Professional Development and Training Courses

The Professional Development and Training Committee has planned a rich program of extended and mini-courses for the 2010 AERA Annual Meeting. The program was crafted based on consideration of more than 70 submissions and a competitive review process. Professional development courses provide training in specific research methods and skills, cover significant research issues in related disciplines, emphasize specialized areas, address professional development issues, focus on research for the improvement of practice, or examine recent methodological and substantive developments in education research. The extended courses begin on Thursday, April 29, one day before the start of the Annual Meeting. Mini-courses are held Saturday through Monday, May 1–3. For further information on these courses, visit http://www.aera.net. Direct any questions about the professional development and training courses to profdevel@aera.net. Tickets for courses may be purchased on line during preregistration or on site at Onsite Registration (Colorado Convention Center, Hall F, Upper Level).

Below is a summary of all courses throughout the meeting week, and the following pages contain course details.

Extended Courses

Thursday, April 29
PDC01. A “Gentle” Introduction to Statistical Analysis and Research With R
   Director: Brandon K. Vaughn, University of Texas, Austin
   Instructor: Shana M. Shaw, University of Texas, Austin
   Date: Thursday, April 29, 9:00 am–5:00 pm
   Location: Hyatt Regency, Denver / Centennial Ballroom H
   Fee: $100

The purpose of this course is to introduce the basic principles of using the free statistical software package R. In this hands-on training session, participants learn how to input data and perform basic statistical analysis in R through instructor demonstration and active learning opportunities. The course also includes discussion of strategies to use in incorporating R into classroom, research, or business settings. Participants will be given access to free tutorial videos developed by the instructor for use in their own learning of R as well as in classroom settings. Participants should have knowledge of basic statistics. Laptop required.

PDC02. Accessing and Analyzing National Databases to Understand Complex Ecologies in Secondary and Higher Education
   Director: Terrell L. Strayhorn, University of Tennessee
   Date: Thursday, April 29, 9:00 am–5:00 pm
   Location: Hyatt Regency, Denver / Capitol Ballroom 1
   Fee: $85

This course will provide graduate students and emerging and continuing scholars with information and skills to access and analyze national databases to understand complex ecologies in education. This course is designed to be intentionally interactive and will consist of activities, group dialogue, and independent exercises to facilitate understanding of the course content. Participants will be trained on data from widely used sources such as the National Center for Education Statistics and the National Science Foundation. Technical issues associated with analyzing...
data from complex design surveys and techniques for studying formal and informal learning within and across complex ecologies will be discussed. Participants should bring a fully charged laptop with SPSS or SAS already installed.

PDC03. An Introduction to GIS for Educational Researchers

**Directors:** Mark Hogrebe, Washington University in St. Louis
Doug Geverdt, U.S. Census Bureau

**Instructor:** Joseph Kerski, Education Manager for Environmental Systems Research Institute (ESRI)

**Dates:** Thursday, April 29, 9:00 am–5:00 pm (Day 1)
Friday, April 30, 8:00 am–4:00 pm (Day 2)

**Location:** Hyatt Regency, Denver / Centennial Ballroom F

**Fee:** $125

This course introduces geographic information systems (GIS) technology as a means to help researchers investigate the spatial context of education. Education has spatial context because schools are located in areas of metropolitan regions and neighborhoods that influence learning and teaching. This beginning course provides a basic overview of GIS concepts, introduces unique features of spatial data, demonstrates methods to analyze spatial relationships, and discusses how to develop maps to visualize and communicate research results. The course introduces concepts and definitions of census geography, and also reviews geodemographic data resources available from federal agencies for use in education research. Students will use GIS in hands-on lab exercises to integrate and investigate demographic, geographic, educational, and administrative data. Laptops will be provided.

