Use of Nonparametric IRT Techniques for Checking 3PL IRT Model Fit

Discussant

Yi-Hsuan Lee, Educational Testing Service

Sunday, 10:35 a.m.-12:05 p.m., Georgia Room B, G5

DIVERSITY ISSUES AND TESTING COMMITTEE
Equitable Assessment of Special Populations – Invited Symposium

Moderator

Edynn Sato, WestEd

Presenters

Jamal Abedi, University of California, Davis
How Accommodations Can Help in Making Assessments More Linguistically Accessible for ELL Students

Stephanie Cawthon, University of Texas, Austin
Equity Considerations in Assessment of Students Who are Deaf or Hard of Hearing

Karin Hess, Center for Assessment
The Importance of Learning Progression Research for Students with Cognitive Disabilities

Michael Kolen, University of Iowa
Score Comparability and Precision for Special Student Populations: Practice and Policy

Discussant

James Pellegrino, University of Illinois, Chicago

Sunday, 10:35 a.m.–12:05 p.m., Balmoral, G6

Developing a NAEP Validity Research Framework – Coordinated Session

Organizer

Sharyn Rosenberg, American Institutes for Research

Moderator

Cadelle Hemphill, American Institutes for Research

Presenters

George Bohrnstedt, American Institutes for Research
The History of Developing a NAEP Validity Research Framework

Andrew Kolstad, National Center for Education Statistics, Cadelle Hemphill, American Institutes for Research
The Need for a Comprehensive Validity Framework for NAEP Research

Sharyn Rosenberg, American Institutes for Research, Brittany Carpenter, American Institutes for Research
The Process of Creating the NAEP Validity Framework Research Database, 1990 to Present

Fran Stancavage, American Institutes for Research, Sharyn Rosenberg, American Institutes for Research
Using NAEP to Inform Policy and Evaluate Programs

Discussant

Peggy Carr, National Center for Education Statistics

Sunday, 10:35 a.m.-12:05 p.m., Oxford, G7

PUBLICATIONS COMMITTEE
Thematic Orientations and Successful Publication Strategies for Selected Measurement Journals – Moderated Panel Discussion

Moderator

Joanna S. Gorin, Arizona State University

Panelists

Jacqueline Leighton, University of Alberta
Educational Measurement: Issues and Practice

Brian Clauser, National Board of Medical Examiners
Educational and Psychological Measurement

George Marcoulides, University of California, Riverside
Journal of Educational Measurement

Sunday, 12:25 p.m.–1:55 p.m., Plaza Ballroom A, H1

CAT: Item Pool Usage & Exposure Control – Paper Session

Moderator

Wei He, Northwest Evaluation Association

Presenters

Kyung T. Han, Graduate Management Admission Council
A New Item Selection Criterion to Incorporate Item Efficiency Level in Computerized Adaptive Testing

EunYoung Lim, American Institutes for Research, Jinming Zhang, University of Illinois, Urbana-Champaign, Hua-Hua Chang, University of Illinois, Urbana-Champaign
The Effect of Multiple Item Pools for the Possibly Compromised Items in Computerized Adaptive Testing (CAT)

Ryoungsun Park, University of Texas, Austin, Jiseon Kim, University of Washington, Seattle, Hyewon Chung, John Jay College, CUNY, Barbara Dodd, University of Texas, Austin
Enhancing Pool Utilization in Constructing the Multistage Test Using Mixed-Format Tests

Hsiu-Yi Chao, National Chung Cheng University, Jyun-Hong Chen, National Chung Cheng University, Shu-Ying Chen, National Chung Cheng University
Improving the Efficiency of Stratification Procedures With Exposure Control in Computerized Adaptive Testing

Lixiong Gu, Educational Testing Service, Guangming Ling, Educational Testing Service, Yanxuan Qu, Educational Testing Service
A Modified a-stratified Method for Computerized Adaptive Testing

Chingwei Shin, Pearson, Yuehmei Chien, Pearson, Walter D. Way, Pearson
A Comparison of Two Content Balancing Methods for Fixed and Variable Length Computerized Adaptive Test

Discussant

Gage Kingsbury, Northwest Evaluation Association

Sunday, 12:25 p.m.–1:55 p.m., Plaza Ballroom B, H2

Cognitive Diagnostic Assessment: Technical Advances (II) – Paper Session

Moderator

Shauna Sweet, University of Maryland, College Park

Presenters

Guaner Rojas, Universidad Autonoma de Madrid, Jimmy de la Torre, Rutgers, The State University of New Jersey, Julio Olea, Universidad Autonoma de Madrid
Choosing Between General and Specific Cognitive Diagnosis Models When the Sample Size is Small

Young-Sun Lee, Teachers College, Columbia University, Yoon Soo Park, University of Illinois, Chicago, Tae-Je Seong, Korea Institute for Curriculum and Evaluation
An Extension of the DINA Model Using Covariates: Examining Factors Affecting Response Probability and Latent Classification

Ying Cui, University of Alberta
Classification Consistency and Accuracy Indexes for Cognitive Diagnostic Assessment

Sonia Romero, Universidad a Distancia de Madrid, Xavier Ordonez, Universidad Complutense de Madrid, Vicente Ponsoda, Universidad Autónoma de Madrid
Distribution and Properties of Three Criteria for Validation of Cognitive Structures by Means of the Least Squares Distance Model (LSDM)

Jinsong Chen, Rutgers, The State University of New Jersey, Jimmy de la Torre, Rutgers, The State University of New Jersey, Zao Zhang, Rutgers, The State University of New Jersey
Relative and Absolute Fit Evaluation in Cognitive Diagnosis Modeling

Discussant

Robert Henson, University of Michigan

Sunday, 12:25 p.m.–1:55 p.m., Plaza Ballroom C, H3

Automated Scoring in Professions…Now and Beyond – Coordinated Session

Organizer

Elaine Rodeck, Medical Council of Canada

Moderator

Isaac Bejar, Educational Testing Service

Presenters

Melissa Margolis, National Board of Medical Examiners, Polina Harik, National Board of Medical Examiners, Constance Murray, National Board of Medical Examiners, Andrea Veneziano, National Board of Medical Examiners, Brian Clauser, National Board of Medical Examiners
Lessons Learned in the Process of Ten Years of Experience in Scoring Computer-Delivered Constructed-Response Items

Dennis Frezzo, Cisco, John Behrens, Cisco, Kristen DiCerbo, Cisco, Mark Chen, Cisco
An Extensible Micro-World for Assessment of Activities in the Data Networking Professions

Jilliam Joe, Educational Testing Service, Catherine McClellan, Educational Testing Service
Automated Scoring in Large-scale Teaching Quality Assessment

Discussants

Isaac Bejar, Educational Testing Service
Walter D. Way, Pearson

Sunday, 12:25 p.m.–1:55 p.m., Georgia Room A, H4

Random Item Latent Structure Models – Coordinated Session

Organizer

Paul De Boeck, University of Amsterdam

Moderator

Paul De Boeck, University of Amsterdam and K.U. Leuven

Presenters

Timohir Asparouhov, Mplus, Bengt Muthén, Mplus
General Random Effect Latent Variable Modeling: Random Subjects, Items, Contexts, and Parameters

Sun-Joo Cho, Vanderbilt University, Sophia Rabe-Hesketh, University of California, Berkeley and University of London
Random Item Discrimination Maximum Likelihood Estimation of Item Response Models

Hollis Lai, University of Alberta, Mark Gierl, University of Alberta
Calibrated Item Generation for Cognitive Diagnostic Assessments

Paul De Boeck, University of Amsterdam and K.U. Leuven
A Random Item GLMM Approach for the Explanatory Study of Longitudinal Measurement Invariance

Discussant

Matthew Johnson, Teachers College, Columbia University

Sunday, 12:25 p.m.–1:55 p.m., Georgia Room B, H5

AWARDS COMMITTEE
Career Award Address: How is Testing Supposed to Improve Schooling?

Moderator

Mark Wilson, University of California, Berkeley

Presenter

Edward Haertel, Stanford University

Discussant

Daniel Koretz, Harvard University

Sunday, 12:25 p.m.–1:55 p.m., Balmoral, H6

Measuring College and Career Readiness: Opportunities and Challenges for the PARCC Assessments – Coordinated Session

Organizer

Enis Dogan, Achieve, Inc.

Moderator

Jeff Nellhaus, Achieve, Inc.

Presenters

Wayne Camara, The College Board, Rachel Quenemoen, National Center on Educational Outcomes
College and Career Readiness: Developing Performance Level Descriptors and Defining Criteria

Lauress Wise, Human Resources Research Organization
Combining Multiple Indicators of Achievement and Growth

Richard Luecht, University of North Carolina, Greensboro, Wayne Camara, The College Board
A Framework for Evaluating the Comparability of Scores in Multistate Settings

Derek Briggs, University of Colorado, Boulder
Prospects for Modeling Growth with Tests Designed by the State Assessment Consortiums

Discussants

Kristen Huff, Regents Research Fund
Stephen Sireci, University of Massachusetts

Sunday, 12:25 p.m.–1:55 p.m., Oxford, H7

Response Time Modeling – Paper Session

Moderator

Wim van der Linden, CTB/McGraw-Hill

Presenters

Sheng-Yun Huang, The Hong Kong Institute of Education, Wen-Chung Wang, The Hong Kong Institute of Education
Adopting Response Time in Computerized Classification Testing

Yi-Hsuan Lee, Educational Testing Service, Yue (Helena) Jia, Educational Testing Service
An Investigation of Response Time in a NAEP Computer-Based Assessment

Shudong Wang, Northwest Evaluation Assoication, Hong Jiao, University of Maryland
Joint Modeling Response Time and Response Accuracy: A Comparison Between Bayesian and Restricted Pseudo-Likelihood Methods

Frank Goldhammer, German Institute for International Educational Research (DIPF), Ulf Kröhne, German Institute for International Educational Research (DIPF)
Controlling Individual Speed to Standardize Performance Measures

Discussant

David Scrams, Financial Industry Regulatory Authority

Sunday, 12:25 p.m. - 1:55 p.m., Regency EF, H8

Assessment of Students with Significant Cognitive Disabilities: Dynamic Learning Maps (DLM) & National Center and State Collaborative (NCSC) – Structured Demonstration

Moderators
Martha Thurlow, University of Minnesota National Center on Educational Outcomes (NCSC)
Alan Sheinker, University of Kansas (DLM)

Presenters
Jacqui Kearns, University of Kentucky (NCSC), Patti Whetstone, University of Kansas (DLM)
Characteristics of Students Who Participate in These Assessments

Claudia Flowers, University of North Carolina, Charlotte (NCSC), Karin Hess, National Center for the Improvement of Educational Assessment (NCSC)
Content Foundations of the NCSC Assessment

Marianne Perie, National Center for the Improvement of Educational Assessment (NCSC), Paul Nichols, National Center for the Improvement of Educational Assessment (NCSC)
Designing the NCSC Assessment

Ellen Forte, edCount, LLC (NCSC), Elena Diaz-Bilello, National Center for the Improvement of Educational Assessment (NCSC)
Building the Validity Argument

Kelli Thomas, University of Kansas (DLM), Carrie Mark, University of Kansas (DLM)
Learning Maps: A Comprehensive Structure for Assessment

Neal Kingston, University of Kansas (DLM), Amy Clark, University of Kansas (DLM)
Instructionally Relevant Item Types

Tom Walsh, University of Kansas (DLM), Fei Zhao, University of Kansas (DLM)
Use of Bayesian Network Analysis in an Instructionally Embedded Assessment System

Discussion Leaders
Neal Kingston, University of Kansas (DLM)
Rachel Quenemoen, University of Minnesota National Center on Educational Outcomes (NCSC)

Sunday, 2:15 p.m.–3:45 p.m., Plaza Ballroom A, I1

Status and Growth for Alternate Assessments – Paper Session

Moderator

Karen Barton, CTB/McGraw-Hill

Presenters

Jill van den Heuvel, CTB/McGraw-Hill, Mary Hansen, Robert Morris University, Cristina Ilangakoon, CTB/McGraw-Hill
Examining Student Growth on Four States' Alternate Assessments: Measurements of Success

Meagan Karvonen, Western Carolina University, Shawnee Wakeman, University of North Carolina, Charlotte, Claudia Flowers, University of North Carolina, Charlotte, Shauna Moody, Western Carolina University
Building Blocks: Cross-Grade Progressions in Alternate Assessments Based on Alternate Achievement Standards (AA-AAS)

Tia Sukin, Measured Progress, Inc., Jennifer Dunn, Measured Progress, Inc.
Presenting a Validity Argument for a Statewide Alternative Assessment: Addressing Inferences with Novel Approaches

Jennifer Dunn, Measured Progress, Inc., Louis Roussos, Measured Progress, Inc., Tyler Lonczak, Measured Progress, Inc., Tia Sukin, Measured Progress, Inc.
An Exploration of Growth Models for an Alternate Assessment

Discussants

Gerald Tindal, University of Oregon
Andrew Roach, Arizona State University

Sunday, 2:15 p.m.–3:45 p.m., Plaza Ballroom B, I2

Too High, Too Low, or Just Right: Using Empirical Evidence to Incorporate Policy Considerations in Setting Statewide Performance Standards – Coordinated Session

