Adult Learning in the Military Context

Committee

Margaret E. Beier

Chair

Dr. Margaret Beier is a Professor of Industrial and Organizational Psychology and Chair of the Department of Psychological Sciences at Rice University (Houston, TX). She is a leading expert on workplace aging and retirement. Dr. Beier's research examines the influence of age, motivation, skills, and abilities on success in organizations, particularly related to the factors that contribute to lifelong learning and development. Her research has been funded by the National Science Foundation and published in major academic outlets including the Journal of Applied Psychology, and the Journal of Business and Psychology, Psychology and Aging, and Psychological Bulletin. She is a fellow of the Society for Industrial and Organizational Psychology (SIOP) and a fellow of the Association for Psychological Science (APS). She obtained her undergraduate degree at Colby College in Waterville, Maine in French literature and her M.S., and Ph.D. degrees in psychology at the Georgia Institute of Technology. She has participated in two NRC committees: 1) How People Learn II: Learners, Contexts, and Cultures and 2) Are Generational Categories Meaningful Distinctions for Workplace Management?

Laura G. Barron

Member

Dr. Laura G. Barron is an Industrial/ Organizational Psychologist. She currently works in the U.S. Air Force's Air Education and Training Command (AETC) where she conducts enterprise-wide research and assessment to support force development and diversity, equity, and inclusion. Recent projects have addressed: Professional Military Education for Joint Staff officers; Junior Reserve Officer Training Corps instructor recruitment; training and squadron-level practices to support Diversity, Equity, and Inclusion; and foundational military training on information literacy. She previously worked as a Personnel Research Psychologist and Chief of Strategic Research & Assessments at the Air Force Personnel Center (AFPC) supporting the selection and classification of Air Force personnel. Prior to entering public service, she worked as an assistant professor in the University of Wisconsin system. She has authored more than 30 peer-reviewed articles on topics such as workplace diversity, training development, and military personnel selection that have been published in journals such as Military Psychology, International Journal of Selection & Assessment, Human Performance, and Psychology, Public Policy & Law. Dr. Barron has a Ph.D. and M.A. in Industrial and Organizational Psychology from Rice University.

Robert A. Bjork

Member

Dr. Robert Bjork is Distinguished Research Professor of Psychology at the University of California, Los Angeles. He has served as Chair of UCLA’s Department of Psychology, as Editor of Memory and Cognition, Editor of Psychological Review, and Co-editor of Psychological Science in the Public Interest. He is past president or chair of the Association for Psychological Science, the Psychonomic Society, and the Society of Experimental Psychologists. He is a recipient of UCLA’s Distinguished Teaching Award, the American Psychological Association’s Distinguished Service to Psychological Science and Distinguished Scientist Lecturer Awards, and the Mentoring Award from the Association for Psychological Science. He is a member of the National Academy of Sciences and the American Academy of Arts and Sciences. He chaired the National Academy’s Committee on Techniques for the Enhancement of Human Performance from 1990-1994.

Shernette D. Dunn

Member

Dr. Shernette Dunn is the Director for Student Success at the Air Force Academy Preparatory School in Colorado Springs, Colorado. Her research interest includes culturally responsive teaching for online learners, adult education, motivation, instructional technologies, learners with disabilities, and student success initiatives. She is a member of several education-related professional organizations such as the Society for Information Technology in Teacher Education, and the National Organization for Student Success to name a few. Dr. Dunn has won numerous awards for her contributions to promoting student success, equity, and diversity in one of our nation’s top military institutions. She was the winner of her base’s Blacks in Government (BIG) Award for the 2022-2023 academic year and continues to leave her mark on the lives of cadets and staff as she works to contribute to the long blue line. Dr. Dunn is a proud four-time graduate of Florida Atlantic University where she earned her Bachelor's, Master’s, Specialist, and Doctoral degrees. She is a lifelong educator and enjoys reading about, writing about, and publishing on topics in her area of interest.