PDC04. An Introduction to Modern Missing Data—Handling Techniques

**Director:** Craig K. Enders, Arizona State University

**Date:** Thursday, April 29, 9:00 am–5:00 pm

**Location:** Hyatt Regency, Denver / Centennial Ballroom E

**Fee:** $100

There have been substantial methodological advances in the area of missing data analyses during the last 25 years. Two missing data techniques, maximum likelihood (ML) and multiple imputation (MI) are currently considered “state of the art” in the methodological literature. The purpose of this session is to familiarize participants with ML and MI and to demonstrate the use of these techniques using widely available software packages. The session will emphasize the application of ML and MI, with the goal that participants leave the training session with the background knowledge and skills to apply these techniques in their own research. The course will be a mixture of lecture format and computer applications, so participants are strongly encouraged to bring a laptop computer. The course materials and links to free software packages are available at http://www.appliedmissingdata.com. Participants should obtain these materials and install the software packages prior to the session. Laptop required.

PDC05. Critical Race Theory and Educational Research

**Directors:** Thandeka K. Chapman, University of Wisconsin, Milwaukee
Adrienne Dixson, Ohio State University

**Instructors:** Bryan McKinley Jones Brayboy, Arizona State University
David Gillborn, Institute of Education, London
Tyrone C. Howard, University of California, Los Angeles
Marvin Lynn, University of Illinois, Chicago
David O. Stovall, University of Illinois, Chicago
Jamal K. Donnor, California State University, Fullerton
Dolores Delgado Bernal, University of Utah
Enrique Aleman, University of Utah
Laurence J. Parker, University of Illinois, Urbana-Champaign
Rich Milner, Vanderbilt University
Jessica T. Decuir-Gunby, North Carolina State University
Lisa Louzenheiser, University of British Columbia

**Dates:** Thursday, April 29, 9:00 am–5:00 pm (Day 1)
Friday, April 30, 8:00 am–12:00 pm (Day 2)

**Location:** Hyatt Regency, Denver / Centennial Ballroom A

**Fee:** $100

This course is designed to introduce critical race theory (CRT) as an epistemological and methodological approach to researching race in education. The course is designed for advanced doctoral students and early career scholars (pre-tenure). This interactive course will include presentations on the background and history of CRT in the legal field and in education. Participants should have a project designed to examine an education research issue with an interest in using CRT. Participants must submit a written proposal of 2–4 pages that describes in detail their research project and how they believe CRT might be useful. Participants are encouraged to bring data and manuscripts to facilitate their work sessions with CRT scholars. Laptop required.

PDC06. Educator Performance Assessment: A Practical Workshop

**Directors:** Phyllis Jacobson, California Commission on Teacher Credentialing
Jerry DeLuca, Educational Testing Service
Katherine Bassett, Educational Testing Service

**Dates:** Thursday, April 29, 9:00 am–5:00 pm (Day 1)
Friday, April 30, 8:00 am–12:00 pm (Day 2)

**Location:** Hyatt Regency, Denver / Centennial Ballroom C

**Fee:** $85

This course addresses the theory and practice of educator performance assessment, including how to define the expected knowledge, skills, and abilities of an educator and how to measure those qualities in the context of performance with K–12 students and, in the case of principals, with teachers. States are considering licensure requirements that include a performance assessment not only for practicing teachers (such as the National Board for Professional Teaching Standards) but at points along a continuum of practice. Through an interactive, practicum approach, participants will explore issues related to developing and implementing educator performance assessments, using California’s mandated Teaching Performance Assessment licensure requirement and Hawaii’s Principal Performance Contract pilot as case studies.

PDC07. Learning Mathematics for Teaching: Instrument Dissemination Workshop

**Directors:** Geoffrey Phelps, University of Michigan
Heather Hill, Harvard University

**Date:** Thursday, April 29, 9:00 am–5:00 pm

**Location:** Hyatt Regency, Denver / Centennial Ballroom G

**Fee:** $85

The Learning Mathematics for Teaching (LMT) project disseminates survey measures of Mathematical Knowledge for Teaching (MKT) in the content areas of number concepts and operations, patterns functions and algebra, geometry, rational number, proportional reasoning, and data probability and statistics. These measures are suitable for use with elementary and middle school teachers. The course will provide background information on the development and theory supporting the LMT measures and practical guidance on appropriate use of these measures in research and program evaluation. The course is designed for all researchers investigating teacher knowledge. A basic understanding of statistics is helpful. Participants are encouraged to review the information and terms of use on the LMT website before enrolling: http://sitemaker.umich.edu/lmt.

