THE NATIONAL ACADEMIES OF SCIENCES, ENGINEERING, AND MEDICINE

Division of Behavioral and Social Sciences and Education Board on Science Education (BOSE)

Committee on the Equity of PreK-12 STEM Education, Meeting #3

Presenter Biographies

ALFREDO ARTILES is Lee L. Jacks Professor of Education at Stanford University. He is the director of the Stanford Center for Opportunity Policy in Education and the director of research at the Center for Comparative Studies in Race & Ethnicity. Dr. Artiles' scholarship examines cultural-historical dimensions of disability and inclusive education and their implications for policy and practice. He is the editor of the book series Disability, Culture, & Equity and his scholarship has been supported by federal and philanthropic organizations, such as the U.S. Department of Education, the Spencer Foundation, and the W.T. Grant Foundation. He has obtained multiple OSEP leadership preparation grants. Dr. Artiles is an elected member of the National Academy of Education, a fellow of AERA and was a CASBS resident fellow. He was elected AERA Vice-President to lead its Social Context of Education Division. Dr. Artiles has received numerous awards for his scholarly work and mentoring activities, including AERA's Palmer O. Johnson Award, the AERA Review of Research Award, Mentoring Award from AERA's Division on Social Contexts of Education, the Mentor Award from the Spencer Foundation and Distinguished Alumni from the University of Virginia School of Education. He served on NASEM's consensus study panels on English learners and the Opportunity Gap for Young Children from Birth to Eight. Dr. Artiles was a member of the White House Commission on Educational Excellence for Hispanics. He is Honorary Professor at the University of Birmingham (United Kingdom) and received an honorary doctorate from the University of Göteborgs (Sweden). Dr. Artiles holds a Ph.D. (special education) from the University of Virginia.

ANNE BEITLERS, Ph.D., is an Associate Teaching Professor at the University of Washington College of Education, and an expert in English education, teacher education, and pedagogy. She directs the Secondary Teacher Education Program, which graduates an annual cohort of justice-focused educators. Along with Dan Gallagher, Amy Ko, Jayne Everson, and Brett Wortzman she just launched a quarter-long option to prepare educators to teach computer science in secondary schools. Dr. Beitlers earned a B.A. in English and a Masters in Teaching, both from the University of Washington; and a Ph.D. in English Education from New York University.

BRYAN MCKINLEY JONES BRAYBOY (LUMBEE) is President's Professor in the School of Social Transformation at Arizona State University. At ASU, he is senior advisor to the president, director of the Center for Indian Education, and co-editor of the Journal of American Indian Education. From 2007 to 2012, he was visiting President's Professor of Indigenous education at the University of Alaska Fairbanks. He is the author of more than 95 scholarly documents, including being the author/editor of eight volumes, dozens of articles and book chapters, multiple policy briefs for the U.S. Department of Education, National Science

Foundation, and the National Academy of Sciences. His research focuses on the role of race and diversity in higher education, and the experiences of Indigenous students, staff, and faculty in institutions of higher education. He has been a visiting and noted scholar in Canada, Australia, New Zealand, and Norway. His work has been supported by the U.S. Department of Education, the National Science Foundation, the Ford, Mellon, Kellogg, and Spencer Foundations, and several other private and public foundations and organizations. He and his team have, over the past 17 years, prepared more than 165 Native teachers to work in American Indian communities and more than 21 American Indian PhDs. He is a fellow of the American Educational Research Association and a member of the National Academy of Education.

ANDRÉ DELEÓN, MS, is an Education Programs Professional for the Nevada Department of Education (NDE) and has been for over ten years. As a member of NDE's Standards and Instructional Support (SIS) team, his responsibilities focus on K-12 science education and instructional material adoption for the state of Nevada. Mr. DeLeón currently serves on boards for the Council of State Science Supervisors (CS3) and the State Instructional Materials Review Association (SIMRA). Professional experience includes over 25 years as a teacher, school and state-level administrator, and school board member as well as work as a research sociologist and youth-at-risk counselor. Mr. DeLeón received a B.A. in Sociology at California State University, Sacramento and a M.S. in Education Leadership at the University of New Mexico, and designation as a Certified Public Manager (CPM).

