

Learning Sciences: Foundations and Applications to Adolescent and Adult Literacy

Committee

Alan M. Lesgold

Chair

Alan Lesgold (Chair) is the Dean of the School of Education at the University of Pittsburgh. Prior to this position, he served as the Executive Associate Director of the Learning Research and Development Center at the University of Pittsburgh from 1997 to 2000. Other previous positions at the University of Pittsburgh include Professor of Psychology and Intelligent Systems, Co-Director of the Graduate Program in Intelligent Systems Studies and the Faculty of Arts and Sciences, and Director of the Learning Skills Research Unit at the Research and Development Center. He holds an honorary doctorate from the Open University of the Netherlands and is a fellow of the APA Divisions of Experimental Psychology, Applied Experimental and Engineering Psychology, and Educational Psychology. He was Secretary/Treasurer of the Cognitive Science Society from 1988 to 1997 and continues to serve on its Board of Governors. In 1995, he was awarded the Educom Medal by Educom and the American Psychological Association for contributions to educational technology. Dr. Lesgold served on two Congressional Office of Technology Assessment advisory panels and was the chair of the Visiting Panel on Research of Educational Testing Service. Dr. Lesgold and colleagues developed a technology of intelligently coached learning-by-doing over the period from 1986 to 1999, with sponsorship by the U. S. Air Force, US WEST, and Intel Corporation. More recently, he and colleagues also developed a technology for supporting rich collaborative engagement of students and professionals with complex issues and complex bodies of knowledge, including professional development for teachers. Dr. Lesgold served as a member on NRC's Board on Testing and Assessment from 1993 through 1998. He is a National Associate of the National Research Council of the National Academies. The NRC Chair designates individuals for this special honor under guidelines established by the NRC Governing Board. Membership in the Associates is for life, and recognizing past service. He received his Ph.D. in psychology from Stanford University in 1971.

Karen S. Cook

Member

Karen Cook is Chair and Ray Lyman Wilbur Professor of Sociology Stanford University and currently is chair of the Faculty Senate at Stanford University. Currently Dr. Cook's research focuses on social exchange theory and issues of trust in social relations and networks. She has studied power-dependence relations and physician-patient trust, including how interactions between physicians and patients with different racial, ethnic, and cultural backgrounds can affect health outcomes. She was a fellow at the Center for Advanced Study in the Behavioral Sciences (1998-99) and was elected to the American Academy of Arts and Sciences in 1996 and the National Academy of Sciences in 2007. Dr. Cook received her Ph. D. in sociology from Stanford University in 1973.

Aydin Durgunoglu

Member

Aydin Y. Durgunoglu is a Professor and Head of the Department of Psychology at the University of Minnesota Duluth. Dr. Durgunoglu received her Ph.D. in Cognitive Psychology at Purdue University. She conducts research on the literacy development of both adults and children in different linguistic contexts as well as on bilingual cognition. Her work has focused on cross-linguistic transfer and the effects of first languages on second-language learning as well as the information processing of bilinguals related to reading and oral language. She has edited (with L. Verhoeven) a book entitled Literacy

Development in a Multilingual Context: Cross-Cultural Perspectives. Dr. Durgunoglu helped to develop and improve an adult literacy program for the Turkish Mother Child Education Foundation. This program has been implemented in 18 provinces in Turkey and has reached over 60,000 people in the last fifteen years. It has recently won a UNESCO King Sejong Literacy Prize.

Arthur C. Graesser

Member

Arthur C. Graesser is a Professor of Experimental and Cognitive Psychology, an adjunct professor in Computer Science, and co-Director of the Institute of Intelligent Systems at the University of Memphis. His primary research interests are in cognitive science, discourse processing, and the learning sciences. More specific interests include knowledge representation, question asking and answering, tutoring, text comprehension, inference generation, conversation, reading, education, memory, artificial intelligence, and human-computer interaction. He served as editor of the journal *Discourse Processes* (1996–2005) and is the current editor of *Journal of Educational Psychology*. In addition to publishing over 400 articles in journals, books, and conference proceedings, he has written two books and edited nine books (one being the *Handbook of Discourse Processes*). He has designed, developed, and tested cutting-edge software in learning, language, and discourse technologies, including AutoTutor, Coh-Metrix, HURA Advisor, SEEK Web Tutor, MetaTutor, ARIES, Question Understanding Aid (QUAID), QUEST, and Point & Query. Dr. Graesser received his Ph.D. in psychology from the University of California at San Diego.

Steve Graham

Member

Steve Graham is the Currey-Ingram Professor of Special Education and Literacy at Vanderbilt Peabody College. His research interests include learning disabilities, writing instruction and writing development, and the development of self-regulation. Dr. Graham is the editor of *Exceptional Children* and the former editor of *Contemporary Educational Psychology*. He is the co-author of the *Handbook of Writing Research*, *Handbook of Learning Disabilities*, *Writing Better*, and *Making the Writing Process Work*. He is lead author of *Writing Next: Effective Strategies to Improve the Writing of Adolescents in Middle and High School*, a research-based report for teachers recently commissioned by the Carnegie Corporation of New York. In 2001, he was elected a fellow of the International Academy for Research in Learning Disabilities. He is the recipient of career research awards from the Council for Exceptional Children and Special Education Research Interest Group in the American Educational Research Association. He received an Ed.D. in special education from the University of Kansas.