Armando X. Estrada

Member

Dr. Armando X. Estrada (AXE) is an Associate Professor in the Department of Policy, Organizational, and Leadership Studies at Temple University where he has been responsible for leading, planning, designing, and managing portfolios of intramural and extramural research on factors influencing diversity, inclusion and engagement with particular focus on women and underrepresented groups; as well as factors influencing cohesion, resilience, readiness, and effectiveness within teams and organizations. This work encompassed both theoretical and applied studies carried out in laboratory and field settings with interdisciplinary collaborators within DoD, academia, and industry in the United States, Mexico, Sweden and The Republic of Georgia. As part of his scholarly activities, Dr. Estrada has provided leadership support, research, and technical advice to working groups and taskforces in the Office of the Secretary of Defense and the Headquarters of the Department of the Army-Deputy Chief of Staff for Personnel; the Swedish Minister of Equality, the Swedish Department of Defence; the Ministry of Defence for the Republic of Georgia; among many others. Dr. Estrada has also assisted with the leadership, administration, and management of academic programs in Leadership Education and Development; Executive and Strategic Leadership; Experimental Psychology; and Adult and Organizational Development at a variety of institutions of higher learning including the US Naval Postgraduate School; US Naval Academy; The Industrial College of the Armed Forces, The National Defense University; Washington State University; and Temple University. He has taught undergraduate and graduate courses in Statistics (including univariate, bivariate, and multivariate statistics), Experimental Design and Analyses; and undergraduate and graduate courses in Industrial and Organizational Psychology; Military Psychology; Social Psychology; and specialty graduate courses in Adult and Organizational Development, Diversity, Inclusion and Engagement; Executive and Strategic Leadership; and National Security Strategy. Dr. Estrada earned his BA and MA in Psychology from the California State University at Los Angeles and PhD in Industrial and Organizational Psychology from the University of Texas at El Paso. Dr. Estrada is a fellow of several societies including the Inter-University Seminar in the Armed Forces; the Society for Military Psychology; the Society for the Psychology of Women; and the American Psychological Association. Dr. Estrada is the recipient of the 2014 Charles S. Gersoni Award for Excellence in Military Psychology from the American Psychological Association Division 19 Society for Military Psychology and the 2022 John C. Flanagan Award for Lifetime Achievements in Military Psychology from the American Psychological Association Division 19 Society for Military Psychology. Dr. Estrada is actively involved in the Society for Military Psychology having served as the society’s first graduate student representative, Chair of the Membership Committee, Member at Large, President of the Society for Military Psychology in 2011 and most recently as Editor in Chief of Military Psychology. Prior to his professional career, Dr. Estrada served in the United States Marine Corps.

Benjamin S. Goldberg

Member

Dr. Benjamin Goldberg is a Senior Research Scientist at the U.S. Army Combat Capability Development Command – Soldier Center where he serves as technical lead for a research program focused on the development and evaluation of adaptive Training Management Tools for future Army training systems. His research focuses on adaptive experiential learning with an emphasis on simulation-based environments and leveraging Artificial Intelligence to create personalized experiences. This involves exploring research questions linked to intelligent tutoring, competency development, persistent learner modeling, immersive interaction, mixed reality, and user experience. His research aims to impact how technology can be applied to support the development and sustainment of expertise in challenging domains that require proficiency across cognitive, psychomotor, and affective knowledge and skill sets. Dr. Goldberg holds a Ph.D. in Modeling and simulation from the University of Central Florida and has researched adaptive instructional systems and intelligent tutoring for the last 15 years. He is well-published across several high-impact journals and proceedings, including IEEE Transactions of Learning Technologies, the Journal of Artificial Intelligence in Education (AIED), and Computers in Human Behavior. He also serves as Chair of the Extended Reality Technical Group within HFES and sits on several conference program committees including AIED and the Interservice/Industry Training, Simulation and Education Conference (I/ITSEC). Dr. Goldberg is the co-creator of the Generalized Intelligent Framework for Tutoring (GIFT) and received the 2019 Education and Human Performance Award administered by the National Training and Simulation Association (NTSA).

