

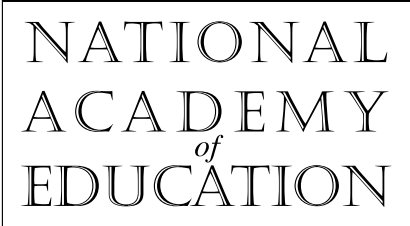
NATIONAL
ACADEMY
of
EDUCATION

Annual Meeting

University of Colorado at Boulder

October 20-21, 2006





Schedule

2006 Annual Meeting
University of Colorado at Boulder

Annual Meeting

Friday, October 20, 2006

7:30 AM.....	Breakfast	UMC 235
8:10 AM.....	Welcome	UMC 235
8:20 AM.....	Fellows Forum I	UMC 245, 247, 415
10:00 AM.....	BREAK	
10:30 AM.....	Fellows Forum II	UMC 245, 247, 415
11:45 AM.....	Lunch	UMC 235
1:00 PM.....	Celebrating 20 Years: The NAEd/Spencer Postdoctoral Fellowship Program	UMC 235
2:00 PM.....	BREAK	
2:30 PM.....	Reforming Undergraduate Teaching in the Sciences	UMC 235
4:30 PM.....	BREAK	
4:45 PM.....	Members Business Meeting (NAEd Members only)	UMC 235
	<i>OR</i> Fellows Forum Follow-Up Discussions (Fellows & non-member attendees)	UMC 247, 285, 287, 289, 415, 417
6:15 PM.....	BREAK	
7:00 PM.....	***Spencer Reception***	St. Julien Hotel & Spa
8:00 PM.....	Dinner	St. Julien Hotel & Spa

Saturday, October 21, 2006

7:45 AM.....	Breakfast	UMC 235
8:30 AM.....	Women in Science	UMC 235
10:00 AM.....	BREAK	
10:30 AM.....	School Choice	UMC 235
12:00 PM.....	Lunch	UMC 235
1:00 PM.....	ADJOURN	

Friday, October 20: Annual Meeting

7:30-8:10 AM **Breakfast** UMC 235

8:10-8:20 AM **Welcome** UMC 235
Lorrie Shepard Dean, School of Education
 University of Colorado at Boulder
 President, National Academy of Education

8:20-10:00 AM **Fellows Forum I** See Chart

Session Location	SESSION A UMC 247	SESSION B UMC 245	SESSION C UMC 415
	Chair: Luis Moll Discussant: Catherine Snow	Chair: Gene Glass Discussant: Martin Carnoy	Chair: Alan Schoenfeld Discussant: Magdalene Lampert
8:20 to 8:45	Nonie Lesaux <i>"I read it, but I don't understand it": The etiology of reading comprehension of English language learners</i>	Eric Grodsky <i>Perverse openness or virtuous cycle? The future and racial and ethnic educational stratification</i>	Noel Enyedy <i>At the intersection of classroom culture and culturally relevant pedagogy</i>
8:45 to 9:10	Tami Katzir <i>Reading fluency: The whole is more than its parts: A cross-linguistic investigation of reading fluency</i>	Miguel Urquiola <i>Vouchers and private school entry: Evidence from Chile</i>	Dor Abrahamson <i>Seeing chance: Fostering student implicit knowledge towards fluency in the domain of probability and statistics</i>
9:10 to 9:35	Amanda Godley <i>Implementing problem-posing grammar instruction in urban high schools</i>	Christopher Lubienski <i>The social geography of school choice in segregated urban areas</i>	Bryan Brown <i>Discursive identity and science learning: Teaching science as a discourse</i>
9:35 to 10:00		Stefanie DeLuca <i>Coming and going: The neighborhood and educational contexts of mobile students</i>	Jennifer Henderlong Corpus <i>Predictors and consequences of children's intrinsic and extrinsic motivational orientations: A developmental perspective</i>

10:00-10:30 AM **BREAK**

10:30-11:45 AM

Fellows Forum II

See Chart

Session Location	SESSION D UMC 247	SESSION E UMC 245	SESSION F UMC 415
	<i>Chair: Judith Singer Discussant: John Meyer</i>	<i>Chair: Andrew Porter Discussant: Edmund Gordon</i>	<i>Chair: Patricia Graham Discussant: William Reese</i>
10:30 to 10:55	Corinne Alfeld <i>The effect of educational structure on the transition to adulthood</i>	Leslie Gutman <i>Understanding the effects of school context on the academic outcomes of African American and European American adolescents from middle to high school</i>	Begoña Echeverria <i>Revitalizing Basque: Does gender make a difference?</i>
10:55 to 11:20	Emily Mann <i>Remedial services as early intervention: Evidence from the NICHD study of early child care and youth development</i>	Regina Deil-Amen <i>Awakening to a dream deferred: When aspirations meet reality in the transition to college</i>	Stephanie Waterman <i>The Haudenosaunee college experience: A different kind of engagement</i>
11:20 to 11:45		Vivian Louie <i>Developing social identities and business skills in a globalized world: The case of Chinese MBA students</i>	Benjamin Justice <i>Education and the American empire, From the founding fathers to Fallujah</i>

11:45-1:00 PM

Lunch**UMC 235**

1:00-2:00 PM

**Celebrating 20 Years:
The NAEd/Spencer Postdoctoral Fellowship Program**

UMC 235

Welcome: **Philip Distefano**
Provost, University of Colorado at Boulder

Panelists: **Patricia Graham**
Harvard Graduate School of Education

Michael McPherson
President, The Spencer Foundation

Larry Hedges
Institute for Policy Research
Northwestern University

2:00-2:30 PM

BREAK

2:30-4:30 PM

Reforming Undergraduate Teaching in the Sciences

UMC 235

Chair: **G.P. “Bud” Peterson**
Chancellor
University of Colorado at Boulder

Panelists: **Bruce Alberts**
Past President, National Academy of Sciences
University of California, San Francisco
Department of Biochemistry & Biophysics

Valerie Otero
University of Colorado at Boulder
School of Education

Carl Wieman
University of Colorado at Boulder
Department of Physics

William Wood
University of Colorado at Boulder
Department of Molecular, Cellular &
Developmental Biology

Question & Answer

4:30-4:45 PM

BREAK

4:45-6:15 PM

Fellows Forum Follow-Up Discussions

(Fellows & Non-Member Attendees)

Discussions will be led by former fellows.
(If you haven't be preassigned to a discussion group,
please join the one that interests you.)

Session A	UMC 247
Session B	UMC 285
Session C	UMC 289
Session D	UMC 415
Session E	UMC 417
Session F	UMC 287

(OR)

Members Business Meeting

UMC 235

(NAEd Members Only)

7:00-8:00 PM

*****Spencer Reception*****

**St. Julien Hotel & Spa
Ballroom Foyer**

8:00-10:00 PM

Dinner

**St. Julien Hotel & Spa
Xanadu Ballroom 2 & 3**

Saturday, October 21:

7:45-8:30 AM	Breakfast	UMC 235
8:30-10:00 AM	Women in Science	UMC 235
	Organizer: Margaret Eisenhart University of Colorado at Boulder	
	Panelists: Jacquelynne Eccles University of Michigan	
	Elaine Seymour University of Colorado at Boulder (retired)	
	Question & Answer	
10:00-10:30 AM	BREAK	
10:30-12:00 PM	School Choice	UMC 235
	Organizer: Andrew Porter Vanderbilt University	
	Panelists: Mark Berends Vanderbilt University	
	Julian Betts University of California, San Diego	
	Eamonn Callan Stanford University	
	Martin Carnoy Stanford University	
	Question & Answer	
12:00-1:00 PM	Closing Lunch	UMC 235
1:00 PM	Adjourn	

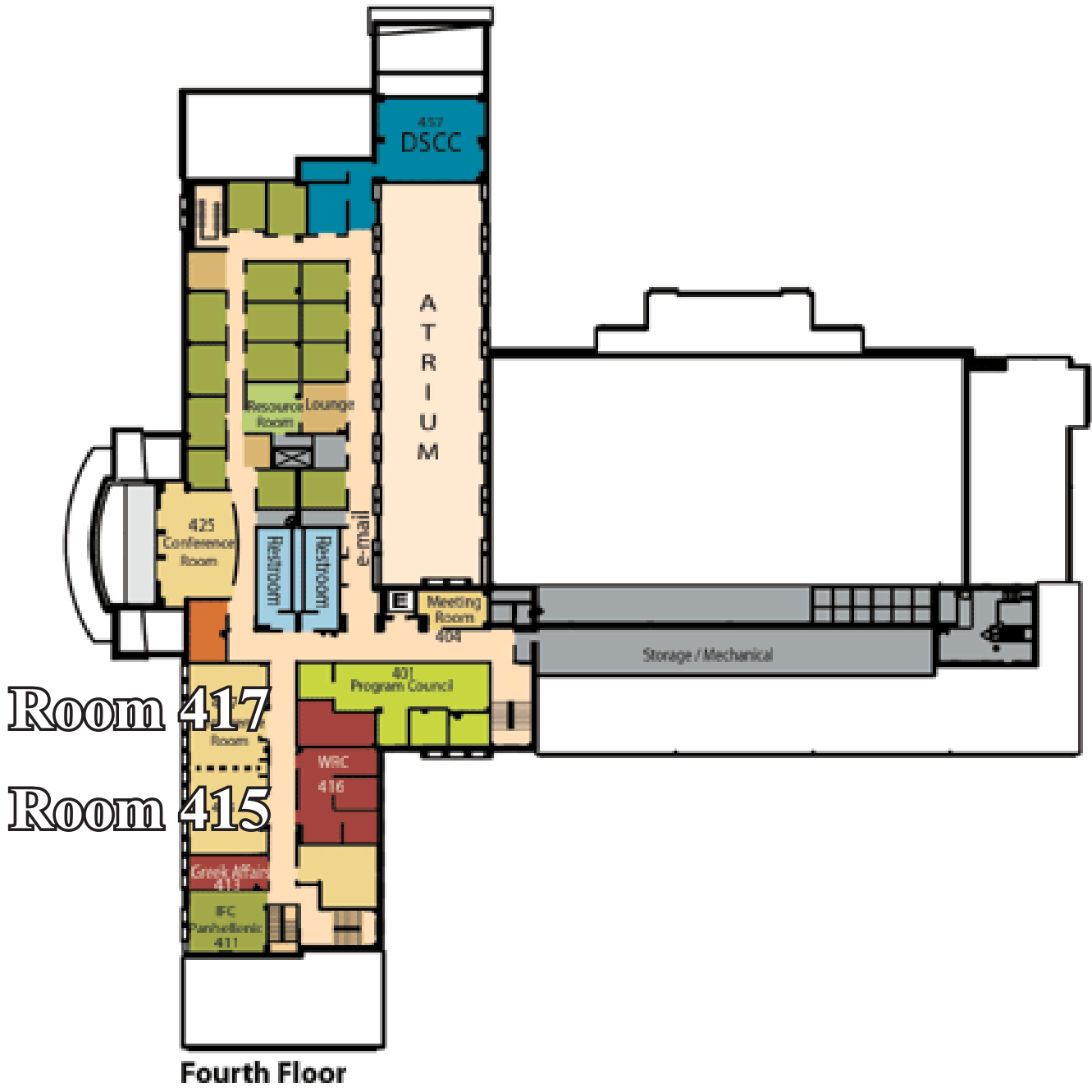
**St. Julien
Hotel & Spa**



2nd Floor



4th Floor



SESSION A - UMC 247, 8:20-9:35

Presenter:

Nonie Lesaux

Title:

I read it, but I don't understand it:

The etiology of reading comprehension of English language learners

Project Abstract: Despite low academic achievement among English language learners (ELLs) in the US, particularly with increased years of schooling, few studies have investigated the nature of reading comprehension development of this population. The purpose of this study is to examine, both concurrently and longitudinally, the relationship between oral language and literacy skills as they relate to reading comprehension performance for a group of native Spanish-speakers developing literacy skills in English. The proposed study will examine the degree to which Spanish and English oral language and word reading skills predict specific aspects of English reading comprehension performance in the middle elementary years. The participants of the study are Spanish-speaking fourth graders enrolled in an urban, public school district in the southwest U.S., and who have completed a transitional bilingual education program. The children will be assessed using a battery of language and literacy measures in Spanish and English in the spring of third and fourth grades. The analyses conducted will examine the relationships among, and relative influence of, English and Spanish language and literacy skills to English reading comprehension. Findings will inform intervention efforts for ELLs who are beyond the primary grades, and for whom reading comprehension is central to academic achievement.

