Biographical Sketches of Steering Committee Members, Authors, and Reviewers

Jared Anthony is the director of the Carnegie Foundation for the Advancement of Teaching Postsecondary Commission, where he is working to accelerate the success of underrepresented students in their secondary and postsecondary education and as they progress toward meaningful careers. Prior to the Carnegie Postsecondary Commission, Anthony served as the director of policy and assessment redesign for the Colorado Education Initiative (CEI), where he helped deepen CEI's understanding of policy and practice related to assessment and school quality measures, as well as coaching schools and districts in implementing strategies for creating balanced assessment systems. Prior to CEI, Anthony served as the assessment principal consultant for the Colorado Department of Education. In this role, he partnered with higher education institutions, districts, and schools to increase student access to higher education using evidence from performance assessments. He also coordinated Colorado's high school accountability assessments and worked to increase assessment literacy among Colorado's districts and schools. Anthony holds a Ph.D. in educational psychology from Fordham University, where he focused on how student motivation and self-regulated learning can influence academic success.

Courtney Bell is the director of the Wisconsin Center for Education Research (WCER) and a professor of learning sciences at the University of Wisconsin–Madison. After receiving a postdoctoral fellowship in measurement from the American Educational Research Association and Educational Testing Service (ETS), Bell worked as a researcher at ETS—the world's largest private nonprofit educational testing and assessment organization—for more than a decade. Since taking the helm at WCER, Bell has led the development of two international teacher observation systems and served as a principal investigator on the Global Teaching InSights study—the first of its kind to comprehensively measure teaching quality using observations, artifacts, questionnaires, and student outcomes in eight economies. Bell is passionate about understanding

and improving teaching for historically underserved children. Her interdisciplinary collaborative work is situated at the intersections of research, policy, and practice and spans the issues of parental choice, teaching performance assessments, teaching quality, teacher learning, teacher education, international comparisons of teaching, and measuring teaching. Bell is currently engaged in both national and international studies of teaching, teacher education, and teacher learning. A former high school science teacher, Bell holds a Ph.D. in curriculum, teaching and educational policy from Michigan State University and a B.A. in chemistry from Dartmouth College.

Amy I. Berman is the deputy director of the National Academy of Education (NAEd), where she works to advance the organization's strategic and research initiatives. Prior to NAEd, Berman was an education civil rights lawyer, serving as an enforcement director at the U.S. Department of Education's Office for Civil Rights and the section chief at the U.S. Department of Justice, Civil Rights Division, Educational Opportunities Section. In these positions, Berman worked to ensure equal access to education through the vigorous enforcement of civil rights laws, including in the areas of race, national origin, sex, religion, disability, and language. In addition to enforcement, Berman worked on key guidance documents addressing the use of race in schools, harassment in schools, education of English learner students, and the requirement to educate all students regardless of immigration status. She has served as an adjunct professor at The George Washington University Graduate School of Education and Human Development (GSEHD), The George Washington University Law School, and the American University Washington College of Law. She recently co-edited a volume for the NAEd titled *Comparability of Large-Scale Educational Assessments: Issues and Recommendations* (2020) and a volume for The ANNALS of the American Academy of Political and Social Science titled *What Use Is Educational Assessment?* (2019). Berman holds an Ed.S. in education policy from GSEHD, a J.D. from Harvard Law School, and a B.S. in industrial and labor relations from Cornell University.

Linda Darling-Hammond is the president and chief executive officer of the Learning Policy Institute, created to provide high-quality research for policies that enable equitable and empowering education for each and every child. She is also the Charles E. Ducommun professor of education emeritus at Stanford University, where she founded the Stanford Center for Opportunity Policy in Education. She also served as a faculty sponsor for the teacher education program at Stanford University, which she helped to redesign. Darling-Hammond is the past president of the American Educational Research Association, a member of the National Academy of Education, and a member of the American Academy of Arts & Sciences. She was recently appointed by President Biden as a member of the National Board of Education Sciences, which oversees the Institute for Education Sciences. In 2022, Darling-Hammond received the Yidan Prize for Education Research in recognition of her work, which has shaped education policy and practice around the most equitable and effective ways to teach and learn. Darling-Hammond is the author or editor of more than 30 books and 600 other publications on teacher quality and educational equity, including *Teaching as the Learning Profession* (1999), *Preparing Teachers for a Changing World: What Teachers Should Learn and Be Able to Do* (2007), *Powerful Teacher Education* (2013), and *Preparing Teachers for Deeper Learning*

(2019). Darling-Hammond holds an Ed.D. from Temple University and a B.A. from Yale University.