PDC08. Mixed Data Analysis Techniques: A Comprehensive Step-by-Step Approach

**Directors:** Anthony J. Onwuegbuzie, Sam Houston State University
Kathleen M. T. Collins, University of Arkansas, Fayetteville
Nancy L. Leech, University of Colorado, Denver
John R. Slate, Sam Houston State University
Normand Peladeau, Provalis Research

**Dates:** Thursday, April 29, 9:00 am–5:00 pm (Day 1)
Friday, April 30, 8:00 am–4:00 pm (Day 2)

**Location:** Hyatt Regency, Denver / Centennial Ballroom D

**Directors:** Emmanuel Sikali, National Center for Education Statistics  
John Wirt, National Center for Education Statistics

**Instructors:** Mike Planty, National Center for Education Statistics  
David Miller, American Institutes for Research

**Date:** Thursday, April 29, 9:00 am–5:00 pm  
**Location:** Hyatt Regency, Denver / Capitol Ballroom 4  
**Fee:** $85

This course provides researchers with tools for using data from the Education Longitudinal Study of 2002 (ELS:2002). It highlights data pertaining to the transition from high school to adulthood and provides overviews of the study designs and technical issues, information on how the surveys complement each other, and computer demonstrations of software that will assist users in preparing data for analyses. The course is for advanced graduate students, faculty, and researchers who have a solid understanding of statistics.

PDC10. Thinking Like a Qualitative Researcher: A Course for New and Prospective Qualitative Researchers

**Director:** Nadine Dolby, Purdue University

**Dates:** Thursday, April 29, 9:00 am–5:00 pm (Day 1)  
Friday, April 30, 8:00 am–12:00 pm (Day 2)

**Location:** Hyatt Regency, Denver / Centennial Ballroom B  
**Fee:** $85

This interactive, experiential course is designed for new and prospective qualitative researchers, and for interested quantitative researchers. The course includes experiential exercises and field experiences that will immerse participants in the following components of qualitative research: the design of a qualitative research question, perspective and positionality in qualitative research, and the role of paradigms and worldviews. Participants should be prepared to complete selected readings before the course and to participate fully in the immersion activities. The course includes a field experience within walking distance of the course venue.

PDC11. Using Qualitative Software to Understand and Analyze Complex Ecologies in Educational Research and Evaluation

**Directors:** Debra C. Burkey Piecka, Wheeling Jesuit University  
Rodney K. Hopson, Duquesne University

**Date:** Thursday, April 29, 9:00 am–5:00 pm

**Location:** Hyatt Regency, Denver / Capitol Ballroom 3  
**Fee:** $100

This course demonstrates how education researchers use qualitative software, specifically concept maps and data visualization, to understand and analyze complex ecologies in education research and evaluation. It is appropriate for qualitative researchers who seek to extend their foundational knowledge of education research using qualitative software. The course proposes an interactive session for intermediate qualitative education researchers and evaluators to expand their use of the data display tools in the software and provides an understanding of the major themes and discussions related to the topic. Participants are required to bring data, laptops, and preloaded qualitative software to practice creating concept maps and other forms of data visualization for their current applications. Instructors will demonstrate with NVivo and ATLAS.ti software.

PDC12. Writing an Application for an IES Grant: A Workshop

**Directors:** Allen Ruby, National Center for Education Research  
Jonathan Levy, National Center for Education Research

**Date:** Thursday, April 29, 9:00 am–5:00 pm  
**Location:** Hyatt Regency, Denver / Capitol Ballroom 2  
**Fee:** No fee, enrollment limited to 40 participants

This course will provide instruction and advice on writing a successful application to the Institute of Education Sciences research grant programs. The workshop will focus on the four sections of the Research Narrative (Significance, Research Plan, Personnel, and Resources). Participants will learn the purpose of each section, including (1) the content expected to be addressed, (2) techniques to explicate the content, and (3) ways to provide continuity throughout the Narrative. Direct instruction on these topics will be accompanied by examples, application to participant’s own work, and discussion. Participants are expected to be familiar with the IES Request for Applications (see http://ies.ed.gov/funding/), to have the appropriate research skills, and to bring an outlined or draft Research Narrative.