Biography:

Nonie K. Lesaux is assistant professor of human development and psychology at the Harvard Graduate School of Education. Her research focuses on the reading development, and the developmental health, of children who are at-risk for learning difficulties, especially language minority learners. Her doctoral research reported on the findings of a 5-year longitudinal study that examined the development of reading, from kindergarten through grade 4, of language minority learners who entered mainstream classrooms with little or no proficiency in English, as compared to their native-speaking peers. Lesaux is currently principal investigator on a project funded by the National Institute of Child Health and Human Development that focuses on reading comprehension skills of Spanish-speaking English Language Learners. In 2003, she was a finalist in the *International Reading Association* Outstanding Dissertation Competition. Lesaux has published her work in *Developmental Psychology*, *Journal of Learning Disabilities*, and *Reading and Writing: An Interdisciplinary Journal*. Lesaux was senior research associate of the National Literacy Panel on Language Minority Learners and is a contributing author of the report of the Panel. She is a member of the International Academy for Research in Learning Disabilities, Society for the Scientific Study of Reading, and Society for Research in Child Development.

Presenter:

Tami Katzir

Title:

***Reading fluency: The whole is more than its parts:
A cross-linguistic investigation of reading fluency***

Project Abstract: Cross-linguistic studies provide a unique tool for the identification of universal processes in oral and written language, both in development and in breakdown (Bates, Devescovi, & Wulfeck, 2001). Examining the differential strengths and weaknesses of average-achieving and struggling readers in contrasting orthographies can help illumine both the more universal aspects of reading development, as well as the language-specific attributes. The aim of this study is to investigate the shared and distinctive characteristics of readers from two cultures on reading and reading fluency across Hebrew and English orthographies. We will compare the performance of 80 Hebrew- and English- speaking children with and without reading challenges in fourth grade on a battery of cognitive, linguistic, and reading measures, as well as on their attitudes towards reading and home literacy background. Implications for reading assessment and intervention in the two languages will be discussed.

Biography:

Tami Katzir is an assistant professor at Haifa University. She received her PhD in applied child development at Tufts University, and was an assistant professor at the Harvard Graduate School of Education. Her research centers on reading development and reading breakdown. Her interests revolve around three connected areas: the first represents an effort to study the intrinsic and extrinsic factors that contribute to reading fluency and comprehension. The second area concentrates on the behavioral and brain-based heterogeneity of reading disabilities in various languages including English, Hebrew, Spanish and Arabic. In her third area of interest, she is committed to research that directly bridges the theoretical and the applied; for example, the application of brain-based theories of dyslexia in the design of intervention for reading-impaired children. Taken together, this work incorporates a multidimensional approach to the investigation of the underlying causes and manifestations of dyslexia and to its prediction and intervention.

Presenter:

Amanda Godley

Title:

Implementing problem-posing grammar instruction in urban high schools

Project Abstract: In many discipline-specific areas of education – such as math, science and social studies – the focus has shifted from teaching students the content of the discipline to teaching disciplinary practices and engaging students in discipline-based debates and dilemmas. My proposed project will study this disciplinary, problem-posing approach as it is applied to grammar instruction in urban high school English classes. Because grammar is the description of language, problem-posing grammar instruction must be grounded in the disciplinary practices of linguistics – the study of languages. Research suggests that students would be better prepared for our increasingly global, multicultural, and multilingual economy if they were taught to think about language change, variety, and use as linguists do (New London Group, 1996; Wolfram, Adger & Christian, 1999). Researchers currently know less, however, about how such an approach could be implemented within the structure of US schools and how it would shape students' academic writing and understandings of language.

Using design-based research techniques, I will co-design problem-posing grammar instruction with English teachers from one, primarily African American urban school; describe the enactment of the instruction in various classrooms; and analyze its effect on student writing and understandings of language use. The

approach to grammar instruction that will be implemented is based on four design principles distilled from my current ethnographic investigation of grammar instruction and from research in literacy studies: (1) Grammar instruction must build upon students' linguistic resources, (2) Grammar instruction should teach students a linguistically accurate metalanguage for analyzing language beyond the sentence level, (3) Grammar instruction needs to provide students with access to Standard English and the tools needed to critique it, (4) Grammar instruction needs to be problem-posing rather than rule-driven.

The study will generate a more refined theoretical understanding of the kinds of linguistics-based grammar instruction that can give marginalized students access to academic dialects and foster a critical stance towards language. It will also generate grounded theoretical understandings of the interplay between public policy, urban school ecologies, and student achievement surrounding grammar instruction. Furthermore, by studying this kind of grammar instruction in a predominantly African American urban school, the study can potentially offer a solution for narrowing the academic achievement gap between African American and Caucasian students.

Biography:

Amanda Godley is assistant professor of english education at the University of Pittsburgh. Before earning her PhD in Language, Literacy and Culture at the University of California–Berkeley, she taught middle and high school English in the US and in Argentina. She currently teaches courses on classroom discourse, theories of literacy, teaching writing, and action research. Her research interests include teaching grammar as critical literacy, issues of power and equity in secondary English classes, identity and literacy, and the practice of gender through literacy. Her recent publications include *Applying Bakhtin's 'Dialogic Origin and Dialogic Pedagogy of Grammar' to current research on literacy and grammar instruction* (Journal of Russian and East European Psychology) and *Literacy learning as gendered identity work* (Communication Education). She is currently researching problem-posing grammar instruction in urban high schools.

SESSION B - UMC 285, 8:20-10:00

Presenter:

Eric Grodsky

Title:

***Perverse openness or virtuous cycle?
The future and racial and ethnic educational stratification***

Project Abstract:

Some recent work in sociology suggests that the effects of race/ethnicity on educational attainment are largely attributable to socioeconomic status and will therefore continue to wane as the minority middle class increases in size. This forecast implicitly assumes that youth benefit uniformly from their parents' socioeconomic achievements. In the proposed research, I empirically test this assumption by exploring the high school achievements, college enrollments and degree attainments of youth from the high school classes of 1972, 1982 and 1992. I hypothesize that Latino and African American students are less adversely affected than white students by poor or working class origins, but also less advantaged than white students by middle or upper class origins, and that race/ethnic difference in educational attainment remain relatively constant over this period. I discuss the implications of these hypotheses for our understanding of social stratification and for affirmative action policies. By looking at the interaction between race/ethnicity and socioeconomic status in the educational attainment process, this project will inform our understanding of the likely future of racial and ethnic educational stratification and the implications of substituting class-

based for race-based affirmative action programs.

Biography: Eric Grodsky is assistant professor of sociology at the University of Wisconsin, Madison. He worked with members of the Madison Metropolitan School District school board as he pursued his PhD in Sociology at the University of Wisconsin. He received his BA *cum laude* with departmental honors from Kenyon College in Anthropology and Sociology. His research interests include sociology of education, social stratification and quantitative methods. For his minor in education policy, he wrote the thesis, *Constrained Opportunity and Student Choice in American Higher Education*. For his MS in Sociology, he wrote the thesis *Stability and Change in Racial Inequality and Intergenerational Mobility*. He has been project assistant for Health and Human Issues at the University of Wisconsin Extension and research assistant/junior programmer with Pelavin Associates, Inc. in Washington, DC.

Presenter: **Miguel Urquiola**

Title: ***Vouchers and private school entry: Evidence from Chile***

Project Abstract: In 1981, Chile began funding public and private schools with equivalent per-student subsidies or “vouchers.” This created a dynamic educational market: more than a thousand new private, often for-profit schools opened, and the private enrollment rate increased from about 20 to 40 percent within a decade. This project addresses three questions regarding Chile’s educational market: 1) Why do private schools choose to locate in some local markets, but not in others? 2) What effect does private school entry have on the sorting of students across public and private schools within local markets? 3) What effect does private school entry have on the net outcomes of students within local markets?

Biography: Miguel Urquiola is assistant professor at the School of International and Public Affairs (SIPA) and in the Economics Department at Columbia University. His research focuses on educational issues in developing countries and the U.S., covering topics like the effects of voucher financing, class size reductions, and accountability schemes. Prior to moving to Columbia, he was an assistant professor of Economics at Cornell, and in the past also worked for the World Bank’s research department, the Bolivian government, and the Bolivian Catholic University’s MBA and public policy programs. He received a BA in Economics & Political Science from Swarthmore College and a PhD in Economics from the University of California at Berkeley.

Presenter: **Christopher Lubienski**

Title: ***The social geography of school choice in segregated urban areas***

Project Abstract: School choice is often advanced as a new civil right, where competition generated by open-enrollment, charter schools, or vouchers is thought to create more equitable educational opportunities for disadvantaged students. Yet we know very little about how competition actually impacts the behavior of different types of schools, or whole populations of public and private schools, particularly in how they engage different students — and thereby distribute options — across segregated urban landscapes. And yet the physical distribution of educational opportunities is critical because parents report geographic proximity as a central consideration in choosing schools. As with other choice-driven goods and services, competition between schools may cause some organizations to “cherry-pick” by offering services in some areas, while not in others, exacerbating overall inequalities in proximity to preferred options.

This project will examine the role of competition in generating and arranging educational options, as different types of schools respond to market competition in the most racially segregated urban area in the nation.

The project uses geo-spatial mapping to delineate positioning strategies of schools, focusing on educational options for neighborhoods across metropolitan Detroit, the largest urban area in one of the leading states for school choice. Charter and open-enrollment options are putting pressure on Michigan's public and private schools — several Detroit Catholic schools have recently closed, merged, and/or moved to more affluent suburbs, and as urban public and parochial schools are closing, charter schools have opened. These, along with open-enrollment plans, have created a competitive education market across public and private sectors in which an over-supply of seats forces public and private schools to compete for students and funding. This geographical approach allows us to see aggregate school responses to competition, and, therefore, the potential of competition across school sectors in providing equitable educational opportunities for disadvantaged students.

Biography:

Christopher Lubienski studies education policy and the political economy of education at the University of Illinois at Urbana-Champaign, where he teaches in the Department of Educational Organization and Leadership. His research examines the intersections of public and private interests in school organization and reform. After completing his Ph.D. in education policy and social analysis at Michigan State University, he participated in the Advanced Studies Post-Doctoral Fellowship Program at Brown University, where he studied incentives for curricular innovation and the equity implications of school marketing. He has recently begun using geo-spatial analyses to examine the equity effects of schools' organizational behavior in "local education markets." He is currently working with an international consortium of researchers on a project to study school governance and achievement in the context of the global privatization movement. His work has appeared in several journals, including the American Educational Research Journal, the American Journal of Education, the Congressional Quarterly Researcher, Educational Policy, Equity & Excellence in Education, Phi Delta Kappan, and Teachers College Record. He is married to Sarah Theule Lubienski, with whom he is collaborating on a study of instructional practices and achievement in public, private, and charter schools, based on NAEP data — while also collaborating with her on raising their two daughters.

