

# NCME

national  
council on  
measurement  
in education

## Annual Meeting Program

April 25–27, 2000  
New Orleans, LA





# **NATIONAL COUNCIL ON MEASUREMENT IN EDUCATION**

Sheraton New Orleans Hotel  
New Orleans Marriott  
Le Meridien New Orleans  
New Orleans, LA  
April 25–27, 2000

## **Future Meetings**

2001 Seattle — April 11–13  
2002 New Orleans — April 2–4  
2003 Chicago — April 22–24  
2004 San Francisco — April 6–8 (tentative)  
2005 Montreal — April 12–14 (tentative)

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Educational Measurement: Issues and Practice	Geri Benson <i>University of Pittsburgh</i>
NCME Newsletter	Douglas F. Becker <i>Riverside Publishing Company</i>
ITEMS	Michael J. Zieky <i>Educational Testing Service</i>
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## **NCME Annual Meeting Training Sessions New Orleans, LA, April 25–27**

Admission to training sessions is limited to ticket holders. Tickets may be obtained by writing to Training/NCME, 1230 17th Street, NW, Washington, DC 20036-3078. Please enclose payment and a self-addressed stamped envelope. Courses are subject to cancellation for insufficient registration. Some courses require advanced registration. The deadline for ordering tickets is March 20, 2000. Any tickets available at the conference will be sold on a first-come, first-served basis at the registration area in one of the convention hotels.

**Thursday, April 27**

**8:15 A.M. – 12:15 P.M.**

### **AA. Assessing Learning Outcomes with Performance Assessment Tasks**

**Presenters:** Susan Thomas, IBM Corporation

**Fee:** \$40

The overall objective of the training session is to provide participants with an overview of the processes involved in developing and using performance assessment tasks to measure learning outcomes. The session will focus initially on the trade-offs and decision points to consider when selecting the method of assessing learning outcomes. Concepts and activities will be used to guide participants through the development of a performance assessment task, its scoring rubric, and its associated components including instructors for the task administrator. Methods of standard setting for performance assessment tasks will be described, and participants will be urged to consider ways that they can use these techniques to determine acceptable performance on the task they create.



Monday, April 24

8:30 A.M. – 4:00 P.M.

## **BB. Computerized Testing — Issues and Applications**

Presenters: Cynthia G. Parshall, University of South Florida;  
Tim Davey, Judy Spray, John Kalohn, ACT, Inc      Fee: \$95

This training session will introduce participants to the field of computerized testing. Several test delivery models will be covered in detail, including: fixed computer-based testing (CBT), automated test construction for online delivery (ATC), computerized adaptive testing (CAT), and computerized classification testing (CCT). Item Response Theory (IRT) will be addressed in terms of the implications of item response models, ability estimation methods, and item selection algorithms for the administration of computerized exams. A discussion of the process of evaluating and preparing an item pool for computerized testing will also be provided. Practical exercises will be included, as will demonstrations of innovative item types and computerized tests. Participants will also receive a handbook written by the presenters that will be used as a framework for the training session material.

Monday, April 24

8:30 A.M. – 4:00 P.M.

## **CC. Test Equating Methods and Practices**

Presenters: Michael J. Kolen, Robert J. Brennan, Iowa Testing Programs:  
University of Iowa      Fee: \$95

The goals of this 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. The potential 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 a statistical process that is used to adjust scores on test forms so that scores on the forms can be used interchangeably. 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 computerized tests will be considered. The text for the session will be the co-directors' 1995 book *Test Equating Methods and Practices*, a copy of which is included as part of the fee for the session. The session is designed for upper-level graduate students, new Ph.D.'s, testing professionals with operational or oversight responsibility for equating, and others with interest in learning about equating methods and practices. Participants should have at least one graduate course in measurement and two graduate courses in statistics.

Wednesday, April 26

2:15 – 6:15 P.M.

**DD. Automated Procedure for Item Selection and Test Construction Using IRT Information**

Presenters: Eduardo Cascallar, Rene Grosser, Ruth Olmsted,  
Leslie Ann Bliss, Regents College; Alicia P. Schmitt, ETS

Fee: \$40

The purpose of this training session is to present and demonstrate an automated solution to practical problems in the test development process when assembling tests using Item Response Theory information functions. This particular procedure allows information to be efficiently organized, so that the test development process is facilitated. Specifically, an application incorporating spreadsheets and pivot tables was developed to operationalize the test assembly process. The spreadsheets assist the process by rank ordering items based on different criteria established a priori. Thus the selection of items is automated, replacing the more cumbersome conventional methods which are often time consuming and less efficient. In addition, pivot tables offering user interactivity provide simultaneous summary information which guides in the selection of items. The workshop structure will include a theoretical presentation, followed by a description of the automated item selection process, demonstration of the application including an interactive audience participation component, and concluding with issues addressed during an actual test assembly process. A bound manual containing material on theoretical concepts and examples of automated tables describing the process to follow, including the procedural steps recommended in the test assembly process, will be provided to each participant.

Monday, April 24

8:30 A.M – 4:30 P.M.

**EE. Dimensionality Assessment**

Presenters: William Stout, Louis Roussos, University of Illinois;  
Instructor: Sarah Hart, University of Illinois

Fee: \$95

The purpose of this training session is to educate practitioners about the issues in test dimensionality assessment, and then to instruct participants on the current conditional covariance based methodology and dimensionality software (DIMTEST, POLY-DIMTEST, CONCOV, HCA/CCPROX, DETECT and MULTISIM). With the national emphasis on testing, it is essential that individuals responsible for constructing and analyzing standardized tests understand how to evaluate what a test is actually measuring.

Monday, April 24

8:30 A.M. – 5:00 P.M.

**FF.                    Setting Standards Using the Body of Work Method**

Presenters: Neal Kingston, Stuart Kahl, Kevin Sweeney, Luz Bay,  
Advanced Systems in Measurement and Evaluation      Fee: \$95

The purpose of this training session is for participants to learn how to perform standard setting using the Body of Work (BoW) method. Participants will take part in a compressed version of BoW standard setting, learn the various steps of the panel process, discuss issues related to certain steps, learn how to perform the required data analyses, become aware of current research findings, allowing interested parties to design and carry out additional research studies to refine the method of particular program needs. This training session will be of interest to researchers and policymakers interested in standard setting.

Monday, April 24

8:30 A.M. – 4:30 P.M.

**GG.                    Implementing Alternate Assessments Required by  
IDEA that Promote Standards-Based Learning  
for Students with Disabilities**

Organizer: Edward Roeber,  
Advanced Systems in Measurement and Evaluation  
Presenters: Julie Armentrout,  
Advanced Systems in Measurement and Evaluation;  
Pat Burgess, Sarah Kennedy, Ken Warlick,  
Inclusive Large-Scale Standards and Assessment  
Discussants: Ken Olsen, Mid-South Regional Resource Center;  
Candy Shyer, New York State Education Department;  
Dan Wiener, Massachusetts Department of Education.  
Fee: \$40

The purpose of this training session is to present state and local educators with information regarding the steps they should take to develop alternate assessments for students with disabilities, unable to take part in the regular assessment programs offered to all students at the state or district levels, even with accommodations. Particular emphasis will be placed on alternate assessments that lead to improved learning of students with disabilities. The training presenters will address several steps which focus on developing and implementing a quality alternate assessment component to the overall assessment program. This training session is particularly targeted for regular educators, special educators, and school administrators.

Thursday, April 27

2:15 – 6:15 P.M.

## **HH. Finishing Up and Finding a Job: Practical Suggestions for Graduate Students in Measurement (co-sponsor with AERA)**

Presenters: Deborah J. Harris, ACT, Inc.; Dara Martinovich-Barhite,  
Wisconsin Department of Public Instruction Fee: \$15

This session addresses practical topics of concern to graduate students in measurement who have questions in such areas as: where jobs are available (e.g., school districts, state departments); what types of things employers look for in application materials; what types of questions might be asked of an interviewee; what types of questions should an interviewee ask; what are possible dissertation topics; should I finish before I leave school, etc. The format of the training session will be a combination of lecture/discussion. The goal is to discuss concerns, provide resources, guidance and reassurance for graduate students in job hunting situations. Materials will be included from a variety of resources and speakers will cover a variety of situations.

Thursday, April 27

2:15 – 6:15 P.M.

## **II. Reliability Generalization: A Meta-Analytic Method to Characterize Variations in the Reliability of a Measure's Scores Across Administrations (co-sponsor with AERA)**

Presenters: Bruce Thompson, Texas A&M University;  
Tammi Vacha-Haase, Colorado State University Fee: \$15

This training session presents a user-friendly introduction to the basic concepts of a new measurement meta-analytic method: reliability generalization. The session presumes no specialized background except basic familiarity with common analysis of variance.

AERA Division D has put together an interesting program for the Joint Meeting, and many of the sessions will interest NCME members. The following sessions may be of particular interest, but the full program includes sessions related to CAT, structural equation modeling, standard setting, TIMSS, and other measurement issues. A full listing of all Division D sessions is available in the AERA Program.

Looking at measurement from the outside: Subject area specialists talk to measurement specialists  
*Monday, 4:05 – 6:05 P.M., Sheraton Bayside B, 4th Floor*

Beyond magical thinking: Designing ideal assessment and accountability systems  
*Tuesday, 10:35 A.M. – 1:35 P.M. (three hours), Sheraton Grand Ballroom A, 5th Floor*

Perspectives on NAEP  
*Friday, 2:15 – 3:45 P.M., Sheraton Hotel, Pontchartrain F, 3rd Floor*

The work of the Joint Committee for Standards on Educational Evaluation on standards for evaluation of students  
*Thursday, 10:35 A.M. – 12:05 P.M., Le Meridien, Ile de France II, 3rd Floor*

Monday, April 24

4:00 – 7:00 P.M.

**NCME Board of Directors Meeting**

Members are invited to attend as observers.

Bayside A, 4th Floor  
Sheraton Hotel

Major address and selected sessions of the annual meeting will be available on cassette tapes. Information on ordering tapes may be obtained in the AERA/NCME registration area.

Tuesday, April 25

8:15 – 9:45 A.M.

A1

## Linking Educational Assessments — Invited Symposium

### Organizer/Moderator

Bradley A. Hanson, ACT, Inc.

### Presenters

Paul W. Holland, University of California at Berkeley

*Linking non-parallel tests: Not just a larger error term, but bias and unfairness as well!*

Eugene G. Johnson, American Institutes for Research

*Issues arising in attempting to link the Voluntary National Test to NAEP*

Daniel Koretz, Boston College

*Embedding as a method of obtaining comparable scores across states: Findings of an NRC committee*

### Discussants

Robert L. Brennan, University of Iowa

Edward H. Haertel, Stanford University

Bayside C, 4th Floor  
Sheraton Hotel

Tuesday, April 25

8:15 – 10:15 A.M.