Noel Gregg

Member

Noel Gregg is a Distinguished Research Professor at The University of Georgia. She is a faculty member in the Department of Psychology and the Department of Communication Sciences and Special Education, as well as, the Director of the UGA Regents' Center for Learning Disorders. Her areas of specialization include adolescents and adults with learning disabilities and AD/HD, accommodations, alternative media, assessment, written language disorders, and test validity. She has been a national expert witness for several key legal cases pertaining to accommodating adults with learning disabilities and AD/HD on high-stakes tests. Dr. Gregg has published four books, as well as, numerous scientific articles and book chapters. Her most recent book, *Assessing and Accommodating the Adolescent and Adult Populations with Learning Disabilities and AD/HD* came out Spring 2009. She received her Ph.D. in communication disorders from Northwestern University, Illinois.

Joyce L. Harris

Member

Joyce L. Harris is an associate professor in the Communication Sciences and Disorders Department at The University of Texas at Austin. She is the Director of the Language and Cognitive Aging Laboratory. Her current research involves the study of text comprehension in aging, particularly the comprehension of text-based health information. Harris teaches courses in acquired neurogenic language disorders in adults and the sociocultural bases of communication. She is co-editor of and chapter contributor to *Literacy in African American Communities* (Erlbaum, 2001). Other print scholarship focuses on normal and disordered communicative process across the human lifespan. Harris has served as an Associate Editor for Language for the *Journal of Speech, Language, and Hearing Research*, Chair of the National Black Association for Speech-Language and Hearing's Board of Directors, and as a member of the Publication Board of the American Speech-Language-Hearing Association of which she is a Fellow and Life Member. Harris holds a Certificate of Clinical Competence in Speech-Language Pathology (CC-SLP) from the American Speech-Language-Hearing Association, and received her Ph.D. from The University of Texas at Austin.

Glynda A. Hull

Member

Glynda Hull is currently a Professor of Education in the Department of Teaching and Learning, Steinhardt School of Culture, Education, and Human Development, at New York University. She has spent most of her career at the University of California, Berkeley, as a professor of Language, Literacy, and Culture in the Graduate School of Education. Dr. Hull's expertise is in adult cognition, learning, education, and adult identity formation. Her work focuses on workplace literacy, adult writing in and out of schools, use of multimedia technologies with at-risk students, and understanding the roles that literacy and new information technologies play in the workplace, particularly for low-income and at-risk populations. She has expertise in the use of qualitative and ethnographic methods. Dr. Hull served on the National Academies' Committee on Performance Levels for Adult Literacy. Her books include *School's Out! Bridging Out-of-School Literacies with Classroom Practice* and *Changing Work, Changing Workers: Critical Perspectives on Language, Literacy, and Skills*.

Maureen L. Lovett

Member

Maureen Lovett is a Professor of Paediatrics, Psychology, and Medical Sciences at the University of Toronto and a Senior Scientist for the Neurosciences and Mental Health Program at The Hospital for Sick Children. She is also founder and director of the hospital's Learning Disabilities Research Program (LDRP), a clinical research unit dedicated to developing and evaluating different forms of remediation for children with developmental reading disabilities. Her research program is devoted to the study of reading disorders in children and adolescents, and methods of intervention for their effective remediation. She is recognized internationally for contributions to reading disabilities research and to the development of interventions that address basic learning problems that interfere with the ability to read. She studies individual differences in response to intervention among children with language-based learning disabilities and developmental neurocognitive disorders as well as methodological and training issues in the rehabilitation of neurocognitive and neurobehavioral disorders. Dr. Lovett completed post-doctoral training in neuropsychology at The Hospital for Sick Children in Toronto. She has a Ph.D. in psychology from McGill University.

Daryl F. Mellard

Member

Daryl F. Mellard is Associate Research Professor in the School of Education and Director of the Division of Adult Studies, Center for Research on Learning, at the University of Kansas. His research focuses on education and employment issues for adults and interventions to improve adult literacy in adult education and other programs such as Job Corps. As co-principal investigator of the National Research Center on Learning Disabilities (NRCLD), Dr. Mellard directed its review of Responsiveness to Intervention, and conducted studies of education, social, and employment issues for adults with disabilities. Dr. Mellard just completed a five-year study funded by the U.S. Department of Education, National Institute for Literacy and the National Institutes of Health to develop, implement, and study the effectiveness of adult literacy interventions for low-literate adults, including the role of decoding, vocabulary, fluency and comprehension instruction and explicitness of instruction. A current IES funded development study focuses on developing literacy skills of Job Corps participants in vocational trades. He has served as a co-chair to the Kansas Coalition on Adult Literacy and Learning Disabilities and on the board of directors for a local independent living center. Dr. Mellard received his Ph.D. in Education from the University of Kansas.