PDC13. Early Childhood Surveys at the National Center for Education Statistics: The ECLS and NHES Studies

**Director:** Gail Mulligan, National Center for Education Statistics

**Instructors:** Amy Rathbun, American Institutes for Research  
Jill Walston, American Institutes for Research

**Date:** Thursday, April 29, 9:00 am–5:00 pm  
**Location:** Hyatt Regency, Denver / Capitol Ballroom 5  
**Fee:** $85

This course introduces researchers to data sets from two programs at the Institute of Education Sciences’ National Center for Education Statistics: the Early Childhood Longitudinal Studies (ECLS) and the National Household Education Surveys Program (NHES). The course provides overviews of the study designs and technical issues, highlights about data pertaining to children from birth through eighth grade, information on how the surveys complement each other, and computer demonstrations of software that assists users in preparing data for analyses. The course is for graduate students, faculty, and researchers with a strong statistical background who seek knowledge about the structure and potential uses of the surveys. It is designed for researchers who have limited familiarity with the ECLS and NHES data.

Mini-Courses

PDC14. Diverse Pedagogical Practices and Conceptual Considerations for Developing and Teaching Qualitative Research Methods Courses

**Directors:** Mirka Koro-Ljungberg, University of Florida  
Ron Chenail, Nova Southeastern University  
Jan Nesper, Ohio State University

**Instructors:** Juha Suoranta, University of Tampere, Finland  
Lene Tanggaard, Aalborg University, Denmark

**Date:** Saturday, May 1, 8:00 am–12:00 pm

**Location:** Hyatt Regency, Denver / Capitol Ballroom 4  
**Fee:** $40

The purpose of this interactive course is to assist scholars in developing and enhancing their skills in teaching qualitative research methods. The course will cover various instructional areas such as course sequencing and course content, assignments and activities, readings and other materials, evaluation, and linking activism and theory in qualitative research. The course will emphasize the ways instructors can use the theoretical and methodological diversity that currently characterizes qualitative research. Pedagogical and instructional examples, as well
as course materials and resources, are drawn from U.S. and European contexts. Course participants are encouraged to bring their own syllabus, course descriptions, and planned assignments to receive feedback from the facilitators and other course participants.

PDC15. Entering, Navigating, and Succeeding in the Professoriate
Directors: Lisa D. Hobson-Horton, Prairie View A&M University
Darrell Cleveland, Richard Stockton College
Instructors: Sherick Hughes, University of Maryland, College Park

Date: Saturday, May 1, 8:00 am–12:00 pm
Location: Hyatt Regency, Denver / Capitol Ballroom 2
Fee: $40

This course provides information to prospective and early career university professors on how to navigate the professoriate. It is geared toward future and emerging scholars who are interested in obtaining and succeeding in tenure-track faculty positions. The instructors will discuss the tenure and promotion process, classroom instruction, design of course materials, and balancing multiple responsibilities. Instructors will provide resources for understanding and working in higher education, and information about contract negotiation, start-up packages, collective bargaining, and university benefits structures. Participants should bring a list of three questions related to obtaining and maintaining faculty positions.

PDC16. Preserve Teacher Action Research
Directors: Kevin M. Carr, Pacific University
Donna Kalmbach Phillips, Pacific University

Date: Saturday, May 1, 8:00 am–12:00 pm
Location: Hyatt Regency, Denver / Capitol Ballroom 3
Fee: $40

This course is for teacher-educators currently using or considering implementing Preserve Teacher Action Research (PTAR) projects. Developing action research/classroom inquiry skills is critical to being an empowered professional educator. The course will address (1) dilemmas of conducting action research as a preservice teacher, (2) action research design and data collection possibilities and challenges, (3) the use of the analytic memo as a space for critical reflexivity, (4) dilemmas of trustworthiness in PTAR, and (5) teaching data interpretation. We invite participants to bring samples of PTAR work, successful teaching strategies, and questions concerning the teaching PTAR. Laptop required.