A2

## Exposure Rates and Calibration Issues in a CAT — Paper Session

**Moderator** Michael Nering, Advanced Systems, Inc.

### Presenters

Hua-Hua Chang, National Board of Medical Examiners;

Wim van der Linden, University of Twente

*Using 0-1 programming model in optimal a-stratified CAT designs*

Cynthia G. Parshall, Jeffrey D. Kromrey, Kristine Y. Hogarty,

University of South Florida

*Sufficient simplicity or comprehensive complexity? A comparison of probabilistic and stratification methods of exposure control*

Chi-Keung C. K. Leung, Hong Kong Institute of Education;

Hua-Hua Chang, National Board of Medical Examiners;

Kit-Tai Hau, Chinese University of Hong Kong

*Solving complex constraints in a-stratified adaptive testing design*

Feng Yu, American Institutes for Research;

Ratna Nandakumar, University of Delaware

*Pretest item calibration under CAT environment*

Fumiko Samejima, University of Tennessee

*Some considerations for improving accuracies of estimation of item characteristic curves in on-line item calibration of computerized adaptive testing*

### Discussants

Gage Kingsbury, North West Education Association

Bert Green, Johns Hopkins University

Pontchartrain B, 3rd Floor  
Sheraton Hotel

Tuesday, April 25

8:15 – 10:15 A.M.

A3

**Making an Informed Choice among IRT Alternatives —  
MCAT Graduate Student Research Program — Symposium**

**Organizer/Moderator**

Ellen R. Julian, Association of American Medical Colleges

**Presenters**

Amy Hendrickson, University of Iowa

*IRT equating of the MCAT*

Vinaya Kelkar, University of North Carolina at Greensboro

*Evaluation of the IRT parameter invariance for the MCAT*

April L. Zenisky, University of Massachusetts at Amherst

*Evaluating the effects of local item dependence on MCAT scores*

**Discussants**

Craig N. Mills, American Institute of Certified Public Accountants

Richard M. Leucht, University of North Carolina at Greensboro

Oakley, 4th Floor  
Sheraton Hotel

Tuesday, April 25

10:35 A.M. – 12:05 P.M.

B1

**Applied Research in State Assessment: Practical Implications for  
Large-Scale Assessment Programs — Symposium**

**Organizer/Moderator**

Phoebe C. Winter, Council of Chief State School Officers

**Participants**

M. David Miller, University of Florida

*Generalizability of constructed-response assessments*

Anne R. Fitzpatrick, Wendy M. Yen, CTB/McGraw-Hill

*A study of the comparability of individual student scores across non-parallel test forms  
containing constructed-response items*

Ronald K. Hambleton, University of Massachusetts at Amherst

*Setting standards on mixed-format assessments*

David Thissen, University of North Carolina, Chapel Hill

*Combining and reporting scores from mixed assessment formats*

**Discussants**

John F. Olson, Council of Chief State School Officers

David Sweet, National Institute on Student Achievement

Ellendale, 4th Floor  
Sheraton Hotel

Tuesday, April 25

10:35 A.M. — 12:05 P.M.

## B2

### Validity Issues — Paper Session

#### Moderator

Richard L. Sawyer, ACT, Inc.

#### Presenters

Shu Jing Yen, Nancy Bene, Maryland State Department of Education;

Huynh Huynh, University of South Carolina

*The effect of content integration to the content validity of reading assessment*

Catherine S. Taylor, University of Washington

*A comparison of empirical methods for item classifications as evidence for the validity of objective-level scores*

Ning Wang, Larry Newman, Assessment Systems, Inc.

*Computer-simulated performance assessment: A validity study*

Ernest N. Skakun, Thomas O. Maguire, University of Alberta

*What do think-aloud protocols tell us about medical students' reasoning on multiple-choice and equivalent constructed response items?*

#### Discussants

Ingemar Wedman, Stockholm University

Clint I. Chase, Indiana University

Tuesday, April 25

10:35 A.M. — 12:05 P.M.

## B3

### Rater Designs and Effects — Paper Session

#### Moderator

Deanna M. De'Liberto, D Squared Assessments, Inc.

#### Presenters

Xiaohong Gao, Lin Wang, ACT, Inc.; Robert L. Brennan, University of Iowa

*Effects of changing rater facet from random to fixed on the generalizability analyses: An empirical evaluation*

Husein M. Taherbhahi, Michael J. Young, University of Pittsburgh

*An analysis of rater impact on composite scores using the multifaceted Rasch model*

Dorothy T. Thayer, John R. Donoghue, Catherine M. Hombo,

Educational Testing Service

*A simulation study of the effect of crossed and nested rater designs on ability estimation*

John R. Donoghue, Catherine M. Hombo, Educational Testing Service

*A comparison of different model assumptions about rater effects*

#### Discussants

Chris Chiu, University of Pittsburgh

George Engelhard, Jr., Emory University



Tuesday, April 25

10:35 A.M. – 12:05 P.M.

**B4**

**How Should NCME Respond to Classroom Practices That Seem to Contradict the “Code of Professional Responsibilities in Educational Measurement”? — Interactive Symposium**

**Organizer/Moderator**

Lisa F. Smith, Kean University

**Presenters**

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

Steven Friedman, University of Wisconsin at Whitewater

Susan E. Phillips, Michigan State University

Cynthia B. Schmeiser, ACT, Inc.

Jeffrey K. Smith, Rutgers University

The presenters have a range of viewpoints on the topic and will reference the Falvo v. Owasso Public Schools lawsuit, which was filed by parents based on negative effects on their children from the practice of students’ scoring classmates papers and announcing the scores aloud in class.

For background information on the Falvo v. Owasso schools decision, please look up the *Tulsa World* newspaper at [www.tulsaworld.com](http://www.tulsaworld.com). Once there, click on Search, then Archives. Use 4/28/99 for the date and “grading practice” for the key word. It should be noted that this case is being appealed to the Tenth Circuit Court in Denver.

Bayside C, 4th Floor  
Sheraton Hotel

Tuesday, April 25

12:25 – 1:55 P.M.

**C1**

**Graduate Student Information Session — Advice from the Professionals — Interactive Symposium**

**Organizer**

Tracy Cerrillo, University of Pittsburgh

**Presenters**

Suzanne Lane, University of Pittsburgh

*Insights into the job process*

Carol S. Parke, West Virginia University

*Insights from a new professor*

Ed Slawski, Psychological Corporation

*Insights into working at a large-scale testing company*

Daniel R. Eignor, Educational Testing Service

*Insights from a journal editor*

Estherwood, 4th Floor  
Sheraton Hotel

Tuesday, April 25

12:25 – 1:55 P.M.

## C2

### **Standards – Assessments – Instructional Improvement: The Golden Triangle of American Education — National Association of Test Directors Session**

#### **Organizer**

Ray Fenton, Anchorage School District

#### **Presenters**

Anne Chartrand, National Computer Systems

*Whose standard are they anyway?*

Fredrick Stofflet, Anchorage Public Schools

*Alignment of curriculum and instruction to state standards and assessments:*

*A visit to the real world*

Mike Strozkeski, Garland Independent School District, Garland, Texas

*High stakes, high standards, massive testing, & improved student success*

Bob Tobias, New York City Public Schools

*The systematic impact of standards and assessments on instruction and school management*

#### **Discussant**

Joe Hansen, Consultant

Tuesday, April 25

12:25 – 1:55 P.M.

## C3

### **Solving Problems in International and Cross-Lingual Assessment — Symposium**

#### **Organizers**

Hariharan Swaminathan, Stephen G. Sireci

University of Massachusetts at Amherst

#### **Moderator**

Linda Cook, Educational Testing Service

#### **Presenters**

Hariharan Swaminathan, University of Massachusetts at Amherst

*Methodological issue in cross-linguistic comparisons*

Stephen G. Sireci, University of Massachusetts at Amherst;

James Harter, Yongwei Yang, Dennison Bhola, The Gallup Organization

*Evaluating the construct evidence of an international employee opinion survey*

Ronald K. Hambleton, University of Massachusetts at Amherst;

*Enhancing the validity of the test adaptation process: Improving the review process*

#### **Discussants**

Michal Beller, The Open University, Israel

Kurt F. Geisinger, Le Moyne College

Tuesday, April 25

12:25 – 1:55 P.M.

Oakley, 4th Floor  
Sheraton Hotel

## C4

### Accuracy Issues with Norms, Achievement Levels, and Classifications — Paper Session

#### Moderator

Valerie S. L. Williams, North Carolina Central University

#### Presenters

R. Gene Hoffman, Laress L. Wise, HumRRO

*Establishing the reliability of student proficiency classifications*

Dean A. Colton, ACT, Inc.

*The accuracy of interpolated norms*

Alvaro Arce-Ferrer, Autonomous University of Yucatan, Mexico;

David A. Frisbie, Michael J. Kolen, University of Iowa

*Standard errors of proportions used in reporting changes in group performance with achievement levels*

Won-Chan Lee, ACT, Inc.; Robert L. Brennan, University of Iowa;

Bradley A. Hanson, ACT, Inc.

*Procedures for computing classification consistency indices with multiple categories*

#### Discussants

Anne R. Fitzpatrick, CTB/McGraw-Hill

Andre F. De Champlain, National Board of Medical Examiners

Tuesday, April 25

2:15 – 3:45 P.M.

Tables 17 – 32, Ponchartraine C,  
3rd Floor, Sheraton Hotel

## D1

### Graduate Student Poster Session

#### Organizers

Bonita Steele, University of British Columbia;

Deanna L. Morgan, University of Georgia

#### Posters

17. Jason E. King, Texas A&M University  
*Bootstrapping robust measures of correlation*
18. K. A. Boughton, D. A. Klinger, University of Alberta  
*Parameter recovery in the generalized partial credit model versus the graded response model*
19. Yuming Liu, University of Iowa  
*Standard error estimation of IRT model parameters as functions of sample size and distribution of ability with Markov Chain Monte Carlo method*
20. L. M. Hellsten, D. L. Henderson, D. A. Klinger, University of Alberta  
*Using generalizability theory to identify problems in performance assessments*

21. Charles Ochieng, University of British Columbia  
*Effects of item order on consistency and precision of attitudinal scales under different ordering schemes: The case of a physical self-concept scale*
22. Shola Akindele, University of British Columbia  
*The development of a prototype item bank: A case-study of Nigeria in West Africa*
23. Thomas K. Burdenski, Texas A&M University;  
Kevin M. Kieffer, James A. Haley, VA Medical Center, Tampa  
*A brief review of the influences on SEM fit indices in covariance structure analysis: The effects of sample size, type of index, model specification, and estimation method*
24. Saba Rizavi, Hariharan Swaminathan,  
University of Massachusetts at Amherst  
*The effect of violation of the linear model assumption on the variance component estimates and the generalizability coefficient*
25. Tess Dawber, Joanna Tomkowicz, University of Alberta  
*Comparison of testwise susceptible and non-susceptible to testwiseness items using classical item analysis and nominal model of item response theory*
26. Sooyeon Kim, University of Georgia  
*Applications of confirmatory factor analysis to the study of adolescent temperament: First- and second-order factor models and factor invariance*
27. Kevin M. Kieffer, James A. Haley, VA Medical Center, Tampa;  
Robin K. Henson, University of Southern Mississippi  
*Development and validation of the Sources of Self-Efficacy Inventory (SOSI): Exploring a new measure of teacher efficacy*
28. Marjorie R. Wallace, Michigan State University  
*Change and innovation: A review of standard setting procedures for large-scale assessments*
29. Shameen Nyla Khaliq, University of Alberta  
*A complete test of Hulin's Hypothesis*
30. Stephanie Barclay McKeown, Bonita Steele, University of British Columbia  
*A meta analytic reliability generalization of the Beck Depression Inventory*
31. M. A. Simpson, Sandra B. Neustel, Grace Kissling,  
University of North Carolina at Greensboro  
*Predicting change in mathematics achievement from 8th to 12th grades: A hierarchical linear modeling approach*
32. N. Scott Bishop, University of Iowa  
*The validity of Reading Comprehension Test scores: Evidence of generalizability across different test administration conditions*

Tuesday, April 25

2:15 – 3:45 P.M.