Patrick C. Kyllonen

Member

Dr. Patrick C. Kyllonen is Distinguished Presidential Appointee in the R&D Division of Educational Testing Service in Princeton, NJ. He conducts research on assessment and psychometric modeling of human skills, such as reasoning and collaborative problem solving, and personality, attitudes, values, and beliefs. Dr. Kyllonen received a B.A. from St. John's University, Ph.D. from Stanford University, and authored Generating Items for Cognitive Tests (with S. Irvine, 2001); Learning and Individual Differences (with P. L. Ackerman & R.D. Roberts, 1999); Extending Intelligence: Enhancement and New Constructs (with R. Roberts and L. Stankov, 2008); and Innovative Assessment of Collaboration (with A. von Davier and M. Zhu, 2017). He is a fellow of the American Psychological Association and American Educational Research Association and has coauthored several National Academy of Sciences reports, Education for Life and Work: Developing Transferable Knowledge and Skills in the 21st Century (2012), Measuring Human Capabilities (2015), and Supporting Students’ College Success: The Role of Assessment of Intrapersonal and Interpersonal Competencies (2017).

Michael W. Natali

Member

LCDR Michael W. Natali is the Deputy, Air Warfare Training Development Integrated Project Team Lead for Naval Aviation Training Systems & Ranges where he manages research projects focused on enhancing aviator performance through identification, development, and integration of emerging technologies into aircraft systems, training, and processes. He previously served as the Department Head for Human Performance and Research for the Chief of Naval Air Training, improving training methodologies and assessment, and as the BioStatistics Division Officer for the Naval Aerospace Medical Institute, managing the Navy's Aviation Selection Test Battery. LCDR Natali's work has been widely recognized, receiving the 2023 ASN(RD&A) Dr. Delores M. Etter Top Scientists & Engineers Team Award; the 2023 SIOP Distinguished Early Career Award – Practice; the 2021 NAWCTSD Admiral Luis de Florez Training & Simulation Award; the 2020 CAPT Sonny Carter Memorial Award; and the 2018 USNAEPS Robert S. Kennedy Award. He completed his doctorate in I-O Psychology at the University of Minnesota while also working as a Research Consultant for Assessment Associates International. LCDR Natali joined the Navy in 2014 as an Aerospace Experimental Psychologist and his expertise covers personnel selection, training systems and evaluation, performance measurement, and human-systems integration within military settings.

Aaron R. Phipps

Member

Dr. Aaron Phipps is an Assistant Professor of Economics at West Point, where he also contributes to research for the Army's Office of Economic and Manpower Analysis. He specializes in Labor Economics, Economics of Education, and Personnel Economics. His research focuses on using incentives to improve education and measuring the returns on educational investments. Dr. Phipps has been recognized for his teaching and scholarly accomplishments. He has been the recipient of several honors, including the Institute of Education Sciences Predoctoral Fellowship, Predoctoral Bankard Fellowship from the University of Virginia, Department of the Army Civilian Service Achievement Medal, West Point's Murdy Teaching Award, and the Upjohn Institute's Early Career Research Award. He received his Ph.D. in Economics from the University of Virginia in 2018.

Eduardo Salas

Member

Dr. Eduardo Salas is the Allyn R. & Gladys M. Cline Professor and Chair of the Department of Psychological Sciences at Rice University since 2015. He has a 40-year proven track record for developing evidence-based principles, guidance, tools and interventions to improve teamwork, learning and safety across a wide variety of contexts such as aviation, oil and gas, military, emergency response, space exploration as well as healthcare. He is a Past President of the Society for Industrial/Organizational Psychology (SIOP) and the Human Factors and Ergonomics Society (HFES), Fellow of the APA, the HFES and the Association for Psychological Science (APS), and a recipient of the Meritorious Civil Service Award from the Department of the Navy. He received the 2012 Society for Human Resource Management Losey Lifetime Achievement Award, the 2012 Joseph E. McGrath Award for Lifetime Achievement from the INGroup, the 2012 Distinguished Professional Contributions & 2016 Distinguished Scientific Contributions Award, a four-time winner of the M. Scott Myers Award for Applied Research in the Workplace, and the 2023 Wayne Casio Scientist-Practitioner Award, all awarded by SIOP. He received the 2023 James McKeen Cattell Fellow Award for outstanding lifetime contributions to the area of Applied Psychological Research from the APS and the 2023 American Psychological Foundation Gold Medal Award for Impact in Psychology.