Organizer

Katie McClarty, Pearson

Moderator

Laurie Davis, Pearson

Presenters

Amy LaSalle, Pearson, Richard Sedillo, Pearson, Cip Munoz, Pearson, Leslie Ruff, Pearson, Layna Phyllips, Pearson
Grounded in Content: How Content Alignment Studies Can Provide Meaning to External Validity Evidence Used in Standard Setting

Leslie Keng, Pearson, Daniel Murphy, Pearson, Matthew Gaertner, Pearson
Supported by Data: A Comprehensive Approach for Building Empirical Evidence for Standard Setting

Katie McClarty, Pearson, Laurie Davis, Pearson
Enriched by Policy – Making Performance Standards Meaningful for Educational Outcomes

Natasha Williams, Pearson, Leslie Keng, Pearson, Kimberly O'Malley, Pearson
Maximizing Panel Input: Incorporating Empirical Evidence in a Way the Standard-Setting Panel will Understand

Discussants

Steve Ferrara, Pearson
Stephen Sireci, University of Massachusetts, Amherst

Sunday, 2:15 p.m. –3:45 p.m., Plaza Ballroom C, I3

Efforts to Improve Measurement Precision at the Lower End of the National Assessment of Educational Progress (NAEP) Scales – Coordinated Session

Organizer

Young Kim, American Institutes for Research

Moderator

George Bohrnstedt, American Institutes for Research

Presenters

Enis Dogan, Achieve, Inc., Sal Rivas, University of Luxembourg
A Blind Item-Review Process as a Method to Investigate Item Characteristics in Measuring Diverse Populations

Lizanne DeStefano, University of Illinois, Urbana-Champaign
Study of the Feasibility of a NAEP Accessible Booklet Alternative

Kim Gattis, American Institutes for Research, Young Kim, American Institutes for Research
Developing Assessment Items Which Can Measure Knowledge and Skills Appropriate for Low-Achieving Students

Xueli Xu, Educational Testing Service, Andreas Oranje, Educational Testing Service, John Mazzeo, Educational Testing Service, Ed Kulick, Educational Testing Service
An Adaptive Approach for Group-Score Assessments

Discussant

Lorrie Shepard, University of Colorado, Boulder

Sunday, 2:15 p.m.–3:45 p.m., Georgia Room A, I4

Subdimensions and Subscores – Paper Session

Moderator

Anton Béguin, Cito

Presenters

Jianbin Fu, Educational Testing Service, Yanxuan Qu, Educational Testing Service
A Review of Subscore Estimation Approaches

Ying Li, American Institutes for Research, Robert Lissitz, University of Maryland
Exploring the Full-Information Bifactor Model in Vertical Scaling with Construct Shift

James Marcus, Fordham University, Frank Rijmen, Educational Testing Service
The Stability of a Bifactor Model across Multiple Operational Forms of Large-Scale High-Stakes Assessment of English-Language Proficiency

Ji Seung Yang, University of California, Los Angeles, Scott Monroe, University of California, Los Angeles, Li Cai, University of California, Los Angeles
A Multiple Group Multilevel Item Bifactor Model with Applications

Steffen Brandt, Kiel, Germany
Definition and Classification of a Generalized Subdimension Model

Discussant

Frank Rijmen, Educational Testing Service

Sunday, 2:15 p.m.–3:45 p.m., Georgia Room B, I5

Educational Testing Around the World – Invited Multimedia Session

Moderator

Terry Ackerman, University of North Carolina, Greensboro

Presenters

Fang Chen, East China Normal University, Shanghai, China
Educational Testing in China: JAES as an Example

Jeff Lansdale, International Advisor in Education Policy and Standards-Based Reform and Implementation, Tegucigalpa, Honduras
Diagnostic, Formative, and Summative Assessments in Honduras

Fernando Rubio, Universidad del Valle de Guatemala, Guatemala City, Guatemala
Educational Testing in Guatemala

Anil Kanjee, Tshwane University of Technology, South Africa
Assessment and Education Transformation in South Africa

Discussants

Michael Rodriguez, University of Minnesota
Luz Bay, Measured Progress, Inc.

Sunday, 2:15 p.m.–3:45 p.m., Balmoral, I6

Assessment of Linguistic Minorities: An International Perspective – Invited Symposium

Moderator

Eva Baker, Center for Research on Evaluation, Standards, and Student Testing

Presenters

Stephen May, University of Auckland, New Zealand, Peter Keegan, University of Auckland, New Zealand
Indigenous Language Assessment: Cultural and Linguistic Implications

Jurgen Baumert, Max Planck Institute for Human Development, Germany
Is There a Matthew Effect in Reading and Mathematics in Elementary School?

Guillermo Solano-Flores, University of Colorado, Boulder, United States
Probabilistic Approaches to Examining the Impact of Items' Linguistic Features on Student Performance

Kadriye Ercikan, University of British Columbia, Canada, Marielle Simon, University of Ottawa, Canada, Wolff-Michael Roth, University of Victoria, Canada, Debra (Dallie) Sandilands, University of British Columbia, Canada, Juliette Lyons-Thomas, University of British Columbia, Canada
Assessment of Linguistic Minorities in Canada

Discussants

Guadalupe Valdes, Stanford University
Ronald Hambleton, University of Massachusetts, Amherst

Sunday, 2:15 p.m.–3:45 p.m., Oxford, I7

Mathematics Assessment – Paper Session

Moderator

Howard Mzumara, Indiana University - Purdue University, Indianapolis

Presenters

Turker Toker, University of Denver, Kathy Green, University of Denver
An Application of Cognitive Diagnostic Assessment onTIMMS-2007 8th Grade Mathematics Items

Mee-Ae Kim-O, Georgia Institute of Technology, Susan Embretson, Georgia Institute of Technology, Hyun Seok Kim, Georgia Institute of Technology, John Poggio, University of Kansas
Analysis of Growth in Mathematical Achievement from 6th to 8th Grade Using Multidimensional Rasch Model for Learning and Change (MRMLC)

David Foster, Silicon Valley Mathematics Assessment Collaborative
Improved Mathematical Teaching Practices and Student Learning Using Complex Performance Assessment Tasks

Yuehmei Chien, Pearson, Chingwei D. Shin, Pearson, Tian Song, Pearson, Chuck Simon, Pearson, Bob Dolan, Pearson, Walter D. Way, Pearson
An Exploratory Study for the Initial Placement Test of Online Math Learning Courseware Using the Attribute Hierarchy Model and Computerized Adaptive Testing

Discussant

Finbarr Sloane, Arizona State University

Sunday, 2:15 p.m.–3:45 p.m., Regency EF, I8

Embedded Assessment in Innovative Digital Learning Environments – Structured Demonstration

Moderator

André A. Rupp, University of Maryland
Valerie Shute, Florida State University

Presenters

Yoon Jeon Kim, Florida State University
Crayon Physics Deluxe: When the Science of Assessment Development Meets the Art of Game Design

Deidre Kerr, University of California, Los Angeles
Save Patch: Using In-Game Performance to Assess Content Knowledge

Kristen DiCerbo, Cisco
PacketTracer / Aspire: Leveraging a Complex Simulation Environment for Gaming and Assessment

Cynthia D'Angelo, University of Wisconsin, Madison
LandScience: Assessing Student Discourse in Games with Epistemic Network Analysis

Edys Quellmalz, WestEd
SimScientists: Using Simulations to Assess Model-Based Learning and Inquiry Practices

Dixie Ching, New York University
Battleship Numberline: Using Eye Tracking and Retrospective Think-Alouds to Investigate Fraction Estimation Strategies in Middle School Students

Douglas Clark, Vanderbilt University
SURGE: Bridging Intuitive and Formal Understandings of Physics

Discussants

Valerie Shute, Florida State University
Matthew Ventura, Educational Testing Service

Sunday, 4:05 p.m.–6:05 p.m., Plaza Ballroom A, J1

Automated Text Processing: Readability Measurement for Assessment and Instruction – Invited Symposium

Organizer

David Williamson, Educational Testing Service

Moderator

David Williamson, Educational Testing Service

Presenters

Art Graesser, University of Memphis, Danielle McNamara, Arizona State University
Coh-Metrix, Text Easability Assessor and Assessments of Common Core Standards

Thomas Landauer, Pearson Knowledge Technologies, Walter D. Way, Pearson
Improving Text Complexity Measurement Through the Word Maturity Metric

Kathleen Sheehan, Educational Testing Service
SourceRater: Helping Teachers and Test Developers Determine the Difficulty of Text for Instruction and Assessment

Carl Swartz, MetaMetrics, A. Jackson Stenner, MetaMetrics
Understanding Text Complexity, Reader Ability, and Task Difficulty to Help Educators Personalize Literacy Activities

Eric Stickney, Renaissance Learning, Inc., Michael Milone, Renaissance Learning, Inc.
Practical Aspects of Readability Analysis for Informing Instruction and Test Development

Linda Straley, Questar Assessment, Inc., Leon Dreyfus, Questar Assessment, Inc.
Degrees of Reading Power Program: A Unique Reading Comprehension Assessment Designed Specifically to Link Students and Texts

Jessica Nelson, University of Pittsburgh
An Empirical Comparison of Text Difficulty Metrics

Discussant

Charles Perfetti, University of Pittsburgh

Sunday, 4:05 p.m.–6:05 p.m., Plaza Ballroom B, J2

DIF Detection: Technical Advances – Paper Session

Moderator

Louis Roussos, Measured Progress, Inc.

Presenters

Holmes Finch, Ball State University, Brian French, Washington State University
Bayesian Modeling of Differential Item Functioning: Type I Error and Power Rates in the Presence of Nonnormal Ability Distributions, Impact, and Anchor Set Contamination

Stefano Rainelli, University of Miami, Randall Penfield, University of Miami
Extending the Empirical Bayes DIF Approach to Polytomous Items

Hariharan Swaminathan, University of Connecticut, H. Jane Rogers, University of Connecticut, Pei-Hsuan Chiu, University of Connecticut, Rohini Sen, University of Connecticut
A Bayesian Approach for Assessing Differential Item Functioning

Priya Kannan, Educational Testing Service, Kevin Kim, University of Pittsburgh
Comparing DIF Detection for Multidimensional Polytomous Models Using MG-CFA and MGRM-DFIT

Zhushan Li, Boston College, Feng Hong, Harvard University
Log-Linear Item Response Model for DIF Detection: A Pseudolikelihood Approach

Jyun-Hong Chen, National Chung Cheng University, Ya-Hui Su, National Chung Cheng University, Shu-Ying Chen, National Chung Cheng University
Using IRTLRT to Assess Differential Item Functioning for Pre-Test Items in Computerized Adaptive Testing

Discussant

Seock-Ho Kim, University of Georgia

Sunday, 4:05 p.m.–6:05 p.m., Plaza Ballroom C, J3

Linking and Equating: Technical Advances (I) – Paper Session

Moderator

Jonathan Weeks, Educational Testing Service

Presenters

Anne Corinne Huggins, University of Miami
The Effect of Differential Item Functioning on IRT True Score Equating Invariance

Yanmei Li, Educational Testing Service
The Impact of Anchor Characteristics on IRT Equating for Set-Based Tests

Marie Wiberg, Umeå University, Wim van der Linden, CTB/McGraw-Hill, Alina von Davier, Educational Testing Service
Integrating Kernel and Local Equating

Ru Lu, Educational Testing Service, Hongwen Guo, Educational Testing Service, Jinghua Liu, Educational Testing Service, Neil Dorans, Educational Testing Service
Multiple Linkings in Equating: A Comparison Study of One, Two, Three, and Four Links

Yi-Fang Wu, University of Iowa, Deping Li, Educational Testing Service
The Standard Errors for IRT True Score Equating Based on Internal and External Anchors

Rob Kirkpatrick, Pearson, Ahmet Turhan, Pearson, Jie Lin, Pearson
Linking Two Assessment Systems Using Common-Item IRT Method and Equipercentile Linking Method

Discussant

Jinghua Liu, Educational Testing Service

Sunday, 4:05 p.m.–6:05 p.m., Georgia Room A, J4

Classification in IRT – Paper Session

Moderator

Matthias von Davier, Educational Testing Service

Presenters

Arnond Sakworawich, Fordham University, Charles Lewis, Fordham University
Setting Cut-Scores for College Placement and Classification Using Bayesian Decision Theory

Jianan Sun, Beijing Normal University, Tao Xin, Beijing Normal University, Shumei Zhang, Beijing Normal University, Jimmy de la Torre, Rutgers, The State University of New Jersey
An IRT-Based Cognitive Diagnostic Method – Generalized Distance Discrimination

Steven Nydick, University of Minnesota, Yuki Nozawa, ACT, Inc., Rongchun Zhu, ACT, Inc.
Accuracy and Efficiency in Classifying Examinees Using Computerized Adaptive Tests: An Application to a Large-Scale Test

Quinn Lathrop, University of Notre Dame, Ying Cheng, University of Notre Dame
Comparing Two Approaches to Classification Accuracy Under Item Response Theory

Ying Cheng, University of Notre Dame
Distribution-Based Expected Classification Accuracy and Consistency within the IRT Framework: A Conceptual Comparison Between Two Popular Approaches

Melinda Montgomery, University of Kansas, William Skorupski, University of Kansas
Investigation of IRT Parameter Recovery and Classification Accuracy in Mixed Format Assessments

Discussant

Russell Almond, Florida State University

Sunday, 4:05 p.m. - 6:05 p.m., Georgia Room B, J5

NATIONAL ASSOCIATION OF TEST DIRECTORS
Data Use in a World of Common Standards and Assessments: How Can Aligned, Timely and Comparative Student Assessment Data Impact Teacher Practice and Support Student Success? – Invited Symposium

Moderator

Trevor Mahlum, Casper College

Presenters

Enis Dogan, Achieve, Inc.