**D2 1998 Career Award Winner Address**  
**Conceptual Compatibility between Large-Scale and Classroom Assessments — Invited Address**

**Moderator**

Robert L. Linn, University of Colorado

**Presenter**

Lorrie A. Shepard, University of Colorado at Boulder

**Discussants**

Caroline Gipps, Kingston University, Surrey

Robert J. Mislevy, Educational Testing Service

Cassettes of this session will be available for purchase in the registration area.

Pontchartrain B, 3rd Floor  
Sheraton Hotel

Tuesday, April 25

2:15 – 3:45 P.M.

**D3**  
**Maintaining Test Security in Computerized Testing Programs – Implications for Practice — Invited Symposium**

**Organizer**

Cynthia G. Parshall, University of South Florida

**Moderator**

Lynda M. Reese, Law School Admission Council

**Presenters**

Fanmin Guo, Walter D. Way, Rosemary Reshetar  
Educational Testing Service

*Test security and the development of computerized tests*

John Kalohn, Judy Spray, ACT, Inc.

*Test security and item exposure control for computer-based examinations*

Gerald Rosen, Sylvan Prometric

*Computer-based testing — Test site security*

Mark D. Shermis, IUPUI

*Where did all the data go? Internet security for Web-based assessments*

**Discussants**

Tim Davey, ACT, Inc.

Cynthia G. Parshall, University of South Florida

Cassettes of this session will be available for purchase in the registration area.

Bayside C, 4th Floor  
Sheraton Hotel

Tuesday, April 25

2:15 – 3:45 P.M.

#### D4

### Linking Issues with Performance Assessments — Paper Session

#### Moderator

Mary Schratz, Performance Solutions, Inc.

#### Presenters

Nancy L. Allen, Dorothy T. Thayer, Educational Testing Service;

Paul W. Holland, University of California-Berkeley

*Equating free-response questions selected by examinees*

Andre F. De Champlain, Marc E. Gessaroli,

National Board of Medical Examiners

*Equating performance-based tests using structural equation modeling: Assessing the impact of anchor length and sample on mastery-level decision consistency rates*

Hunter M. Breland, Eiji Muraki, Yong-Won Lee, Michelle Najarian, Julia Beyer,

Educational Testing Service

*Comparability in TOEFL CBT essay prompts using logistic regression method*

Anne R. Fitzpatrick, Guemin Lee, Furong Gao, CTB/McGraw-Hill

*Assessing the comparability of school scores across test forms that are not parallel*

#### Discussants

Mark L. Davison, University of Minnesota

Richard Hill, Center for Assessment

Tuesday, April 25

4:05 – 6:05 P.M.

#### E1

### Setting Standards and Passing Scores — Paper Session

#### Moderator

Linda Althouse, SAS Institute

#### Presenters

Stephen G. Sireci, Saba Rizavi, Alan Dillingham, Georgette Rodriquez,  
University of Massachusetts at Amherst; Thanos Patelis, The College Board

*Setting standards on a computerized adaptive placement examination*

Susan J. Thomas, IBM Corporation

*Determining the passing score for translated tests: implications for practice*

Huynh Huynh, University of South Carolina

*On item mapping and statistical rules for selecting binary items for criterion-referenced interpretation and bookmark standard setting*

Barbara Donahue, Jeri Benson, Steve Cramer, University of Georgia

*Setting standards on a kindergarten performance assessment: A joint application of two recent methods*

Luz G. Bay, Advanced Systems

*1998 NAEP writing achievement levels-setting process performance profiles study*

#### Discussants

Patricia B. Elmore, Southern Illinois University

Mark Albanese, University of Wisconsin Medical School

Tuesday, April 25

4:05 – 6:05 P.M.

**E2**

**The Feasibility of Linking Scores on the Voluntary National Test (VNT) and the National Assessment of Educational Progress (NAEP) — Invited Symposium**

**Organizer**

Patricia Ann Kenney, University of Pittsburgh

**Moderator**

Valerie S. L. Williams, North Carolina Central University

**Presenters**

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

*Factors affecting the NAEP and VNT scales*

Charles W. Peters, Oakland Schools, Waterford, Michigan;

Patricia Ann Kenney, University of Pittsburgh (both presenting)

*Content and process considerations in linking the NAEP and VNT scales*

Michael J. Kolen, University of Iowa;

Wim van der Linden, University of Twente (both presenting)

*Psychometric considerations in linking the NAEP and VNT scales*

**Discussants**

Edward H. Haertel, Stanford University

Eugene G. Johnson, American Institutes for Research

Bayside C, 4th Floor  
Sheraton Hotel

Tuesday, April 25

4:05 – 6:05 P.M.

**E3**

**Measurement Wit and Wisdom for the 21st Century: Sharing Research Experiences — Graduate Student Issues Session**

**Organizer:**

Michelle A. Mingeling, University of Iowa

**Moderator**

H. D. Hoover, University of Iowa

**Presenters**

Sylvia T. Johnson, Howard University/CRESPAR

*Working with teachers to improve assessment — both “theirs” and “ours”*

Lloyd Bond, University of North Carolina

*A retrospective and prospective look at research on test bias*

Hariharan Swaminathan, University of Massachusetts at Amherst

*Research areas and training of researchers in measurement*

Fumiko Samejima, University of Tennessee

*Software, user friendly or user unfriendly?*

Ronald A. Berk, Johns Hopkins University

*The 7 career habits of highly effective psychometricians*

Cassettes of this session will be available for purchase in the registration area.

Ponchartraine B, 3rd Floor  
Sheraton Hotel

Tuesday, April 25

6:15 – 7:30 P.M.

### **No-Host Cocktail Party and Reception**

Members of NCME are invited to attend the No-Host Cocktail Party and Reception, which will be held in conjunction with the NCME Graduate Student Issues Committee reception.

The reception is sponsored by ACT, Inc., CTB/McGraw-Hill, Educational Testing Service, GED Testing Service, Harcourt Educational Measurement, Measured Progress, National Board of Medical Examiners.

Wednesday, April 26

5:30 – 7:30 A.M.

### **NCME Fitness Run/Walk Marriott Hotel: Inside Lobby**

#### **Co-Directors:**

Ronald A. Berk, Johns Hopkins University  
Valerie Andrews, Southern Runner Production

Run or walk 5K/2.5K course in Audubon Park. Meet in the lobby of the Marriott Hotel at 5:30 A.M. Buses will leave promptly at 6:00 A.M. for the Park. The last bus will return to the Marriott by 7:30 A.M. Advanced registration is required.

This event is made possible through the sponsorship of: Harcourt Brace Educational Measurement, CTB/McGraw-Hill, Riverside Publishing Company, National Evaluation Systems, and *Runner's World*.



Wednesday, April 26

8:00 – 10:15 A.M.

**F1**

**NCME Breakfast and Presidential Address**

**Linking Assessments Effectively: Purpose and Design**

**Presenter**

Michael J. Kolen, University of Iowa

NCME members who would like to attend only the presidential address are welcome at 9:00 A.M.

Cassettes of this session will be available for purchase in the registration area.

Bissonet, 3rd Floor  
Marrion

Wednesday, April 26

10:35 A.M. – 12:05 P.M.

**G1**

**Annual Teachers' Classroom Assessment Recognition Program —  
Poster Session**

**Organizers**

Rick Stiggins, Assessment Training Institute

Jeff Oescher, University of New Orleans

**Presenters**

Teachers from the New Orleans area will be recognized for their outstanding achievements in classroom assessment.

Pontchartrain C, 3rd Floor  
Sheraton Hotel

Wednesday, April 26

10:35 A.M. – 12:05 P.M.

## G2

### A Judgment and Decision-Making Perspective on Performance on Multiple-Choice Tests — Related Papers

#### Organizer/Moderator

David V. Budescu, University of Illinois

#### Presenters

Anat Ben-Simon, National Institute for Testing and Evaluation;

Gershon Ben-Shakhar, The Hebrew University of Jerusalem

*Cognitive aspects of partial knowledge as expressed in multiple-choice tests*

Yigal Attali, National Institute for Testing and Evaluation;

Maya Bar-Hillel, The Hebrew University of Jerusalem

*Guessing in multiple-choice tests as a judgement and choice problem*

Yoella Bereby-Meyer, Joachim Meyer, Ben-Gurion University of the Negev;

David V. Budescu, University of Illinois

*A decision analysis of the effects of scoring rules on MC tests*

#### Discussants

Linda L. Cook, Educational Testing Service

Tim Davey, ACT, Inc.

Wednesday, April 26

10:35 A.M. – 12:05 P.M.

## G3

### Issues in Testing Accommodations — Paper Session

#### Moderator

Herbert W. Ware, George Mason University

#### Presenters

Karen Barton, Huynh Huynh, University of South Carolina

*Type of errors made by accommodated students on a high-stakes reading examination comprising multiple-choice items*

Linda Meloy, Western Illinois University;

David A. Frisbie, Craig Deville, University of Iowa

*The effect of a reading accommodation on standardized test scores of learning disabled and non-learning disabled students*

Ronald L. Huesman, David A. Frisbie, University of Iowa

*The validity of ITBS Reading Comprehension test scores for learning disabled and non-learning disabled students under extended-time conditions*

Pamela M. Jakwerth, American Institutes for Research

*Developing a national alternative assessment for students with disabilities:*

*A feasibility study*

#### Discussants

David Mittelholtz, ACT, Inc.