Presenter:

Stefanie DeLuca

Title:

Coming and going: The neighborhood and educational contexts of mobile students

Project Abstract:

Despite the frequency of residential and school mobility in the US, little research has examined the destinations of mobile families, and even less research has examined the school destinations of mobile students. Given the demonstrated importance of both neighborhood and school context, it is critical to determine where families and children "end up" when they make a move. On the one hand, many researchers suggest that the disruptions often accompanying neighborhood moves negatively impact behavioral outcomes and school performance. By contrast, residential mobility experiments, where poor families are placed into better neighborhoods via legislative mandate, demonstrate that moving from disadvantaged neighborhoods to more affluent, safer areas can significantly improve children's educational outcomes and family life. If the quality of new schools and neighborhoods can make up for the disruption caused by moving, then some moves may be worth it. Further, many current policies, such as HOPE VI and No Child Left Behind, might increase the chances that a family will move neighborhoods and that a child will

change schools. Therefore, we need to get a comprehensive sense of the consequences of these policies for youth educational development via their impact on mobility.

Biography:

Stefanie DeLuca is assistant professor in the Department of Sociology and the Center for Social Organization of Schools at the Johns Hopkins University. She is interested in the way social context affects the outcomes of young people, primarily in adolescence and at the transition to adulthood. She earned her PhD in Human Development and Social Policy at Northwestern University. During this time she was a graduate fellow at both the Institute for Policy Research and the Joint Center for Poverty Research. She is currently engaged in several areas of research involving sociological considerations of education and housing policy issues. First, she is analyzing educational attainment, the timing of educational transitions and student effort using the National Education Longitudinal Study of 1988 (NELS:88). Stefanie's second project uses the National Longitudinal Survey of Youth 1997 to assess whether participation in career and technical education (CTE) enhances school outcomes, especially for students at risk. Two additional programs of research consider the impacts of neighborhood and social context on the educational and economic outcomes of families and young people. One study examines the long-term effects of the Gautreaux neighborhood mobility program on welfare use, employment, special education, and mobility patterns. Another project involves a mixed methods analysis of survey data and interviews with mothers and teenagers from the Baltimore site of the Moving to Opportunity Program. Stefanie's work has been published in academic journals such as *Sociology of Education*, *Social Forces*, *Demography*, *Housing Policy Debate*, *Sociological Focus* and the Brookings Institution series on Urban Policy.

SESSION C - UMC 289, 8:20-10:00

Presenter:

Noel Enyedy

Title:

At the intersection of classroom culture and culturally relevant pedagogy

Project Abstract:

The proposed project aims to investigate the ways classroom cultures (e.g., who gets to talk, when, and what counts as legitimate knowledge) mediate and navigate the tensions between the goals of culturally relevant pedagogy and the content goals of mathematics classrooms—in this case statistics. I propose to investigate this topic in the context of investigating issues of social and educational justice. Culturally relevant pedagogy promises to provide contexts where urban, and non-majority students are more engaged, develop a sense of agency and socio-political consciousness, and develop academic identities. However, when students engage with socially relevant topics they do not (nor should they) segment off the world in terms of traditional disciplinary boundaries. Students often bring with them assumptions and ways of talking that have been developed outside of school. These styles of discussion and debate can be an excellent resource for students to better understand the topics at hand, but sometimes they are not well aligned with the norms for academic discourse. In the project I will first study the informal ways students try and convince other people of some course of action outside of school. Second, I will study the academic discourse within schools. Finally, I will collaborate with teachers to create classroom cultures that are productive bridges between the two discourses and honor the goals of culturally relevant pedagogy and mathematics.

Biography:

Noel Enyedy is assistant professor of psychological studies in education in the Graduate School of Education and Information Studies at the University of California, Los Angeles. Noel Enyedy received

his PhD in Education from the University of California at Berkeley. His research addresses cognition, learning, and the development of mathematical reasoning using a framework that combines cognitive and sociocultural theories with sociolinguistics methods to simultaneously consider individual cognitive processes, external representation, and social discourse—not as separate factors, but as interdependent aspects of learning and development. Empirically this model is driven by studies that examine: the ways in which material, representational tools (e.g., visual displays, symbol systems, etc.) shape the mathematical activity, reasoning, and learning of students; the ways individuals construct meaning around these tools and representations; and the ways that mathematical discourse and discourse communities shape the learning process.

Presenter:

Dor Abrahamson

Title:

Seeing chance: Fostering student implicit knowledge towards fluency in the domain of probability and statistics

Project Abstract:

Leading mathematics education authorities have identified student understanding of probability and statistics as “essential [for being] an informed citizen, employee, and consumer.” Yet, national reports currently paint a bleak picture of students’ understanding of this subject. Student performance is especially disconcerting given that very young students already have rich everyday experiences with chance. If students can generally make sense of addition and subtraction on the basis of understanding simple situations, why can they not leverage their implicit understanding of probability towards formalizing this understanding mathematically? Perhaps prevalent classroom learning supports do not engage these implicit understandings. I propose to identify, typify, and tap students’ early notions for this domain and explore potential learning paths towards mastery of the central ideas of probability and statistics. To do so, I will work closely with elementary and middle-school students to observe their strengths and challenges in negotiating between their unarticulated intuitions and a set of objects and computer-based activities I have been creating. The proposed methodology is ‘design research’: through cycles of implementation, analysis, and modification, I will home in on concrete and virtual forms that enable students to express their knowledge and link it to formal mathematical notations. The learning-and-facilitation tools are designed for students to ground, within a coordination of combinatorial analysis and simulations of probability experiments, an appreciation and understanding of the ineluctable determinism of emergent distributions of stochastic events. One direction of the planned research is to explore the temporal–spatial and additive–multiplicative relations inherent in various visual representations of stochasm. That is, I will investigate: (a) learners’ resources that enable them to understand outcomes of probability experiments that are experienced dynamically yet represented statically; (b) learning issues of students’ additive vs. multiplicative reasoning; and (c) design issues, e.g., how implicit visual cues enable or constrain spatial–temporal and additive–multiplicative coordination.

Biography:

Dor Abrahamson is assistant professor of cognition and development at the Berkeley Graduate School of Education. He received his BMu in Performing Arts (Cello) from the Jerusalem Academy of Music; his MA in Cognitive Psychology (magna cum laude) from the Tel Aviv University; and his PhD in Learning Sciences from Northwestern University. At Northwestern, he joined the School of Education and Social Policy, where he completed the Learning Sciences doctoral program under the supervision of Dr. Karen C. Fuson. In his doctoral dissertation, *Keeping Meaning in Proportion: The Multiplication Table as a Case of Pedagogical Bridging Tools*, Dor developed insights from an implementation of an

innovative unit on multiplicative reasoning that led to a model of student situated mathematical learning. Dor then pursued a postdoctoral position under the supervision of Dr. Uri Wilensky at the Center for Connected Learning and Computer-Based Modeling, where he did further design research on the topics of probability and basic statistics. Abrahamson's research and teaching interests span a range of theoretical and pragmatic domains relating to the learning and teaching of mathematics with an emphasis on the design and research of mixed-media learning supports. Abrahamson recently co-authored with Karen C. Fuson a chapter in *Handbook of Mathematical Cognition*. He is a member of the American Educational Research Association, the International Society of the Learning Sciences, the International Group for the Psychology of Mathematics Education, and a member of the editorial board of the *International Journal of Computers for Mathematics Learning*. Dor has recently accepted an Assistant Professor position at the University of California, Berkeley Graduate School of Education. Dor is married to Gabrielle and they have a daughter, Neomi and a son, Evyatar.

Presenter:

Bryan Brown

Title:

Discursive identity and science learning: Teaching science as a discourse

Project Abstract: This research project proposes the empirical investigation of a pedagogical approach designed to promote science literacy development for ethnically and linguistically diverse students. The Directed Discourse Approach to Science Instruction builds upon the notion that science language has the potential to serve as a gatekeeper for minority students, and uses an approach that teaches science as a discourse. The instructional method proposes teaching the primary ideas associated with a subject of study free from detailed science language. This study proposes a two-year mixed methodological study of an urban science class in Oakland, CA. The investigation will assess the performance of an experimental and control classroom by examining their academic performance and use of science discourse in the classroom. The academic performance of both classes will be examined through the administration and analysis of pre and post-test examinations of student performance over the course of 6 academic units. Students use of science discourse will be examine through collection and analysis of video data and student written work [exams, journals, and classroom notes]. The analysis of discourse will be of two sorts: (1) Video will be coded for emerging themes and patterned linguistic behavior. (2) The written samples will be coded for patterns of common practice, re-coded based on the initial coding system, and contrasted across both classrooms.

Biography:

Bryan A. Brown is assistant professor of teacher education at the Stanford School of Education. He received his BS in Biological Sciences from Hampton University and his PhD in Science Education from the University of California, Santa Barbara. Dr. Brown served a one-year term as a visiting professor as a part of Michigan State University's teacher education department. During this term, he worked as an instructor for the teacher education department's science intern methods course, co-taught a graduate course on national science education standards and reform, co-taught a course on science literacy, and taught a class on scientific inquiry. Currently, Dr. Brown is conducting research and teaching in the Curriculum Studies and Teacher Education (C&TE) and the Stanford Teacher Education Program (STEP) within the Graduate School of Education at Stanford University. In this position, Dr. Brown's research examines the relationship between student language practices, identity, and classroom learning. He focuses on the social connotations and cultural politics of science discourse in small-group and whole-group interaction. His approach to science educational research is one founded on the principles of discourse analysis, social constructivism, and the history and philosophy of science. Additionally, his research work in

science education examines how teacher and student discourse serve to shape learning opportunities for students in science classrooms. Dr. Brown's work in science education in urban communities focuses on developing collaborative curricular cycles and classroom pedagogy based on developing discourse intensive instruction for urban learners. He is also the founder and director of the Etu Schule (KiSwahilli for "Our Schools") Educational Project, a non-profit academic outreach program designed to teach study skills to urban students.

Presenter:

Jennifer Henderlong Corpus

Title:

Predictors and consequences of children's intrinsic and extrinsic motivational orientations: A developmental perspective

Project Abstract:

In ancient times scholars worked for their own improvement; nowadays they seek only to win the approval of others. --Confucius, Analects 14.24 (551-479 BCE)
Work can be done, as Confucius suggests, as a means to an end (an *extrinsically* motivated pursuit) or as an end in itself (an *intrinsically* motivated pursuit). In the academic domain, intrinsic motivation, relative to extrinsic motivation, is associated with a host of adaptive behaviors, such as challenge seeking and involvement in school. However, research consistently reveals that children's levels of intrinsic – but not extrinsic – motivation dissipate as they progress through the elementary- and middle-school years. The current project seeks to identify the constellation of beliefs and goals that enable some children to maintain an intrinsic orientation while their peers are showing substantial declines in intrinsic motivation. Using a cross-sequential design with two time points, I am investigating the relationship between children's intrinsic and extrinsic motivational orientations and their beliefs about the malleability of intelligence, personal achievement goals, perceived goal emphasis of their teachers, and performance outcomes. Establishing a framework of inter-related motivational concepts will point to potential precursors, consequences, and correlates of intrinsic and extrinsic motivations, which could then be tested via experimentation.

Biography:

Jennifer Henderlong Corpus is assistant professor of Psychology at Reed College, where she teaches courses in developmental psychology and human motivation. She received her BA in Psychology from the University of Michigan, and her MA and PhD in Developmental Psychology from Stanford University, where her dissertation work was supported by the Spencer Foundation. Prior to joining the faculty at Reed College in 2001, she was a National Institute of Mental Health (NIMH) postdoctoral fellow at the University of California, Los Angeles. Her research interests include intrinsic and extrinsic motivation, praise and reward systems, and children's self-regulation of motivation, each of which she examines from a developmental perspective. She has published in the Journal of Educational Psychology, Contemporary Educational Psychology, Human Development, and Psychological Bulletin. She was awarded the Stanford Centennial Teaching Assistant Award and co-authored *The effects of person versus performance praise on children's motivation: Gender and age as moderating factors* with Lepper, M. R..