Kim Schildkamp, University of Twente

Arie van der Ploeg, American Institutes for Research

Jeff Wayman, University of Texas, Austin

Sunday, 4:05 p.m.–6:05 p.m., Balmoral, J6

Research and Development on Assessment and Accountability for Special Education – Coordinated Session

Organizer

Joseph Stevens, University of Oregon

Moderator

Stephen Elliott, Arizona State University

Presenters

Ann Schulte, North Carolina State University
Critical Issues for Examining Special Education Outcomes in Status and Growth Accountability Models

Stephen Elliot, Arizona State University, Alexander Kurz, Arizona State University
Measurement of Opportunity to Learn and its Contribution to Achievement Gains for Students with Disabilities

Gerald Tindal, University of Oregon, Joseph Nese, University of Oregon
Within Year Achievement Growth Using Curriculum Based Measures

Joseph Stevens, University of Oregon, Keith Zvoch, University of Oregon, Gina Biancarosa, University of Oregon
Technical Issues in the Use and Interpretation of Growth Models for Students With and Without Disabilities

Discussants

Barbara Plake, University of Nebraska
Yeow Meng Thum, Northwest Evaluation Association

Sunday, 4:05 p.m.–6:05 p.m., Oxford, J7

Applied Measurement Studies (I) – Paper Session

Moderator

Jill van den Heuvel, CTB/McGraw-Hill

Presenters

John Willse, University of North Carolina, Greensboro, Keston Fulcher, James Madison University, Christine DeMars, James Madison University
Confirmatory Mixture Rasch Analysis for Understanding and Improvement of an Information Seeking Skills Test

Yi Lu, University of Wisconsin, Madison, Daniel Bolt, University of Wisconsin, Madison
Application of a MIRT Model to Address Response Style Differences in Cross-National Assessment of Educational Attitudes

Tamar Kennet-Cohen, National Institute for Testing and Evaluation, Elliot Turvall, National Institute for Testing and Evaluation, Carmel Oren, National Institute for Testing and Evaluation
An Examination of Three Methods for Detecting Bias in Selection for Higher Education

Marjorie Wine, GED® Testing Service, Tracy Gardner, GED® Testing Service, Linda Zimmerman, Pearson, Erika Hall, Pearson
Development of the Career and College Ready Assessment Targets for the Next Generation GED Assessment

Kathryn Akers, Kentucky P20 Data Collaborative, Kelly Bradley, University of Kentucky
Connections, Paths, and Explanations: A Social Network Approach to Investigating Experiences of Early Childhood Special Education with the ECLS-K

Gyenam Kim-Kang, Purdue University, SoYoon Yoon, Purdue University
Computerized Adaptive Testing of the Revised Purdue Spatial Visualization Tests: Visualization of Rotations (Revised PSVT:R)

Discussant

Michael Rodriguez, University of Minnesota

Sunday, 4:05 p.m.–6:05 p.m., Regency EF, J8

Reading for Understanding: Assessment and Core Terms – Structured Demonstration

Moderator

Joanna S. Gorin, Arizona State University

Opening Remarks

John Easton, Institute for Education Sciences

Presenters

John Sabatini, Educational Testing Service, Tenaha O'Reilly, Educational Testing Service, Gary Feng, Educational Testing Service, Carla Wall, Arizona State University
Gathering and Evaluating Evidence for Theory-Based Assessment Designs of Reading for Understanding: Eye Tracking and Other Innovative Techniques

Tenaha O'Reilly, Educational Testing Service, John Sabatini, Educational Testing Service, Keith Millis, Northern Illinois University, Kelly Bruce, Educational Testing Service, Pavan Pillarisetti, Educational Testing Service
Global Integrated Student Assessment: Summative Measures of Reading for Understanding

Yaacov Petscher, Florida State University, Barbara Foorman, Florida State University, Christopher Schatschneider, Florida State University, Richard Wagner, Florida State University
Multiple Group Comparison of Component Skills and Relations to Reading Comprehension

James Pellegrino, University of Illinois, Chicago, Joseph Magliano, Northern Illinois University, Susan Goldman, University of Illinois, Chicago, Kimberly Lawless, University of Illinois, Chicago
Assessing Complex Comprehension: Models & Methods Focused on Disciplinary Competence

Carolyn Denton, University of Texas Health Science Center Houston, Mischa Enos, University of Texas Health Science Center Houston
Assessing Reading for Understanding in Adolescent Adequate and Poor Comprehenders with Think-Aloud Verbal Protocols

Ann A. O'Connell, The Ohio State University, Jill Pentimonti, The Ohio State University, Shayne Piasta, The Ohio State University, James A. Bovaird, University of Nebraska, Lincoln, and the Language and Reading Research Consortium (LARRC)
Assessing Cognitive Processes at the Core of Reading Comprehension: Pre-Kindergarten Through Grade 3 for the General English Speaking Population

M. Adelaida Restrepo, Arizona State University, Shelley Gray, Arizona State University, and the Language and Reading Research Consortium (LARRC)
Assessing Cognitive Processes at the Core of Reading Comprehension for ELLs in English-Only Programming

Sunday, 4:05 p.m.–6:05 p.m., Regency D, J9

GRADUATE STUDENT ISSUES COMMITTEE
Graduate Student Poster Session

Organizers
Chad Gotch, Washington State University
Ian Hembry, University of Texas, Austin
Jeffrey Patton, University of Notre Dame
Amanda Soto, University of Massachusetts, Amherst
Chia-Lin Tsai, University of Missouri, Columbia
Robert Zwitser, Cito/University of Amsterdam

Presenters

Poster #1
Jing Chen, Michigan State University
Applying IRT Methods to Design Learning Progression Based Science Assessments

Poster #2
Juan Chen, University of Iowa, Won-Chan Lee, University of Iowa
Bootstrap Standard Errors of Group Invariance Statistics for Concordance

Poster #3
Ying-Fang Chen, University of Maryland, College Park, Hong Jiao, University of Maryland, College Park
The Impact of Missing Responses on Parameter Estimation and Classification Accuracy in a Mixture Rasch Model

Poster #4
Jinnie Choi, University of California, Berkeley, Hyo Jeong Shin, University of California, Berkeley, Karen Draney, University of California, Berkeley, Charles Anderson, Michigan State University, Mark Wilson, University of California, Berkeley
Exploring the Relationship Between Forced-Choices and Constructed Responses of Mixed-Format Items Using MIRT Estimates

Poster #5
Joseph Chow, The Hong Kong Institute of Education
The Mixture Modeling Approach to Heterogeneity in Large-Scale Assessment and its Implication in International Comparative Studies

Sunday, 4:05 p.m.–6:05 p.m., Regency D, J9

Poster #6
Man-Wai Chu, University of Alberta, Hollis Lai, University of Alberta, Xian Wang, University of Alberta
Effectiveness of CATSIB Under Impact in a Multistage Testing Environment

Poster #7
Andrew Dallas, University of North Carolina, Greensboro, Robert Furter, University of North Carolina, Greensboro, Xiao Luo, University of North Carolina, Greensboro, Jia Ma, University of North Carolina, Greensboro
Using Assessment Engineering to Build Effective Blueprints and Task Models for State End of Grade Assessments

Poster #8
Richard Feinberg, University of Delaware/National Board of Medical Examiners, Howard Wainer, National Board of Medical Examiners, Ratna Nandakumar, University of Delaware, Michael Jodoin, National Board of Medical Examiners
Subscores That Add Value in a Licensure Context: A Simulation Study

Poster #9
Yuling Feng, University of South Carolina, Brian Habing, University of South Carolina
Q Matrix Validation Method for the Reduced RUM

Poster #10
Yin Fu, South Carolina University, Brian Habing, South Carolina University
Mokken Scaling for Items with Varying Numbers of Response Categories

Poster #11
Likun Hou, University of Delaware, Jimmy de la Torre, Rutgers, The State University of New Jersey, Ratna Nandakumar, University of Delaware
Differential Item Functioning Assessment in Cognitive Diagnosis Modeling: Applying Wald Test to Investigate DIF for DINA Model

Poster #12
Ying-Ju Hsu, University of Iowa, David Shin, Pearson
Reducing Measurement Error for Extreme Proficiency Estimation in Computerized Adaptive Testing via Administering Off-Grade Items

Sunday, 4:05 p.m.–6:05 p.m., Regency D, J9

Poster #13
Mehmet Kaplan, Rutgers, The State University of New Jersey, Soo Youn Lee, Rutgers, The State University of New Jersey, Jinsong Chen, Rutgers, The State University of New Jersey, Yan Huo, Rutgers, The State University of New Jersey, Jimmy de la Torre, Rutgers, The State University of New Jersey
Higher-Order and Saturated Single- and Multiple-Strategy DINA Models: A Comparison Based on EM Algorithm

Poster #14
Han Yi Kim, University of Iowa, Walter Vispoel, University of Iowa
A Comparison of Psychometric Properties for the Balanced Inventory of Desirable Responding: Fitting One-Parameter Logistic Model, Two-Parameter Logistic Model, Partial Credit Model, and Graded Response Model

Poster #15
Ja Young Kim, University of Iowa, Won-Chan Lee, University of Iowa, Deborah Harris, ACT, Inc., Michael Kolen, University of Iowa
The Effect of Content and Statistical Representation of Common Items on Accuracy of Equating with Non-Equivalent Groups Design

Poster #16
Sungeun Kim, Ewha Womans University, Yoonsoo Park, University of Illinois, Chicago, Young-Sun Lee, Teachers College, Columbia University
An Application of Latent Class Models to Multiple Strategy CDM Analysis

Poster #17
Lee LaFond, University of Iowa, Kathleen Banks, University of Iowa, Catherine Welch, Iowa Testing Programs
Exploring Gender Differential Bundle Functioning in an Algebra Readiness Assessment

Poster #18
Michelle LaMar, University of California, Berkeley
Identifying Student Conceptions Using a Differential Scoring IRT Mixture Model

Poster #19
Quinn Lathrop, University of Notre Dame
A Nonparametric Approach to Classification Accuracy and Consistency

Sunday, 4:05 p.m.–6:05 p.m., Regency D, J9

Poster #20
Sunbok Lee, University of Georgia, Jongmin Ra, University of Georgia
Jeffreys's Principle for Non-Informative Prior Specification in Bayesian IRT

Poster #21
Yeongju Lee, Ewha Womans University, Boran In, Ewha Womans University, Yoonsoo Park, Teachers College, Columbia University, Youngsun Lee, Teachers College, Columbia University
An Empirical Analysis of Item Parameter Drift in TIMSS Using the DINA Model

Poster #22
Hwang Gyu Lim, Yonsei University, Kyung Sun Kim, Yonsei University, Young Jun Lee, Yonsei University, Guemin Lee, Yonsei University
Comparison of the Standard Error of Equating Using the Bootstrap and Delta Methods Under the Different Equating Form Assumptions

Poster #23
Xiao Luo, University of North Carolina, Greensboro, Xinrui Wang, University of North Carolina, Greensboro, Lauren Fluegge, University of North Carolina, Greensboro
The Multiple-Choice Multiple-Answer Items: Application of Polytomous IRT Model in Multiple-Choice Items

Poster #24
Liyang Mao, Michigan State University, Xuechen Zhou, Michigan State University
The Effect of Common Testlets Selection on Testlet-Based Test Equating

Poster #25
Jessica Marini, Teachers College, Columbia University, Matthew Johnson, Teachers College, Columbia University
Latent Variable Matching: An Item Response Theory Approach to Causal Inference

Poster #26
Kinge Mbella, University of North Carolina, Greensboro
Data Collection Design for Equivalent Groups Equating for Mixed-Format Tests

Sunday, 4:05 p.m.–6:05 p.m., Regency D, J9

Poster #27
Casey Nixon, University of Georgia, Amanda Ferster, University of Georgia, Cigdem Alagoz, University of Georgia, Jonathan Templin, University of Georgia
A Diagnostic Model for GKIDS Performance Ratings

Poster #28
Brian Patterson, Teachers College, Columbia University, Lawrence DeCarlo, Teachers College, Columbia University
Examining the Impact of Examinee-Selected Constructed Response Items in the Context of a Hierarchical Rater Model Using Signal Detection Theory

Poster #29
Jeffrey Patton, University of Notre Dame, Ying Chen, University of Notre Dame
Capitalization on Item Calibration Error in a-Stratified Multistage Adaptive Testing

Poster #30
Hyo Jeong Shin, University of California, Berkeley, Jinnie Choi, University of California, Berkeley
Using the Rater Bundle Model (RBM) and the Hierarchical Rater Model (HRM) for Polytomous Data

Poster #31
Xiaomei Song, Queen's University
The Effect of a National Education Policy on Language Test Performance: A Fairness Perspective

Poster #32
Anna Topczewski, University of Iowa, Zhongmin Cui, ACT, Inc., David Woodruff, ACT, Inc., Hanwei Chen, ACT, Inc., Yu Fang, ACT, Inc.
A Comparison of Four Linear Equating Methods for the Common-Item Nonequivalent Groups Design Using Simulation Methods

Poster #33
Anne Traynor, Michigan State University
Impeded Attainment: The Role of Graduation Exam Requirements in the High School Diploma Completion of Language Minority Students