Stephen N. Elliott, University of Wisconsin, Madison

## Program Summary

<i>Session Time</i>	<i>Number</i>	<i>Location</i>	<i>Session Title</i>
<b>Monday, April 24th Afternoon Session</b>			
• 4:00		Sheraton, Bayside A	NCME Board of Directors Meeting
<b>Tuesday, April 25th Morning Sessions</b>			
• 8:15	A1	Sheraton, Bayside C	Linking educational assessments
	A2	Sheraton, Ponchartrain B	Exposure rates and calibration issues in a CAT
	A3	Sheraton, Oakley	Making an informed choice among IRT alternatives—MCAT Graduate Student Research Program
• 10:35	B1	Sheraton, Ellendale	Applied research in state assessment: Practical implications for large-scale assessment programs
	B2	Sheraton, Ponchartrain B	Validity issues
	B3	Sheraton, Oakley	Rater designs and effects
	B4	Sheraton, Bayside C	How should NCME respond to classroom practices that seem to contradict the “Code of Professional Responsibilities in Educational Measurement”?
<b>Tuesday, April 25th Afternoon Sessions</b>			
• 12:25	C1	Sheraton, Estherwood	Graduate Student Information Session
	C2	Sheraton, Ponchartrain B	Standards–assessments–instructional improvement: The golden triangle of American education
	C3	Sheraton, Bayside C	Solving problems in international and cross-lingual assessment
	C4	Sheraton, Oakley	Accuracy issues with norms, achievement levels, and classifications
• 2:15	D1	Sheraton, Ponchartrain C	Graduate Student poster session
	D2	Sheraton, Ponchartrain B	Conceptual compatibility between large-scale and classroom assessments
	D3	Sheraton, Bayside C	Maintaining test security in computerized testing programs—Implications for practice
	D4	Sheraton, Oakley	Linking issues with performance assessments

<i>Session Time</i>	<i>Number</i>	<i>Location</i>	<i>Session Title</i>
<b>Tuesday, April 25th Afternoon Sessions (cont'd)</b>			
• 4:05	E1	Sheraton, Oakley	Setting standards and passing scores
	E2	Sheraton, Bayside C	The feasibility of linking scores on the Voluntary National Test (VNT) and the National Assessment of Educational Progress (NAEP)
	E3	Sheraton, Ponchartrain B	Measurement wit and wisdom for the 21st century: Sharing research experiences
• 6:15		Sheraton, Ponchartrain B	No-Host Cocktail Party and Reception
<b>Wednesday, April 26th Morning Sessions</b>			
• 5:30		Marriott, Inside Lobby	NCME Fitness Run/Walk
• 8:00	F1	Marriott, Bissonet	NCME Breakfast/Presidential Address
• 10:35	G1	Sheraton, Ponchartrain C	Annual teachers' classroom assessment recognition program
	G2	Marriott, Bonaparte	A judgment and decision-making perspective on performance on multiple-choice tests
	G3	Marriott, Mardi Gras C	Issues in testing accommodations
	G4	Marriott, Mardi Gras D	Looking forward and back: Measurement issues for the 21st century
<b>Wednesday, April 26th Afternoon Sessions</b>			
• 12:25	H1	Marriott, Mardi Gras D	Looking forward and back: Measurement issues for the 21st century (cont'd)
	H2	Marriott, Bonaparte	Test score accuracy
	H3	Marriott, Mardi Gras C	New considerations of validity with second language tests
• 2:15	I1	Marriott, Bonaparte	Determining the appropriateness of assessments with nontraditional test takers: The effect of changing demographics
	I2	Marriott, Mardi Gras C	A synthesis of the consequential evidence for MSPAP: How has a state performance-based assessment program affected instruction and student learning?
	I3	Marriott, Mardi Gras D	Software Ad Hoc Committee Report

<i>Session Time</i>	<i>Session Number</i>	<i>Location</i>	<i>Session Title</i>
<b>Wednesday, April 26th Afternoon Sessions (cont'd)</b>			
• 4:05	J1	Marriott, Bonaparte	Test use in admissions, placement, and decision-making
	J2	Marriott, Mardi Gras C	Dimensionality and Fit
	J3	Marriott, Mardi Gras D	Computerized adaptive testing: New developments and applications
	J4	Marriott, Balcony I	Issues with IRT and classical item statistics
	J5	Marriott, Mardi Gras F	Equating issues
<b>Thursday, April 27th Morning Sessions</b>			
• 8:15	K1	Le Meridien Hotel, Suite 801	Comparing student, district, and state achievement to national standards
	K2	Le Meridien Hotel, St. Claude	Standards and standard setting methods used in different states
	K3	Le Meridien Hotel, Ile de France III	Adaptive testing research at ACT
• 10:35	L1	Le Meridien Hotel, St. Claude	Scores, grades, and standards
	L2	Le Meridien Hotel, Suite 801	Reliability and generalizability issues
	L3	Le Meridien Hotel, Ile de France III	Item Response Models
	L4	Le Meridien Hotel, Ile de France I	Graduate Student Paper Session
<b>Thursday, April 27th Afternoon Sessions</b>			
• 12:25	M1	Le Meridien Hotel, Suite 801	Minority Issues and Testing
	M2	Le Meridien Hotel, St. Claude	The ACT/NAGB standard setting method: The results of eight years of development
	M3	Le Meridien Hotel, Ile de France I	The state-of-the-art in computer-automated scoring for performance assessments
	M4	Le Meridien Hotel, Ile de France III	Applying the New Standards with operational testing programs

<i>Time</i>	<i>Session Number</i>	<i>Location</i>	<i>Session Title</i>
<b>Thursday, April 27th Afternoon Sessions (cont'd)</b>			
• 2:15	N1	Le Meridien Hotel, St. Claude	Response time and DIF in CAT
	N2	Le Meridien Hotel, Suite 801	Testing over the Internet: Examples of types of uses
	N3	Le Meridien Hotel, Ile de France III	The development and application of multi-stage testlet-based designs for computerized adaptive testing
• 4:05	O1	Le Meridien Hotel, Suite 801	Educating assessment professionals for applied settings
	O2	Le Meridien Hotel, St. Claude	DIF Issues
	O3	Le Meridien Hotel, Ile de France III	Comparability issues in test assembly, test translation, and item context
• 4:00		Marriott, St. Charles	NCME Board of Directors Meeting

Of special interest to graduate students:

### **A3 Making an informed choice among IRT alternatives — MCAT Graduate Student Research Program (Tuesday, 8:15)**

The three graduate students who participated in the MCAT's 1999 summer externship program will present their research, followed by two discussants providing comments.

### **C1 Graduate Student Issues Information Session: Advice from the professionals (Tuesday, 12:25)**

### **D1 Graduate Student Poster Session (Tuesday, 2:15)**

Sixteen selected graduate students will present their research in a poster format.

### **E3 Measurement wit and wisdom for the 21st century: Sharing research experiences — Graduate Student Issues Committee Session (Tuesday, 4:05)**

### **No-Host Cocktail Party**

A reception will be held immediately following the above presentations. Graduate students should locate a member of the Graduate Student Issues Committee there to get two free beverage tickets.

### **L4 Graduate Student Paper Session (Thursday, 10:35)**

Four selected graduate students will present their research, followed by two discussants providing comments.

### **HH. Finishing Up and Finding a Job: Practical Suggestions for Graduate Students in Measurement (co-sponsor with AERA)**

Presenters: Deborah J. Harris, ACT, Inc.;

Dara Martinovich-Barhite, Wisconsin Department of Public Instruction

Date: Thursday, April 27, 2:15-6:15

Fee: \$15

Wednesday, April 26

10:35 A.M. – 12:05 P.M.

## G4

### Looking Forward and Back: Measurement Issues for the 21st Century — Invited Symposium

#### Organizer

Catherine J. Welch, ACT, Inc.

#### Moderator

Cynthia B. Schmeiser, ACT, Inc.

#### Presenters

Michael T. Kane, University of Wisconsin

*Current concerns in validity theory*

Robert L. Brennan, University of Iowa

*Reliability: Historical practice, current problems, and future prospects*

Nancy Cole, Educational Testing Service

*The new faces of fairness*

Mark D. Reckase, Michigan State University

*Computerized testing – The adolescent years: Juvenile delinquent or positive role model?*

Eva Baker, UCLA/CRESST

*Roles of performance assessment in practice and policy*

Cassettes of this session will be available for purchase in the registration area.

Mardi Gras D, 3rd Floor  
Marriott Hotel

Wednesday, April 26

12:25 – 1:55 P.M.

## H1

### Looking Forward and Back: Measurement Issues for the 21st Century — Invited Symposium (cont.)

#### Organizer

Catherine J. Welch, ACT, Inc.

#### Moderator

Cynthia B. Schmeiser, ACT, Inc.

#### Presenters

Rick Stiggins, Assessment Training Institute

*Classroom assessment: A history of neglect, a future of immense potential*

Susan Embretson, University of Kansas

*Improving construct validity with cognitive psychology principles*

Ronald K. Hambleton, University of Massachusetts at Amherst

*Measurement, test design, and scoring models*

#### Discussants

Linda Crocker, University of Florida

H.D. Hoover, University of Iowa

Cassettes of this session will be available for purchase in the registration area.

Mardi Gras D, 3rd Floor  
Marriott Hotel

Wednesday, April 26

12:25 – 1:55 P.M.

Bonaparte, 4th Floor  
Marriott Hotel

## H2

### Test Score Accuracy — Paper Session

#### Moderator

Carol Morrison Featherman, National Board of Medical Examiners

#### Presenters

Nilufer Caper, Florida State University;

Tony D. Thompson, Tim Davey, ACT, Inc.

*Using out-of-scale information to increase the precision of test scores*

Carrolyn K. Iwamoto, Ronald J. Nungester,

National Board of Medical Examiners

*Detection of person misfit due to item exposure in computer-based testing*

Liane N. Patsula, Educational Testing Service;

Lori D. McLeod, Law School Admission Council

*Detecting items that have been memorized in computerized-adaptive testing and multi-stage testing: A comparison*

Daniel O. Segall, Defense Manpower Data Center

*An item response model for characterizing test compromise*

#### Discussants

Janice Scheuneman, Quality Assessment Services

James Wollack, University of Wisconsin

Wednesday, April 26

12:25 – 1:55 P.M.

Mardi Gras C, 3rd Floor  
Marriott Hotel

## H3

### New Considerations of Validity with Second Language Tests — Invited Symposium

#### Organizers

Craig Deville, Micheline Chalhoub-Deville, University of Iowa

#### Moderator

Micheline Chalhoub-Deville, University of Iowa

#### Presenters

Terry Ackerman, University of North Carolina at Greensboro

*A comparison of the dimensionality of TOEFL response data from different first language groups*

Lyle F. Bachman, University of California at Los Angeles

*Alternative interpretations to alternative assessments: Some validity issues in educational performance assessments*

Charles Stansfield, Charlene Rivera, Second Language Testing, Inc.

*A national survey of LEP accommodation policies and their implications*

Bruno D. Zumbo, University of Northern British Columbia

*The effect of DIF on classical test statistics: Undetected DIF and the reliability and interpretability of scores from a language proficiency test*

#### Discussants

Craig Deville, University of Iowa

Daniel R. Eignor, Educational Testing Service



Wednesday, April 26

2:15 – 3:45 P.M.

Bonaparte, 4th Floor  
Marriott Hotel

## I1

### Determining the Appropriateness of Assessments with Nontraditional Test Takers: The Effect of Changing Demographics — Symposium

#### Organizer

Cathy LW Wendler, Educational Testing Service

#### Moderator

Amy Elizabeth Schmitt, The College Board

#### Presenters

Patricia Baron, W. Edward Curley, Educational Testing Service

*The effects of different language background indicators*

Cathy LW Wendler, Miriam Feigenbaum, Alicia Schmitt,

Educational Testing Service

*Defining group membership: The impact of multiple versus single ethnic/racial categories on testing practices*

Carolyn Crone, Educational Testing Service

*Scaling and equating language tests with native language speakers*

Brent Bridgeman, Educational Testing Service

*Selecting students with a general reasoning test (SAT I) or tests in academic subjects (SAT II): Does it matter for non-native speakers of English?*

Cathy LW Wendler, Anne Ninneman, Miriam Feigenbaum,

Educational Testing Service

*Evaluating the appropriateness of the SAT I for 7th and 8th graders*

#### Discussants

Lloyd Bond, University of North Carolina

Rebecca Zwick, University of California, Santa Barbara

Wednesday, April 26

2:15 – 3:45 P.M.