SESSION D - UMC 247, 10:30-11:20

Presenter:

Corinne Alfeld

Title:

The effect of educational structure on the transition to adulthood

Project Abstract: What happens to youth who don't enroll in a 4-year college? Evidence shows that many drift in and out of jobs and community/technical colleges, often without receiving credentials or other resources that would put them on a career path. What happens to these individuals in young adulthood? If they do get training, a degree, or a certification, where do they do so and is it sufficient? Developmental researchers such as Arnett (2000b) have identified a new, normative period of time called "emerging adulthood" where young people may still be exploring their options. Is this really developmentally beneficial? Other industrialized countries (e.g., Germany) provide much more structure for their students making the transition to work or further education. This research project primarily draws on a longitudinal dataset of U.S. youth, and secondarily on a similar dataset of German youth, to better understand the multiple possible educational and work trajectories and outcomes during the transition to young adulthood.

Biography:

Corinne Alfeld is research associate currently serving as the Deputy Director of the National Research Center for Career and Technical Education at the University of Minnesota. She received her BA in Psychology from Vassar College, her MA in Developmental Psychology from George Washington University, and her PhD in Education & Psychology from the University of Michigan. After receiving her PhD in Educational Psychology from the University of Michigan in 1999, she spent one year as a postdoctoral research fellow at the Max Planck Institute for Human Development in Berlin, Germany studying the difference in educational structures for non-university bound students in Germany and the United States. After returning to the U.S., she worked as a research analyst at the National Science Foundation and the United Negro College Fund in the Washington, DC area before moving to Minnesota. Her interests focus on access to secondary and post-secondary educational and work opportunities for less advantaged populations of adolescents and young adults. Her perspectives are those of developmental psychology, sociology, and educational policy.

Presenter:

Emily Mann

Title:

***Remedial services as early intervention:
Evidence from the NICHD study of early child care and youth development***

Project Abstract: The purpose of this research is to evaluate the effects of early remedial and special education services on academic achievement and social development using data from the first three phases of the National Institute of Child Health and Human Development (NICHD) Study of Early Child Care and Youth Development (SECCYD). Children placed in remedial services and special education early in elementary school (K-2) will be studied to determine if placement in remedial services or special education influences their social and academic trajectories through elementary school (grade 5) and serves as a natural intervention. Specifically, comparisons on child outcomes will be evaluated between children who receive low levels of educational remediation (i.e. reading assistance, tutoring), high levels of special education (i.e. full or part time resource room), and children who receive no special educational services. The purpose of the present research is twofold. First, I will examine whether social and academic outcomes vary for children with different initial identification criteria (i.e. between children placed in high or low levels of special

educational services). Second, I will explore whether and how this relation is influenced by other child, family, and school factors over time.

Biography:

Emily A. Mann received a Master's of Science in Social Work (MSSW) (1998) and a Ph.D. in Social Welfare (2003) from the University of Wisconsin-Madison. In her dissertation, entitled "Early intervention as delinquency prevention: Evidence from the Chicago Longitudinal Study," Emily investigated the early predictors and pathways of delinquent behavior and explored the role of early intervention and family support on adolescent problem behavior. From 2003 to 2005, Emily participated in the Clinical Research Training Program (CRTP) in Biological and Social/Developmental Psychiatry at Judge Baker Children's Center, Harvard Medical School. Her postdoctoral research, which used data from the NICHD Study of Early Child Care and Youth Development, investigated the early predictors of special educational services, as well as the role of the early child care experience on special education outcomes. As a CRTP fellow, Emily also began "Bridge the Gap," a pilot home visiting preschool intervention for former low birth weight babies. This program was supported by the Deborah Munroe Noonan Foundation and the Robert Wood Johnson Foundation and was designed to examine the feasibility of establishing pre-academic and social skills based intervention for at-risk children and their families. In the fall of 2005, Emily joined the faculty of Bridgewater State College in the graduate department of Social Work. She currently teaches in the areas of human behavior and social work research.

SESSION E - UMC 285, 10:30-11:45

Presenter:

Leslie Gutman

Title:

Understanding the effects of school context on the academic outcomes of African American and European American adolescents from middle to high school

Project Abstract:

The following study examined how characteristics of the school context contribute to ethnic, gender, and socioeconomic differences in students' academic outcomes from middle to high school. Data included 945 African American and European American adolescents in 23 middle schools in a large county in Maryland. Using HLM, a three-level model was examined which waves of data were nested within students which in turn were nested within schools. School characteristics included percent the proportion of African American students, proportion of gifted programs, and mean achievement test scores. Academic outcomes included grade point average, intrinsic motivation, extrinsic motivation, and academic importance. Highlighted findings indicate that although European American and higher SES students had a higher GPA than African American and lower SES students, none of the school-level variables examined explained these differences. However, low SES students reported a greater increase in academic importance in schools with gifted programs compared to high SES students. Gifted programs also increased the rate of extrinsic motivation for African American students, whereas they increased the rate of intrinsic motivation for European American students.

Biography:

Leslie Gutman is quantitative research officer at the Centre for Research on the Wider Benefits of Learning at the Institute of Education, University of London. She received her PhD in the Combined Program in Education & Psychology and her MA in Psychology from the University of Michigan-Ann Arbor. She was a research investigator in the Gender and Achievement Research Program at the University of Michigan. Her research focuses on the factors that impede and support healthy developmental trajectories with a

strong interest in ethnic minority children and adolescents. Three central issues underlie her work: the study of risk and resilience, the role of ecological influences during critical developmental transitions, and the effects of school context on students' academic achievement. She is principal investigator of a project with data from African American parents, adolescents, teachers, and principals collected during the middle school transition (Wave 1), high school transition (Wave 2), and the transition to young adulthood (Wave 3). This research project has been supported by the Spencer Foundation Dissertation Fellowship (1997-1998), Spencer Foundation Small Grants Program (1999-2000), and the National Poverty Center at the University of Michigan (2004-2005). She is also co-investigator of a longitudinal study of high-risk individuals spanning from infancy to young adulthood funded by the National Institute of Mental Health-Centers for Behavioral Sciences Research. She wrote *How student and parent goal orientations and classroom goal structures influence the math achievement of African Americans during the high school transition*.

Presenter:

Regina Deil-Amen

Title:

Awakening to a dream deferred: When aspirations meet reality for low-income minority students in their transition to college

Project Abstract: This study uses in-depth, open-ended qualitative interviews to explore the sense-making activities of graduates of five high-poverty, racial minority high schools with regard to their college knowledge and plans and their actual implementation of these plans. More specifically, I examine how and why the college degree goals and aspirations of a group of low-income, Black and Latino, high school students change over time.

The students were interviewed and surveyed in their senior year in high school regarding their college and career plans, aspirations, knowledge about college and admissions and financial aid procedures, attitudes toward school, and the level and type of support, encouragement, and information from their family, school, and peers. These students are being re-interviewed at the end of what, according to their plans, should be their first year of college and again after what should be their second year of college.

Prior theory and research suggest that community college students experience a “cooling-out,” or lowering of their aspirations, but researchers have not directly examined the thoughts and decision-making experiences of students over time as they enter and exit different post-secondary contexts. Analyses compare the differences between students who enroll in community colleges and students who enroll in other types of colleges with regard to a) the content and certainty of their the initial aspirations, b) whether or not their aspirations become stronger, weaker, altered, or reformulated and c) the reasons for changes in their aspirations, with particular attention paid to institutional influences.

This study may highlight the potential ramifications of a paradox that exists within our ‘open access’ educational structure. I explore the possibility that these students are deceived by a ‘college-for-all’ ideology that encourages the pursuit of a college degree in a postsecondary context in which such an attainment is highly unlikely, particularly for the population of students in the study. Are these students’ hopes and plans unrealistically high? Is their knowledge of college so limited as to inhibit their ability to construct realistic strategies regarding their future?

Biography: Regina Deil-Amen is sociologist and assistant professor in the Educational Theory and Policy Program at Pennsylvania State University. She received her PhD in Sociology from Northwestern University. She is the author of several articles and a forthcoming book based on her research exploring how community colleges and private postsecondary vocational colleges structure students' educational experiences and prepare students for sub-baccalaureate careers. She served as a research director at Northwestern University's Institute for Policy Research for a study entitled College to Careers - a mixed methods case study of the organizational structures of community colleges and private postsecondary career/technical, or "occupational," colleges and how these institutions prepare students for sub-baccalaureate careers. She is currently working on a book with James Rosenbaum that details the findings of this study. Her area of expertise is sociology of education/higher education, and her research interests include mechanisms of educational stratification and inequality, the impact of community colleges on student aspirations and persistence, and the dynamics of race, ethnicity and social class in educational settings. Her most recent research involves a qualitative study of urban, low-performing, low SES, community college bound students' transition from high school to community college. She wrote *Women's Movement into Technical Fields: A Comparison of Technical and Community Colleges*, and *Going Coed in the Twentieth Century: Women's Experiences in Formerly Men's Colleges and Universities, 1950-2000*.

Presenter: **Vivian Louie**

Title: ***Developing social identities and business skills in a globalized world:
The case of Chinese MBA students***

Project Abstract: This study examines the processes of social identity formation and business skills acquisition in a globalized world among MBA students from the People's Republic of China. I focus on Chinese students studying in elite Master's of Business Administration programs in the United States for the following reasons. The MBA provides the professional knowledge sought by developing nations like China, with an emphasis on global markets, and a premium on global skill sets such as flexible and creative thinking skills and cross-cultural teamwork. Chinese students are consequently engaged with learning processes that differ from the educational system in China. Additionally, Chinese students are involved in identity processes related to migration as they navigate elements of new and old cultural contexts. This study will draw on longitudinal interviews and case studies to chart how Chinese adults experience and are transformed by the learning and cultural identity processes of global postgraduate exchange.

By focusing on the Chinese case, this study addresses a key gap in the literatures: namely, the ways in which students, who come to the United States through postgraduate exchanges, interact with the American social context, and how this maps onto immigration paradigms; how Chinese students educated in an examination-based system experience the learning of global skill sets; and lastly, how their identities are transformed by migration, and relatedly, how they make choices about returning to China. A MBA program is an ideal venue in which to explore such matters, as Chinese international students will be engaged in acquiring the content that can facilitate participation in the global marketplace through the learning processes necessitated by globalization. The findings will shed light on the types of policies that would facilitate the learning processes in global postgraduate exchanges, and will provide a point of departure for future research on returning graduate students, who have been trained in elite institutions of business management, and their role in shaping China.

Biography:

Vivian Louie is a sociologist who focuses her research on how immigrants and the children of immigrants learn about and engage with the K-16 and graduate educational system in the United States, and develop identities. She is particularly interested in comparisons across and within immigrant groups, as well as with native born American groups. In one stream of research, Louie has focused on how second generation individuals (American born or reared children of immigrants) learn about college and the paths they take to get there, and the identities they form as they are incorporated into American life. Her book, *Compelled to Excel: Immigration, Education, and Opportunity among Chinese Americans*, examines such issues among second generation Chinese Americans. She is presently working on a book manuscript currently titled, *Crossing Borders in America: Dominican and Colombian Experiences of Immigration and Education*. Her publications have appeared in the *International Migration Review*, *Identities*, *Teacher's College Record*, and the *Review of Research in Education*, and peer-reviewed edited volumes. Louie is pursuing a second line of inquiry on the messages and practices immigrant parents give to their young second generation children around ethnic language, assimilation, and education. Here, she examines language as central to assimilation and identity processes, rather than as an indicator of assimilation. Louie's third line of inquiry examines the development of social identities and business skills among MBA students from the People's Republic of China studying in the United States. This study examines the ways in which Chinese international MBA students, who embody transnational lives, interact with the American social context, and how this maps onto immigration paradigms, and the ways in which they experience the learning of global skill sets. She is assistant professor at the Harvard Graduate School of Education, and received her A.B. from Harvard University, M.A. in Communication from Stanford University, and Ph.D in Sociology from Yale University. She has previously worked as a newspaper journalist, and a lecturer in Sociology at Harvard.