PDC17. Using NAEP Data on the Web for Educational Policy Research
Directors: Debbie Kline, Educational Testing Service
Cathy Trapani, Educational Testing Service
Emmanuel Sikali, National Center for Education Statistics

Date: Saturday, May 1, 8:00 am–12:00 pm
Location: Hyatt Regency, Denver / Capitol Ballroom 1
Fee: $85

This course is for researchers interested in National Assessment of Educational Progress (NAEP) data and focuses on using the NAEP Data Explorer Web tool to examine the wealth of assessment data collected since 1990. The course provides hands-on learning and active participation. You will be guided through an examination of the data, with emphasis on (1) the relationships between student performance and teacher and school characteristics and (2) using NAEP data to augment or confirm other education research findings. You will also have the opportunity to work independently according to your own interests. This course focuses on the 2009 math and reading assessments and the most recent assessments of science and writing. Laptop required.

Director: Bruce Thompson, Texas A&M University

Date: Saturday, May 1, 1:00 pm–5:00 pm
Location: Hyatt Regency, Denver / Capitol Ballroom 5
Fee: $40

Only multivariate analyses (e.g., MANOVA, descriptive discriminant analysis, predictive discriminant analysis, canonical correlation analysis, structural equation modeling) consider how all the variables in an analysis interact simultaneously in all possible configurations, and honor a reality “in which the researcher cares about multiple outcomes, in which most outcomes have multiple causes, and in which most causes have multiple effects” (Thompson, 1986, p. 9). This first of two courses will cover two commonly used multivariate methods, the 4 multivariate significance test and MANOVA, and will presume as background only that participants have previously heard about Pearson r and ANOVA. Further information about the presenter is available at http://www.coe.tamu.edu/~bthompson.

PDC19. Protection of Human Subjects in Education Research
Directors: George W. Bohrnstedt, American Institutes for Research
Robert Boruch, University of Pennsylvania
Instructor: Walter Secada, University of Miami

Date: Saturday, May 1, 1:00 pm–5:00 pm
Location: Hyatt Regency, Denver / Capitol Ballroom 2
Fee: $40

This course examines human research protection issues in the design, development, implementation, and review of social science research. The course provides education researchers with an understanding of key concepts that inform federal guidelines on human research protection (e.g., consent, privacy and confidentiality, benefits and harms, level of risk) and the tools for assessing best ethical practices in the context of social science research. It also offers guidance on the preparation of protocols and effective communication with institutional review boards (IRBs). In addressing ethical issues in human research, the course focuses on a breadth of methodological approaches that are used in education research and the social sciences (e.g., surveys, interviews, observations, ethnographies, case studies, laboratory and field experiments, secondary analysis of extant data). Attention is paid to human research protection issues involved in data collection, data use, data protection, data reporting, and data dissemination. The course consists of three major units: understanding key concepts and ethical guidance in human subjects research, putting human research protections into practice in education research, and comprehending the IRB process and the role of review. Building upon research examples, the course examines how to weigh human research protection issues with carrying substantive topics, methods, contexts, and populations under study. A volume of specially prepared readings and background materials is provided, and participants will be asked to complete in advance a brief information form to help structure the course in a way that is responsive to the concerns, interests, and expertise of participants.

PDC20. QuickStats and PowerStats: An Introduction to NCES’s New Online Data Tools
Directors: Ted Socha, National Center for Education Statistics
Instructors: Matthew E. Soldner, University of Maryland, College Park
Sean Simone, AIR/NCES Postdoctoral Policy Fellow

Date: Saturday, May 1, 1:00 pm–5:00 pm
Location: Hyatt Regency, Denver / Capitol Ballroom 1
Fee: $85

Do you need a simple statistic from the National Center for Education Statistics (NCES) for the background section of your next paper? Would you like to do complex analyses of NCES data without getting a restricted license? This course will train researchers to use QuickStats and PowerStats, new online analysis tools that make it easier to access NCES data. With a user-friendly interface, QuickStats and PowerStats provide functionality for basic users and serious researchers. QuickStats runs simple tables quickly and generates tables and charts from a limited set of frequently used variables. PowerStats produces complex tables and runs linear and logistic regression. The course will include demonstrations and practice to help you become a proficient QuickStats and PowerStats user. Laptop required.