Kathryn Dewsbury-White is the president and chief executive officer of the Michigan Assessment Consortium (MAC), where she directs the MAC's work in pursuit of increasing assessment literate practice among Michigan's education stakeholders. The MAC, founded in 2008, supports numerous professional learning programs and networked communities, undertakes proof-of-concept evaluations for its assessment programs and services, and publishes resources in formats designed to support practicing educators. The MAC's services, publications, and informal applied research are designed to leverage the implementation of balanced and learner-centric assessment systems. Dewsbury-White also serves as the project or contract director for the MAC's grants and secures and cultivates the many national and state partnerships and collaborations necessary to advance its mission. Prior to the MAC, Dewsbury-White served as a curriculum and professional learning director for a large education service agency for 25 years, directing curriculum and assessment review projects and professional learning programs through the evolution of the standards-based education movement. She initiated and developed a sustaining arts integration professional learning program with the Wharton Center for the Performing Arts and the Kennedy Center for the Performing Arts in mid-Michigan. She also co-founded the Early College at Lansing Community College and served as its first principal. Early in her career, she taught social studies and English language arts to adult and alternative education students. Dewsbury-White holds a Ph.D. in curriculum and instruction, an M.A. in reading, and a B.A. in political philosophy and secondary education from Michigan State University.

Elena Diaz-Bilello is the associate director of the Center for Assessment, Design, Research, and Evaluation (CADRE) and a faculty affiliate in the School of Education at the University of Colorado Boulder. Diaz-Bilello collaborates with state education agencies, school districts, and educational organizations to develop practical and sound approaches to address assessment and educational policy challenges. This partnership work includes conducting mixed-methods research and program evaluations to study the effectiveness of educational reforms and initiatives intended to provide equitable learning and assessment experiences, and to improve teaching and learning. She also serves as a Technical Advisory Committee member in several states. Prior to joining CADRE, Diaz-Bilello was a senior associate at the National Center for the Improvement of Educational Assessment providing technical assistance and guidance to state agencies, the U.S. Department of Education, national organizations, and school districts in the areas of designing validity and program evaluation studies and improving upon accountability and assessment practices. Early in her K–12 career, she conducted district-wide program evaluations in the Denver Public Schools and served as an advisor/consultant to the Colorado Department of Education. Diaz-Bilello holds a Ph.D. in research and evaluation methodology from the University of Colorado Boulder, an M.P.A. in international economic and political development from Columbia University, and a B.A. in philosophy and history from Lewis and Clark College.

Debbie Durrence is the executive director of data governance for the Gwinnett County Public Schools in metro Atlanta, Georgia, which serves a diverse population of more than 180,000 students. She oversees teams focused on student data management, data integration, data governance, state and federal reporting, data privacy, and data systems and engineering. Prior to serving as executive director of data governance, Durrence served as executive director of accountability and assessment, where she led a team that developed and administered a district assessment program, provided staff development programs for assessment literacy, and supervised the administration of all standardized assessments. In addition to serving as a member of the board of directors and the classroom assessment committee for the National Council on Measurement in Education (NCME), she currently serves on the board of directors for 1EdTech and the K–12 advisory for Qualtrics. She has presented on a variety of topics during conferences for organizations including NCME, the American Educational Research Association, 1EdTech, the National Center for the Improvement of Educational Assessment, and the Ed-Fi Alliance. Durrence holds an Ed.D. in education leadership from the University of Georgia, where her dissertation focused on the effectiveness of technology training in a K–12 setting.

John Q. Easton is a senior advisor to the Institute for Policy Research at Northwestern University. Prior to Northwestern, he served as a senior fellow at the University of Chicago Consortium on School Research (the Consortium), as well as the Consortium's deputy director and executive director. Easton also served as the director of the Institute of Education Sciences and the vice president for programs at The Spencer Foundation. He is involved in several advisory boards at non-profit organizations, including the Illinois Economic Security Advisory Board. Easton is the chair of the advisory boards for both the Illinois Workforce and Education Research Collaborative and the Early Childhood Research Alliance of Chicago, and recently completed a two-year term on the Chicago Public Schools' Accountability Redesign Advisory Group. Easton was recently appointed to the 2023–2024 EdWorkingPapers Review Board at the Annenberg Institute at Brown University. Easton holds a Ph.D. in education from the University of Chicago, an M.S. in psychology from Western Washington University, and a B.A. in psychology from Hobart College.

Carla Evans is a senior associate at the National Center for the Improvement of Educational Assessment. Evans works primarily with state education agencies and other entities on projects that bridge classroom and large-scale assessment. Her research interests and expertise focus on the impact and implementation of assessment and accountability policies on teaching and learning. For example, she conducts policy research related to balanced and innovative assessment systems, culturally responsive assessment, performance-based assessments, and assessment literacy initiatives. Evans has received numerous honors, including the American Educational Research Association's (AERA's) Division H Outstanding Dissertation Award, the University of New Hampshire's (UNH's) Dissertation Year Fellowship, UNH Graduate Research Assistantships, and the UNH Education Department Outstanding Graduate Student Paper Award. Evans currently serves on AERA's Classroom Assessment Special Interest Group's leadership team and as an adjunct professor of education at UNH. Evans

has published numerous articles in peer-reviewed journals and regularly presents her research at AERA, the National Council for Measurement in Education (NCME), and the National Conference on Student Assessment. She has co-authored, with Scott Marion, a forthcoming book on instructionally useful assessment and is co-editing an NCME volume on culturally responsive assessment. Evans began her career as an elementary classroom teacher and taught for almost a decade. She holds a Ph.D. in education with a concentration in assessment, evaluation, and policy from UNH.