SESSION F - UMC 289, 10:30-11:45

Presenter:

Begoña Echeverria

Title:

Revitalizing Basque: Does gender make a difference?

Project Abstract:

Hundreds of languages are in danger of extinction; with each language that is lost, we lose an important part of our cultural heritage. Many endangered language communities try to revitalize the use of their language by teaching it in schools and requiring proficiency in it for certain occupations. Scholars who study movements to revitalize languages often assume that there will be an automatic fit between the movements' goals and those of their target audience—that individuals will use or pass on the language if it becomes more instrumentally advantageous to do so. However, in order to fully understand the outcomes of language revitalization efforts, we must go beyond discussion of “instrumental value.” Rather “to the extent that speakers conceptualize language as socially purposive action, we must look at their ideas about the meaning, function and value of language[s]” (Woolard & Schieffelin 1994: 70). Focusing on the Basque case, this research uses a language ideology approach to examine how gender affects the linguistic, educational and occupational choices of young people in their post-secondary school years. As such, it will potentially inform revitalization efforts in hundreds of other endangered language communities—including indigenous and immigrant language communities in the United States.

Biography:

Begoña Echeverria is assistant professor in the Graduate School of Education at the University of California, Riverside. She received her bachelor's degree in Human Biology from Stanford University, and her

master's degree and PhD in Sociology from UC San Diego. She received a Regents' Faculty Fellowship in 2003 and an Academic Senate Research Award in 2004. She is currently part of a project that studies the relationships between science curriculum, organizational culture, federal policy, and identity among ethnic minorities in the United States. She has also tried to address educational inequities by offering free writing help with personal statements for local high school students, most of whom are ethnic minorities.

Presenter:

Stephanie Waterman

Title:

The Haudenosaunee college experience: A different kind of engagement

Project Abstract: This qualitative study will extend to a larger group of participants the author's Ph.D. dissertation research on how Haudenosaunee (Iroquois) college graduates constructed pathways to their degree completion. No analysis of this kind about Haudenosaunee college graduates existed before. Findings from the original study of twelve participants were that the pathways were complex because of the participants' dedication to their culture and family. The participants in the study did not "break away" from communities of their past; all found their greatest support from their family. Participants embarked on a double curriculum; that of their academic program and a Haudenosaunee language class or involvement in their traditional culture. The participants resembled adult returning students even when they were college aged and living on campus. The men students received more mentoring than the women, and reported richer, more intense experiences than the women. All participants negotiated their college experience with agency and resistance, maintaining their cultural integrity as defined by Deyhle (1995). The study now planned, will extend the number of participants to provide greater knowledge about this population. The participants will relate their experiences on the path to degree completion through open-ended interviews starting with their K-12 experiences, including the role of family, community, high school guidance, and access issues such as GED attainment and community college experiences.

Biography:

Stephanie J. Waterman of the Onondaga Turtle Clan is a lifelong resident of the Onondaga Nation and graduate of the Onondaga Indian School. She still lives in the very house she grew up in an extended family arrangement. She earned a BA in Psychology from the College of Arts and Sciences through University College of Syracuse University. After 19 years of employment, Stephanie retired from her formal duties at Syracuse to pursue her doctorate. She graduated in May 2004 with a doctorate in Higher Education Administration. Her research interests include Native American college experiences, the academic transition to college, indigenous and feminist methodologies, and staff involvement in college student retention. Waterman's research is unique in that she demonstrates an ability to provide a powerful portrait of student lives while carefully negotiating the interface between herself as a Haudenosaunee and her role as researcher. Her voice as a Haudenosaunee never waivers, nor does her willingness to "stand aside" in her role as researcher. She has taught courses in the areas of educational policies on Native American education, sociology, and issues of race, class, and gender in higher education. Currently, she is teaching a Freshman Forum class for the School of Education. Stephanie has been named Faculty Associate by the Vice Chancellor's office for the new Native Student Program. She is also working on a project called Students' Learning and the Transition from High School to College. She was recently named "runner" for the Onondaga Nation, serving as its liaison with Syracuse University.

Presenter:

Benjamin Justice

Title:

Education and the American empire, From the founding fathers to Fallujah

Project Abstract: This book project examines the development of imperial educational ideology in the United States. Using case studies, it examines the ways in which Americans developed and applied a narrative of civic and social identity. The book's central argument is that Americans inherited their narrative from the British Empire and then adapted it to their unique circumstances. As Americans built an empire in the West, and then expanded into the global theater, they understood formal education to be a central component of what it meant to be a free citizen in a free society—even as they established exploitative and repressive regimes and exploited the natural resources of those they “liberated.” The book will conclude by examining how this pattern has played out in the contemporary nation-building ventures in Iraq and Afghanistan. Case studies include: 16th century colonial efforts to educate Native Americans; seventeenth century efforts to educate German speakers in Pennsylvania; the role of education in the ideology and policies of the Founding Fathers; the creation of Liberia; the conquest of the Confederate States of America; the “liberation” of the Philippines, the post-war reconstruction of Japan, a possible chapter on Vietnam, and the current effort in the Middle East.

Biography:

Benjamin Justice is assistant professor of education and (by courtesy) history, and co-director of the Social Studies Education Program at the Graduate School of Education at Rutgers University in New Brunswick, New Jersey. He holds a BA in History from Yale, and both an MA in History and PhD in History of Education from Stanford University. His research interests include religion and public education, social and civic education, prison education, the art and politics of Thomas Nast, and the political uses of history in nation building. His recently published *The War That Wasn't: Conflict and Compromise in the Common Schools of New York State* examines the ways in which democratic, local control of common schools interacted with religious diversity in an age of political polarization. Dr. Justice's other works focus on a variety of topics, including prison education, civic education, the art and politics of Thomas Nast, and the political uses of history today.

Bruce Alberts

Bruce Alberts, a respected biochemist with a strong commitment to the improvement of science and mathematics education, has returned to the Department of Biochemistry and Biophysics at the University of California, San Francisco, after serving two six-year terms as the president of the National Academy of Sciences (NAS). During his tenure at the NAS, Alberts was instrumental in developing the landmark National Science Education standards that have been implemented in school systems nationwide. Alberts is also noted as one of the original authors of *The Molecular Biology of the Cell*, a preeminent textbook in the field now in its fourth edition. For the period 2000 to 2009, he serves as the co-chair of the InterAcademy Council, a new organization in Amsterdam governed by the presidents of 15 national academies of sciences and established to provide scientific advice to the world. Committed in his international work to the promotion of the “creativity, openness and tolerance that are inherent to science,” Alberts believes that “scientists all around the world must now band together to help create more rational, scientifically-based societies that find dogmatism intolerable.” Widely recognized for his work in the fields of biochemistry and molecular biology, Alberts has earned many honors and awards, including 15 honorary degrees. He currently serves on the advisory boards of more than 15 non-profit institutions. He is an overseer at Harvard University, a trustee of the Carnegie Corporation of New York, a trustee of the Gordon and Betty Moore Foundation, and the president-elect of the American Society of Cell Biology.

Mark Berends

Mark Berends is associate professor of Public Policy and Education in the Department of Leadership, Policy, and Organizations at Vanderbilt University. He also is director of the National Center on School Choice, funded by the U.S. Department of Education. His latest book is *Examining gaps in mathematics achievement among racial-ethnic groups, 1972-1992* (RAND), and he is currently coediting two books on school choice entitled *Charter Schools: Their Growth and Outcomes* and *Handbook of Research on School Choice* (Lawrence Erlbaum Associates). Throughout his research career, he has focused on how the organization of schools and classroom instruction are related to student achievement, with special attention to disadvantaged students. For example, he led the summative evaluation of the New American Schools (NAS) whole-school reform effort in various districts across the United States. At the time, NAS was the largest privately funded reform effort aimed at developing “break the mold” schools to promote student achievement in urban settings. Due to his research on NAS, the U.S. Department of Education requested his participation in the national evaluation of Title I and of the Comprehensive School Reform programs. Alongside these evaluations, he examined the relationships of changing families and schools on student achievement between 1972 and 2004 to better understand how these changes during differ periods of reform relate to the achievement black-white and Latino-white achievement gaps. A key outcome of this work was that secondary school curriculum differentiation (tracking) became more flexible for black and Latino students, which was one of the factors associated with the closing of the achievement gap. Relying on experimental and quasi-experimental designs, his current research and evaluation projects focus on the effects of school choice (e.g., charter and magnet schools) on student achievement growth and on the scaling-up of a peer-assisted learning strategies program and early reading achievement. Using additional survey and observational methods to understand the instructional conditions within these choice and reading programs plays a prominent role in these various projects.

Julian Betts

Julian Betts is professor in the Department of Economics at the University of California, San Diego, and a senior fellow at the Public Policy Institute of California, where he published several books on education policy. He received his PhD in Economics from Queen's University, Kingston, Ontario. His expertise lies in K-12 education, educational standards, the relationship between school quality and cost, the economics of unions, and the effect of new technologies on workers' earnings. He is a member of the National Technical Review Panel for the Longitudinal Study of No Child Left Behind, and also serves on a Congressionally mandated National Academy of Sciences' Committee on Evaluation of Teacher Certification by the National Board for Professional Teaching Standards (NBPTS) and the technical working group for the federal Impact Evaluation of the D.C. Choice Program. He was previously a member of the National Working Commission on Choice in K-12 Education at the Brookings Institution, and the National Academy of Sciences' Committee on Improving Measures of Access to Equal Educational Opportunity.

Hilda Borko

Hilda Borko is professor of education and chair of the educational psychology program area at the University of Colorado at Boulder. She received her BA in psychology, her MA in philosophy education, and her PhD in educational psychology from the University of California, Los Angeles. Borko's research explores teacher cognition and the process of learning to teach, with an emphasis on changes in novice and experienced teachers' knowledge and beliefs about teaching, learning, and assessment; classroom practices; and professional identities as they participate in reform-based teacher education and professional development programs. Her teaching interests are in the related areas of classroom processes, teaching for understanding, and learning to teach. Borko is a member of numerous professional organizations in education and psychology and has served as a member and chair of various committees for the American Educational Research Association and Educational Psychology Division of the American Psychological Association. She was editor of the teaching, learning, and human development section of the American Educational Research Journal and interim editor (with Lorrie Shepard) of Educational Researcher. She served as President of the American Educational Research Association (2003-2004). She is incoming editor of Journal of Teacher Education (with Dan Liston and Jennie Whitcomb). She received the National Council of Teachers of Mathematics award for the outstanding article published in the Journal for Research in Mathematics Education in 1992.

Eamonn Callan

Eamonn Callan is Pigott Family Professor in the Stanford University School of Education. He is a philosopher of education whose work draws heavily on contemporary moral and political theory. His principal interests are in civic and moral education and in the application of theories of justice and democracy to problems in educational policy and practice. He received his undergraduate and masters degrees from the National University of Ireland and his doctorate in the philosophy of education from the University of Alberta. His many publications include *Creating Citizens: Political Education and Liberal Democracy and Autonomy and Schooling*.