Mardi Gras C, 3rd Floor  
Marriott Hotel

## I2

### A Synthesis of the Consequential Evidence for MSPAP: How has a State Performance-Based Assessment Program Affected Instruction and Student Learning? — Symposium

#### Organizer/Moderator

Suzanne Lane, University of Pittsburgh

#### Presenters

Suzanne Lane, Clement A. Stone, Carol S. Parke, University of Pittsburgh

*Consequential evidence for MSPAP from the teacher, principal, and student perspective*

Tracy L. Cerrillo, Mary A. Hansen, Carol S. Parke, Suzanne Lane,

Kathryn Scott, University of Pittsburgh

*The relationship between MSPAP and science classroom instruction and assessment materials*

Mary A. Hansen, Tracy L. Cerrillo, Suzanne Lane, Jennifer Padula,

Carol S. Parke, Jill R. Van den Heuvel, University of Pittsburgh

*The relationship between MSPAP and social studies classroom instruction and assessment materials*

Clement A. Stone, Suzanne Lane, University of Pittsburgh

*MSPAP performance gains from 1993–1998 and their relationship to “MAPAP’S impact” and school characteristic variables*

#### Discussants

Wendy M. Yen, CTB/McGraw-Hill

Stephen Ferrara, American Institutes for Research

Wednesday, April 26

2:15 – 3:45 P.M.

### I3

## Software Ad Hoc Committee Report — Invited Interactive Symposium

### Organizer

Bradley A. Hanson, ACT, Inc.

### Moderator

Jim Carlson, CTB/McGraw-Hill

### Presenters

Bradley Hanson, ACT, Inc.; Cynthia Parshall, University of South Florida

### Discussants

Gary Skaggs, West Mesa Associates, Inc.

Anne R. Fitzpatrick, CTB/McGraw-Hill

### Committee Members

Robert Brennan, Jim Carlson, Joe Crick, Bradley Hanson (Chair),

Eiji Muraki, Cynthia Parshall

A copy of the committee report will be available before the annual meeting on the committee web page at [www.b-a-h.com/ncmesoft](http://www.b-a-h.com/ncmesoft). A portion of this session will be set aside to allow for prepared comments on the committee report by NCME members. Contact Bradley Hanson ([bradh@pobox.com](mailto:bradh@pobox.com)) if you would like to reserve some time during the session to present prepared comments.

Wednesday, April 26

4:05 – 6:05 P.M.

### J1

## Test Use in Admissions, Placement, and Decision-Making — Paper Session

### Moderator

E. James Maxey, ACT, Inc.

### Presenters

Richard L. Sawyer, Jeff L. Schiel, ACT, Inc.

*Posttesting students to assess the effectiveness of remedial instruction in college*

Andrea E. Thornton, Peter J. Pashley, Law School Admission Council

*Optimizing admission decisions*

Samuel A. Livingston, Educational Testing Service

*How well do SAT scores predict pass/fail status on a college-level basic skills test?*

Damian W. Betebenner, University of Colorado Boulder;

E. Matthew Schulz, ACT, Inc.

*A comparison of Bayesian and maximum likelihood estimation procedures in*

*ACT Course Placement analyses*

Thomas S. Paskus, University of Denver, John J. McArdle, University of Virginia

*A decision theoretic methodology for making high-stakes psychometric decisions*

### Discussants

Thomas Haladyna, Arizona State University

Ellen R. Julian, Association of American Medical Colleges

Wednesday, April 26

4:05 – 6:05 P.M.

**J2**

## **Dimensionality and Fit — Paper Session**

### **Moderator**

Sandra M. Harris, Auburn University

### **Presenters**

Carol S. Parke, West Virginia University

*An examination of factors influencing the fit of mathematics performance items to the graded response model*

Jinming Zhang, Educational Testing Service

*Estimating multidimensional item response models with approximate simple structure*

Hui Deng, Timothy N. Ansley, University of Iowa

*Detecting compensatory and noncompensatory multidimensionality using DIMTEST*

Richard B. Sullivan, Timothy N. Ansley, Stephen B. Dunbar, University of Iowa

*Dimensionality of complex achievement domains in mathematics as a function of developmental level*

Brain T. Habing, R. Webster West, University of South Carolina

*Applications of data image to testing data*

### **Discussants**

E. Matthew Schulz, ACT, Inc.

Lila J. Quero-Munoz, State Examining Boards

Mardi Gras C, 3rd Floor  
Marriott Hotel

Wednesday, April 26

4:05 – 6:05 P.M.

**J3**

## **Computerized Adaptive Testing: New Developments and Applications — Symposium**

**Organizer** Wim J. van der Linden, University of Twente

**Moderator** Rob R. Meijer, University of Twente

### **Presenters**

Wim J. van der Linden, University of Twente

*Constrained adaptive testing with shadow tests*

Cees A. W. Glas, University of Twente

*A Bayesian approach to evaluation of model fit in on-line calibration in computer adaptive testing*

Rob R. Meijer, University of Twente

*Testing invariant ability in computerized adaptive testing*

Edith M. L. A. van Krimpen-Stoop, University of Twente

*Detection of person misfit in computerized adaptive testing with polytomous items*

Hans J. Vos, University of Twente

*Adaptive mastery testing using a multidimensional IRT model and Bayesian sequential decision theory*

### **Discussants**

Hua-Hua Chang, National Board of Medical Examiners

Craig N. Mills, American Institute of Certified Public Accountants

Mardi Gras D, 3rd Floor  
Marriott Hotel

Wednesday, April 26

4:05 – 5:35 P.M.

## J4

### Issues with IRT and Classical Item Statistics — Paper Session

#### Moderator

Rebecca S. Lipner, American Board of Internal Medicine

#### Presenters

Stephen E. Stark, Fritz Drasgow, University of Illinois

*Development of parameter estimation procedures for the Zinnes and Griggs paired comparison ideal point IRT model*

Gray S. Kaskowitz, University of Maryland;

R. J. De Ayala, University of Nebraska

*An examination of error in IRT item parameter estimates on linking and equating using the test characteristic curve method*

Gary A. Schaeffer, Marc W. Julian, Tsung-Hsun Tsai, CTB/McGraw-Hill

*The impact of ceiling effects on IRT parameter estimates*

Shun-wen Chang, National Taiwan Normal University;

Bradley A. Hanson, Deborah J. Harris, ACT, Inc.

*A standardization approach to adjusting pretest item statistics*

#### Discussants

Eiji Muraki, Educational Testing Service

Michael R. Harwell, University of Pittsburgh

Wednesday, April 26

4:05 – 5:35 P.M.

## J5

### Equating Issues — Paper Session

#### Moderator

Catherine S. Taylor, University of Washington

#### Presenters

William F. Lohss, Thomas E. Langenfeld, ACT, Inc.

*An investigation of the adequacy of IRT pre-equating of certification tests*

Heru Widiatmo, Bradley A. Hanson, ACT, Inc.

*Describing a procedure for computing the standard error of equating of a composite score using the bootstrap*

Qing Yi, Bradley A. Hanson, Deborah J. Harris, ACT, Inc.

*Procedures of screening for “affected” common items in common-item nonequivalent groups design*

Anton A. Beguin, Cees A. W. Glas, University of Twente;

Bradley A. Hanson, ACT, Inc.

*MCMC multidimensional IRT observed score equating: Robustness to multidimensionality of unidimensional equating*

#### Discussants

Ida M. Lawrence, Educational Testing Service

Gary Skaggs, West Mesa Associates, Inc.

Thursday, April 27

8:15 – 9:45 A.M.

## K1

### Comparing Student, District, and State Achievement to National Standards — Symposium

#### Organizer/Moderator

Judy Koenig, National Academy of Sciences

#### Presenters

Michael Feuer, National Academy of Sciences

*Background and context for studies*

Lauress Wise, Human Resources Research Organization;

Richard Noeth, National Academy of Sciences

*Evaluation of the development of voluntary national tests, Year 2*

Pasquale DeVito, Rhode Island Department of Education;

Kaeli Knowles, National Academy of Sciences

*Investigating the feasibility of district-level NAEP*

Daniel Koretz, The Center for the Study of Testing, Evaluation,  
and Educational Policy

*Embedding items in state and district tests*

#### Discussants

Michael J. Kolen, University of Iowa

John Tanner, Delaware Department of Education

Suite 801, 8th Floor  
Le Meridien Hotel

Thursday, April 27

8:15 – 10:15 A.M.

## K2

### Standards and Standard-Setting Methods Used in Different States — Symposium

#### Organizer/Moderator

Luz G. Bay, Advanced Systems

#### Presenters

Steve Rattenborg, Minnesota Department of Children, Families and Learning

*Modified-Angoff method: Minnesota Comprehensive Assessment*

Daniel M. Lewis, CTB/McGraw-Hill

*Bookmark procedure: Colorado Student Assessment Program (CSAP)*

Neal M. Kingston, Advanced Systems

*Body of Work (BOW) method: Massachusetts Comprehensive Assessment System (MCAS)*

Kevin P. Sweeney, Advanced Systems

*Contrasting groups and Body of Work (BOW) method: Wyoming Comprehensive Assessment System (WYCAS)*

#### Discussants

Robert A. Forsyth, University of Iowa

Douglas Rindone, Connecticut Department of Education

St. Claude, 3rd Floor  
Le Meridien Hotel

Thursday, April 27

8:15 – 10:15 A.M.

### K3

## Adaptive Testing Research at ACT — Symposium

### Organizer

Timothy R. Miller, ACT, Inc.

### Moderator

Maria Potenza, Microsoft Corporation

### Presenters

Timothy R. Miller, ACT, Inc.

*Some principals and methods for adaptive testing*

Tim Davey, ACT, Inc.

*Specific information item selection in adaptive testing*

Meichu Fan, Tim Davey, ACT, Inc.

*Specific information item selection applied to discrete-item tests*

Tony D. Thompson, Tim Davey, ACT, Inc.

*Specific information item selection applied to passage-based tests*

Mary Pommerich, Timothy Burden, ACT, Inc.

*From simulation to application: Examinees react to computerized testing*

### Discussants

David Thissen, University of North Carolina at Chapel Hill

Walter D. Way, Educational Testing Service

Thursday, April 27

10:35 A.M. – 12:05 P.M.

### L1

## Scores, Grades, and Standards — Paper Session

### Moderator

Kristie K. Waltman, ACT, Inc.

### Presenters

Hazen Ham, American Board of Emergency Medicine;

Richard Shavelson, Stanford University;

Mary Ann Reinhart, Leonard Bianchi, American Board of Emergency Medicine

*Using compensatory and conjunctive scoring approaches with a medical certificate oral examination*

Melissa J. Margolis, Andre F. De Champlain, Daniel J. Klass,

National Board of Medical Examiners

*Scoring a large-scale performance assessment: A comparison of two approaches*

James H. McMillan, Virginia Commonwealth University

*Teacher classroom assessment and grading practices decision-making*

Chad W. Buckendahl, Barbara S. Plake, James C. Impara, Patrick M. Irwin,

University of Nebraska-Lincoln

*Alignment of standardized achievement tests to state content standards: A comparison of publishers' and teachers' perspectives*

### Discussants

Paul Nichols, ACT, Inc.

Amy E. Schmidt, The College Board

Thursday, April 27

10:35 A.M. – 12:05 P.M.