Sarah Schatz

Member

Dr. Sarah “Sae” Schatz is the Founder and CEO of The Knowledge Forge, LLC. She works at the intersection of human cognition and learning, technology, and data. From 2015-2022, Sae served as the director of the Advanced Distributed Learning (ADL) Initiative, a U.S. Department of Defense program for research, development, and policy stewardship. She also co-chaired the NATO Training Group (NTG) Individual Training and Educational Developments (IT&ED) task group. Under her leadership, the U.S. ADL Initiative sparked the community’s pursuit of the “future learning ecosystem,” in part with her popular book Modernizing Learning: Building the Future Learning Ecosystem. From 2011 to 2014, she was the chief scientist at MESH Solutions (a defense contractor), where she led the U.S. Marine Corps’ Making Good Instructors Great project and the U.S. Joint Staff’s award-winning Blended Learning-Training effort. Prior to that, she held an assistant professorship with the University of Central Florida’s (UCF) Institute for Simulation and Training, and she was an instructor in the UCF Digital Media Department. Sae is a prolific writer and professional presenter as well as a graphic designer who often uses those skills to enhance books, presentations, and infographics. She holds a doctorate in Modeling and Simulation, with an emphasis on human systems.

Elizabeth A. Stine-Morrow

Member

Dr. Elizabeth A. L. Stine-Morrow is a Professor Emerita and Research Scientist in Educational Psychology and the Beckman Institute at the University of Illinois. Her research is broadly concerned with the multifaceted nature of adult development and aging, and the factors that support the maintenance and growth of cognition and learning through the adult lifespan. This work has examined how self-regulated adaptations (e.g., selective allocation of attentional resources, reliance on knowledge-based processes, activity engagement) impact cognitive abilities and everyday performance through adulthood. Much of this research has focused on the important role of literacy and the processes through which effective reading is maintained into late life. This research has been funded by NIA, NSF, and IES. She is a Fellow of the American Psychological Association (APA; Division 20), the Association for Psychological Science, the Gerontological Society of America, and the Psychonomic Society, and was the recipient of the APA Division 20 Mentorship Award in 2018. She has served as Associate Editor for the Journal of Gerontology: Psychological Science and for Memory & Cognition; she currently serves as Editor for Psychology and Aging. Professor Stine-Morrow received her PhD from Georgia Tech in General-Experimental Psychology, with a focus in cognitive aging, and was a postdoctoral fellow at Duke University. She was a member of the National Academy of Sciences Committee on Learning Sciences: Foundations and Application to Adolescent and Adult Literacy.

Mikhail A. Wolfson

Member

Dr. Mikhail A. Wolfson is an Assistant Professor and Vernon Smith Fellow in Management at the University of Kentucky. He was also previously an Assistant Professor in Kogod School of Business at American University. His research expertise includes informal learning, team composition, human capital resources, multilevel modeling, network analysis, and unobtrusive measurement. Primarily his research focuses on advancing configural approaches of team composition that account for individuals’ characteristics and interrelations among team members. He has conducted research in the contexts of the U.S. Military (Army, Navy, Marine Corps), surgical teams, ICU teams, professional cycling, and student teams. Additionally, he has experience working with the U.S. Military on grant research funded by the Department of Defense through the Army Research Institute (ARI), and US Army Medical Research and Development Command (USAMRDC), Military Operational Medicine Research Program (MOMRP). He is a member of the Academy of Management, the Society of Industrial and Organizational Psychology and has received awards for his research and teaching from the University of Connecticut, American University, and the University of Kentucky. He earned his Bachelor's in Psychology at the University of Massachusetts and his Ph.D. in Business Administration from the University of Connecticut.