Erin Marie Furtak is a professor of STEM education at the University of Colorado Boulder. A former high school biology and earth science teacher, Furtak studies how teachers learn through the iterative design and enactment of classroom assessment, and how formative assessment can be a vehicle for more equitable learning. She conducts extensive service to the teaching profession through long-term research and professional development partnerships with school districts and organizations in Colorado and across the United States. Furtak received the 2011 Presidential Early Career Award for Scientists and Engineers and the German Chancellor Fellowship from the Alexander von Humboldt Foundation in 2006. Her research and professional writing have been published in multiple journal articles, research-and practitioner-oriented books, book chapters, humorous essays, and advice columns. Her most recent book, *Formative Assessment for 3D Science Learning: Supporting Ambitious and Equitable Instruction*, was published in 2023 by Teachers College Press. Furtak holds a Ph.D. in curriculum and teacher education from Stanford University; an M.A. in education from the University of Denver; and a B.A. in environmental, population, and organismic biology from the University of Colorado Boulder.

Susan R. Goldman is a distinguished professor emerita of liberal arts and sciences, psychology, and education and a founding co-director of the Learning Sciences Research Institute at the University of Illinois Chicago. She has conducted research on subject matter learning, instruction, assessment, and roles for technology throughout her career. Goldman focuses on understanding literacy demands in different academic disciplines and the implications of these demands for supporting subject matter learning. Goldman has also been involved in Project READi throughout her career, and more information about the Project can be found at https://projectreadi.org. Her most recent research focuses on how teachers learn to engage in instruction and assessment consistent with the deep learning needed to meet 21st-century demands. This research highlights the importance of systemic support for change, as well as necessary collaboration with teachers and school and district-level practitioners. Goldman is a member of the American Academy of Arts & Sciences and the National Academy of Education, an inaugural fellow of the Society for Text and Discourse and the International Society of the Learning Sciences (ISLS), and a fellow of the American Educational Research Association. She served on the ISLS Board of Directors from 2009–2015, as its president from 2012–2013, and as its executive officer from 2016–2023. She also served on the Board of Directors of the Society for Text and Discourse from 1990–2007 and as its president from 2000–2007. Goldman served as an associate editor for *Cognition and Instruction*, *Discourse Processes*, and *Journal of Educational Psychology*. She currently serves on the editorial boards of the *Journal of the Learning Sciences*, the *International Journal of Computer-Supported Collabora-*

tive Learning, and *Research in the Teaching of English*. Goldman holds a Ph.D. in psychology from the University of Pittsburgh, an M.S. in psychology from the University of Pittsburgh, and a B.A. in psychology from Barnard College of Columbia University.

Brian Gong is a senior associate with the National Center for the Improvement of Educational Assessment (the Center for Assessment), where he assists states and other educational entities in addressing challenging assessment and accountability design and implementation issues. Gong has helped develop educationally valuable and technically defensible state accountability systems and innovative assessments. He has also been involved with creating policies, models, and criteria for promoting validity, reliability, and credibility in both assessments and accountability systems through work with groups such as the U.S. Department of Education, the Council of Chief State School Officers (CCSSO), the National Center on Educational Outcomes, and several state Technical Advisory Committees. His recent work has also included the development of standards and criteria for the design and evaluation of assessment and accountability programs. Gong was a member of the committee tasked with revising the Standards for Educational and Psychological Testing and the co-author of content methodology to implement the CCSSO Criteria for Procuring and Evaluating High-Quality Assessments. Prior to co-founding the Center for Assessment in 1998, Gong was responsible for curriculum, assessment, and accountability in the Kentucky Department of Education and served as a research scientist at the Educational Testing Service. Gong holds a Ph.D. in education with a concentration in the design and evaluation of educational programs from Stanford University.

Ajit Gopalakrishnan is the chief performance officer for the Connecticut State Department of Education (CSDE), where he oversees data collection, student assessment, psychometrics, reporting, research, and school and district accountability. Prior to CSDE, he worked in the field of adult education for more than 15 years, where he managed initiatives on standards, assessment, data, and accountability. He also served as Connecticut's General Education Development administrator. Gopalakrishnan has published articles on learner retention, accountability, and technology. Gopalakrishnan holds an M.B.A. in management and industrial relations for the University of Bridgeport and a B.B.A. from Loyola College.

Edward Haertel is the Jacks Family professor of education, emeritus, at Stanford University. While at Stanford, he studied quantitative research methods, psychometrics, and educational policy—especially test-based accountability and the use of test data for educational program evaluation. Haertel's early work investigated the use of latent class models for item response data, and his later projects included studies of standard setting and standards-based score interpretations, statistical properties of test-based accountability systems, metric-free measures of score gaps and trends, and examining value-added models for teacher evaluation from a psychometric perspective. Prior to his retirement, Haertel served as the president of the National Council on Measurement in Education; the chair of the Technical Advisory Committee concerned with the design and refinements of California's test-based school accountability system; the chair of the National Academies of Sciences, Engineering, and Medicine's Board on Testing and

Assessment; and as a member of the National Assessment Governing Board. Haertel holds a Ph.D. in measurement, evaluation, and statistical analysis from the University of Chicago.