Elizabeth B. Moje

Member

Elizabeth B. Moje is an Arthur F. Thurnau Professor of Literacy, Language, and Culture in Educational Studies at the University of Michigan. She also serves as a Faculty Associate in the University's Institute for Social Research and a Faculty Affiliate in Latino/a Studies. Dr. Moje's work focuses on adolescents including high school students and the development of literacy skills in disciplines such as social studies and science. She studies the relation between formal and informal literacy experiences, informal reading habits, and engagement in diverse literacy activities. She is an expert on adolescent identities related to literacy and how these develop through participating in literacy practices of homes and communities and in ethnic, popular, and school cultures. Dr. Moje sits on the Carnegie Corporation of New York's Adolescent Literacy Council and is Research Chair of the National Conference on Research on Language and Literacy (NCRLL). Her books include *Reframing Sociocultural Research on Literacy: Identity, Agency, and Power*; *Constructions of Literacy: Studies of Literacy Teaching and Learning In and Out of Secondary Schools*; and *All The Stories We Have: Adolescents' Insights On Literacy And Learning In Secondary School*. She is also a co-editor of the *Handbook of Reading Research, Volume IV*. She received her Ph.D. from the School of Education at Purdue University.

Ken Pugh

Member

Kenneth Pugh is President and Director of Research at Haskins Laboratories, a Yale University affiliated interdisciplinary institute, dedicated to the investigation of the biological basis of language and human communication. He also holds an appointment of Associate Professor in the Department of Pediatrics at Yale University School of Medicine and is the Director of the NIH-funded Yale Reading Center. His primary research interests are in the areas of cognitive neuroscience and psycholinguistics. He was among the first scientists to use functional magnetic resonance imaging (fMRI) to reveal brain activity associated with reading and reading disabilities. His current research employs combined behavioral and neurobiological measures in the study of typical and atypical reading and language development, with a particular focus on learning and plasticity in disabled readers. Dr. Pugh received his Ph.D. in Experimental Psychology from the Ohio State University.

Chris Schatschneider

Member

Chris Schatschneider is Professor in the Department of Psychology at Florida State University. His expertise is in reading early reading development in children and learning disabilities. His research focuses on individual differences in the development of reading and the discovery and measurement of skills needed to acquire reading and that can be used to identify children who are at-risk for reading problems. Dr. Schatschneider completed a post-doctoral fellowship in statistics and research methodology at the University of Houston, and is a leading expert in quantitative methods, statistics, and research design. His interests include multi-level modeling, growth-curve analyses, theory building and testing, intervention design in field settings, and item-response theory. He serves as an Associate Director at the Florida Center for Reading Research at Florida State University and was a member of the National Early Literacy Panel which synthesized scientific research on the development of literacy in children. He earned his Ph.D. in psychology from Case Western Reserve University.

Mark S. Seidenberg

Member

Mark Seidenberg is the Hildale Professor and Donald O. Hebb Professor in the Department of Psychology at the University of Wisconsin. He is a cognitive psychologist with neuroscience training who studies language and reading, with the goal of understanding how these skills are acquired and used, and the brain circuits that support them. The work involves a combination of behavioral studies, neuroimaging, and computational (connectionist) modeling. His reading research addresses the nature of skilled reading, how children learn to read, dyslexia, and the brain bases of reading, using the tools of modern cognitive neuroscience: behavioral experiments, computational models, and neuroimaging. He has examined educational implications of reading research, how language background affects early school achievement, reading achievement of low-income and minority children, and relations between African American dialect and the language of schooling. He has published over a hundred scientific articles and was recently honored as one of the 250 most-cited researchers in the areas of psychology and psychiatry. He received a Ph.D. in psychology from Columbia University.

Elizabeth A. Stine-Morrow

Member

Elizabeth A. L. Stine-Morrow is a Professor in the Department of Educational Psychology and a member of Beckman's Human Perception and Performance group at the University of Illinois, Urbana-Champaign. Her research focuses on cognition and the capacity for learning throughout life. Her work builds on past research showing that "mental mechanics" (fluid abilities, working memory capacity, computational speed, effortful processes requiring attention) show age-graded declines in many contexts, whereas crystallized abilities (verbal ability, knowledge, acculturation) show continued capacity for growth. Dr. Stine-Morrow studies the implications of these findings for decline and growth in language comprehension and memory. As part of this work, she has used eye-movement methodologies to examine self-regulated reading in adulthood and has shown how shifts in reading strategies can mitigate declines so as to enable more effective learning throughout the life span. Dr. Stine-Morrow serves as Associate Editor of Memory and Cognition and the Journal of Gerontology: Psychological Sciences. She is a Fellow of the Gerontological Society of America and Fellow of the American Psychological Association. Her current work on age differences in reading strategies and on health literacy is funded by the NIH National Institute on Aging. Dr. Stine-Morrow received a Ph.D. in general-experimental psychology from Georgia Institute of Technology.