**Directors:** Janice Earle, National Science Foundation
Kusum Singh, National Science Foundation
Sharon Lynch, National Science Foundation

**Instructors:** Jim Dietz, National Science Foundation
Barry J. Fishman, University of Michigan
Ricardo Nemirovsky, San Diego State University

**Date:** Saturday, May 1, 1:00 pm–5:00 pm
**Location:** Hyatt Regency, Denver / Capitol Ballroom 3

**Fee:** No fee, limited to 40 participants

The course is intended to build capacity for funding from NSF’s Division of Research on Learning (DRL). The content will include a discussion of contexts of STEM education at NSF/DRL, kinds of proposals supported by the DRL, review process, and characteristics of competitive proposals. Two successful Principal Investigators will share their proposals and lead discussions of proposal writing and negotiation processes. Participants examine these proposals for evidence of intellectual merit and broader impact and the rigor of the proposed research. Participants may discuss their proposal ideas. The course is appropriate for graduate students, emerging researchers, and continuing researchers. The format will be interactive, with presentations and discussion.

PDC22. Grant Writing for Large-Scale Secondary Data Analysis

**Directors:** Chandra Muller, University of Texas, Austin
Mark R. Wilson, University of California - Berkeley

**Date:** Sunday, May 2, 8:00 am–12:00 pm
**Location:** Hyatt Regency, Denver / Capitol Ballroom 3

**Fee:** No fee, limited to 40 participants

This course will provide an introduction to funding studies using extant secondary data sources, such as those supported by the AERA Grants Program (http://www.aera.net/grantsprogram/index.html). The course is designed for early career scholars (e.g., advanced graduate students, postdoctoral fellows and junior faculty), although others are welcome. It is recommended that participants have a research question or idea and data set in mind. Participants should have experience using large-scale secondary data sets such as those developed by the National Center for Education Statistics and the National Science Foundation and sufficient statistics and methods background for conducting their research. Course topics will include planning the proposal, proposal writing (framing and motivating research questions; preparing and writing the data, methods, and analytic plans; and use of multiple databases), the review process, and funding sources.

PDC23. How to Get Published: Guidance From Emerging and Senior Scholars

**Director:** Patricia A. Alexander, University of Maryland, College Park

**Instructors:** Sandra M. Loughlin, University of Maryland, College Park
Emily Grossnickle, University of Maryland, College Park
Krista Muis, McGill University, Canada
Jeffery A. Greene, University of North Carolina, Chapel Hill
Matthew McCrudden, Victoria University of Wellington, New Zealand
Gaea Leinhardt, University of Pittsburgh
Larry Hedges, Northwestern University
P. Karen Murphy, Penn State University
Sofie Loyens, Erasmus University Rotterdam, Netherlands
Patricia B. Elmore, Southern Illinois University
Gregory Camilli, Rutgers University

**Date:** Sunday, May 2, 8:00 am–12:00 pm
**Location:** Hyatt Regency, Denver / Capitol Ballroom 4

**Fee:** $45

This course will provide graduate students and early-career faculty with critical information about how to publish. The course will feature two panels: emerging scholars who have learned how to navigate the complex and demanding publication process successfully, and senior scholars who have acquired expertise in foundational aspects of publication. The course will present an overview of the publishing process, from conceptualizing studies to preparing well-crafted manuscripts and from submission through review and resubmission. Question-and-answer sessions will follow both presentations, by the emerging scholars and the senior scholars. Each participant will be provided with materials, including handouts, work samples, and correspondence that elaborate the important points shared during the session.