Poster #34
Chia-Lin Tsai, University of Missouri, Columbia, Steven Osterlind, University of Missouri, Columbia
Assessing Multilevel Construct Validity with Latent Variable Modeling

Sunday, 4:05 p.m.–6:05 p.m., Regency D, J9

Poster #35
Joshua Tudor, University of Iowa, Shalini Kapoor, University of Iowa, Stephen Dunbar, University of Iowa, Catherine Welch, University of Iowa
Mapping the NAEP Performance Levels to the Iowa Standard Score Scale

Poster #36
Michelle Vanchu-Orosco, University of Denver
A Meta-Regression of Testing Accommodations for Students with Disabilities: Implications for High Stakes Testing

Poster #37
Hong Wang, University of Pittsburgh, Yun Tang, University of Pittsburgh, Xiuyuan Zhang, National Board of Osteopathic Medical Examiners
A Monte Carlo Comparison of Random-Groups and Common-Item Equating Designs in IRT Equating

Poster #38
Min Wang, University of Iowa, Keyu Chen, University of Iowa, Catherine Welch, University of Iowa and Iowa Testing Programs, Stephen Dunbar, University of Iowa and Iowa Testing Programs
Validity Support for the Evaluation of College Readiness for English Language Learners, Hispanic and Asian Students

Poster #39
Xinrui Wang, University of North Carolina, Greensboro, Xiao Luo, University of North Carolina, Greensboro, Jia Ma, University of North Carolina, Greensboro
Simulate Data with Unique Distractor Information: Application of an IRT-Based Data-Simulation Method

Poster #40
Yi-Fang Wu, University of Iowa
How Weighting Schemes Impact the Equating of Composite Scores

Poster #41
Hsiao-Ju Yen, Washington State University, Brian French, Washington State University
Evaluating the Effects of Parental Involvement on English Language Learners' Education Using the Factor Mixture Model

Sunday, 4:05 p.m.–6:05 p.m., Regency D, J9

Poster #42
Anna Zilberberg, James Madison University, Alan Socha, James Madison University, Ha Phan, Pearson, Jadie Kong, Pearson, Leslie Keng, Pearson
The Effects of Matching Type and Sample Size on the Mantel-Haenszel Technique for Detecting Items with DIF

Monday, 5:45 a.m.–7:30 a.m., Hyatt Regency Vancouver, Lobby

NCME Fitness Run/Walk

Organizers

Brian F. French, Washington State University
Jill van den Heuvel, CTB/McGraw-Hill

Run a 5K or walk a 2.5K course in downtown Vancouver. Meet in the lobby at 5:45 a.m. Pre-registration is required. Pickup your bib number and sign your liability waiver at the NCME Information Desk, Regency Ballroom A Foyer, anytime prior to the run.

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National Council of State Boards of Nursing, Inc.
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Pearson Educational Measurement
Pearson VUE
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Monday, 8:15 a.m.–10:15 a.m., Plaza Ballroom A, K1

Differential Item and Bundle Functioning – Paper Session

Moderator

Seock-Ho Kim, University of Georgia

Presenters

Insu Paek, Florida State University, Hirotaka Fukuhara, Florida Department of Education
Differential Testlet Effects and Differential Item Functioning

Anthony Albano, University of Minnesota, Michael Rodriguez, University of Minnesota
Multilevel Modeling of Item Parameter Drift

Kimberly Colvin, University of Massachusetts, Amherst, Lisa Keller, University of Massachusetts, Amherst, Mary Zanetti, University of Massachusetts Medical School, An Dinh, University of Massachusetts Medical School
Comparing Small Sample DIF Procedures to Evaluate a Curricular Change

Jose-Luis Padilla, University of Granada, Isabel Benitez, University of Granada, M. Dolores Hidalgo, University of Murcia, Stephen Sireci, University of Massachusetts, Amherst
Can Cognitive Interviewing Help in Interpreting DIF?

Samira Elatia, University of Alberta, Mark Gierl, University of Alberta
Evaluating the Effect of Socio-Linguistic Factors on Translated and/or Adapted Educational Tests in a Bilingual Context

Sangwook Park, Florida State University, Akihito Kamata, University of Oregon
Investigating Unexpectedly Detected Directions in Differential Item Functioning Analysis

Discussant

Yan Liu, University of British Columbia

Monday, 8:15 a.m.–10:15 a.m., Plaza Ballroom B, K2

Advances in Psychometrics – Invited Symposium

Moderator

André A. Rupp, University of Maryland

Presenters

Jonathan Templin, University of Georgia
Answering the Psychometric Challenges of Measuring Student Progress Longitudinally Through Interim, Formative, and Summative Assessments

Jean-Paul Fox, University of Twente
Advances in Bayesian Item Response Modeling: The Role of Priors

Wim van der Linden, CTB/McGraw-Hill
Reflections on Multidimensional Response Modeling

Li Cai, University of California, Los Angeles
Second-Generation, Multidimensional, and Multilevel Item Response Modeling

Frank Rijmen, Educational Testing Service
Gains from Graphs: Estimating Latent Variable Models by Local Computations

Discussant

Anton Béguin, Cito

Monday, 8:15 a.m.–10:15 a.m., Georgia Room A, K3

Linking and Equating: Technical Advances (II) – Paper Session

Moderator

Marie Wiberg, Umeå University

Presenters

Yong He, University of Missouri, Zhongmin Cui, ACT, Inc., Yu Fang, ACT, Inc., Hanwei Chen, ACT, Inc.
Using a Linear Regression Method to Detect Outliers in IRT Common Item Equating

Zhiming Yang, Educational Testing Service, Shelby Haberman, Educational Testing Service, Yi Han, Educational Testing Service
Comparison Between Haberman's and Stocking-Lord's Linking Methods

In-Hee Choi, University of California, Berkeley, Xueli Xu, Educational Testing Service, Matthias von Davier, Educational Testing Service
Linking Large-Scale International Assessments over Multiple Cycles

Yue Liu, National Assessment of Education Quality, Hongyun Liu, Beijing Normal University
Comparison of MIRT Linking Methods for Different Common Item Designs

Sarah Gallimore, Virginia Polytechnic Institute and State University, Gary Skaggs, Virginia Polytechnic Institute and State University
Effect of Sample Size on IRT Equating of Unidimensional Tests in the Common Item Non-Equivalent Groups Design: A Monte Carlo Simulation Study

Deping Lee, Educational Testing System
Item Response Theory Linking and Equating Through Simultaneous Scaling

Discussant

James Carlson, Educational Testing System

Monday, 8:15 a.m.-10:15 a.m., Georgia Room B, K4

COUNCIL OF CHIEF STATE SCHOOL OFFICERS
Linking Scores from Different Assessments: Evaluating Approaches for Comparisons of Different Groups across Different Tests – Invited Symposium

Moderator

Anne Howard, Council of Chief State School Officers

Presenters

Wayne Camara, The College Board

Lauress Wise, Human Resources Research Organization (HumRRO)

Joseph Martineau, Michigan Department of Education

Kristen Huff, Regents Research Fund

Discussant

Hillary Michaels, WestEd

Monday, 8:15 a.m.–10:15 a.m., Balmoral, K5

Assessment in the Professions – Paper Session

Moderator

Carrol Morrison Featherman, National Board of Medical Examiners

Presenters

Nilufer Kahraman, National Board of Medical Examiners, Crystal Brown, National Board of Medical Examiners, Jeanette Sanger, National Board of Medical Examiners
A Closer Look at the Psychometric Characteristics of Tasks in a Standardized Patient Examination: Examining Patient-Rater and Clinical Content Related Effects on Task Parameters

Chaitanya Ramineni, Educational Testing Service, John Mattar, American Institute of Certified Pulbic Accountants, Waverely VanWinkle, Educational Testing Service, F. Jay Breyer, Educational Testing Service
Developing and Evaluating Generic Scoring Models for Constructed Response Items in Large-Scale Assessments

Sooyeon Kim, Educational Testing Service, Tim Moses, Educational Testing Service
Determining When Single Scoring for Constructed-Response Items is as Effective as Double Scoring in Licensure Tests

Michael Culbertson, University of Illinois, Urbana-Champaign, Feiming Li, National Board of Osteopathic Medical Examiners
Analyzing Knowledge Structure: An Application of Graphical Models to a Medical Licensure Exam

Marc Kroopnick, Association of American Medical Colleges, Scott Oppler, Association of American Medical Colleges, Dana Dunleavy, Association of American Medical Colleges, Xiaohui Zhao, Association of American Medical Colleges, Amanda Koch, University of Minnesota
Investigating Differential Speededness on the Medical College Admissions Test (MCAT®)

Mark Raymond, National Board of Medical Examiners, Kimberly Swygert, National Board of Medical Examiners, Nilufer Kahraman, National Board of Medical Examiners
Conditional SEMs for Examinees Who Repeat Performance Assessments

Discussant

Elaine Rodeck, Medical Council of Canada

Monday, 8:15 a.m.–10:15 a.m., Oxford, K6

Hierarchical Data Structures: Lessons from Practice – Paper Session

Moderator

Xiaoshu Zhu, University of Maryland, College Park

Presenters

Jing Zhao, The Ohio State University, William Loadman, The Ohio State University, Raeal Moore, The Ohio State University, Jian Li, The Ohio State University, Weijia Ren, The Ohio State University, Charles Okonkwo, The Ohio State University
A Hierarchical Linear Modeling Analysis of Incarcerated Youth's Reading Proficiency

Ze Wang, University of Missouri
Examining the Big-Fish-Little-Pond Effect across 49 Countries: A Multilevel Latent Variable Modeling Approach

Hao Ren, CTB/McGraw-Hill, Dong-In Kim, CTB/McGraw-Hill, Furong Gao, CTB/McGraw-Hill
School Effects on Performance Prediction of Summative Assessment Using Benchmark Assessment

Hyo Jeong Shin, University of California, Berkeley, Yi Du, Data Recognition Corporation, Ron Mead, Data Recognition Corporation
The Persistence of the School Effects Using Different Outcome Variables and Model Specifications

Youhua Wei, Educational Testing Service, Yanxuan Qu, Educational Testing Service
Using Multilevel Analysis to Monitor Test Performance across Administrations

Thakur Karkee, Measurement, Inc., Winnie Reid, Measurement, Inc.
Sensitivity of Sampling Design and Sample Size in the Recovery of Rasch Model Item Parameter Estimates and Resulting Proficiency Classifications

Discussant

Deping Li, Educational Testing Service

Monday, 10:35 a.m.–12:05 p.m., Plaza Ballroom A, L1

Embedded Assessment within Innovative Digital Learning Environments: A Methodological Case Study – Invited Symposium

Organizer

Katie Kunze, Arizona State University

Moderator

Katie Kunze, Arizona State University

Presenters

Robert Mislevy, Educational Testing Service, John Behrens, Cisco, Patti West, Independent Researcher
Evidence Centered Design of Complex Assessment Systems

Shawn Stockford, Sigma Squared Consulting, Ben Babcock, The American Registry of Radiologic Technologists
Weighting Simulated Practical Skill Assessments Using Task Analysis Data

Derek Fay, Arizona State University, Katie Kunze, Arizona State University, Aaron Crawford, Arizona State University, Roy Levy, Arizona State University
Analysis of PTSBA Product Data Using Exploratory Dimensionality Assessment Techniques

Shauna Sweet, University of Maryland, Aaron Crawford, Arizona State University, Derek Fay, Arizona State University, Katie Kunze, Arizona State University, Roy Levy, Arizona State University
Confirmatory Modeling and Data-Model Fit Techniques for Assessments Embedded in Digital Learning Environments

Taigo Calico, University of Maryland, Kristen DiCerbo, Independent Researcher
Making Inferences from Log File Data

Patti West, Independent Researcher, Kristen DiCerbo, Independent Researcher
Reporting Results of Complex Assessments to Students and Teachers

Monday, 10:35 a.m.–12:05 p.m., Plaza Ballroom B, L2

Testlet Effects: Theory & Practice – Paper Session

Moderator

Ru Lu, Educational Testing Service

Presenters

Wei Tao, ACT, Inc., Yu-Lan Su, University of Iowa
Setting Up Critical Values for Identifying Local Dependence Using the Testlet Model

Wen-Chung Wang, The Hong Kong Institute of Education, Kuan-Yu Jin, The Hong Kong Institute of Education
Do We Need Testlet Response Models if We are Interested in Person Measure Only?

Wei He, Northwest Evaluation Association, Feifei Li, Educational Testing Service, Edward Wolfe, Pearson, Xia Mao, Pearson
Model Selection for Equating Testlet-Based Tests in the Neat Design: An Empirical Study

Tsung-Han Ho, Educational Testing Service, Zhan Shu, Educational Testing Service
New Hybrid Item Selection Procedures for an Adaptive Test Based on the Testlet Response Theory Model

Mark Hansen, University of California, Los Angeles, Li Cai, University of California, Los Angeles
The Potential of Local Dependence Diagnostics to Inform or Mislead

Discussant

Walter D. Way, Pearson

Monday, 10:35 a.m.–12:05 p.m., Georgia Room A, L3

The Qualities of Quality in Classroom Assessment – Innovative Format Session

Organizer

Sarah Bonner, Hunter College, CUNY

Moderator

Jay Parkes, University of New Mexico

Presenters

Sarah Bonner, Hunter College, CUNY
Validating Interpretations and Actions Based on Classroom Assessments

Jay Parkes, University of New Mexico
The Value and Values of Reliability of Classroom Assessment

Robin Tierney, University of Ottawa
Fairness in Classroom Assessment

Bruce Randel, McRel, Tedra Clark, McRel
Measuring Quality in Classroom Assessment

Discussants

Susan Brookhart, Duquesne University
Michael Kane, Educational Testing Service

Monday, 10:35 a.m.–12:05 p.m., Georgia Room B, L4

GRADUATE STUDENT ISSUES COMMITTEE
Emerging Issues in Graduate Student Preparation and the Work of New Professionals – Invited Symposium

National education reform efforts in the United States (e.g., Common Core State Standards Initiative, PARCC and SMARTER Balanced common assessments, ESEA reauthorization) have the potential to lead to significant shifts in measurement policy and practice. Panelists will discuss what is happening as a result of these various initiatives and what it all means for students who are preparing their programs of study and building skills to become employable. Perspectives from state departments of education, academia, and both large and small testing companies will be provided.