Martin Carnoy

Martin Carnoy is professor of education and economics at Stanford University. After graduating from Caltech with a BS in electrical engineering and the University of Chicago with a PhD in economics, he worked at The Brookings Institution for four years, writing on Latin American trade and development. In 1969, he came to the School of Education at Stanford, where he helped build the International and Comparative Education Program. Carnoy has written extensively about education and economic development, the political economy of the United States, the role of the state in social change, and the changing international economy. Some of his books are *Economic Democracy* (with Derek Shearer), *A New Social Contract* (with Derek Shearer and Russell Rumberger), *The State and Political Theory*, *Education and*

Work in the Democratic State (with Henry Levin). Carnoy writes regularly for international organizations such as the ILO, UNESCO, the Inter-American Development Bank, the OECD, and the World Bank. He is also the editor of the recently published *International Encyclopedia of the Economics of Education*. Carnoy is currently president of the Comparative and International Education Society.

Michael Cole

Michael Cole is university professor of communication, psychology, and human development and director of the Laboratory of Comparative Human Cognition at the University of California, San Diego. He received his BA from the University of California, Los Angeles, and his PhD from Indiana University. He conducted postdoctoral research with Alexander Luria at Moscow State University. His subsequent research has focused on the role of culture in human development with a special emphasis on the role of education as a sociocultural institution. Cole is a member of the American Academy of Arts and Sciences and the Russian Academy of Education. His publications include *Cultural Psychology: A Once and Future Discipline*, *The Psychology of Literacy* (with Sylvia Scribner), and *The Development of Children* (with Sheila Cole).

Allan Collins

Allan Collins is professor emeritus of Education and Social Policy at Northwestern University. He is a member of the National Academy of Education, a fellow of the American Association for Artificial Intelligence, and served as a founding editor of the journal *Cognitive Science* and as first chair of the Cognitive Science Society. His research in education centers on design research, learning communities, epistemic forms and games, cognitive apprenticeship, situated learning, and systemic validity in assessment. He is best known in psychology for his work on semantic memory and mental models, in artificial intelligence for his work on plausible reasoning and intelligent tutoring systems, and in education for his work on inquiry teaching, cognitive apprenticeship, situated learning, epistemic games, and systemic validity in educational testing. From 1991 to 1994 he was co-director of the US Department of Education's Center for Technology in Education centered at Bank Street College of Education. His publications include *The Cognitive Structure of Emotions* (with Andrew Ortony and Gerald Clore), *Readings in Cognitive Science* (edited with Edward Smith), and *Cognitive Apprenticeship: Teaching the Crafts of Reading, Writing, and Arithmetic* (with John Seely Brown and S.E. Newman).

Jacquelynne Eccles

Jacquelynne Eccles is Wilbert McKeachie Professor of Psychology, Education, and Women's Studies at the University of Michigan. She received her BA from the University of California, Berkeley, and her PhD from the University of California, Los Angeles. Eccles has received the James McKeen Cattell Award, the Sarah Goddard Power Award, and the Kurt Lewin Award. She is a fellow in the American Psychological Association and the American Psychological Society, and past president of the Society for Research on Adolescence. Her publications include *The Psychobiology of Sex Differences and Sex Roles* and *Managing to Make It*. Her research focuses on school, family, and peer groups as contexts for social and cognitive development.

Margaret Eisenhart

Margaret Eisenhart is university distinguished professor and Charles Professor of Educational Anthropology and Research Methodology at the University of Colorado at Boulder. She received her undergraduate degree in french literature from Emory University and her masters and doctorate degrees in anthropology from the University of North Carolina, Chapel Hill. Her research focuses on the application of anthropological concepts and methods to educational settings. In particular, Eisenhart has studied culture, gender relations, women's experiences, and women in science. She has conducted research in elementary and secondary schools, colleges, universities, and work places. Her most important works include: *Educated in Romance: Women, Achievement, and College Culture* (with Dorothy Holland); *Women's Science: Learning and Succeeding from the Margins*

(with Elizabeth Finkel); and *Designing Classroom Research* (with Hilda Borko). Her teaching areas are anthropology and education, ethnographic research methods, and introduction to research design. She is a fellow of the American Anthropological Association and an active participant in the Council on Anthropology and Education. Eisenhart is director of the Center for Youth in Science, Culture, and New Media, an umbrella organization for the University of Colorado's School of Education's outreach and research initiatives in the Five Points community of urban Denver. Eisenhart was the 2001 recipient of the Elizabeth Gee Award for outstanding contributions to research, teaching, and service for women. In 2003, she won the university's highest honor, the Distinguished Research Lectureship Award for a career of outstanding scholarship.

Frederick Erickson

Frederick Erickson is George F. Kneller Professor of Anthropology of Education at the University of California, Los Angeles (UCLA), where from 2000-2006 he has also been director of research at the Corinne A. Seeds University Elementary School, UCLA's laboratory school. He received his bachelors and masters degrees in the history of music and his PhD in education at Northwestern University. His contribution to the field of anthropology of education has earned him numerous honors and awards including Spencer and Annenberg Institute for Public Policy fellowships, a Fulbright Award, and an Award for Scholarly Contributions to Educational Anthropology from the American Anthropological Association. Erickson's writings on the microethnography of classroom and family interaction, and especially how this interaction affects disadvantaged students, continue to be ground-breaking and widely cited. His recent book, *Talk and Social Theory: Ecologies of Speaking and Listening in Everyday Life* (Polity Press, 2004) received an Outstanding Book Award for 2005 from the American Educational Research Association. He currently serves on the editorial boards of *Research on Language and Social Interaction* and *Teachers College Record*. In 1998-99, he was a fellow in residence at the Center for Advanced Study in the Behavioral Sciences, to which he returns as a fellow for the academic year 2006-07.

Michael Feuer

Michael Feuer is executive director of the Division of Behavioral and Social Sciences and Education at the National Research Council (NRC) of the National Academies. He has been at the NRC since 1993, first as the director of the Board on Testing and Assessment and then as the founding director of the Center for Education. He received a PhD in public policy analysis from the School of Public and Urban Policy at the University of Pennsylvania (Penn), a MA in public management from the Wharton School, and a BA in English literature from Queens College of the City University of New York. Prior to joining the NRC, Feuer was senior analyst and project director at the Office of Technology Assessment of the United States Congress. Upon completing his doctorate, he taught graduate seminars at Penn and then joined the faculty of Drexel University, where he was granted early tenure and taught courses in organization theory, labor economics, and public policy. He has published in numerous academic journals on topics ranging from mathematical human resources planning to human capital theory applied to corporate training, mental testing, and democratic education. His current special interests are evidentiary standards in education research and theories of rationality applied to education policy and education research. Michael's most recent book is 'Moderating the Debate: Rationality and the Promise of American Education,' published by Harvard Education Press in 2006.

Noah Finkelstein

Noah Finkelstein is assistant professor in the Department of Physics at the University of Colorado at Boulder. He did his undergraduate work at Yale University in mathematics retaining strong interest in both physics and philosophy. Thereafter, he worked in industry at Ford Aerospace and Space Systems Loral. He later joined LCHC as a research associate and studied the early stages of email communities and networks. He returned to graduate school at Princeton University where he studied applied physics. Then with an NSF sponsored postdoctoral fellowship in mathematics science engineering he studied how people learn physics and technology education. He worked at University of California at San Diego and with researchers

at the SEMSAME program at the University of California at Berkeley. At UCSD, he was affiliated with the department of physics and the school of engineering. He has taught at the High Tech High School and has run programs affiliated with the Boys and Girls Clubs, The Ruben H. Fleet Science Center, and San Diego City College. Since his arrival in 2003, he has helped build the now well-established Physics Education Research Group at CU at Boulder.

Gene V. Glass

Gene V. Glass is regents' professor at Arizona State University in both the Educational Leadership and Policy Studies, and Psychology in Education divisions. He received his BA in German and Mathematics from the University of Nebraska, and MS and PhD in Educational Psychology from the University of Wisconsin. He served as president of the American Educational Research Association in 1975. Glass has made many important contributions to education statistics, notably his development of "meta-analysis." He applied meta-analysis to his often-cited research on the relationship of class size and achievement. Currently, he is a pioneer in developing the concept of online education research journals. He has published over a dozen books and nearly two hundred articles in scholarly and professional journals. Glass is the founding editor of *Education Policy Analysis Archives*, editor of *Education Review*, and executive editor of the *International Journal of Education and the Arts*. In 2006, he was honored with the "Distinguished Contributions to Educational Research" award of AERA.

Edmund Gordon

Edmund W. Gordon is John M. Musser Professor of Psychology (emeritus) at Yale University, Richard March Hoe Professor of Psychology and Education (emeritus) at Teachers College, Columbia University, and director of the Institute of Urban and Minority Education (IUME) also at Teachers College. From July 2000 until August 2001, he was vice president of academic affairs and interim dean at Teachers College. Professor Gordon's distinguished career spans professional practice, scholarly life as a minister, clinical and counseling psychologist, research scientist, author, editor, and professor. He is concerned with issues associated with increasing the number of high academic achieving students who come from African American, Latino, and Native American families. He is widely known for his research on diverse human characteristics and pedagogy, and the education of low status populations. Currently, he is the senior scholar and advisor to the president of the College Board where he developed and co-chaired the Taskforce on Minority High Achievement.

Patricia Graham

Patricia Graham is Charles Warren Professor of the History of Education Emerita at Harvard. She received her BS and MS from Purdue University and her PhD from Columbia University. Graham has received a John Simon Guggenheim Foundation fellowship, a Woodrow Wilson fellowship, and a Radcliffe Institute fellowship. Her books include *Progressive Education: From Arcady to Academe*, *Community and Class in American Education*, *Women in Higher Education*, *S.O.S.: Sustain Our Schools*; and *Schooling America*. Formerly, she was director of the National Institute of Education (1977-1979), dean of the Harvard Graduate School of Education (1982-1991) and president of the Spencer Foundation (1991-2000).

Maureen Hallinan

Maureen Hallinan is the William and Hazel White Professor of Sociology and director of the Center for Research on Educational Opportunity at the University of Notre Dame. She is a sociologist of education whose research focuses on how the formal and informal organization of schools and classrooms affects students' learning opportunities and academic achievement. She conducts research on tracking and ability grouping, school organization and its effects, students' friendships, and peer relations. She has served as president of the American Sociological Association and the Sociological Research Association. Her publications include the *Handbook of the Sociology of Education*; *Stability and Change in American Education: Structure, Process and Outcomes* with Adam Gamoran, Warren Kubitschek, and Tom Loveless; *School Sector and Student Outcomes*, and numerous articles in professional journals. She is the recipient of ASA's Willard Waller award for distinguished career in

sociology of education and Notre Dame's presidential award.

Larry Hedges

Larry Hedges is Stella M. Rowley Professor of Education, Psychology, Sociology, and Public Policy Studies at the University of Chicago. He received his BA from the University of California, San Diego, and his MA and PhD from Stanford University. His publications include *Statistical Methods for Meta-Analysis* (with Ingram Olkin), *A Practical Guide to Modern Methods of Meta-Analysis* (with James Shymansky and George Woodworth), and *The Handbook of Research Synthesis* (with Harris Cooper).

Kenneth Howe

Kenneth R. Howe is professor in the Educational Foundations, Policy, and Practice program area, and director of the Education and the Public Interest Center. Professor Howe specializes in education policy, professional ethics, and philosophy of education. He has conducted research on a variety of topics, ranging from the quantitative/qualitative debate to a philosophical examination of constructivism to a defense of multicultural education. His current research is focused on education policy analysis, particularly school choice. His books include the *Ethics of Special Education* (with Ofelia Miramontes), *Understanding Equal Education: Social Justice, Democracy and Schooling*, *Values in Evaluation and Social Research* (with Ernest House), and *Closing Methodological Divides: Toward Democratic Educational Research*. Professor Howe teaches courses in the social foundations of education, the philosophy of education, and philosophical issues in educational research.