Laura S. Hamilton is a senior director at the American Institutes for Research (AIR), where she leads the Center on Advancing Measurement and Assessment. This inter-disciplinary center promotes high-quality, innovative approaches to measurement and assessment, generating evidence to inform policy and practice in education, workforce, and family and community development. Hamilton also leads and conducts research on education policy, teaching, educational technology, youth development, and civic learning and engagement. Prior to AIR, Hamilton served as an associate vice president in the Research and Measurement Sciences area at the Educational Testing Service (ETS), leading a portfolio of research on assessment and learning related to K–12 and postsecondary education, workforce development, and language assessment. Prior to ETS, she held the distinguished chair in learning and assessment at the RAND Corporation, where she co-directed the American Educator Panels and directed The RAND Center on Social and Emotional Learning Research. Hamilton has served on numerous editorial teams, committees, and panels, including the National Academies of Sciences, Engineering, and Medicine's Committee on Developing Indicators of Education Equity; the American Educational Research Association/American Psychological Association/National Council on Measurement in Education's Committee to revise the *Standards for Educational and Psychological Testing*; the Research Advisory Council for the Collaborative for Academic, Social, and Emotional Learning; the Alliance for Learning Innovation Task Force on Inclusive R&D; and Technical Advisory Committees for several state assessment programs. She has held several editorial roles and received the Joseph E. Zins Distinguished Scholar Award for Social and Emotional Learning Action Research. Hamilton holds a Ph.D. in educational psychology and an M.S. in statistics from Stanford University.

Margaret Heritage is an independent education consultant whose career has spanned research and practice. She spent 22 years at the University of California, Los Angeles (UCLA), first serving as the principal of the laboratory school of the Graduate School of Education and Information Studies and then as an assistant director at the Center for Research on Evaluation, Standards and Student Testing. While at UCLA, she also taught in the Teacher Education Program. Prior to UCLA, Heritage served as a senior scientist at WestEd. Prior to working in the United States, she held several roles in her native England: classroom teacher, elementary school principal, adjunct professor in the Department of Education at the University of Warwick, and a county inspector of schools. Her current work centers on formative assessment, including how it supports regulatory processes and contributes to educational equity goals, and how formative assessment practices can support English learners in reaching content and language goals.

Ethan L. Hutt is the Gary Stuck faculty scholar in education and an associate professor in the School of Education at the University of North Carolina at Chapel Hill. Hutt's research is concerned with the systems and tools that assess the work of schools—

specifically the academic standards, data systems, and evaluation metrics that have become ubiquitous in modern school systems—resulting in research focused on the historical development, modern use, and ongoing influence of standardized tests, grades, attendance policies, teacher value-added measures, longitudinal datasets, and accountability systems. Hutt is the co-author, with Jack Schneider, of *Off the Mark: How Grades, Ratings, and Rankings Undermine Learning (But Don't Have To)* (2023); the co-editor, with Michael A. Gottfried, of *Absent from School: Understanding and Addressing Student Absenteeism* (2019); and has published more than 25 peer-reviewed articles in a wide variety of venues including *Social Science History*, *Educational Researcher*, *Journal of Teacher Education*, and the *Virginia Law Review.* Hutt has served as an associate editor for *Educational Researcher*, the book review co-editor of *History of Education Quarterly*, and the co-editor-in-chief of *The High School Journal*. Hutt holds a Ph.D. in education from Stanford University, an M.A. in history from Stanford University, and a B.A. in history from Yale University.

Erika Landl is a senior associate with the National Center for the Improvement of Educational Assessment (the Center for Assessment), where she provides technical support to states on issues related to the design, development, implementation, and validation of assessment and accountability systems. Prior to the Center for Assessment, Landl was a senior research scientist at Pearson, where she served as the lead measurement specialist for a variety of state and national assessment programs. During her 13 years at Pearson, Landl was responsible for the planning, management, and coordination of the full array of psychometric activities necessary to sustain a large-scale assessment program, including test design and development, scaling and equating, item and test analysis, parameter estimation, standard setting, the development of reliability and validity research, report design, and the creation of technical documentation. Landl serves on multiple state Technical Advisory Committees and is a co-facilitator of the Council of Chief State School Officers' Balanced Assessment Systems Collaborative. Accordingly, a significant portion of her work is focused on developing tools and processes that inform the selection and use of assessment resources by states, districts, and schools. Landl also frequently develops white papers, publications, and presentations for technical and non-technical audiences. Landl holds a Ph.D. in educational measurement and statistics and an M.A. in educational psychology from the University of Iowa.