Moderator

Chad Gotch, Washington State University

Panelists

Phoebe Winter, Pacific Metrics Corporation

Brian Gong, National Center for the Improvement of Educational Assessment

Derek Briggs, University of Colorado

Dianne Henderson-Monterro, Educational Testing Service

Monday, 10:35 a.m.–12:05 p.m., Balmoral, L5

Design Issues in Equating Studies Using Simulation and Resampling – Coordinated Session

Organizer

James Carlson, Educational Testing Service

Moderator

Mark Reckase, Michigan State University

Presenters

Michael Walker, Educational Testing Service
Toward More Principled Simulations

Neil Dorans, Educational Testing Service
Simulations are Deductive Demonstrations not Empirical Experiments

Samuel Livingston, Educational Testing Service
Keeping it Real

James Carlson, Educational Testing Service
Issues in Comparability of Anchor Item Sets in Comparative Studies with Implications for Research and Practice

Discussants

Nancy Petersen, ACT, Inc.
Mark Reckase, Michigan State University

Monday, 10:35 a.m.–12:05 p.m., Oxford, L6

Rater Effects: Lessons from Practice – Paper Session

Moderator

Mark Raymond, National Board of Medical Examiners

Presenters

Jilliam Joe, Educational Testing Service, Yoon Soo Park, University of Illinois, Chicage, Wyman Brantley, Educational Testing Service, Michael Lapp, Educational Testing Service, Dawn Leusner, Educational Testing Service
Examining the Effect of Prompt Complexity on Rater Behavior: A Mixed-Methods Application to GRE Analytical Writing Measure

Andre De Champlain, Medical Council of Canada, William Roberts, National Board of Osteopathic Medical Examiners
Evaluating the Impact of Judge Characteristics in a Standard Setting Exercise of a Large-Scale Medical Licensure Performance Assessment: An Application of Hierarchical Generalized Linear Modeling

Moonsoo Lee, University of California, Los Angeles
A Comparison of Generalizability Theory and Many Facet Rasch Model Approaches with Focusing on Interaction Effects

Xiaohong Gao, ACT, Inc., Fanmin Guo, Graduate Management Admission Council, Robert Brennan, University of Iowa
Modeling Measurement Facets and Assessing Generalizability of the GMAT Analytical Writing Assessment

Kevin Raczynski, University of Georgia
Detection of Essay Characteristics Associated with Examinee Misfit: Implications for Rater Training in a Large-Scale Writing Assessment

Discussant

Zhen (Jane) Wang, Educational Testing Service

Monday, 12:25 p.m.–1:55 p.m., Plaza Ballroom A, M1

Symposium on Technology Enhanced Assessments – Invited Symposium

Organizer

Pascal Forgione Jr., Center for K-12 Assessment & Performance Management at ETS

Moderator

Pascal Forgione Jr., Center for K-12 Assessment & Performance Management at ETS

Presenters

Kristen DiCerbo, Cisco Networking Academy, John Behrens, Cisco Networking Academy
Technology Enhanced Assessments in the Cisco Networking Academy

Ken Koedinger, Carnegie Mellon University
Assistments and Intelligent Tutors

Valerie Shute, Florida State University, Matthew Ventura, Florida State University, Yoon Jeon Kim, Florida State University
Developing and Evaluating Stealth Assessments for 21st Century Competencies

Nancy Doorey, K-12 Center at ETS
Emerging and Innovative Technology Enhanced Assessments: A Look Over the Horizon

Discussants

Robert Torres, Bill & Melinda Gates Foundation
David Williamson, Educational Testing Service

Monday, 12:25 p.m.–1:55 p.m., Plaza Ballroom B, M2

Advanced Psychometric Models for Situational Judgment Tests – Coordinated Session

Organizers

Jonas Bertling, Educational Testing Service
Patrick Kyllonen, Educational Testing Service

Moderator

Jonas Bertling, Educational Testing Service

Presenters

Carolyn MacCann, The University of Sydney, Richard Roberts, Educational Testing Service
Validity Evidence for Different Scoring Techniques in SJTs: An Empirical Examination with the Situational Judgment Test of Emotion Management (STEM)

Jiyun Zu, Educational Testing Service, Patrick Kyllonen, Educational Testing Service, Jonas Bertling, Educational Testing Service
The Nominal Response Model as a Method to Score Situational Judgment Tests

Jonas Bertling, Educational Testing Service, Frank Rijmen, Educational Testing Service, Veleka Allen, Fordham University
The Latent Class Model as a Measurement Model for Situational Judgment Tests

Steven Stemler, Wesleyan University
Scoring the Ethical Priority Test – Identification of Value Profiles by a Mixture Modeling Approach

Discussant

Jacqueline Leighton, University of Alberta

Monday, 12:25 p.m.–1:55 p.m., Georgia Room A, M3

Unidimensional IRT: Technical Advances – Paper Session

Moderator

Joseph Patrick Meyer, University of Virginia

Presenters

Christy Jenkins, University of Georgia, Jonathan Templin, University of Georgia, Allan Cohen, University of Georgia
Comparing the Two- and Three-Parameter Logistic Models via Likelihood Ratio Tests: A Commonly Misunderstood Problem

Stephen Cubbellotti, Fordham University, Ying Liu, Fordham University
Item Parameter Recovery of Dichotomous Items for the Rasch Model: IRT Program Showdown

Litong Zhang, CTB/McGraw-Hill, Jessalyn Smith, CTB/McGraw-Hill, Joanna Tomkowicz, CTB/McGraw-Hill, Brian Habing, University of South Carolina
The Effects of Test Length on Scoring Methods and Scale Score Distributions

Natalie Koziol, University of Nebraska, Lincoln, Jonathan Templin, University of Georgia
Quantifying the Impact of Misusing Examinee Latent Variable Estimates in Item Response Models

Jodi Casabianca, Carnegie Mellon University/RAND, Charles Lewis, Fordham University
Loglinear Smoothing Models for the Latent Trait Distribution in 3PL IRT MML Estimation: Impact on Item Parameter Recovery

Discussant

William Skorupski, University of Kansas

Monday, 12:25 p.m.–1:55 p.m., Georgia Room B, M4

Principled Approaches to Assessment: Putting Theories into Practice – Coordinated Session

Organizer

Matthew Burke, American Institute of Certified Public Accountants

Moderator

Michael S. Finger, American Institute of Certified Public Accountants

Presenters

Richard Luecht, University of North Carolina, Greensboro
Assessment Engineering Task Model Maps, Task Models and Templates as a New Way to Develop and Implement Test Specifications

Stephen Luebke, Law School Admission Council, James Lorie, Law School Admission Council
Use of Bloom's Taxonomy in Developing Reading Comprehension Specifications

Amy Hendrickson, The College Board, Kristen Huff, Regents Research Fund, Maureen Ewing, The College Board, Pamela Kaliski, The College Board
Evidence-Centered Assessment Design in Practice

Matthew Burke, American Institute of Certified Public Accountants, Richard Devore, American Institute of Certified Public Accountants, Joshua Stopek, American Institute of Certified Public Accountants
Incorporating Assessment Engineering into an Operational Licensure Examination

Discussants

Barbara Plake, University of Nebraska, Lincoln
Gregory J. Cizek, University of North Carolina, Chapel Hill

Monday, 12:25 p.m.–1:55 p.m., Balmoral, M5

Implications of Difficulty Modeling for Test Creation: Scalability, Security and Validity – Coordinated Session

Organizer

Isaac Bejar, Educational Testing Service

Moderator

Isaac Bejar, Educational Testing Service

Presenters

Isaac Bejar, Educational Testing Service
Construct Representation and Preservation Through Item Generation

Rene Lawless, Educational Testing Service, Paul Deane, Educational Testing Service
Modeling the Difficulty of Vocabulary Items

Kathleen Sheehan, Educational Testing Service
Cognitivel- Based Modeling of Reading Stimuli

Brent Bridgeman, Educational Testing Service, Catherine Trapani, Educational Testing Service
Comparability of Essay Question Variants: Comparison of Results from High- and Low-Stakes Tests

Discussants

Susan Embretson, Georgia Institute of Technology
Kristen Huff, Regents Research Fund

Monday, 12:25 p.m.–1:55 p.m., Oxford, M6

Reliability and Standard Error Estimation – Paper Session

Moderator

Alvaro Arce-Ferrer, Pearson

Presenters

Tae Hun Lee, University of California, Los Angeles, Mark Hansen, University of California, Los Angeles, Yang Jiseung, University of California, Los Angeles, Li Cai, University of California, Los Angeles
Variability of Estimates in Generalizability Theory: A Simulation Based Confidence Interval for Reliability Coefficients

Steven Culpepper, University of Colorado, Denver
The Reliability of Teacher Value-Added Effects in the Presence of Measurement Bias and Student Tracking

Jeffrey Patton, University of Notre Dame, Ying Cheng, University of Notre Dame
Standard Error Estimation in IRT: Bootstrap or Formula?

Jinnie Choi, University of California, Berkeley
An Evaluation of GLLAMM Approach to Generalizability in Item Response Modeling

Yasuo Miyazaki, Virginia Polytechnic Institute and State University
A Simulation Study on Appropriate Transformations of Reliability Coefficient in Multilevel Meta-Analysis Models

Louis Roussos, Measured Progress, Inc., Tyler Lonczak, Measured Progress, Inc., Zhushan Li, Boston College
A Nonparametric Conditional Standard Error of Measurement for Use in Alternate Assessments and in Checking IRT Assumptions

Discussant

Xiaohong Gao, ACT, Inc.

Monday, 2:15 p.m.–3:45 p.m., Plaza Ballroom A, N1

Innovative Approaches to Identifying Sources of Differential Item Functioning – Coordinated Session

Organizer

Raman Grover, University of British Columbia

Moderator

Kadriye Ercikan, University of British Columbia

Presenters

Wolff-Michael Roth, Griffith University, Maria Elena Oliveri, University of British Columbia, Debra Sandilands, University of British Columbia, Juliette Lyons-Thomas, University of British Columbia, Kadriye Ercikan, University of British Columbia
Tracking the Sources of DIF Using Expert Think-Aloud Protocols

Stephanie Barclay-McKeown, University of British Columbia, Maria Elena Oliveri, University of British Columbia, Debra Sandilands, University of British Columbia
Investigating Sources of Differential Item Functioning in the Deep Learning Items in the National Survey of Student Engagement (NSSE)

Raman Grover, University of British Columbia, Kadriye Ercikan, University of British Columbia
Within Gender Group Heterogeneity and Sources of Gender DIF

Maria Elena Oliveri, University of British Columbia, Kadriye Ercikan, University of British Columbia, Bruno Zumbo, University of British Columbia
Identifying Sources of Latent Class DIF

Bruno Zumbo, University of British Columbia, Yan Liu, University of British Columbia, Benjamin Shear, University of British Columbia, Oscar Olvera, University of British Columbia, Tavinder Ark, University of British Columbia
Latent Class Logistic Regression Family of Models and Its Applications to Explanatory DIF

Discussant

Stephen Sireci, University of Massachusetts

Monday, 2:15 p.m.–3:45 p.m., Plaza Ballroom B, N2

Standard Setting – Paper Session

Moderator

Michael Beck, Questar Assessment, Inc.

Presenters

Adam Wyse, Michigan Department of Education, Steven Viger, Michigan Department of Education, Michael Bunch, Measurement, Inc., Craig Deville, Measurement, Inc.
A Modified Body of Work Standard-Setting Method with Construct Maps

Mingchuan Hsieh, National Academy for Educational Research, Taiwan
Evaluating the Quality of Standard Setting Procedure using Multifaceted Rasch Approach

Susan Davis-Becker, Alpine Testing Solutions, Russell Smith, Alpine Testing Solutions
Evaluating Agreement Among Angoff Standard Setting Judges: A Proposed Statistical Approach

Brian Clauser, National Board of Medical Examiners, Jerome Clauser, University of Massachusetts, Amherst
An Examination of the Replicability of Angoff Standard Setting Results within a Generalizability Theory Framework

Katie McClarty, Pearson, Daniel Murphy, Pearson, Leslie Keng, Pearson, Ahmet Turhan, Pearson, Ye Tong, Pearson
Putting Ducks in a Row: Methods for the Empirical Alignment of Performance Standards

Brett Foley, Alpine Testing Solutions, Deirdre Lupher, Alpine Testing Solutions
Evaluating the Stability of Cut Scores Over Time in a Statewide Assessment System

Discussant

Marianne Perie, Center for Assessment

Monday, 2:15 p.m.–3:45 p.m., Georgia Room A, N3

Advances in Automated Scoring Reliability – Coordinated Session

Organizer

Lei Yu, Pacific Metrics Corporation

Moderator

Lei Yu, Pacific Metrics Corporation

Presenters

Susan Lottridge, Pacific Metrics Corporation, Howard C. Mitzel, Pacific Metrics Corporation
The Results of Using an Automated Scoring Engine to Detect and Monitor Rater Performance in Essay Scoring

Peter Foltz, Pearson, Karen Lochbaum, Pearson, Laurie Davis, Pearson
Increasing Reliability Throughout the Automated Scoring Development Process

Lei Yu, Pacific Metrics Corporation, Scott Wood, Pacific Metrics Corporation, Phoebe Winter, Pacific Metrics Corporation
Investigating Automated Scoring Consistency for Students of Special Groups

F. Jay Breyer, Educational Testing Service, Chris Brew, Educational Testing Service, Charles Lewis, Educational Testing Service, Frank Williams, Educational Testing Service, John Blackmore, Educational Testing Service
The Reliability of Scoring Short-Text Responses for Correct Content: Can Humans Really Outperform a Computer Armed with Natural Language Processing Capabilities?