Magdalene Lampert

Magdalene Lampert is George Herbert Mead Collegiate Professor in Education and Coordinator of Program Design and Development for the Teacher Education Initiative at the School of Education, University of Michigan. She conducts research on teaching and on the learning of teaching in, from, and for practice. Lampert has received the Raymond B. Cattell Early Career Award for Programmatic Research and the Interpretive Scholarship Award for Relating Research to Practice from the American Educational Research Association (AERA), the Exemplary Research in Teaching and Teacher Education Award from Division K of AERA, and the NAE/Spencer Postdoctoral Fellowship. She received her BS from Chestnut Hill College, Masters Degrees in Education from Temple University and Antioch New England Graduate School of Education, and her EdD from Harvard University. Her publications include *Teaching Problems and The Problems in Teaching: Talking Mathematics* (with Merrie Blunk); and *Teaching, Multimedia, and Mathematics* (with Deborah Ball).

Robert Linn

Robert L. Linn is distinguished professor emeritus of education at the University of Colorado at Boulder and former co-director of the National Center for Research on Evaluation, Standards, and Student Testing. He has published over 225 journal articles and chapters in books dealing with a wide range of theoretical and applied issues in educational measurement. He served as editor of the third edition of *Educational Measurement* and as editor of the *Journal of Educational Measurement*. He has received several awards for his contributions to the field, including the ETS Award for Distinguished Service to Measurement, the E.L. Thorndike Award, the E.F. Lindquist Award, the National Council on Measurement in Education Career Award, and the American Educational Research Association Award for Distinguished Contributions to Educational Research. He is past president of the American Educational Research Association, past president of the National Council on Measurement in Education, past president of the Evaluation and Measurement Division of the American Psychological Association, and past vice-president for the Research and Measurement Division of the American Educational Research Association. He is a Lifetime National Associate of the National Academies, and serves on two Boards of National Academy of Sciences.

Milbrey McLaughlin

Milbrey McLaughlin is David Jacks Professor of Education and Public Policy at Stanford University, co-director of the Center for Research on the Context of Secondary School Teaching, and executive director of the John W. Gardner Center for Youth and Their Communities. She received her BA from Connecticut College and her EdM and EdD from Harvard University. Her books include *Building Professional Learning Communities* with Joan Talbert, *Professional Communities and the Work of High School Teaching* with Joan Talbert, *Community Counts*, and *Urban Sanctuaries: Neighborhood Organizations in the Lives and Futures of Inner-City Youth*.

Michael McPherson

Michael McPherson is president of the Spencer Foundation, having assumed that post in 2003. A nationally known economist whose expertise focuses on the interplay between education and economics, McPherson was previously president of Macalester College (1996-2003) and spent the twenty-two years prior to assuming the Macalester presidency as professor of economics, chairman of the Economics Department, and dean of faculty at Williams College. McPherson has co-authored and edited seven books, including *Keeping College Affordable* and *Economic Analysis and Moral Philosophy*, and is co-founder and co-editor of *Economics and Philosophy*. He has served as a trustee of the College Board and the American Council on Education. He was a fellow of the Institute for Advanced Study and a senior fellow at The Brookings Institution. McPherson holds a BA in Mathematics, a MA in Economics, and a PhD in Economics, all from the University of Chicago.

Bud Mehan

Hugh Mehan is a professor of sociology and director of the Center for Research on Educational Equity and Teaching Excellence at the University of California, San Diego (UCSD). He received his BA from Hobart College, his MA from San Jose State College, and his PhD from the University of California, Santa Barbara. Mehan has received the UCSD Academic Senate Distinguished Teaching Award, the British Council–Fulbright Commission’s Higher Education Link, and numerous research grants. His publications include *The Reality of Ethnomethodology*, *Learning Lessons*, *Handicapping the Handicapped*, *Constructing School Success*, and *Extending Educational Reform*. His most recent book, *Reform as Learning: School Reform, Organizational Culture, and Community Politics in San Diego* (with Lea Hubbard and Mary Kay Stein), analyzes the contentious consequences of the comprehensive, centralized, content-based and fast-paced reform introduced by Alan Bersin and Anthony Alvarado in San Diego between 1998-2002.

John Meyer

John W. Meyer is Professor of Sociology, emeritus, at Stanford. He has contributed to organizational theory (e.g., with W. R. Scott, *Organizational Environments*, Sage 1983; *Institutional Environments and Organizations*, Sage 1994), comparative education, and the sociology of education, developing lines of thought now called sociological institutional theory. Since the late 1970s, he has been involved in empirical research on the impact of global society on national states and societies (e.g., Thomas et al., *Institutional Structure*, Sage 1987). Recently, he completed a collaborative study of worldwide science and its impact on national societies (Drori, et al., *Science in the Modern World Polity*, Stanford, 2003). Another collaborative project, on the impact of globalization on organizational structures, has just been published (Drori et al., eds., *Globalization and Organization*, Oxford 2006). He is now engaged, with colleagues, in studies of the rise and impact of the world human rights regime, in comparative research on the curricula of mass and higher education, and on the global expansion of higher education. He is a member of the National Academy of Education, has received honorary doctorates from the Stockholm School of Economics and the University of Bielefeld, and received the American Sociological Association’s Waller Award, for lifetime contributions to the sociology of education.

Luis Moll

Luis Moll is professor in the Department of Language, Reading, and Culture and associate dean of the College of Education at the University of Arizona. He received his BS from California State Polytechnic University, his MSW from the University of Southern California, and his PhD from the University of California, Los Angeles. His publications include *Vygotsky and Education* and *Funds of Knowledge: Theorizing Practices in Households and Classrooms* (with Norma González and Cathy Amanti).

Nel Noddings

Nel Noddings is Lee Jacks Professor of Child Education emerita at Stanford University. She received her BA from Montclair State College, her MA from Rutgers University, and her PhD from Stanford University. She has received the “Anne Roe Award for Contributions to the Professional Development of Women” from Harvard University; the “Willystine Goodsell Award” from the American Educational Research Association; and honorary doctorates from Columbia College (SC), Montclair State University, and Queen’s University (Canada). Her publications include: *Critical Lessons: What Our Schools Should Teach; Philosophy of Education; Educating for Intelligent Belief or Unbelief; Caring: A Feminine Approach to Ethics and Moral Education; The Challenge to Care in Schools; Educating Moral People; Starting at Home: Caring and Social Policy; Happiness and Education;* and *Critical Lessons: What Our Schools Should Teach*.

Valerie Otero

Valerie Otero is assistant professor of science education. Dr. Otero’s research explores the dynamic nature of the learning environment and how it influences (and is influenced by) the evolution of students’ ideas. She also studies prospective and practicing teachers’ conceptions of students’ prior knowledge, and teachers’ conceptions of the use of students’ prior knowledge for teaching and learning. Her teaching interests are in the areas of elementary science methods, the nature of science, and physics for prospective elementary teachers. She is a member of several professional organizations such as the American Association of Physics Teachers, National Science Teachers Association, National Association of Research on Science Teaching, and the American Educational Research Association.

Annemarie Palincsar

Annemarie Palincsar is Jean and Charles Walgreen Jr. Chair of Reading and Literacy, Arthur F. Thurnau Professor, and teacher educator in Educational Studies at the University of Michigan. Her research focuses on the design of learning environments that support self-regulation in learning activity, especially for children who experience difficulty learning in school. In current research, conducted with science educator, S.J. Magnusson, she studies how children use literacy in the context of guided inquiry science instruction, what types of text support children’s inquiry, and what support students who are identified as atypical learners require to be successful in this instruction. In collaboration with R. J. Spiro and S. J. Magnusson, she is investigating the use of a hypermedia tool (called EASE-C) to support bringing to scale knowledge and practice regarding text comprehension instruction. In collaboration with B. Dalton from the Center for Applied Special Technologies, she also studies the role of computer assisted instruction in enhancing children’s understanding of subject matter text and web-based text. Annemarie has served as a member of: the National Academy’s Research Council on the Prevention of Reading Difficulty in Young Children; the OERI/RAND Reading Study Group, the National Research Council’s Panel on Teacher Preparation, The National Education Goals Panel, and the National Advisory Board to Children’s Television Workshop. She is co-editor of the journal *Cognition and Instruction*. She completed her doctorate at the Center for the Study of Reading at the University of Illinois, Champaign-Urbana.

G.P. "Bud" Peterson

Dr. Peterson attended Kansas State University and earned a Bachelor of Science degree in Mechanical Engineering and a second Bachelor's degree in Mathematics. In 1980 he received a Master of Science in Engineering. In 1985 he received a Doctorate in Mechanical Engineering from Texas A&M University. He served as a Visiting Research Scientist at the NASA Johnson Space Center before returning to Texas A&M as a faculty member in the Mechanical Engineering Department, where he conducted research and taught courses in thermodynamics and heat transfer. He was later named the Halliburton Professor of Mechanical Engineering and the College of Engineering's Tenneco Professor. While at Texas A&M, he held leadership positions as Head of the Mechanical Engineering Department, Executive Associate Dean of the College of Engineering, and Associate Vice Chancellor for the Texas A&M University System. In 1993-94 he served as Program Director for the Thermal Transport and Thermal Processing Division of the National Science Foundation. A Fellow of both the American Society of Mechanical Engineers and the American Institute of Aeronautics and Astronautics, Dr. Peterson is the author or co-author of 12 books or book chapters, 160 refereed journal articles, more than 150 conference publications and holds eight patents. He is a member of several professional organizations and the recipient of numerous national and international honors and awards for both teaching and research. Dr. Peterson and his wife Val have four grown children.

Andrew Porter

Andrew Porter is Patricia and Rhodes Hart Professor of Educational Leadership and Public Policy at Vanderbilt University. He has published widely on psychometrics, student assessment, education indicators, and research on teaching. His current work focuses on curriculum policies and their effects on opportunity to learn. Currently he has research support from the National Science Foundation as co-director, System-Wide Change for All Learners and Educators; principal investigator, Longitudinal Design to Measure Effects of MSP Professional Development in Improving Quality of Instruction and Science Education; and principal investigator, Improving Effectiveness of Instruction in Mathematics and Science with Data on Enacted Curriculum. He is an elected member and former officer of the National Academy of Education, lifetime national associate of the National Academies, and past president of the American Educational Research Association.

William Reese

William Reese is professor of educational policy studies and history at the University of Wisconsin, Madison, where he received his PhD in 1980. He has served as president of the History of Education Society, vice president of the History and Historiography Division of the American Educational Research Association, and editor of the History of Education Quarterly. His books include *Power and the Promise of School Reform: Grassroots Movements during the Progressive Era*, *The Origins of the American High School*, and *America's Public Schools: From the Common School to 'No Child Left Behind.'* A new book entitled, *History, Education, and the Schools*, will be published in 2007. His current research project on the history of academic standards and promotion policies in the public schools was funded by the Spencer Foundation.

Lauren Resnick

Lauren Resnick is professor of psychology at the University of Pittsburgh and director and senior scientist at the Learning Research and Development Center there. She received her AB from Radcliffe College and her AM and EdD from Harvard University. Resnick has received many awards, including the Award for Distinguished Contribution to the Field of Education from the American Educational Research Association and the Oeuvre Award for Outstanding Contributions to the Science of Learning and Instruction from the European Association for Research on Learning and Instruction. She has had fellowships from the Center for Advanced Study in the Behavioral Sciences, the American Association for the Advancement of Science, and the American Psychological Association. Her publications include *Education and Learning to Think and Knowing, Learning, and Instruction*.