Carol D. Lee is the Edwina S. Tarry professor of education, emerita, in the School of Education and Social Policy and in African American Studies at Northwestern University. She is the president of the National Academy of Education, a past president of the American Educational Research Association (AERA), a former representative to the World Educational Research Association on behalf of AERA, past vice president of AERA's Division G, past president of the National Conference on Research in Language and Literacy, and past co-chair of the Research Assembly of the National Council of Teachers of English (NCTE). She is a member of the National Academy of Education; a fellow of AERA, the National Conference on Research in Language and Literacy, and the International Society of the Learning Sciences; a former fellow at the Center for Advanced Study in the Behavioral Sciences; and a member of the American Academy

of Arts & Sciences and the Reading Hall of Fame. Lee has received numerous awards, including Distinguished Contributions to Research in Education and Scholars of Color Distinguished Scholar Award from AERA; the Harold W. McGraw, Jr. Prize in Education; the James R. Squire Award and the Distinguished Service Award from NCTE; the LAS Alumni Distinguished Service Award from the College of Liberal Arts & Sciences at the University of Illinois-Urbana; The President's Pacesetters Award from the American Association of Blacks in Higher Education; the Lifetime Achievement Award from the American Association of Colleges for Teacher Education; and an honorary doctorate from the University of Pretoria, South Africa. In 2023, she was selected by President Biden to serve on the National Board for Education Sciences. Lee holds a Ph.D. in education (curriculum and instruction) from the University of Chicago, an M.A. in English from the University of Chicago, and a B.A. in the teaching of secondary school English from the University of Illinois at Urbana-Champaign.

Peter Leonard is the executive director of Student Assessment & Multi-Tiered Systems of Support (MTSS) for Chicago Public Schools (CPS). He and his team empower CPS stakeholders with high-quality evidence of student learning to advance achievement, access, and opportunity for all students. They achieve this by leading policy, strategy, implementation, and support across all assessment, MTSS, and high-dosage tutoring programs. Leonard also represents CPS in national- and state-level committees, including as the vice chair of the Illinois State Assessment Review Committee. He is a proud fellowship alum of AmeriCorps, Education Pioneers, the University of Chicago Civic Leadership Academy, and the Erikson Institute's Barbara Bowman Leadership Fellows. Leonard holds a Certificate in Civic Leadership from the University of Chicago, an M.A. in the learning sciences from Northwestern University, and a B.A. in history (honors) from the University of Notre Dame.

Scott F. Marion is the executive director of the National Center for the Improvement of Educational Assessment and a national leader in conceptualizing and designing innovative and balanced assessment systems to support instructional and other critical uses. Marion's current projects include designing—and supporting states in implementing—assessment and accountability initiatives; providing technically defensible policy guidance; and implementing high-quality, locally designed performance-based assessments. Marion was recently elected to the National Academy of Education and is one of three measurement specialists on the National Assessment Governing Board, which oversees the National Assessment of Educational Progress. He coordinates and/or serves on 10 state or district Technical Advisory Committees for assessment and accountability. He has served on multiple National Research Council committees, including those that provided guidance for next-generation science assessments, investigated the issues and challenges of incorporating value-added measures in educational accountability systems, and outlined best practices in state assessment systems. Marion is a co-author of the validity chapter in *Educational Measurement* (in press) and a co-author, with Carla Evans, of a forthcoming book on instructionally useful assessment. He has published dozens of articles in peer-reviewed journals and edited volumes, and he regularly presents his work at the conferences of the American Educational Research

Association, the National Council on Measurement in Education, and the Council of Chief State School Officers. Marion holds a Ph.D. in education with a concentration in measurement and evaluation from the University of Colorado Boulder.

José Felipe Martínez is a professor of social research methodology at the University of California, Los Angeles (UCLA). Prior to UCLA, he was an associate social/behavioral scientist at the RAND Corporation. His research involves applications of measurement theory and methods to issues in education policy and practice—specifically concerning teacher, school, and program evaluation. Areas of particular focus include systems of multiple measures for teacher and school evaluation and instruments and tools for measuring instructional practice and classroom climate in mathematics and science. His recent projects have involved the development and validation of a range of such measures, including electronic teacher portfolios, student surveys, and observation protocols. His work has been supported by the National Science Foundation, The Spencer Foundation, the William T. Grant Foundation, and the James S. McDonnell Foundation. Martínez teaches courses on measurement, research design, and survey methodology. In 2020, he was the recipient of the American Educational Research Association's (AERA's) Palmer O. Johnson Memorial Award for the most outstanding paper published in an AERA journal for his article "Assessing the Assessment: Evidence of Reliability and Validity in the edTPA." Martínez holds a Ph.D. in education from UCLA; an M.A. from UCLA; and a bachelor's degree in information science from the Autonomous University of Aguascalientes (Mexico).

Scott Norton is a retired educator and most recently served as the deputy executive director of programs at the Council of Chief State School Officers (CCSSO). In this role, he directed and oversaw the development and execution of CCSSO's programmatic areas, including addressing student expectations, student transitions, teacher workforce, school leadership, and overall school improvement. Prior to CCSSO, Norton was the assessment director and then the assistant superintendent in the Office of Standards, Assessments, and Accountability for the Louisiana Department of Education. He also was a public-school teacher in Louisiana. Norton holds a Ph.D. in educational administration and supervision from Louisiana State University, an M.S. in education administration from Louisiana State University, an M.S. in public administration from Louisiana State University, and a B.S. in education from Tennessee Technological University.