Alan Nicewander, Pacific Metrics Corporation
A Comparison of Item Parameter and Item Reliability Estimates for Short Answer and Essay Items Scored by Human Raters and Automated Scoring

Discussants

Mark Shermis, The University of Akron
Walter D. Way, Pearson

Monday, 2:15 p.m.–3:45 p.m., Georgia Room B, N4

Technical Issues in Development and Implementation of Computerized Adaptive Test in K-12 Assessments – Coordinated Session

Organizer

Liru Zhang, Delaware Department of Education

Moderator

Liru Zhang, Delaware Department of Education

Presenters

Marty McCall, Smarter Balance Assessment Consortium
Technical Issues in Developing Computerized Classification Test (CCT)

David Chayer, Data Recognition Corporation, Pam Hermann, Data Recognition Corporation, Mayuko Simon, Data Recognition Corporation, Yi Du, Data Recognition Corporation
Field-Test Items Calibration in CAT: Approaches and Implications to Practice in State Assessment Programs

Shudong Wang, Northwest Evaluation Association, Hong Jiao, University of Maryland
Examine Construct Validity of Computerized Adaptive Test in K-12 Assessments

Liru Zhang, Delaware Department of Education, Shudong Wang, Northwest Evaluation Association
Using Computerized Adaptive Test to Determine Student Growth

Discussants

Steven Wise, Northwest Evaluation Association
Tim Davey, Educational Testing Service

Monday, 2:15 p.m.–3:45 p.m., Balmoral, N5

Rater Effects: Technical Advances – Paper Session

Moderator

YoungKoung Kim, The College Board

Presenters

Zhen (Jane) Wang, Educational Testing Service, Lihua Yao, Defense Manpower Data Center
Investigation of the Effects of Scoring Designs and Rater Severity on Students' Ability Estimation Using Different Rater Models

Adrienne Sgammato, Educational Testing Service
Using Tests of Marginal Homogeneity as a Measure of Rater Agreement in NAEP

Yoon Soo Park, University of Illinois, Chicago, Jilliam Joe, Educational Testing Service, Jean Williams, Educational Testing Service
Investigating a Mixture Extension of the Latent Class Signal Detection Theory Model for Differential Rater Functioning

Lidia Dobria, Wilbur Wright College
A Semiparametric Approach to Modeling Rater Severity Drift

Discussant

Andre De Champlain, Medical Council of Canada

Monday, 2:15 p.m.–3:45 p.m., Oxford, N6

Unidimensional IRT: New Models – Paper Session

Moderator

Michael Jodoin, National Board of Medical Examiners

Presenters

Chao Xie, University of Maryland, College Park, Hong Jiao, University of Maryland, College Park, George Macready, University of Maryland, College Park
Multidimensional Four-Parameter Logistic Item Response Theory Model

Laine Bradshaw, James Madison University, Jonathan Templin, University of Georgia
A Two Parameter Asymptote IRT Model for Binary Data

Hung-Yu Huang, Taipei Municipal University of Education, Wen-Chung Wang, Hong Kong Institute of Education
The Multilevel Higher-Order Item Response Theory Model

Kuan-Yu Jin, Hong Kong Institute of Education, Wen-Chung Wang, Hong Kong Institute of Education
The Item Response Model for Performance Decline During Testing

Yongsang Lee, Korea Institute for Curriculum and Evaluation, Mark Wilson, University of California, Berkeley
A Multidimensional Model with Internal Factors for Componential Structure of Data

Discussant

Hariharan Swaminathan, University of Connecticut

Monday, 4:05 p.m.–6:05 p.m., Plaza Ballroom A, O1

Application of Natural Language Processing Techniques in Reading Assessments – Coordinated Session

Organizer

Changjiang Wang, Pearson

Moderator

Kirk Becker, Pearson

Presenters

Kathleen Sheehan, Educational Testing Service, Irene Kostin, Educational Testing Service, Yoko Futagi, Educational Testing Service, Michael Flor, Educational Testing Service
SourceRater: An Automated Approach for Generating Text Complexity Classifications Aligned with the Common Core State Standards

Thomas Landauer, Pearson, Kirill Kireyev, Pearson, Charles Panaccione, Pearson
The Word Maturity Metric

Changjiang Wang, Pearson, Xiaofei Lu, The Pennsylvania State University
Exploring the Use of Natural Language Processing Techniques to Generate Test Items for Reading Assessments

A. Jackson Stenner, MetaMetrics, Carl Swartz, MetaMetrics
A Causal Rasch Model for Understanding Comprehension in the Context of Reader-Text-Task

Jill Burstein, Educational Testing Service, Jane Shore, Educational Testing Service, John Sabatini, Educational Testing Service, Brad Moulder, Educational Testing Service, Steven Holtzman, Educational Testing Service
Linguistically-Fortified Instructional Authoring for Teachers of English Learners

Barbara A. Badgett, Alpine Testing Solutions, Alice J. Corkill, University of Nevada, Las Vegas
Toward the Development of a Measurement Model Suitable for Establishing the Readability of Credentialing Examination Items: The Exploration of Variables to Accommodate the Specialized Textual Format and Content

Discussant

Donald Leu, University of Connecticut

Monday, 4:05 p.m.–6:05 p.m., Plaza Ballroom B, O2

Status and Growth for Accountability – Paper Session

Moderator

Derek Briggs, University of Colorado, Boulder

Presenters

Katherine Furgol Castellano, University of California, Berkeley
Contrasting Normative Group Growth Measures

Kimberly Marsh, James Madison University, Carol Barry, The College Board, Dena Pastor, James Madison University, Thanos Patelis, The College Board
Is Change in Participation Related to Change in Performance? An Application of Simultaneous Growth Modeling

Susan Embretson, Georgia Institute of Technology, John Poggio, University of Kansas
An Evaluation of Select Psychometric Models to Monitor Growth in Student Achievement

John Denbleyker, Minnesota Department of Education, Shuqin Tao, Data Recognition Corporation
Measuring Cross-Test Achievement Gaps: A Bayesian Approach Using Effect-Size

Mark Reckase, Michigan State University, Eun Hye Ham, Michigan State University
What Can Be Learned from Simulation Studies of Value-Added Models?

Discussant

Damian Betebenner, Center for Assessment

Monday, 4:05 p.m.–6:05 p.m., Georgia Room A, O3

Score Reporting, Interpretation, and Validation – Paper Session

Moderator

April Zenisky, University of Massachusetts, Amherst

Presenters

Rebecca Zwick, Educational Testing Service, Diego Zapata-Rivera, Educational Testing Service, Mary Hegarty, University of California, Santa Barbara
Comparing Graphical and Verbal Representations of Measurement Error in Test Score Reports

Xueming Li, University of Massachusetts, Amherst, Stephen Sireci, University of Massachusetts, Amherst
Analyzing Alignment Data Using Multidimensional Scaling

Natalija Curkovic, National Centre for External Evaluation of Education, Croatia
Which Cognitive Levels Do Knowledge Tests Really Measure? Comparison of Students, Teachers, and Test Makers Perspectives

Meiko Lin, Teachers College, Columbia University, Madhabi Chatterji, Teachers College, Columbia University
Tackling Errors Using a Multi-Stage Validation Approach for Survey-Based Construct Measures

Gretchen Anderson, University of Kansas, Neal Kingston, University of Kansas
Providing Useful Information to Guide Student Learning: A Review of State Level Individual Score Reports (Parent Letters)

Craig Waterman, University of Connecticut
Validating the Use of Multiple Measures in Teacher Evaluation

Discussant

Stanley Rabinowitz, WestEd

Monday, 4:05 p.m.–6:05 p.m., Georgia Room B, O4

Contrasting State-of-the-Art in Automated Scoring of Essays – Coordinated Session

Organizer

Mark Shermis, The University of Akron

Moderator

Mark Shermis, The University of Akron

Presenters

Lawrence Rudner, Graduate Management Admission Council
Overview and Context

David Williamson, Educational Testing Service
e-rater

Susan Lottridge, Pacific Metrics Corporation
TruScore

Shayne Miel, Measurement, Inc.
PEG

Peter Foltz, Pearson Knowledge Technologies
Intelligent Essay Assessor

Matthew Schultz, Vantage Learning
Intellimetric

Mark Shermis, The University of Akron
Contrasting State-of-the-Art in Automated Scoring of Essays: Analysis

Discussant

Jeff Nellhaus, Partnership for Assessment of Readiness for College and Careers

Monday, 4:05 p.m.–6:05 p.m., Balmoral, O5

Approaches to Develop, Study, and Use Instructionally Sensitive Assessments – Coordinated Session

Organizer

Maria Araceli Ruiz-Primo, University of Colorado, Denver

Moderator

Maria Araceli Ruiz-Primo, University of Colorado, Denver

Presenters

Maria Araceli Ruiz-Primo, University of Colorado, Denver, Min Li, University of Washington, Seattle, Michael Giamellaro, University of Colorado, Denver
An Approach to Develop and Evaluate Assessments at Different Distances of a Curriculum

Jim Popham, University of California, Los Angeles, Joseph Ryan, Arizona State University
A Practical, Low-Cost Procedure for Detecting the Instructional Sensitivity of Items

Morgan Polikoff, University of Southern California, Andrew Porter, University of Pennsylvania, John Smithson, University of Wisconsin, Madison
Comparing the Instructional Sensitivity of State Assessments and Off-the-Shelf Measures of Student Learning: Evidence from the Measures of Effective Teaching Project

Min Li, University of Washington, Seattle, Maria Araceli Ruiz-Primo, University of Colorado, Denver, Kellie Wills, University of Washington, Seattle
Comparing Methods to Estimate the Instructional Sensitivity of Items

Marsha Ing, University of California, Riverside
Using Instructional Sensitivity and Instructional Opportunities to Interpret Students' Mathematics Performance

Discussants

Richard Shavelson, Stanford University
Laura Hamilton, RAND Corporation

Monday, 4:05 p.m.–6:05 p.m., Oxford, O6

Applied Measurement Studies (II) – Paper Session

Moderator

Leslie Rutkowski, Indiana University

Presenters

Per-Erik Lyrén, Umeå University
The Value of Reporting Subscores from the New SweSAT

Shu Jing Yen, Center for Applied Linguistics, Ying Zhang, IMPAQ International, LLC, David MacGregor, Center for Applied Linguistics
Using Explanatory Item Response Models to Analyze Linguistic Features of an Academic Language Assessment

Yujie Jia, University of California, Los Angeles
Using Multivariate Generalizability Theory to Investigate the Dependability of a Computer-Based Oral Test

Joseph Stevens, University of Oregon, Keith Zvoch, University of Oregon, Marie-Hélène Véronneau, University of Québec, Montreal
Analysis and Interpretation of Hybrid Regression Discontinuity Designs

Yuan Zhang, University of Maryland, College Park, Shu Jing Yen, Center for Applied Linguistics, Dorry Kenyon, Center for Applied Linguistics
The Effect of Sampling Strategy on the Stability of Equating for an Academic Language Assessment

Jerome De Lisle, University of the West Indies, St. Augustine
Installing a System of Performance Standards for National Learning Assessments in the Republic of Trinidad and Tobago, 2005 to 2010: Issues and Challenges

Discussant

Howard Everson, City University of New York

Monday, 4:00 p.m.–7:00 p.m., Seymour Room

NCME Board of Directors Meeting

Members of NCME are invited to attend as observers.