Suite 801, 8th Floor  
Le Meridien Hotel

## L2

### Reliability and Generalizability Issues — Paper Session

#### Moderator

Jay T. Parkes, University of New Mexico

#### Presenters

Bokhee Yoon, University of California;

Michael Young, University of Pittsburgh

*Estimating the reliability for test scores with mixed item formats: Internal consistency and generalizability*

Elizabeth Burton, Aurora Public Schools, Aurora, Colorado

*A comparison of the generalizability of large-scale performance assessment results for pupil-level vs. school-level decisions*

Chris W. Chiu, University of Pittsburgh

*A subdividing method for generalizability theory: Precision of measurement errors and the amounts and pattern of missing data*

Lisa A. Keller, University of Massachusetts at Amherst;

Brian Clauser, David Swanson, Polina Harik, Stephen Clyman,

National Board of Medical Examiners

*A multivariate generalizability analysis to examine the effect of content stratification on the reliability of a performance assessment*

#### Discussants

Joy A. Frechtling, WESTAT

Brian Clauser, National Board of Medical Examiners

Thursday, April 27

10:35 A.M. – 12:05 P.M.

Ile de France III, 3rd Floor  
Le Meridien Hotel

## L3

### Item Response Models — Paper Session

#### Moderator

Sara S. Hennings, Riverside Publishing

#### Presenters

Richard J. Patz, CTB/McGraw-Hill; Brian W. Junker, Carnegie Mellon University; Machteld Hoskens, Mark R. Wilson, University of California-Berkeley

*Advances in item response models for multiple ratings of student work*

Sarah M. Hartz, University of Illinois at Urbana-Champaign;

Louis V. DiBello, Educational Testing Service;

William F. Stout, University of Illinois at Urbana-Champaign

*A Bayesian framework for the unified model for cognitive abilities: Added flexibility and improved parameter estimation*

Jon Cohen, American Institutes for Research;

Andrew Kolstad, National Center for Education Statistics

*Theory-consistent item response models*

Young-Sun Lee, Jeffrey Douglas, University of Wisconsin-Madison

*Longitudinal item response model and missing data in educational intervention*

#### Discussants

Robert Ankenmann, University of Iowa

Liru Zhang, Delaware Department of Education

Thursday, April 27

10:35 – 12:05 P.M.

## L4

### Graduate Student Paper Session

#### Organizers

Michael S. Finger, University of Minnesota; Lora Monfils, Rutgers University

#### Moderator

Michael S. Finger, University of Minnesota

#### Presenters

Huan-Wen Chen, Michael Kolen, University of Iowa

*Linking ITBS survey tests to complete tests using six different methods with two different designs*

Russell W. Smith, University of Nebraska-Lincoln

*An exploratory analysis of item parameters and characteristics that influence item response time*

Pui-Wa Lei, University of Iowa

*A comparison of parametric and nonparametric approaches to item analysis for multiple-choice tests*

Ahmet Turhan, Akihito Kamata, Florida State University

*Robustness of multiple-group IRT vertical equating to violation of the unidimensionality assumption*

#### Discussants

Sue Brookhart, Duquesne University

Judy Spray, ACT, Inc.

Thursday, April 27

12:25 – 1:55 P.M.

## M1

### Minority Issues and Testing — Minority Issues Committee Session

No session information available at press time



Thursday, April 27

12:25 – 1:55 P.M.

## M2

### The ACT/NAGB Standard-Setting Method: The Results of Eight Years of Development — Coordinated Paper Session

#### Organizer/Moderator

Mark D. Reckase, Michigan State University

#### Presenters

Mary Lyn Bourque, National Assessment Governing Board

*Student performance standards: The role of achievement level descriptions in the standard setting process*

Susan Cooper Loomis, ACT, Inc.

*Feedback data for the NAEP achievement levels-setting process: A decade of refinements*

Wen-Ling Yang, ACT, Inc.; Wen-Hung Chen, American Institutes for Research

*From ratings to cutpoints: Statistical techniques for NAEP achievement level setting*

Mark D. Reckase, Michigan State University

*The ACT/NAGB standard setting process: How "modified" does it have to be before it is no longer a Modified Angoff Process?*

#### Discussants

Stephen Ferrara, American Institutes for Research

John J. Norcini, Jr., American Board of Internal Medicine

St. Claude, 3rd Floor  
Le Meridien Hotel

Thursday, April 27

12:25 – 1:55 P.M.

## M3

### The State-of-the-Art in Computer-Automated Scoring for Performance Assessments — Symposium

**Organizer** Brian E. Clauser, National Board of Medical Examiners

**Moderator** Stephen G. Sireci, University of Massachusetts at Amherst

#### Presenters

Robert J. Mislevy, Linda S. Steinberg, Educational Testing Service;

F. Jay Breyer, Chauncey Group International;

Russell G. Almond, Educational Testing Service;

Lynn Johnson, University of Iowa

*Making sense of data from complex assessments*

Brian E. Clauser, Polina Harik, Stephen G. Clyman, National Board of Medical Examiners;

*The generalizability of scores for a performance assessment scored with a computer-automated scoring system*

Tom Landauer, University of Colorado, Boulder

*Computer essay scoring with latent semantic analysis: A review and progress report*

David M. Williamson, Anne S. Hone, Chauncey Group International;

Susan S. Miller, Isaac I. Bejar, Educational Testing Service

*Kohonen self-organizing maps in validity maintenance for automated scoring of constructed response*

#### Discussants

Ronald K. Hambleton, University of Massachusetts at Amherst

Michael Kane, University of Wisconsin

Ile de France I, 3rd Floor  
Le Meridien Hotel

Thursday, April 27

12:25 – 1:55 P.M.

## M4

### Applying the New Standards with Operational Testing Programs — Invited Discussion

#### Organizer

Daniel R. Eignor, Educational Testing Service

#### Moderator:

Michael J. Kolen, University of Iowa

#### Presenters:

Wendy M. Yen, CTB/McGraw-Hill

Cynthia B. Schmeiser, ACT, Inc.

Ellen R. Julian, Association of American Medical Colleges

Neal M. Kingston, Advanced Systems

Daniel R. Eignor, Educational Testing Service

Thursday, April 27

2:15 – 3:45 P.M.

## N1

### Response Time and DIF in CAT — Paper Session

#### Moderator

Tianyou Wang, ACT, Inc.

#### Presenters

Eiji Muraki, Educational Testing Service;

Jimmy de la Torre, University of Illinois, Urbana-Champaign

*An application of Samejima's continuous response model to GRE response time*

Pankaja Narayanan, Robin Durso, Educational Testing Service;

Louis Roussos, Law School Admission Council

*Impact of time-usage strategies on examinee performance: An investigation using examinee item response time data*

Ratna Nandakumar, University of Delaware;

Louis Roussos, Law School Admission Council;

Julie Cwikla, University of Delaware

*DIF assessment of CAT data: Kernel-smoothed CATSIB*

Douglas R. Ripkey, Susan M. Case, David B. Swanson,

National Board of Medical Examiners

*Using hierarchical linear modeling to examine factors influencing item response times in computer-based testing*

#### Discussants

Cynthia G. Parshall, University of South Florida

David J. Scrams, Microsoft Corporation

Thursday, April 27

2:15 – 3:45 P.M.

## N2

### Testing over the Internet: Examples of Types of Uses — Symposium

#### Organizer

Thanos Patelis, The College Board

#### Moderator

Maria Potenza, Microsoft Corporation

#### Presenters

Thanos Patelis, The College Board;

Walter D. Way, Educational Testing Service;

Scott Elliot, Vantage Technologies Knowledge Assessment

*Developing a research plan for an online assessment program*

Daniel G. Eignor, Educational Testing Service

*Developing an online pretesting design for ACCUPLACER*

Scott Elliot, Vantage Technologies Knowledge Assessment

*ACCUPLACER: Online sensitivity review*

Anne L. Harvey, Krishna Tateneni, Neil Dorans, Educational Testing Service

*Comparing onsite and online standard setting methods for multiple levels of standards*

#### Discussants

Howard Everson, The College Board

Mark D. Reckase, Michigan State University

Suite 801, 8th Floor,  
Le Meridien Hotel

Thursday, April 27

2:15 – 3:45 P.M..

## N3

### The Development and Application of Multi-Stage Testlet-Based Designs for Computerized Adaptive Testing — Symposium

#### Organizer/Moderator

Lynda M. Reese, Law School Admission Council

#### Presenters

Ronald D. Armstrong, Douglas H. Jones, Nicole Koppel, Rutgers University;

Peter J. Pashley, Law School Admission Council

*Computerized adaptive testing with multiple forms structures*

Richard M. Luecht, University of North Carolina at Greensboro

*Implementing the computer adaptive sequential testing framework to mass produce high quality computer adaptive and mastery tests*

Lori D. McLeod, Louis A. Roussos, Law School Admission Council

*An investigation of various multiple-forms structure designs*

David Thissen, University of North Carolina at Chapel Hill

*Results obtained using various methods for scoring adaptive tests based on multiple-forms structures*

#### Discussants

Wim J. van der Linden, University of Twente

Daniel O. Segall, Defense Manpower Data Center

Ile de France III, 3rd Floor  
Le Meridien Hotel

Thursday, April 27

4:05 – 5:35 P.M.

## O1

### Educating Assessment Professionals for Applied Settings — Symposium

#### Organizer/Moderator

William D. Schafer, University of Maryland

#### Presenters

Timothy N. Ansley, University of Iowa

*Recruitment, prerequisites, and coursework for training applied measurement professionals*

Arlen Gullickson, Western Michigan University

*Providing assessment training using an intensive continuing education model*

William D. Schafer, University of Maryland

*Educating applied assessment professionals at the master's level*

Steven L. Wise, T. Dary Erwin, James Madison University

*Developing professionals in applied assessment and measurement: The James Madison University model*

#### Discussants

Steven Ferrara, American Institutes for Research

Marjorie M. Mastie, Washtenaw Intermediate School District, Ann Arbor

Thursday, April 27

4:05 – 6:05 P.M.

## O2

### DIF Issues — Paper Session

#### Moderator

Seock-Ho Kim, University of Georgia

#### Presenters

H. Jane Rogers, Columbia University;

Hariharan Swaminathan, University of Massachusetts at Amherst

*Identification of factors that contribute to DIF: A hierarchical modeling approach*

David J. Scrams, Microsoft Corporation

Lori D. McLeod, Law School Admission Council

*An expected response function approach to graphical differential item functioning*

Michael G. Jodoin, Mark J. Gierl, University of Alberta

*Reducing type I error rates using an effect size measure with the logistic regression procedure for DIF detection*

Daniel M. Bolt, University of Wisconsin-Madison

*The effects of model misspecification on detection of DIF in polytomously-scored items*

Patrick O. Monahan, University of Iowa

*The effect of unequal variances in the ability distributions on the type I error rate of the Mantel-Haenszel chi-square test for detecting DIF*

#### Discussants

Ann W. French, ACT, Inc.

Allen E. Doolittle, Advanced Systems

Thursday, April 27

4:05 – 6:05 P.M.

**O3**

## **Comparability Issues in Test Assembly, Test Translation, and Item Context — Paper Session**

### **Moderator**

Terry Ackerman, University of North Carolina, Greensboro

### **Presenters**

Mark J. Gierl, Shameem Nyla Khaliq, University of Alberta

*Identifying sources of differential item and bundle functioning on translated tests*

Iosif A. Krass, Defense Manpower Data Center

*Change in distribution of latent ability with item position in a CAT sequence*

Jae-Chun Ban, Tianyou Wang, Qing Yi, Deborah J. Harris, ACT, Inc.