**Directors:** Valerie J. Janesick, University of South Florida
Carolyn A. Stevenson, Kaplan University

**Date:** Sunday, May 2, 8:00 am–12:00 pm
**Location:** Hyatt Regency, Denver / Capitol Ballroom 2

**Fee:** $85

Oral history is a useful technique for the qualitative researcher. Members will participate in learning modules that include the technique of oral history, the use of the Internet to augment a story, and use of Web-based resources for representing the data of oral history projects. Technology use will include on-site video, digital photography, and digital voice transferred to a CD; members will practice using digital cameras and webcams and will learn how to integrate data from blogs and use the visual image insites such as TagCloud, Wordle, Prezi, Wordpress Animoto, and VoiceThread. Members are encouraged to bring a laptop, camera, webcam, and CD.

PDC25. Deriving Causal Relationships From Observational Data: A Concise Overview of Propensity Score Matching

**Directors:** Sinan Gemici, University of Georgia
InHeok Lee, University of Georgia

**Date:** Monday, May 3, 8:00 am–12:00 pm
**Location:** Hyatt Regency, Denver / Capitol Ballroom 3

**Fee:** $40

Propensity Score Matching (PSM) is an increasingly popular quantitative method that allows the post hoc estimation of causal treatment effects from observational data. This course will provide a systematic overview of PSM, elaborate on its advantages and limitations, and offer general guidelines for participants interested in applying the method for their own purposes. The course focuses on developing a conceptual understanding of PSM. Recent developments in PSM research and various alternative PSM software packages will be part of the course content. Education researchers, policy makers, administrators, practitioners, and individuals with a limited or general understanding of PSM will benefit from this course.

PDC26. Implementing and Researching Performatory Learning Environments: Meeting the Challenge of Integrating Cognitive-Social-Emotional Learning

**Directors:** Lois Holzman, East Side Institute
Carrie Lobman, Rutgers University
Tony Perone, University of Illinois, Chicago
Jaime Martinez, East Side Institute

**Date:** Monday, May 3, 8:00 am–12:00 pm
**Location:** Hyatt Regency, Denver / Capitol Ballroom 4

**Fee:** $40

This course introduces education researchers to the expanding field of performance practices and related research on the performatory learning model. It is designed for graduate students and faculty exploring interdisciplinary approaches to education and education research, particularly those interested in creativity, the arts and performing arts,
cognitive-social learning, and the interplay of in-school and outside-of-
school learning environments. The goals of this course are to (1) introduce
theatrical performance, particularly improvisation, as an effective tool
for building socially and emotionally supportive and productive learning
environments; (2) generate interest in new research that examines the
value of performance for education; (3) link social-emotional learning
with the expanding field of performance studies; (4) provide a forum for
examining both the chasms and the interrelationships between learning in
formal and informal settings and how they are researched and evaluated.

PDC27. Using Research to Lead School Improvement
Director: S. David Brazer, George Mason University
Scott C. Bauer, George Mason University
Date: Monday, May 3, 8:00 am–12:00 pm
Location: Hyatt Regency, Denver / Capitol Ballroom 5
Fee: $40

This course is intended for university faculty who prepare teacher and
administrative leaders. It addresses the challenge of teaching master’s
candidates to engage with data and research in ways that lead to improved
student achievement in their schools. Participants will learn how to help
education leaders interpret student achievement data, understand a specific
research literature, create new knowledge about learning problems or
gaps, and build an improvement project proposal. The interactive format
of this course gives participants a clear idea about how to implement the
strategy presented and how to transform the research courses they teach
K–12 practitioners.

PDC28. Using the PIRLS 2006 International Database for
Secondary Data Analysis
Director: Eugenio Gonzalez, International Association for the Evaluation
of Educational Achievement (IEA)–ETS Research Institute
Instructors: Plamen Mirazchiyski, IEA Data Processing and Research Center
Ann Kennedy, Boston College
Date: Monday, May 3, 8:00 am–12:00 pm
Location: Hyatt Regency, Denver / Capitol Ballroom 1
Fee: $40

This course will provide an overview of the available database, methods,
and analysis procedures used in the 2006 Progress in International Reading
Literacy Study (PIRLS). PIRLS collects data on reading achievement at
the primary school level as well as contextual background information on
the students, parents, teachers, and schools from more than 40 countries.
The data set is a valuable resource for secondary analysis. In this course,
the methodological complexities of the program will be presented.
Further, the course is intended to familiarize participants with the latest
PIRLS data set and user-friendly means for correct analysis. This course is
proposed for participants at all statistical skill levels. Participants are
requested to bring laptops with SPSS.