James W. Pellegrino is a professor emeritus of liberal arts and sciences, psychology, and education and a founding co-director of the Learning Sciences Research Institute at the University of Illinois Chicago. His research on STEM education and assessment has been funded by the National Science Foundation, the Institute of Education Sciences, and private foundations. His recent projects have focused on the design of high-quality science assessments and instructional resources for K–8 classrooms. He has chaired several National Academies of Sciences, Engineering, and Medicine committees that issued major reports related to education and assessment, including the Committee on the Evaluation of National and State Assessments of Educational Progress; the Committee on Learning Research and Educational Practice; and the Committee on the Foundations of Assessment, which authored the seminal report *Knowing What Students*

Know: The Science and Design of Educational Assessment. Most recently, he served on the Committee on Science Learning: Computer Games, Simulations, and Education and the Committee on a Conceptual Framework for New Science Education Standards. He chaired the Committee on Defining Deeper Learning and 21st Century Skills and co-chaired the Committee on Developing Assessments of Science Proficiency in K–12. He is a lifetime member of the National Academy of Education and the American Academy of Arts & Sciences. He currently serves on the National Assessment of Educational Progress Validity Studies Panel and on Technical Advisory Committees for multiple state assessment programs, including Illinois, Maine, New York, Rhode Island, Texas, and Vermont. He has published numerous books, chapters, and articles on cognitive theory and research and their implications for the design of instruction and assessment. Pellegrino holds a Ph.D. and an M.A. in experimental, quantitative psychology from the University of Colorado and a B.A. in psychology from Colgate University.

William R. Penuel is a distinguished professor of learning sciences and human development in the Institute of Cognitive Science and School of Education at the University of Colorado Boulder. He designs and studies curriculum materials, assessments, and professional learning experiences for teachers in STEM education—primarily in science. He investigates how contemplative practices and critical inquiry can support educators in cultivating more compassionate learning environments and schools. He also focuses on how long-term research–practice partnerships can be organized to address systemic inequities in education systems linked to race, gender and sexual diversity, and language. In each of his projects, Penuel works in partnership with educators and education leaders to explore how to attenuate inequities in school systems by (1) creating equitable classroom cultures that attend to student experience; (2) testing strategies to address epistemic injustices in whose knowledge is elicited and valued; and (3) connecting teaching to the interests, experiences, and identities of learners, particularly those to whom our society owes an education debt. He uses a wide range of research methods, including one he and his colleagues developed called design-based implementation research, to test what he and his colleagues co-design. Penuel is an author of two books on research-practice partnerships—*Creating Research-Practice Partnerships in Education* (2017) and *Connecting Research and Practice for Educational Improvement: Ethical and Equitable Approaches* (2018) and co-edited a book on improvement research titled *The Foundational Handbook on Improvement Research in Education* (2022). Penuel holds a Ph.D. in developmental psychology from Clark University, an Ed.M. in human development and psychology from Harvard Graduate School of Education, and a B.A. in psychology from Clark University.

Donald J. Peurach is a professor of educational policy, leadership, and innovation at the University of Michigan Marsal Family School of Education, a senior fellow at the Carnegie Foundation for the Advancement of Teaching, and a co-director—with Jennifer Lin Russell—of the Improvement Scholars Network. His research focuses on the organization, management, and improvement of instruction in education systems, with a particular focus on network-based continuous improvement. Peurach is the co-editor of *The Foundational Handbook on Improvement Research in Education* (2022); the author of *Seeing Complexity in Public Education: Problems, Possibilities, and Success for*

All (2011); and a co-author of *Improvement by Design: The Promise of Better Schools* (2014). Peurach holds a Ph.D. in educational studies from the University of Michigan; an M.P.P. from the University of Michigan; and a B.A. in computer science and his teaching certificate from Wayne State University.

Morgan S. Polikoff is a professor of education at the University of Southern California (USC) Rossier School of Education and a co-director of the USC EdPolicy Hub. He researches the design, implementation, and effects of curriculum, standards, accountability, and assessment policies. He has also led state and nationally representative surveys to understand Americans' views on education policy and the educational experiences of American households since the onset of the COVID-19 pandemic. He has been the principal investigator or co-principal investigator on more than $15 million in federal and foundation grants, including the Institute of Education Science–funded Center on Standards, Alignment, Instruction and Learning from 2015 through 2020. He received the American Educational Research Association (AERA) Early Career Award in 2017 and served on the National Academies of Sciences, Engineering, and Medicine's Committee on Developing Indicators of Educational Equity. Polikoff is a committed public intellectual, disseminating his and others' research through dozens of commentaries, blogs, and social media engagements, winning AERA's Outstanding Public Communication of Education Research Award in 2020 for his impact on state accountability policies under the Every Student Succeeds Act. Polikoff has published more than 50 peer-reviewed journal articles and one book, *Beyond Standards: The Fragmentation of Education Governance and the Promise of Curriculum Reform* (2021). He has served as an associate editor of the *American Educational Research Journal* and a co-editor of *Educational Evaluation and Policy Analysis*. Polikoff holds a Ph.D. in education policy from the University of Pennsylvania and a B.S. in mathematics from the University of Illinois at Urbana-Champaign.