Participant Index

A

Abedi, Jamal 55
Ackerman, Terry 28, 42, 70
Akers, Kathryn 80
Alagoz, Cigdem 86
Albano, Anthony 90
Allen, Veleka 103
Almond, Patricia 41
Almond, Russell 8, 77
Anderson, Charles 82
Anderson, Gretchen 116
Andrews, Benjamin 22
Arce-Ferrer, Alvaro 33, 35,107
Ark, Tavinder 108
Asparouhov, Timohir 61
Attali, Yigal 34

B

Babcock, Ben 96
Badgett, Barbara A. 114
Bahry, Louise 35
Baker, Eva 71
Baldwin, Su 21
Bandalos, Deborah 38
Banks, Kathleen 84
Barclay-McKeown, Stephanie 108
Baron, Karen 24
Barrett, Michelle 32
Barry, Carol 38, 115
Barton, Karen 24, 66
Baumert, Jurgen 71
Bay, Luz 19, 70
Becker, Kirk 21, 114
Beck, Michael 109
Béguin, Anton 69, 91
Behrens, John 60, 96, 102
Bejar, Isaac 60, 106
Belov, Dmitry 21, 54
Benitez, Isabel 90
Bennett, Randy 34
Ben-Simon, Anat 34
Bentler, Peter M. 25
Bertling, Jonas 10, 51, 103
Betebenner, Damian 14, 115
Biancarosa, Gina 79
Binici, Salih 22
Blackmore, John 110
Bohrnstedt, George 56, 68
Bolt, Daniel 80
Bonner, Sarah 98
Bottge, Brian 29
Bovaird, James A. 81
Bradley, Kelly 80
Bradshaw, Laine 9, 52, 113
Brandt, Steffen 47, 69
Brantley, Wyman 101
Braun, Henry 31
Breithaupt, Krista 21
Brennan, Robert 12, 44, 101
Brew, Chris 110
Breyer, F. Jay 43, 94, 110
Bridgeman, Brent 106
Briggs, Derek 31, 39, 63, 99, 115
Broaddus, Angela 27
Brookhart, Susan 16, 98
Brown, Crystal 94
Bruce, Kelly 81
Bunch, Michael 11, 109
Burke, Matthew 105
Burstein, Jill 114

C

Cai, Li 69, 91, 97, 107
Calico, Taigo 96
Camara, Wayne 45, 63, 93
Cao, Chunhua 52
Carlson, James 15, 92, 100
Carpenter, Brittany 56
Carr, Peggy 56
Casabianca, Jodi 104
Castellano, Katherine Furgol 115
Cawthon, Stephanie 55
Chang, Hua-Hua 20, 28, 36, 58
Chao, Hsiu-Yi 58
Chatterji, Madhabi 116
Chayer, David 111

Participant Index

Chen, Cong 27
Chen, Fang 70
Chen, Hanwei 86, 92
Chen, Jing 82
Chen, Jinsong 9, 59, 84
Chen, Juan 82
Chen, Jyun-Hong 58, 75
Chen, Mark 60
Chen, Pei-Hua 23
Chen, Shu-Ying 58, 75
Chen, Yi-Hsin 52
Chen, Ying 86
Chen, Ying-Fang 82
Cheng, Weiyi 47
Cheng, Ying 11, 77, 107
Chia-Ling, Hsu 36
Chien, Yuehmei 58, 72
Ching, Dixie 73
Chiu, Chia-Yi 9
Chiu, Pei-Hsuan 75
Cho, Sun-Joo 17, 29, 61
Cho, Youngmi 28
Cho, YoungWoo 53
Choi, In-Hee 92
Choi, Jinnie 82, 86, 107
Chow, Joseph 82
Chu, Man-Wai 83
Chung, Hyewon 58
Cid, Jaime 53
Cizek, Gregory J. 26, 30, 105
Clark, Amy 65
Clark, Douglas 73
Clark, Tedra 98
Clarke-Midura, Jody 27
Clauser, Brian 21, 57, 60, 109
Clauser, Jerome 109
Close, Catherine 27
Cohen, Allan 25, 29, 35, 104
Cohen, Yoav 34
Coleman, Chris 23
Colvin, Kimberly 90
Cook, Robert 21
Corkill, Alice J. 114
Crawford, Aaron 96
Crotts, Katrina M. 20
Cubbellotti, Stephen 104
Cui, Ying 40, 59
Cui, Zhongmin 86, 92
Culbertson, Michael 94
Culpepper, Steven 107
Curkovic, Natalija 116
Custer, Michael 25

D

Dallas, Andrew 42, 83
D'Angelo, Cynthia 73
Davey, Tim 41, 111
Davidson, Anne 33
Davis, Laurie 23, 67, 110
Davis-Becker, Susan 109
Davison, Mark 27
De Boeck, Paul 17, 46, 61
De Champlain, Andre 101, 112
de la Torre, Jimmy 9, 40, 59, 77, 83, 84
De Lisle, Jerome 119
Deane, Paul 34, 106
Debeer, Dries 23
DeCarlo, Lawrence 86
DeMars, Christine 80
Denbleyker, John 115
Deng, Weiling 25
Denton, Carolyn 81
DeStefano, Lizanne 68
Deville, Craig 11, 109
Devore, Richard 105
Diakow, Ronli 39
Diao, Qi 32
Diaz-Bilello, Elena 65
DiCerbo, Kristen 60, 73, 96, 102
Ding, Shuliang 40
Dinh, An 90
Dobria, Lidia 112
Dodd, Barbara 19, 58
Dogan, Enis 52, 63, 68, 78
Dolan, Bob 36, 72

Participant Index

Domingue, Benjamin 16, 39
Donoghue, John 46
Doorey, Nancy 102
Dorans, Neil 33, 76, 100
Douglas, Aaron 23, 46
Draney, Karen 82
Dreyfus, Leon 74
Du, Yi 95, 111
Dunbar, Stephen 87
Dunleavy, Dana 94
Dunn, Jenn 41
Dunn, Jennifer 66

E

Easton, John 26, 81
Elatia, Samira 90
Elliott, Stephen 79
Embretson, Susan 72, 106, 115
Enos, Mischa 81
Ercikan, Kadriye 71, 108
Erickson, Amy 41
Everson, Howard 119
Ewing, Maureen 13, 105

F

Fan, Meichu 35
Fang, Yu 86, 92
Fay, Derek 96
Fay, Robert 52
Featherman, Carrol Morrison 94
Feinberg, Richard 83
Feng, Gary 81
Feng, Yuling 83
Ferrara, Steve 67
Ferster, Amanda 86
Fina, Anthony 53
Finch, Holmes 25, 75
Finger, Michael S. 105
Finney, Sara 38
Fitzpatrick, Anne 22, 44
Flor, Michael 114
Flowers, Claudia 65, 66
Fluegge, Lauren 42, 85
Foley, Brett 109
Foltz, Peter 21, 43, 110, 117
Foorman, Barbara 81
Forgione, Pascal, Jr. 102
Forte, Ellen 65
Foster, David 72
Fox, Jean-Paul 91
French, Brian 16, 75, 87, 89
Frezzo, Dennis 60
Fu, Jianbin 69
Fu, Yin 83
Fukuhara, Hirotaka 90
Fulcher, Keston 80
Furter, Robert 42, 83
Futagi, Yoko 114

G

Gaertner, Matthew 67
Gallimore, Sarah 92
Gao, Furong 95
Gao, Xiaohong 20, 22, 101, 107
Gardner, Tracy 80
Gattis, Kim 68
Geranpayeh, Ardeshir 54
Giamellaro, Michael 118
Gierl, Mark 21, 23, 40, 61, 90
Gitomer, Drew 31
Godfrey, Kelly 23
Goldhammer, Frank 64
Gong, Brian 99
Goodman, Joshua 22, 24
Gorin, Joanna S. 57, 81
Gotch, Chad 82, 99
Graesser, Art 74
Gray, Shelley 81
Grover, Raman 108
Gu, Lixiong 44, 58
Guerere, Claudia 52
Guo, Fanmin 20, 37, 43, 101
Guo, Hongwen 76

H

Haberman, Shelby 46, 92
Habing, Brian 47, 83, 104
Haertel, Edward 62

Participant Index

Hall, Erika 23, 80
Ham, Eun Hye 115
Hambleton, Ronald 36, 45, 71
Hamilton, Laura 118
Han, Kyung 20, 58
Han, Ning Ning 37
Han, Yi 92
Hansen, Mark 97, 107
Hansen, Mary 66
Hao, Shiqi 54
Harik, Polina 60
Harris, Deborah 12, 22, 29, 35, 44, 84
Harris, Doug 31
Harris, John, Jr. 24
He, Wei 58, 97
He, Yong 92
Hegarty, Mary 116
Hembry, Ian 23, 82
Hemphill, Cadelle 56
Henderson-Monterro, Dianne 99
Hendrickson, Amy 13, 22, 105
Henson, Robert 40, 59
Herman, Joan 33
Hermann, Pam 111
Hess, Karin 55, 65
Hidalgo, M. Dolores 90
Higgins, Derrick C. 15
Ho, Andrew 12
Ho, Tsung-Han 36, 97
Hochweber, Jan 51
Holtzman, Steven 114
Hong, Feng 75
Hong, Yuan 11
Hou, Likun 83
Howard, Anne 93
Hsieh, Mingchuan 109
Hsu, Ying-Ju 83
Huang, Hung-Yu 1 13
Huang, Sheng-Yun 64
Huff, Kristen 13, 23, 31, 63, 93, 105,106
Huggins, Anne Corinne 76
Hunter, Charles 27
Huo, Yan 40, 84

I

Ilangakoon, Cristina 66
In, Boran 85
Ing, Marsha 118
Ingrisone, James 41
Ito, Kyoko 20

J

Janssen, Rianne 23
Jenkins, Christy 104
Jeon, Minjeong 46, 51
Jia, Yue (Helena) 64
Jia, Yujie 119
Jiao, Hong 28, 64, 82, 111, 113
Jin, Kuan-Yu 97, 113
Jiseung, Yang 107
Jodoin, Michael 83, 113
Joe, Jilliam 60, 101, 112
Johnson, Matthew 61, 85

K

Kahraman, Nilufer 94
Kaliski, Pamela 13, 23, 105
Kamata, Akihito 46, 90
Kamil, Michael 19
Kane, Michael 98
Kanjee, Anil 70
Kannan, Priya 75
Kaplan, David 51
Kaplan, Mehmet 84
Kapoor, Shalini 22, 87
Karkee, Thakur 95
Karvonen, Meagan 66
Kary, David 21
Kearns, Jacqui 65
Keegan, Peter 71
Keller, Lisa 35, 90
Keng, Leslie 24, 67, 88, 109
Kennet-Cohen, Tamar 80
Kenyon, Dorry 119
Kerr, Deidre 73
Khalid, Muhammad Naveed 54

Participant Index

Kilpatrick, Jeremy 19
Kim, Dong-In 95
Kim, Han Yi 84
Kim, Hyun Seok 72
Kim, Ja Young 84
Kim, Jinok 33
Kim, Jiseon 58
Kim, Kevin 75
Kim, Kyung Sun 85
Kim-O, Mee-Ae 72
Kim, Seock-Ho 29, 75, 90
Kim, Sooyeon 94
Kim, Sungeun 84
Kim, Yoon Jeon 73, 102
Kim, Young 68
Kim, YoungKoung 112
Kim-Kang, Gyenam 80
Kingsbury, Gage 58
Kingston, Neal 65, 116
Kingston, Neal M. 54
King, Teresa 33
Kireyev, Kirill 114
Kirkpatrick, Rob 76
Klein, Beth 24
Knupp, Tawnya 53
Kobrin, Jennifer 43
Koch, Amanda 94
Koedinger, Ken 102
Koenig, Judith 31
Kolen, Michael 12, 22, 44, 53, 55, 84
Kolstad, Andrew 56
Kong, Jadie 88
Kopp, Jason 38
Koretz, Daniel 62
Kostin, Irene 114
Koziol, Natalie 104
Kröhne, Ulf 64
Kroopnick, Marc 53, 94
Kulick, Ed 68
Kunze, Katie 96
Kurz, Alexander 79
Kyllonen, Patrick 10, 23, 51, 103

L

LaFond, Lee 84
Lagunoff, Rachel 14
Lai, Emily 24
Lai, Hollis 21, 40, 61, 83
Lakin, Joni 33
LaMar, Michelle 84
Landauer, Thomas 74, 114
Lane, Suzanne 30, 45
Lange, Rense 33
Lansdale, Jeff 70
Lapp, Michael 101
LaSalle, Amy 67
Lathrop, Quinn 77, 84
Lawless, Kimberly 81
Lawless, Rene 106
Lee, Deping 92
Lee, Eunjung 44
Lee, Moonsoo 101
Lee, Soo Youn 84
Lee, Sunbok 85
Lee, Tae Hun 107
Lee, Won-Chan 22, 44, 53, 82, 84
Lee, Yeongju 85
Lee, Yi-Hsuan 54, 64
Lee, Yongsang 113
Lee, Young Jun 85
Lee, Youngsun 85
Lee, Young-Sun 59, 84
Leighton, Jacqueline 27, 57, 103
Leu, Donald 114
Leusner, Dawn 101
Leuven, K.U. 61
Levy, Joshua 41
Levy, Roy 96
Lewis, Charles 28, 77, 104, 110
Li, Chen 43
Li, Deping 76, 95
Li, Dongmei 35
Li, Feifei 36, 97
Li, Feiming 21, 94
Li, Guangming 37