*Effects of nonequivalence of item pools on ability estimates in CAT*

Frederic Robin, Dehui Xing, University of Massachusetts at Amherst;

David J. Scrams, Maria Potenza, Microsoft Corporation

*Comparison of linear and computerized adaptive mastery testing designs*

Chuan-Ju Lin, University of Iowa; Judy Spray, ACT, Inc.;

Walter Vispoel, University of Iowa

*Automated test assembly—Comparison between classical test theory and item response theory in assembling parallel forms*

### **Discussants**

Neal Kingston, Advanced Systems

Mark D. Reckase, Michigan State University

Ile de France III, 3rd Floor  
Le Meridien Hotel

Thursday, April 27

4:00 – 7:00 P.M.

## **NCME Board of Directors Meeting**

Members are invited to attend as observers.

St. Charles, 41st Floor  
Marriott Hotel

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# INDEX TO SESSIONS FOR ALL PROGRAM PARTICIPANTS

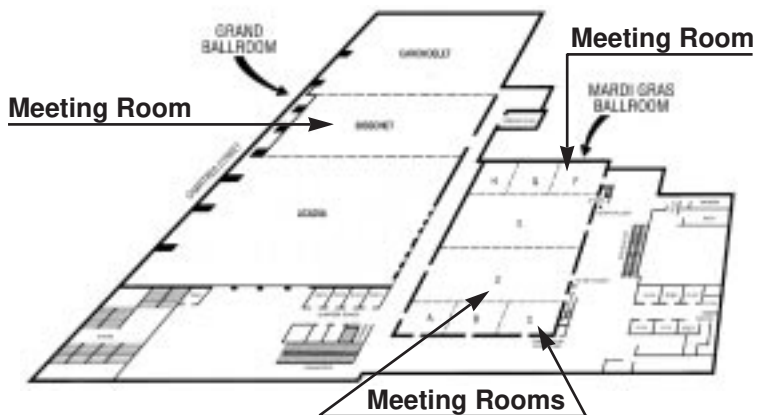
Ackerman, Terry	H3, O3	Colton, Dean A.	C4	Hanson, Bradley A.	A1, C4, I3, J4, J5
Akindele, Shola	D1	Cook, Linda	C3, G2	Harik, Polina	L2, M3
Albanese, Mark	E1	Cramer, Steve	E1	Harris, Deborah J.	J4, J5, O3
Allen, Nancy L.	D4	Crick, Joe	I3	Harris, Sandra M.	J2
Almond, Russell G.	M3	Crocker, Linda	G4	Harter, James	C3
Althouse, Linda	E1	Crone, Carolyn	I1	Hartz, Sarah M.	L3
Ankenmann, Robert	L3	Curley, W. Edward	I1	Harvey, Anne L.	N2
Ansley, Timothy N.	J2, O1	Cwikla, Julie	N1	Harwell, Michael R.	J4
Arce-Ferrer, Alvaro	C4	Dawber, Tess	D1	Hau, Kit-Tai	A2
Armstrong, Ronald D	N3	Davey, Tim	D3, G2, H2, K3	Hellsten, L.M.	D1
Attali, Yigal	G2	Davison, Mark L.	D4	Henderson, D.L.	D1
Bachman, Lyle F.	H3	de la Torre, Jimmy	N1	Hendrickson, Amy	A3
Baker, Eva	G4	De Ayala R.J.	J4	Hennings, Sara S.	L3
Ban, Jae-Chun	O3	De Champlain, Andre F.	C4, D4, L1	Henson, Robin K.	D1
Barclay McKeown,		De Vito, Pasquale	K1	Hill, Richard	D4
Stephanie	D1	De'Liberto, Deanna M.	B3	Hoffman, R. Gene	C4
Bar-Hillel, Maya	G2	Deng, Hui	J2	Hogarty, Kristin Y.	A2
Baron, Patricia	I1	Deville, Craig	G3, H3	Holland, Paul W.	A1, D4
Barton, Karen	G3	DiBello, Louis V.	L3	Hombo, Catherine M.	B3
Bay, Luz G.	E1, K2	Dillingham, Alan	E1	Hone, Anne S.	M3
Beguín, Anton A.	J5	Donahue, Barbara	E1	Hoover, H.D.	E3, H1
Bejar, Isaac I.	M3	Donoghue, John R.	B3	Hoskens, Machteld	L3
Beller, Michal	C3	Doolittle, Allen E.	O2	Huesman, Ronald L.	G3
Bene, Nancy	B2	Dorans, Neil	N2	Huynh, Huynh	B2, E1, G3
Ben-Simon, Anat	G2	Douglas, Jeffrey	L3	Impara, James C.	L1
Ben-Shakhar, Gershon	G2	Dragow, Fritz	J4	Irwin, Patrick M.	L1
Benson, Jeri	E1	Dunbar, Stephen B.	J2	Iwamoto, Carolyn K.	H2
Bereby-Meyer, Yoella	G2	Durso, Robin	N1	Jakwerth, Pamela	G3
Berk, Ronald A.	E3	Eignor, Daniel G.	C1, H3, M4, N2	Joachim, Meyer	G2
Betebenner, Damian W.	J1	Elliot, Scott	N2	Jodoin, Michael G.	O2
Beyer, Julia	D4	Elliott, Stephen N.	G3	Johnson, Eugene G.	A1, E2
Bhola, Dennison	C3	Elmore, Patricia B.	E1	Johnson, Lynn	M3
Bianchi, Leonard	L1	Embretson, Susan	H1	Johnson, Sylvia T.	E3
Bishop, N. Scott	D1	Engelhard, George Jr.	B3	Jones, Douglas H.	N3
Bolt, Daniel M.	O2	Erwin, T. Dary	O1	Julian, Ellen R.	A3, J1, M4
Bond, Lloyd	E3, I1	Everson, Howard	N2	Julian, Marc W.	J4
Boughton, K.A.	D1	Fan, Meichu	K3	Junker, Brian W.	L3
Bourque, Mary Lyn	M2	Featherman, Carol M.	H2	Kalohn, John	D3
Breland, Hunter M.	D4	Feigenbaum, Miriam	I1	Kane, Michael	G4, M3
Brennan, Robert L.	A1, B3, C4,	Fenton, Ray	C2	Kamata, Akihito	L4
	G4, I3	Ferrara, Steven	I2, M2, O1	Kaskowitz, Gary S.	J4
Breyer, F. Jay	M3	Feuer, Michael	K1	Kelkar, Vinaya	A3
Bridgeman, Brent	I1	Finger, Michael S.	L4	Keller, Lisa	L2
Brookhart, Sue	L4	Fitzpatrick, Anne R.	B1, C4, D4	Kenney, Patricia	E2
Buckendahl, Chad W.	L1	Forsyth, Robert	K2	Khalig, Shameen Nyla	D1, O3
Budescu, David V.	G2	Frechtling, Joy A.	L2	Kieffer, Kevin M.	D1
Burden, Timothy	K3	French, Ann W.	O2	Kim, Seock-Ho	O2
Burdenski, Thomas K.	D1	Friedman, Steven	B4	Kim, Sooyeon	D1
Burton, Elizabeth	L2	Frisbie, David A.	C4, G3	King, Jason E.	D1
Caper, Nilufer	H2	Gao, Furong	D4	Kingsbury, Gage	A2
Carlson, James	I3	Gao, Xiaohong	B3	Kingston, Neal M.	K2, M4, O3
Case, Susan M.	N1	Geisinger, Kurt F.	C3	Kissling, Grace	D1
Cerrillo, Tracy L.	C1, I2	Gessaroli, Marc E.	D4	Klass, Daniel J.	L1
Chalabou-Deville, Micheline	H3	Gierl, Mark J.	O2, O3	Klinger, D.A.	D1
Chang, Hua-Hua	A2, J3	Gipps, Caroline	D2	Knowles, Kaeli	K1
Chang, Shun-wen	J4	Glas, Cees A.W.	J3, J5	Koenig, Judy	K1
Chartrand, Anne	C2	Green, Bert	A2	Kolen, Michael J.	C4, E2, F1, K1,
Chase, Clint I.	B2	Gullickson, Arlen	O1		L4, M4
Chen, Huan-Wen	L4	Guo, Fanmin	D3	Kolstad, Andrew	L3
Chen, Wen-Hung	M2	Habing, Brian T.	J2	Koppel, Nicole	N3
Chiu, Chris W.	B3, L2	Haertel, Edward H.	A1, E2	Koretz, Daniel	A1, K1
Cizek, Gregory	B4, E2	Haladyna, Thomas	J1	Krass, Iosif A.	O3
Clauser, Brian E.	L2, M3	Ham, Hazen	L1	Kromrey, Jeffrey D.	A2
Clyman, Stephen G.	L2, M3	Hambleton, Ronald K.	B1, C3, H1, M3	Landauer, Tom	M3
Cohen, Jon	L3	Hansen, Joe	C2	Lane, Suzanne	C1, I2
Cole, Nancy	G4	Hansen, Mary A.	I2	Lawrence, Ida	J5