Jennifer Randall is the Dunn Family Endowed Professor of Psychometrics and Test Development at the Marsal Family School of Education at the University of Michigan. She is also the founding president of the Center for Measurement Justice, a research center dedicated to facilitating the adoption of justice-oriented educational assessment and measurement processes. Randall began her career as a public high school social studies teacher, working with racially and ethnically minoritized students. In this capacity, she began to recognize the ways that traditional assessment practices cause deep and irreparable harm to the most marginalized students—the students the system should be seeking to serve the most. Her work seeks to disrupt white supremacist, racist logics in assessment through practices that center justice and are explicitly and unapologetically antiracist. Randall sits on numerous state and national working groups, committees, and Technical Advisory Groups as a fierce advocate for antiracist, liberating processes that center the needs of Black, Brown, and Indigenous students. In addition, she teaches courses in measurement theory, statistics, research design, and assessment. Randall's work has been published in assessment and education journals such as *Educational Measurement: Issues and Practice*, *Educational Assessment*, and *Language Testing*. Randall holds a Ph.D. in educational measurement from Emory

University, an M.A.T. in education from Duke University, and bachelor's degree in psychology from Duke University.

Maria Araceli Ruiz-Primo is an associate professor in the Graduate School of Education at Stanford University and the director of the Laboratory of Educational Assessment, Research, and InnovatioN. Her work, funded mainly by the National Science Foundation and the Institute of Education Sciences, examines assessment practices and the assessment of student learning in the classroom and large-scale assessment programs. She has researched the development and evaluation of instructionally sensitive assessments and instruments intended to measure teachers' formative assessment practices. She has also recently worked on the analysis of state testing programs. Her publications address the development and evaluation of multiple learning assessment strategies—including concept maps and students' science notebooks—and the study of teachers' informal and formal formative assessment practices, including the use of assessment conversations and embedded assessments. She was a co-editor of a special issue of the *Journal of Research in Science Teaching* on assessment and a special issue of the *Journal of Educational Measurement* on classroom assessment. She has published in *Science*, *Educational Measurement: Issues and Practice*, the *Journal of Research in Science Teaching*, and other major technical educational research journals.

Jennifer Lin Russell is a professor of leadership, policy, and organizations at Vanderbilt University's Peabody College, a senior fellow at the Carnegie Foundation for the Advancement of Teaching, and a co-director—with Donald Peurach—of the Improvement Scholars Network. Her research focuses on organizing educational systems for improvement, with a particular emphasis on networked continuous improvement. Her work seeks to reshape the relationship between educational research and practice to create more equitable learning opportunities for students. She is a co-editor of *The Foundational Handbook on Improvement Research in Education* (2022). Russell holds a Ph.D. in education policy, organizations, measurement, and evaluation from the University of California, Berkeley; an M.A. in curriculum and instruction from the University of San Francisco; and a B.A. in political science and urban studies from Northwestern University.

Lorrie A. Shepard is a university distinguished professor in the School of Education at the University of Colorado Boulder. Her research in educational measurement has addressed the use and misuse of tests in education settings. Most cited are her contributions to validity theory, standard setting, bias detection, grade retention, and the effects of high-stakes accountability testing. Her validity research emphasizes the examination of unintended side effects of testing as well as the intended meanings of test constructs. She has conducted validity investigations at the large-scale and classroom assessment level. At the large-scale level, for example, she has served on the National Assessment of Educational Progress Validity Studies Panel (NVS) from 1995 to the present and has conducted studies under the auspices of the NVS. In recent years, her work has focused, at the classroom level, on drawing deeper connections between sociocultural learning theory, ambitious teaching, and formative assessment—with particular attention to culturally responsive pedagogy and equitable assessment practices. Shepard is past

president of the American Educational Research Association (AERA) and past president of the National Council on Measurement in Education (NCME). She is an AERA Fellow, a member of the National Academy of Education (NAEd), and served as the president of NAEd from 2005–2009. Shepard has received distinguished career awards recognizing her contributions in measurement, research, and teacher education, respectively, from NCME and the Educational Testing Service, AERA, and the American Association of Colleges for Teacher Education. Shepard holds a Ph.D. in research and evaluation methodology from the University of Colorado Boulder, an M.A. in counseling from the University of Colorado Boulder, and a B.A. in history from Pomona College.

Guillermo Solano-Flores is a professor of education at the Stanford University Graduate School of Education. His research focuses on the intersection of assessment, cultural and linguistic diversity, and fairness. This research is relevant to the testing of students who are not proficient in English in the United States, students from different countries in the context of international comparisons, and students with disabilities. His research is based on the use of multidisciplinary approaches employing a combination of psychometrics, sociolinguistics, semiotics, and cognitive science. He is the author of the theory of test translation error, which addresses testing across cultures and languages. He has also investigated the use of generalizability theory—a psychometric theory of measurement error—in the testing of English language learners and Indigenous populations, and the use of Boolean algebra in complex coding endeavors. Solano-Flores has advised Latin American countries on the development of national assessment systems and has advised countries in Latin America, Asia, Europe, the Middle East, and Northern Africa on the adaptation and translation of performance tasks into multiple languages. His current research projects examine academic language and testing, formative assessment practices for culturally diverse science classrooms, and the design and use of testing accommodations and accessibility resources for students with special needs in computer-administered tests. Solano-Flores serves as a testing and measurement expert for the National Assessment Governing Board and has been a member of Technical Advisory Committees for several assessment projects and institutions, including the Smarter Balanced Assessment Consortium, the National Assessment of Educational Progress, the National Academy of Education, and the Department of Education of Hawaii. Solano-Flores holds a Ph.D. in education with an emphasis in methodology and measurement from the University of California, Santa Barbara; an M.A. in educational psychology from the National University of Mexico; and a B.A. in psychology from the National University of Mexico.