Participant Index

Li, Hongli 27
Li, Jian 95
Li, Jie 32
Li, Kuan-Yi 23
Li, Min 118
Li, Xueming 116
Li, Yanmei 76
Li, Ying 69
Li, Zhushan 75, 107
Liao, Chi-Wen 44
Lietz, Petra 51
Lim, EunYoung 58
Lim, Hwang Gyu 85
Lin, Haiyan 36
Lin, Jie 20, 76
Lin, Johnny 25
Lin, Meiko 116
Ling, Guangming 58
Link, Valerie 53
Lissitz, Robert 69
Liu, Chen-Wei 25
Liu, Chunyan 44
Liu, Fu 28
Liu, Hongyun 92
Liu, Jinghua 76
Liu, Lydia 29
Liu, Min 54
Liu, Qungsi 37
Liu, Yan 40, 90, 108
Liu, Ying 104
Liu, Yue 92
Livingston, Samuel 44, 100
Loadman, William 95
Lochbaum, Karen 23, 43, 110
Lonczak, Tyler 41, 66, 107
Loomis, Susan 19
Lorenz, Florian 43
Lorie, James 105
Lottridge, Susan 110, 117
Lu, Ru 76, 97
Lu, Xiaofei 114
Lu, Yi 80
Lu, Zhenqiu (Laura) 25
Luebke, Stephen 105
Luecht, Richard 23, 32, 36, 42, 63, 105
Lukoff, Brian 29
Luo, Xiao 23, 83, 85, 87
Lupher, Deirdre 109
Lyons-Thomas, Juliette 71, 108
Lyrén, Per-Erik 119

M

Ma, Jia 83, 87
Ma, Lingling 20
MacCann, Carolyn 103
Macready, George 28, 113
Magliano, Joseph 81
Mahlum, Trevor 78
Mao, Liyang 85
Mao, Xia 41, 44, 97
Marcoulides, George 57
Marcus, James 69
Margolis, Melissa 60
Marini, Jessica 85
Marion, Scott 31
Mark, Carrie 65
Marsh, Kimberly 115
Martineau, Joseph 93
Martiniello, Maria 33
Mattar, John 94
Maul, Andrew 39
May, Stephen 71
Mazzeo, John 68
Mbella, Kinge 85
McCall, Marty 20, 27, 111
McClarty, Katie 67, 109
McClellan, Catherine 15, 60
McNamara, Danielle 74
Mead, Alan 21
Mead, Ron 95
Melican, Gerald 23, 42
Meyer, Joseph Patrick 104
Meyers, Jason 22
Michaels, Hillary 93
Miel, Shayne 117

Participant Index

Millis, Keith 81
Milone, Michael 74
Mislevy, Robert 8, 96
Mitzel, Howard C. 110
Miyazaki, Yasuo 107
Monfils, Lora 25
Monowar-Jones, Lauren 24
Monroe, Scott 69
Montgomery, Melinda 77
Moody, Shauna 66
Moore, Christopher 43
Moore, Raeal 95
Moore, Terrence 24
Moses, Tim 94
Moulder, Brad 114
Mroch, Andrew 43
Munoz, Cip 67
Murphy, Daniel 23, 24, 67
Murphy, Stephen 22
Murray, Constance 60
Muthén, Bengt 61
Mzumara, Howard 72

N

Nandakumar, Ratna 83
Nellhaus, Jeff 63, 117
Nelson, Jessica 74
Nese, Joseph 79
Newton, Paul E. 30
Nhouyvanisvong, Adisack 52
Nicewander, Alan 110
Nichols, Paul 65
Nixon, Casey 86
Nozawa, Yuki 20, 77
Nydick, Steven 77

O

O'Connell, Ann A. 81
Okonkwo, Charles 95
Olea, Julio 59
Oliveri, Maria Elena 108
Olsen, James 21
Olvera, Oscar 108
O'Malley, Kimberly 67
O'Neil, Timothy 35
Oppler, Scott 94
Oranje, Andreas 46, 68
Ordonez, Xavier 59
O'Reilly, Tenaha 81
Oren, Carmel 80
Osleson, Lara 24
Osterlind, Steven 86

P

Packman, Sheryl 13
Padilla, Jose-Luis 90
Paek, Insu 90
Palma, Jose 41
Panaccione, Charles 114
Park, Ryoungsun 58
Park, Sangwook 90
Park, Yoon Soo 59, 101, 112
Parkes, Jay 98
Pashley, Peter 28
Pastor, Dena 38, 115
Patarapichayatham, Chalie 46
Patel, Priyank 53
Patelis, Thanos 115
Patterson, Brian 86
Pattie, Noonan 41
Patton, Jeffrey 82, 86, 107
Patz, Richard 51
Pellegrino, James 55, 81
Penfield, Randall 75
Pentimonti, Jill 81
Perfetti, Charles 74
Perie, Marianne 65, 109
Petersen, Nancy 100
Petscher, Yaacov 81
Phan, Ha 88
Phyllips, Layna 67
Piasta, Shayne 81
Pillarisetti, Pavan 81
Pitoniak, Mary 37
Plake, Barbara 38, 45, 79, 105
Poggio, John 27, 72, 115
Polikoff, Morgan 118

Participant Index

Pollak, Pamela 21
Ponsoda, Vicente 59
Popham, Jim 118
Porter, Andrew 118
Powers, Sonya 22
Proctor, Thomas 42, 53
Puhan, Gautam 22, 53

Q

Qian, Jiahe 44, 46
Qiu, Xue Lan 28
Qu, Yanxuan 44, 58, 69, 95
Quellmalz, Edys 73
Quenemoen, Rachel 63, 65

R

Ra, Jongmin 85
Rabe-Hesketh, Sophia 46, 51, 61
Rabinowitz, Stanley 116
Raczynski, Kevin 101
Rahman, Nazia 28
Rainelli, Stefano 75
Ramineni, Chaitanya 43, 94
Randel, Bruce 98
Raymond, Mark 94, 101
Reckase, Mark 11, 28, 45, 100, 115
Reid, Winnie 95
Ren, Hao 95
Ren, Weijia 95
Reshetar, Rosemary 53
Restrepo, M. Adelaida 81
Rho, Yun Jin 40
Rijmen, Frank 28, 46, 51, 69, 91, 103
Rivas, Sal 68
Roach, Andrew 66
Roberts, Richard 10, 103
Roberts, William 101
Rodeck, Elaine 60, 94
Rodriguez, Michael 70, 80, 90
Rogers, H. Jane 75
Rojas, Guaner 59
Romero, Sonia 59
Rosenberg, Sharyn 56
Rosenstein, Mark 23
Roth, Wolff-Michael 71, 108
Roussos, Louis 41, 66, 75, 107
Rubio, Fernando 70
Rudner, Lawrence 20, 117
Ruff, Leslie 67
Ruiz-Primo, Maria Araceli 118
Rupp, André A. 16, 73, 91
Rutkowski, Leslie 46, 119
Ryan, Joseph 118

S

Sabatini, John 81, 114
Sakworawich, Arnond 77
Sanclemente, Julio 12
Sandilands, Debra 71, 108
Sanger, Jeanette 94
Sato, Edynn 14, 41, 55
Schildkamp, Kim 78
Schmidt, Mary Lou 24
Schneider, Christina 43
Schulte, Ann 79
Schultz, Matthew 117
Schwarz, Richard D. 15
Scrams, David 64
Sedillo, Richard 67
Segall, Daniel 20
Sen, Rohini 75
Seo, Dong Gi 52, 54
Seo, Minhee 47
Seong, Tae-Je 59
Serlin, Ronald 35
Sgammato, Adrienne 112
Shafran, Yael 34
Sharairi, Sid 25
Shavelson, Richard 118
Shaw, Emily 43
Shaw, Stuart D. 30
Shear, Benjamin 108
Sheehan, Kathleen 74, 106, 114
Sheinker, Alan 65
Shen, Linjun 21
Shepard, Lorrie 31, 68
Shermis, Mark 24, 43, 110, 117

Participant Index

Shin, Chingwei 58, 72
Shin, David 83
Shin, Hyo Jeong 82, 86, 95
Shore, Jane 114
Shu, Zhan 46, 97
Shute, Valerie 73, 102
Simon, Chuck 72
Simon, Marielle 71
Simon, Mayuko 111
Sinharay, Sandip 33
Sireci, Stephen 20, 30, 43, 63, 67, 90, 108, 116
Skaggs, Gary 92
Skorupski, William 24, 77, 104
Sloane, Finbarr 72
Smith, Jessalyn 104
Smith, Russell 109
Smithson, John 118
Socha, Alan 88
Solano-Flores, Guillermo 33, 71
Song, Lihong 40
Song, Tian 72
Song, Xiaomei 86
Soto, Amanda 82
Spitalny, Ilyse 53
Springhorn, Anne 24
Stancavage, Fran 56
Stemler, Steven 103
Stenner, A. Jackson 74, 114
Stevens, Joseph 79, 119
Stickney, Eric 74
Stockford, Shawn 96
Stone, Elizabeth 41
Stopek, Joshua 105
Straley, Linda 74
Su, Ya-Hui 75
Su, Yu-Lan 52, 97
Sukin, Tia 41, 66
Sun, Huaping 24
Sun, Jianan 77
Sunbul, Onder 47
Svetina, Dubravka 47
Swaminathan, Hariharan 75, 113
Swartz, Carl 74, 114
Sweeney, Kevin 23
Sweet, Shauna 59, 96
Swift, David 25
Swygert, Kimberly 94

T

Talento-Miller, Eileen 20
Tang, Yun 87
Tao, Shuqin 115
Tao, Wei 97
Templin, Jonathan 9, 86, 91, 104, 113
Thomas, Kelli 65
Thum, Yeow Meng 30, 79
Thurlow, Martha 65
Tierney, Robin 98
Tindal, Gerald 66, 79
Tobin, Mollie 51
Toker, Turker 72
Tomkowicz, Joanna 104
Topczewski, Anna 35, 86
Torres Irribarra, David 39
Torres, Robert 102
Trapani, Catherine 106
Traynor, Anne 86
Trierweiler, Tammy 25
Tsai, Chia-Lin 82, 86
Tudor, Joshua 87
Turhan, Ahmet 22, 76, 109
Turner, Alyn 51
Turvall, Elliot 80

V

Valdes, Guadalupe 71
van den Heuvel, Jill 66, 80, 89
van der Linden, Wim 32, 64, 76, 91
van der Ploeg, Arie 78
Van Iwaarden, Adam 14
Van Meter, Peggy 27
Vanchu-Orosco, Michelle 41, 87
VanWinkle, Waverely 94
Veneziano, Andrea 60
Ventura, Matthew 73, 102

Participant Index

Véronneau, Marie-Hélène 119
Vieluf, Svenja 51
Viering, Michaela 24
Viger, Steven 54, 109
Vispoel, Walter 84
von Davier, Alina 76
von Davier, Matthias 46, 51, 77, 92

W

Wagner, Richard 81
Wainer, Howard 83
Wakeman, Shawnee 66
Walker, Michael 100
Wall, Carla 81
Wall, Nathan 12, 22
Walsh, Tom 65
Wan, Ping 24
Wang, Changjiang 33, 114
Wang, Chun 28
Wang, Hong 87
Wang, Hongling 35
Wang, Lei 37
Wang, Min 87
Wang, Shudong 64, 111
Wang, Wei 53
Wang, Wen-Chung 25, 28, 64, 97, 113
Wang, Wenhao 54
Wang, Wenyi 40
Wang, Xian 83
Wang, Xinrui 42, 85, 87
Wang, Ze 95
Wang, Zhen (Jane) 101, 112
Warnakulasooriya, Rasil 40
Waterman, Craig 116
Waters, Bryan 43
Way, Walter D. 24, 58, 60, 72, 74, 97, 110
Wayman, Jeff 78
Weeks, Jonathan 16, 76
Wei, Hua 20, 53
Wei, Youhua 95
Welch, Catherine 84, 87
Wells, Craig 35
Wen, Yao 25
Wen-Chung, Wang 36
West, Patti 96
Whetstone, Patti 65
Wiberg, Marie 76, 92
Wiley, Andrew 23
Williams, Frank 110
Williams, Jean 15, 112
Williams, Natasha 67
Williamson, David 8, 74, 102, 117
Wills, Kellie 118
Willse, John 40, 42, 80
Wilson, Mark 39, 62, 82, 113
Wine, Marjorie 80
Winter, Phoebe 99
Wise, Lauress 63, 93
Wise, Steven 16, 20, 111
Wolfe, Edward 97
Woodruff, David 86
Wood, Scott 110
Wothke, Werner 29
Wright, Wendi 43
Wu, Yi-Fang 76, 87
Wyse, Adam 109

X

Xie, Chao 113
Xin, Tao 37, 77
Xu, Xueli 68, 92

Y

Yan, Duanli 8, 20
Yang, Ji Seung 69
Yang, Zhiming 92
Yao, Lihua 11, 36, 53, 112
Yeagley, Pamela 14
Yen, Hsiao-Ju 87
Yen, Shu Jing 119
Yi, Qing 22, 35, 53
Yoo, Hanwook 36
Yoon, SoYoon 80
Yu, Lei 110

Z

Zanetti, Mary 90

Participant Index

Zapata-Rivera, Diego 116
Zenisky, April 20, 42, 116
Zhang, Jiahui 37
Zhang, Jinming 27, 47, 58
Zhang, Liru 111
Zhang, Litong 35, 104
Zhang, Mo 43
Zhang, Shumei 77
Zhang, Xiuyuan 87
Zhang, Ying 119
Zhang, Yuan 119
Zhang, Zao 59
Zhang, Zhiyong (Johnny) 25
Zhao, Fei 54, 65
Zhao, Jing 95
Zhao, Xiaohui 94
Zheng, Chunmei 41
Zheng, Yi 20
Zhou, Jie 28
Zhou, Xuechen 85
Zhu, Rongchun 77
Zhu, Xiaoshu 95
Zilberberg, Anna 88
Zimmerman, Linda 80
Zu, Jiyun 22, 103
Zumbo, Bruno 108
Zvoch, Keith 79, 119
Zwick, Rebecca 116
Zwitser, Robert 17, 82

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