Lee, Guemin	D4	Peters, Charles W.	E2	Swanson, David B.	L2, N1
Lee, Won-Chan	C4	Phillips, Susan E.	B4	Sweeney, Kevin P.	K2
Lee, Yong-Won	D4	Plake, Barbara S.	L1	Sweet, David	B1, C2
Lee, Young-Sun	L3	Pommerich, Mary	K3	Taherbhai, Husein M.	B3
Lei, Pui-Wa	L4	Potenza, Maria	K3, N2, O3	Tanner, John	K1
Leung, Chi-Keung C.K.	A2	Quero-Munoz, Lila J.	J2	Tateneni, Krishna	N2
Lewis, Daniel M.	K2	Rattenborg, Steve	K2	Taylor, Catherine S.	B2, J5
Lin, Chuan-Ju	O3	Reckase, Mark D.	G4, M2, N2, O3	Thayer, Dorothy T.	B3, D4
Linn, Robert	D2	Reese, Lynda M.	D3, N3	Thissen, David	B1, K3, N3
Lipner, Rebecca S.	J4	Reinhart, Mary Ann	L1	Thomas, Susan J.	E1
Liu, Yuming	D1	Reshetar, Rosemary	D3	Thompson, Tony D.	H2, K3
Livingston, Samuel A.	J1	Rindone, Douglas	K2	Thornton, Andrea E.	J1
Lohss, William F.	J5	Ripkey, Douglas R.	N1	Tobias, Robert	C2
Loomis, Susan Cooper	M2	Rizavi, Saba	D1, E1	Tomkowicz, Joanna	D1
Luecht, Richard M.	A3, N3	Robin, Frederic	O3	Turhan, Ahmet	L4
Maguire, Thomas O.	B2	Rodriguez, Georgette	E1	Tsai, Tsung-Hsun	J4
Margolis, Melissa J.	L1	Rogers, H. Jane	O2	Van den Heuvel, Jill R.	I2
Mastie, Marjorie M.	O1	Rosen, Gerald	D3	van der Linden, Wim J.	A2, E2, J3, N3
Maxey, E. James	J1	Roussos, Louis A.	N1, N3	van Krimpen-Stoop, Edith	J3
McArdle, John J.	J1	Samejima, Fumiko	A2, E3	Vispoel, Walter	O3
McLeod, Lori D.	H2, N3, O2	Sawyer, Richard L.	B2, J1	Vos, Hans J.	J3
McMillan, James H.	L1	Schaeffer, Gary A.	J4	Wallace, Marjorie R.	D1
Meijer, Rob R.	J3	Schafer, William D.	O1	Waltman, Kristie K.	L1
Meloy, Linda	G3	Scheuneman, Janice	H2	Wang, Lin	B3
Miller, M. David	B1, C2	Schiel, Jeff L.	J1	Wang, Ning	B2
Miller, Susan S.	M3	Schmeiser, Cynthia B.	B4, G4, H1, M4	Wang, Tianyou	N1, O3
Miller, Timothy R.	K3	Schmitt, Alicia	I1	Ware, Herbert W.	G3
Mills, Craig N.	A3, J3	Schmidt, Amy E.	I1, L1	Way, Walter D.	D3, K3, N2
Mislevy, Robert J.	D2, M3	Schratz, Mary	D4	Wedman, Ingemar	B2
Mittelholtz, David	G3	Schulz, E. Matthew	J1, J2	Welch, Catherine J.	G4, H1
Monahan, Patrick O.	O2	Scott, Kathryn	I2	Wendler, Cathy L W	I1
Morgan, Deanna L.	D1	Scrams, David J.	N1, O2, O3	West, R. Webster	J2
Muraki, Eiji	D4, I3, J4, N1	Segall, Daniel O.	H2, N3	Widiatmo, Heru	J5
Najarian, Michelle	D4	Shavelson, Richard	L1	Williams, Valerie S.L.	C4, E2
Nandakumar, Ratna	A2, N1	Shepard, Lorrie	D2	Williamson, David M.	M3
Narayanan, Pankaja	N1	Shermis, Mark D.	D3	Wilson, Mark R.	L3
Nering, Michael	A2	Simpson, M.A.	D1	Winter, Phoebe C.	B1, C2
Neustel, Sandra B.	D1	Sireci, Stephen G.	C3, E1, M3	Wise, Lauress L.	C4, K1
Newman, Larry	B2	Skaggs, Gary	I3, J5	Wise, Steven L.	O1
Nichols, Paul	L1	Skakun, Ernest N.	B2	Wispoel, Walter	O3
Ninneman, Anne	I1	Slawski, Ed	C1	Wollack, James	H2
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Nungester, Ronald J.	H2	Smith, Russell, W.	L4	Yang, Yongwei	C3
Ochieng, Charles	D1	Spray, Judy	D3, L4, O3	Yen, Shu Jing	B2
Oeschler, Jeff	G1	Stansfield, Charles	H3	Yen, Wendy M.	B1, I2, M4
Olson, John F.	B1, C2	Stark, Stephen E.	J4	Yi, Qing	J5, O3
Padula, Jennifer	I2	Steele, Bonita	D1	Yoon, Bokhee	L2
Parke, Carol S.	C1, I2, J2	Steinberg, Linda S.	M3	Young, Michael J.	B3, L2
Parkes, Jay T.	L2	Stiggins, Rick	G1, G4, H1	Yu, Feng	A2
Parshall, Cynthia G.	A2, D3, I3, N1	Stofflet, Frederick	C2	Zenisky, April L.	A3
Pashley, Peter J.	J1, N3	Stone, Clement A.	I2	Zhang, Jimming	J2
Paskus, Thomas S.	J1	Stout, William F.	L3	Zhang, Liru	L3
Patelis, Thanos	E1, N2	Strozeski, Mike	C2	Zumbo, Bruno D.	H3
Patsula, Liane N.	H2	Sullivan, Richard B.	J2	Zwick, Rebecca	I1
Patz, Richard J.	L3	Swaminathan, Hariharan	C3, D1, E3, O2		

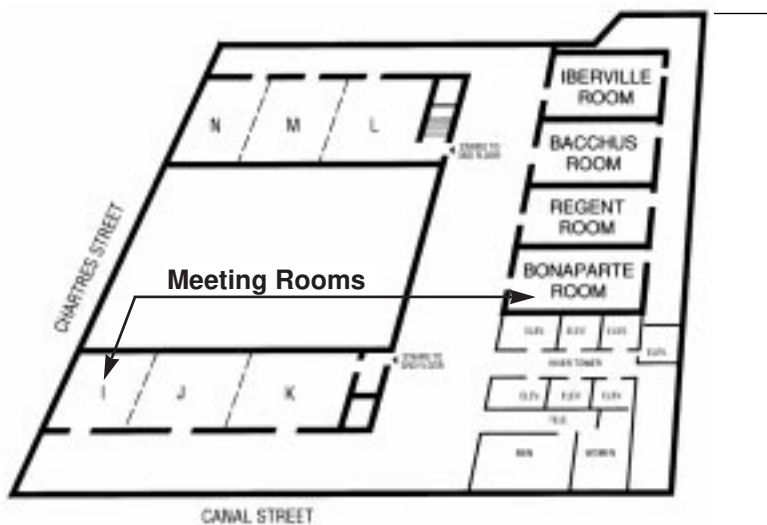
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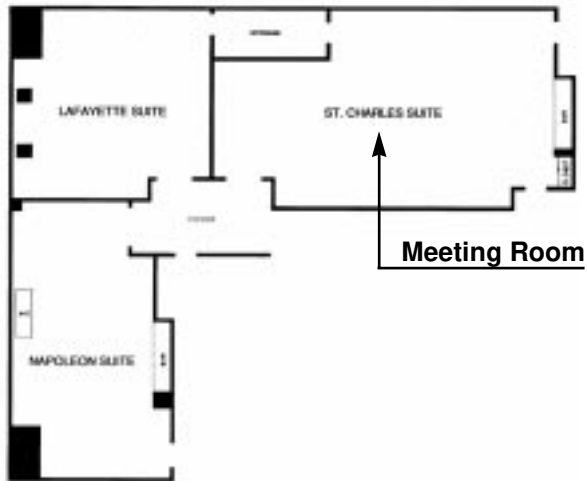


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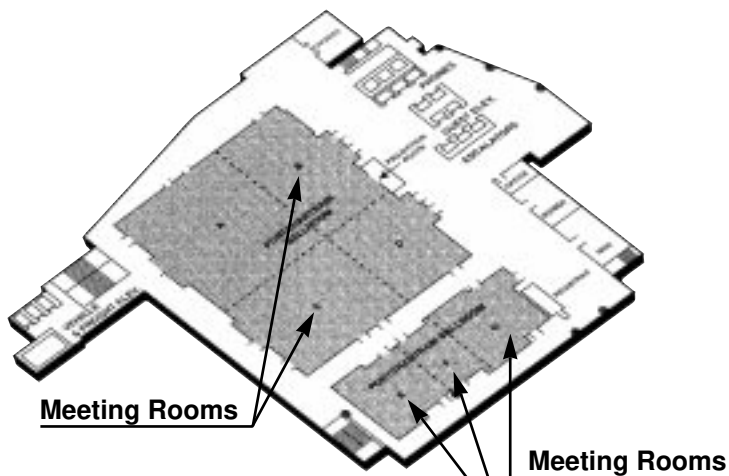
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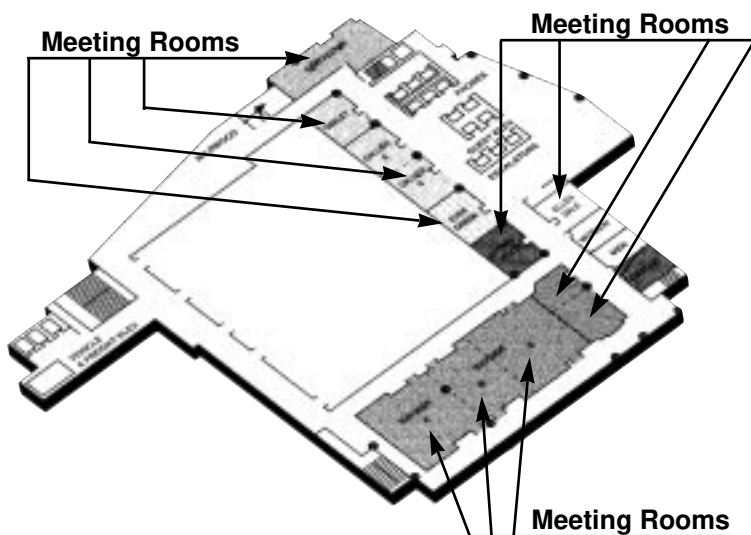


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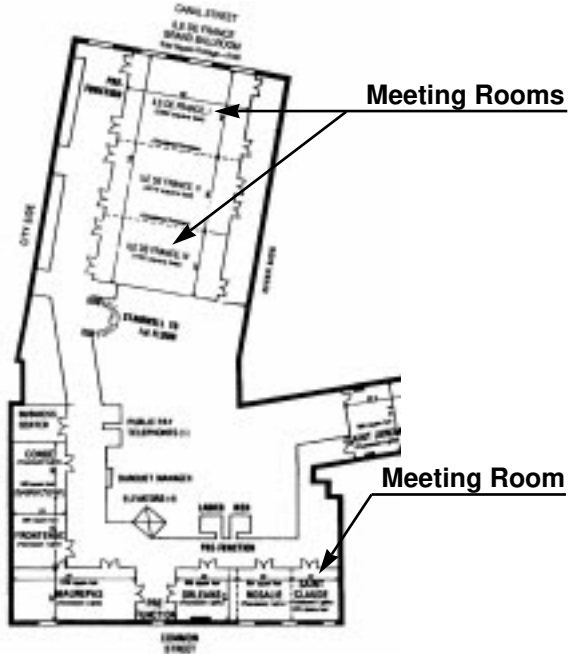
**Fourth Floor Meeting Rooms**



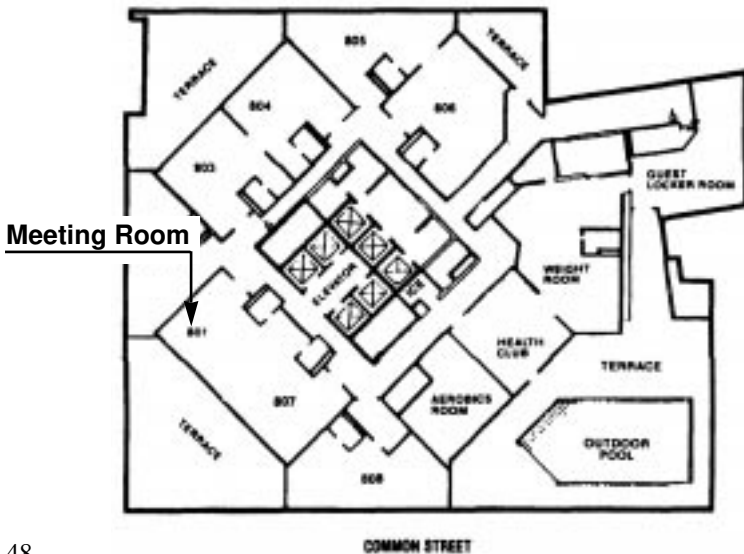
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