Alan Schoenfeld

Alan Schoenfeld is Elizabeth and Edward Conner Professor of Education at the University of California, Berkeley. Schoenfeld is past president of the American Educational Research Association and past vice president of the National Academy of Education; he is a fellow of the American Association for the Advancement of Science and a laureate of Kappa Delta Pi. He serves as senior advisor to the Education and Human Resources Directorate of the national Science Foundation, and was writing group leader for grades nine to twelve for the National Council of Teachers of Mathematics' Principles and Standards for School Mathematics. Schoenfeld received his BA from Queens College and his MS and PhD from Stanford University. Books he has written or edited include *Mathematical Problem Solving*, *Cognitive Science and Mathematics Education*, *Mathematical Thinking and Problem Solving*, and four volumes of *Research in Collegiate Mathematics Education*. A major focus of his current work is the Diversity in Mathematics Education project.

Elaine Seymour

Elaine Seymour was for sixteen years director of Ethnography & Evaluation Research (E&ER), at the University of Colorado's Center to Advance Teaching and Research in the Social Sciences. E&ER includes both social and physical scientists whose research focuses on issues of change in science, technology, engineering, and mathematics (STEM) education and careers, and on evaluation of initiatives that seek to improve quality and access in these fields. The issues of women in these disciplines have been a special focus and, in recognition of this work, WEPAN awarded Elaine its 2002 Betty Vetter Award for Research. Her best-known published work may be *Talking about Leaving: Why Undergraduates Leave the Sciences*, (1997), co-authored with Nancy M. Hewitt. Recently, she and E&ER members published, "Partners in Innovation: Teaching Assistants in College Science Courses" (2005) drawing on their studies of three science education innovations. She and her group have been evaluators for several national and institution-based innovations including two NSF-funded chemistry consortia and (currently) an NSF ADVANCE award focused on accelerating the career progress of STEM faculty women. In response to the learning assessment needs of faculty classroom innovators, Elaine designed two online resources: the Student Assessment of their Learning Gains (SALG) online instrument and the Field-Tested Learning Assessment Guide (FLAG). Notwithstanding her semi-retirement, she is working with E&ER members on a comparative, longitudinal study that explores the nature, benefits, costs, and processes of undergraduate research experiences, and a study of the nature and sources of resistance to innovation. Elaine has served as an evaluator and as a member of national visiting committees and advisory boards for many STEM education change projects. She is a sociologist and a British-American whose education and career have been conducted on both sides of the Atlantic.

Lorrie Shepard

Lorrie Shepard is professor of research and evaluation methodology and dean of the School of Education at the University of Colorado at Boulder. Her research focuses on psychometrics and the use and misuse of tests in education settings. In addition to technical work on validity theory, standard setting, and statistical models for detecting test bias, her studies evaluating test use have addressed the identification of learning disabilities, readiness screening for kindergarten, grade retention, teacher testing, and effects of high-stakes accountability testing on teaching and learning. She served as president of the American Educational Research Association and president of the National Council on Measurement in Education, and is currently president of the National Academy of Education. She has received distinguished career awards from the National Council on Measurement in Education, the American Educational Research Association, and the Educational Testing Service.

Judith Singer

Judith Singer is the James Bryant Conant Professor of Education and former academic dean at the Harvard Graduate School of Education. As one of the nation's leading applied statisticians, she focuses her professional life on improving the quantitative methods used in social, educational and behavioral research. Singer is primarily known for her contributions to the practice of multilevel modeling, survival analysis, and individual growth modeling, and to making these and other statistical methods

accessible to empirical researchers. Her wide-ranging interests have led her to publish across a broad array of disciplines including: statistics, education, psychology, and medicine/public health. In addition to writing (or more often co-writing) nearly 100 papers and book chapters, she has also co-written three books including *By Design: Planning Better Research in Higher Education* and *Who Will Teach: Policies that Matter*, both published by Harvard University Press. Her most recent book with longtime collaborator John B. Willett is *Applied Longitudinal Data Analysis: Modeling Change and Event Occurrence* (NY: Oxford University Press), for which they received Honorable Mention from the American Publishers Association for the “best Mathematics & Statistics book of 2003.

Catherine Snow

Catherine Snow is Henry Lee Shattuck Professor of Education at the Harvard Graduate School of Education. She received her BA from Oberlin College and her MA and PhD from McGill University. Snow has received research funding from the National Science Foundation, the National Institutes of Health, the Ford Foundation, the Carnegie Corporation, and the Spencer foundation. Her publications include *Unfulfilled Expectations: Home and School Influences on Literacy* (with Wendy Barnes, Jean Chandler, Irene Goodman, and Lowry Hemphill), *Pragmatic Development* (with Anat Ninio), and *Talking to Children: Language Input and Acquisition* (with Charles Ferguson). She chaired the National Research Council Committee on Preventing Reading Difficulties in Young Children, the RAND Reading Study Group that produced the report *Reading for Understanding*, and the subcommittee of the NAE Committee on Teacher Education that produced *Knowledge to Support the Teaching of Reading*. She is currently pursuing research on issues of middle school literacy achievement in collaboration with the Boston Public Schools, which has been established as the first Strategic Education Research Partnership (SERP) field site.

Carl Wieman

Carl Wieman is distinguished professor of physics at the University of Colorado at Boulder and the 2004 Carnegie Foundation National Professor of the Year. He received his PhD in physics from Stanford University. He is co-winner of the Nobel Prize in Physics, 2001, “for the achievement of Bose-Einstein condensation in dilute gases of alkali atoms, and for early fundamental studies of the properties of the condensates.” In addition to atomic physics research, he does research on beliefs in science education and the use of technology in science education. This includes the Physics Education Technology project (PhET), which develops interactive web-based simulations for physics instruction and studies their effectiveness. His work is supported by the National Science Foundation and the Hewlett Foundation. He is also the Director of the Science Education Initiative at Colorado and starting next year will be director of the Carl Wieman Science Education Initiative at the University of British Columbia.

William Wood

William B. Wood is distinguished professor of biology at the University of Colorado at Boulder. He received his PhD in Biochemistry from Stanford University in 1963. Wood became one of the youngest members of the National Academy of Sciences in recognition of his pioneering research on the formation of complicated viruses that infect bacteria. His current research interests include genetic control and molecular biology of axis formation and patterning in embryos of the nematode *C. elegans*, with particular interest in mechanisms of embryonic left-right asymmetry and handedness choice. He won an international research award in recognition of a lifetime of scientific achievements, including groundbreaking work that could produce a better understanding of how genetic defects can lead to the birth of malformed children. Currently, Dr. Wood serves as chair of the NRC Committee on Summer Institute on Undergraduate Biology Education and a member of the NRC Board on Science Education (BOSE). He is also editor-in-chief of the biology education journal *CBE - Life Sciences Education* and is serving on the College Board National Advisory Committee for revision of the Biology Advanced Placement course for secondary schools. In 2004, he received the Bruce Alberts Award of the American Society for Cell Biology for distinguished contributions to science education.

ACADEMY MEMBERS

Bruce Alberts	University of California, San Francisco
James A. Banks	University of Washington
Hilda Borko	University of Colorado at Boulder
Eamonn Callan	Stanford University
Martin Carnoy	Stanford University
Michael Cole	University of California, San Diego
Allan Collins	Northwestern University
Erik De Corte	University of Leuven, Belgium
Andy diSessa	University of California, Berkeley
Jacquelynn Eccles	University of Michigan
Margaret Eisenhart	University of Colorado at Boulder
Frederick Erickson	University of California, Los Angeles
Michael J. Feuer	National Academies
Susan Fuhrman	Teachers College, Columbia University
Adam Gamoran	University of Wisconsin, Madison
Howard Gardner	Harvard University
Gene V. Glass	Arizona State University
Edmund W. Gordon	Teachers College, Columbia University
Patricia Graham	Harvard Graduate School of Education
Maureen Hallinan	University of Notre Dame
Robert M. Hauser	University of Wisconsin, Madison
Larry Hedges	Northwestern University
Walter Kintsch	University of Colorado
Magdalene Lampert	University of Michigan
Hope Jensen Leichter	Teachers College, Columbia University
Robert Linn	University of Colorado at Boulder
Judith Warren Little	University of California, Berkeley
Milbrey McLaughlin	Stanford University
Michael McPherson	Spencer Foundation
Bud Mehan	University of California, San Diego
John W. Meyer	Stanford University
Luis C. Moll	University of Arizona
Nel Noddings	Stanford University
Annemarie Sullivan Palincsar	University of Michigan
Denis C. Phillips	Stanford University
Andrew Porter	Vanderbilt University
William J. Reese	University of Wisconsin, Madison
Lauren Resnick	University of Pittsburgh
Alan Schoenfeld	University of California, Berkeley
Lorrie Shepard	University of Colorado at Boulder
Judith Singer	Harvard Graduate School of Education
Catherine Snow	Harvard Graduate School of Education

CURRENT FELLOWS

Dor Abrahamson	University of California, Berkeley
Corinne Alfeld	University of Minnesota
Eileen Anderson-Fye	Case Western Reserve University/UCLA
Bryan A. Brown	Stanford University
Doug Clark	Arizona State University
Jennifer Henderlong Corpus	Reed College
Joe Crespino	Emory University
Jimmy de la Torre	Rutgers University
Regina Deil-Amen	Penn State/University of Notre Dame
Stefanie DeLuca	Johns Hopkins University
Begoña Echeverria	University of California, Riverside
Noel Enyedy	University of California, Los Angeles
Amanda Godley	University of Pittsburgh
Sara Goldrick-Rab	University of Wisconsin, Madison
Nora Gordon	University of California, San Diego
Eric Grodsky	University of California, Davis
Leslie Morrison Gutman	University of London
Matthew Hartley	University of Pennsylvania
Wendy Hoglund	New York University
Guanglei Hong	OISE/University of Toronto
Benjamin Justice	Rutgers University
Tami Katzir	Haifa University
Rob Kunzman	Indiana University
Eva Lam	Northwestern University
Nonie Lesaux	Harvard University
Vivian Louie	Harvard University
Christopher Lubienski	University of Illinois
Katherine Magnuson	University of Wisconsin, Madison
Emily Mann	Bridgewater State College
Patrick McEwan	Wellesley College
Margaret Nash	University of California, Riverside
Alina Reznitskaya	Montclair State University
Aaron Saiger	Fordham University
Beth Lewis Samuelson	Central Michigan University
Miguel Urquiola	Columbia University
Kim Warren	University of Kansas
Stephanie J. Waterman	Syracuse University
Tonya E. Wolford	North Carolina State University
Wu Xiaogang	Hong Kong University of Science and Technology

FORMER FELLOWS

Michael Bamberg	Clark University
Patricia Bauch	University of Alabama
Claudia Buchmann	Ohio State University
Zoubeida R. Dagher	University of Delaware
Laura Desimone	Vanderbilt University
Elizabeth Henning	University of Johannesburg
Linda Mabry	Washington State University, Vancouver
Jeff MacSwan	Arizona State University
Kofi Marfo	University of South Florida
Rodney McNair	Delaware State University
Michele Moses	University of Colorado at Boulder
Michael Ranney	University of California, Berkeley
Pedro Reyes	University of Texas System
Lorna Rivera	University of Massachusetts, Boston
Alexander Sasha Sidorkin	University of Northern Colorado
Kevin Welner	University of Colorado at Boulder
Regina Werum	Emory University
Shelby Wolf	University of Colorado at Boulder

GUESTS

Kanesha Baynard	University of Colorado at Boulder
Mark Berends	Vanderbilt University
Julian Betts	University of California, San Diego
Noah Finkelstein	University of Colorado at Boulder
Susan G. Gordon	CEJES Institute
Tess Hauser	University of Wisconsin - Madison
Kenneth Howe	University of Colorado at Boulder
Valerie Otero	University of Colorado at Boulder
Elaine Seymour	University of Colorado at Boulder
Jennie Whitcomb	University of Colorado at Boulder
Carl Wieman	University of Colorado at Boulder
Edward Wiley	University of Colorado at Boulder
William Wood	University of Colorado at Boulder