PDC29. An Introductory Primer/Review of Multivariate Statistics
II: Descriptive and Predictive Discriminant Analyses and Canonical
Correlation Analysis
Director: Bruce Thompson, Texas A&M University
Date: Monday, May 3, 1:00 pm–5:00 pm
Location: Hyatt Regency, Denver / Capitol Ballroom 5
Fee: $40

Only multivariate analyses (e.g., MANOVA, descriptive discriminant analysis, predictive discriminant analysis, canonical correlation analysis, structural equation modeling) consider how all the variables in an analysis interact simultaneously in all possible configurations, and honor a reality “in which the researcher cares about multiple outcomes, in which most
outcomes have multiple causes, and in which most causes have multiple
effects” (Thompson, 1986, p. 9). This second of two courses will cover
three commonly used multivariate methods, descriptive discriminant analysis, predictive discriminant analysis, and canonical correlation analysis, and will presume as background only that participants have previously heard about Pearson \( r \) and ANOVA. Further information about

PDC30. Designing Adequately Powered Cluster Randomized Trials
Director: Jessaca Spybrook, Western Michigan University
Date: Monday, May 3, 1:00 pm–5:00 pm
Location: Hyatt Regency, Denver / Capitol Ballroom 3
Fee: $40

The purpose of this workshop is to help researchers learn how to plan
adequately powered cluster randomized trials. The workshop will focus on
two-level cluster randomized trials, three-level cluster randomized
trials, and three-level multisite (or blocked) cluster randomized trials.
In addition to providing the rationale and statistical framework for
calculating the power of a study, we will teach the participants how
to use the Optimal Design Software, a free, user-friendly program for
calculating the power for various cluster randomized designs. The
workshop will combine lecture sessions with hands-on practice using
the Optimal Design Software. The target audience for this workshop is
researchers interested in planning and conducting cluster randomized
trials. Laptop required.

PDC31. Textbook Writing: A First Course
Director: Michael D. Spiegler, Providence College
Date: Monday, May 3, 8:00 am–12:00 pm
Location: Hyatt Regency, Denver / Capitol Ballroom 2
Fee: $40

The purpose of this course is to interest educators in accepting the
challenges and rewards of textbook writing by providing them with a
realistic overview of what it entails, what is required, how to get started,
and how to bring the vision of a book to fruition. The course will also
benefit textbook writers who want to hone their skills. Emphasis will be
on practical information and advice, including addressing participants’
specific questions/concerns. The course will be conducted in an interactive
format that facilitates active learning. Topics include reasons for writing
textbooks, personal/professional prerequisites, writing a prospectus and
sample chapters, contacting publishers, negotiating a favorable contract,
the writing phase, the production phase, dealing with publishers, and
author survival skills.

PDC32. Using the TIMSS 2007 International Database for Secondary
Data Analysis
Director: Eugenio Gonzalez, International Association for the Evaluation
of Educational Achievement (IEA)–ETS Research Institute
Instructors: Oliver Neuschmidt, IEA Data Processing and Research Center
Daniel Caro, IEA Data Processing and Research Center
Date: Monday, May 3, 1:00 pm–5:00 pm
Location: Hyatt Regency, Denver / Capitol Ballroom 1
Fee: $40

This course will provide an overview of the available database, methods,
and analysis procedures used in the 2007 Trends in International
Mathematics and Science Study (TIMSS). TIMSS collects achievement
data in mathematics and science at the primary and middle school levels
from more than 60 countries. Contextual background information on
the students, teachers, and schools is available. The data set is a valuable
resource for secondary analysis. In the course, the methodological
complexities of this program will be presented. Further, the course is
intended to familiarize participants with the latest TIMSS data set and
user-friendly means for correct analysis. Participants are requested to
bring laptops with SPSS and to have a basic knowledge of statistics.