James P. Spillane is the Spencer T. and Ann W. Olin Professor in Learning and Organizational Change at the School of Education and Social Policy at Northwestern University. He is also a professor of human development and social policy, a professor of learning sciences, and a faculty associate at Northwestern University's Institute for Policy Research. A former primary school teacher at St. Mary's on the Hill National School in Cork, Ireland, Spillane's work explores the policy implementation process at the state, district, school, and classroom levels, focusing on intergovernmental and policy-practice relations. He also studies organizational leadership and change, conceptualizing organizational leadership as a distributed practice. His recent projects

include studies of relations between organizational infrastructure and instructional advice-seeking in schools and the socialization of new school principals. His work has been supported by the National Science Foundation, the Institute of Education Sciences, The Spencer Foundation, The Sherwood Foundation, and the Carnegie Corporation of New York. In recognition of his contribution to educational research, Spillane was elected to the National Academy of Education in 2013 and to the American Academy of Arts & Sciences in 2020. Spillane has published extensively on issues of education policy, policy implementation, school reform, and school leadership. He has authored or edited several books, including *Distributed Leadership* (2006), *Distributed Leadership in Practice* (2007), *Diagnosis and Design for School Improvement: Using a Distributed Perspective to Lead and Manage Change* (2011), *Navigating the Principalship: Key Insights for New and Aspiring School Leaders* (2019), and numerous journal articles and book chapters. Spillane holds a Ph.D. in curriculum, teaching and education policy from Michigan State University and a B.A. in education and geography from St. Patrick's College, National University of Ireland.

Jonathan A. Supovitz is a professor of education policy and leadership in the Education Policy Division at the University of Pennsylvania's Graduate School of Education. He is the director of the Consortium for Policy Research in Education, a community of leading education policy scholars from across the United States. Supovitz's research focuses on state and local program and policy designs, implementation, and impacts. His current research focuses on investigating policy innovations that seek to influence the instructional core. He has been a lead and co-investigator of numerous Institute of Education Sciences, National Science Foundation, and other foundation-sponsored research projects and has presented his work nationally and internationally. His latest book, *When Reform Meets Reality: The Power and Pitfalls of Instructional Reform in School Districts* will be released in 2024 by Harvard Education Press. Supovitz holds an Ed.D. in education policy and research methods from Harvard University; an M.A. in public policy from Duke University; and a B.A. in history from the University of California, Berkeley.

Allison Timberlake is the deputy superintendent for assessment and accountability at the Georgia Department of Education. She oversees the development, implementation, and evaluation of Georgia's K–12 student assessment and school accountability systems. In her current position, she has led efforts to move Georgia toward a more balanced system of assessments by reducing time spent on state-mandated summative assessments and providing a statewide formative interim assessment resource. She has overseen the development of multiple new assessment systems, including a task-based alternate assessment system for students with significant cognitive disabilities and a game-based formative assessment in literacy and mathematics for first and second grade students. She currently chairs the Council of Chief State School Officers' National Conference on Student Assessment Program Planning Committee, serves as a U.S. Department of Education assessment peer reviewer, and serves as a Technical Advisory Committee member for external organizations. Prior to the Georgia Department of Education, she oversaw assessment and evaluation activities for the Southern Regional Education Board's school improvement initiatives. Timberlake holds a

Ph.D. in educational policy studies–research, measurement, and statistics from Georgia State University and an M.S. and a B.S. in public policy from the Georgia Institute of Technology.

E. Caroline Wylie is a senior associate at the National Center for the Improvement of Educational Assessment. Her primary research interests include the design, implementation, and evaluation of balanced assessment systems, with a focus on the use of formative assessment to improve classroom teaching and learning. She has led studies related to the creation of effective, scalable, and sustainable teacher professional development; the formative use of diagnostic questions for classroom-based assessment; assessment literacy; and the role of learning progressions to support formative assessment in mathematics and science. Her research is or has been funded by the Institute of Education Sciences (IES), the National Science Foundation, and the Hewlett Foundation. She is currently the principal investigator of an IES-funded project examining issues of rater quality for formative classroom observations to support peer learning. She serves as a co-advisor for the Council of Chief State School Officers Balanced Assessment Systems Collaborative. Her work has been published in *Applied Measurement in Education, Educational Assessment, Educational Measurement: Issues and Practice, Learning and Instruction*, and *Teachers College Record*, in addition to having contributed to multiple chapters and books. Wylie holds a Ph.D. in assessment and standard setting, a post-graduate certificate in teaching (mathematics), and a B.S. in applied mathematics and physics, all from Queen's University, Belfast.