AMY FAIRBANKS, MA, is the Director of Culturally and Linguistically Diverse Education for Roaring Fork Schools based out of Carbondale, Colorado. Her experience working with bilingual education and equity spans 29 years. She has worked as a teacher, coach, coordinator, director, adjunct professor, and consultant. She has presented nationally on a variety of topics related to emerging bilingual students. Additionally, Amy served as a consultant with the University of Colorado at Boulder for RtI Effectiveness Model for English Language and composed a section of guidelines in Response to Instruction and Intervention for New York City Schools with Janette Klingner, Nonie Lesaux, and Amy Eppolito for the New York City Department of Education. She served as a team member for Comprehensive Appraisal of District Improvement (CADI) Review where she worked collaboratively to review districts by examining evidence and evaluating effectiveness regarding emerging bilingual students. Amy served as Colorado Association for Bilingual Education as secretary and president. Most recently, she was awarded CO CABE's 2020 Educational Leader of the Year. Amy has a BA in elementary education from Cornell College, an MA in bilingual education from Adam's State College, principal licensure from Colorado State University.

DAN GALLAGHER, Ed.D., is the Director of Career and Technical Education at Shoreline Public Schools, Washington. His previous K-12 district leadership roles include Science Program Manager, Director of STEM and Arts, and Director of Career and College Readiness in Seattle and Bellevue Public Schools. He routinely partners with researchers and other school districts to advance equity work, most recently in computer science education. He co-authored the book *Creating Research-Practice Partnerships in Education* and has served as principal investigator, co-principal investigator, and project director in multiple state and federally funded STEM partnership projects. Prior to holding district leadership roles, he was a high school biology and chemistry teacher and instructional coach. He received his B.S. in Biology from the University of Richmond, and Masters in Teaching and Ed.D. in educational leadership from the University of Washington, Seattle.

RICK HOLT, M.Ed., is the Chief Academic Officer (CAO) for Roaring Fork Schools in Carbondale, Colorado. Roaring Fork Schools serves 5,100 students, 60% minority, and 40% emerging bilingual students. He has spent the last 26 years living and working in rural communities in Alaska and Colorado with highly diverse and underserved populations. In addition to his current role as CAO, Rick has been a 6-12 science teacher, Instructional Coach, building Principal, and Director of Curriculum, Instruction and Assessment. Most recently his work has focused on ensuring that systems and practices are in place to support equitable outcomes for all, with a focus on emerging bilingual students.

LIZZY HULL BARNES is the Mathematics and Computer Science Supervisor in SFUSD. She has worked in education for more than 25 years, as a classroom teacher, as a site-based coach, and as an administrator; she has worked with students from preschool through adults. She has a Masters Degree in Education with a focus on Early Childhood from Mills College in Oakland, and completed her administrative work through the UC Berkeley Graduate School of Education's Leadership Support program.

JOEL ALEJANDRO (ALEX) MEJIA, Ph.D., is an Associate Professor with joint appointment in the Department of Biomedical and Chemical Engineering and the Department of Bicultural-Bilingual Studies at The University of Texas at San Antonio. His research has contributed to the integration of critical theoretical frameworks in engineering education to investigate deficit ideologies and their impact on minoritized communities. His work seeks to analyze and describe the assets, tensions, contradictions, and cultural collisions many Latino/a/x students experience in engineering through *testimonios*. He is particularly interested in approaches that contribute to a more expansive understanding of engineering in sociocultural contexts, the impact of critical consciousness in engineering practice, and the development and implementation of culturally responsive pedagogies in engineering education. Dr. Mejia is an NSF CAREER awardee and holds a B.S. in Metallurgical and Materials Engineering from The University of Texas at El Paso, an M.S. in Metallurgical Engineering from The University of Utah, and a Ph.D. in Engineering Education from Utah State University.

TIFFANY NEILL, Ph.D., is the executive director of Curriculum and Instruction for the Oklahoma State Board of Education and the Past-President for the Council of State Science Supervisors, an organization comprised of state leaders for science education. Ms. Neill is also the co-principal investigator for the National Science Foundation Project, ACESSE, working directly with thirteen states to promote equity and coherence in state science education systems. In her role at the Oklahoma State Department of Education, she works to support districts and educators in aligning their curriculum and instruction to standards and supports thirteen curriculum directors in similar efforts with various disciplines. She served on the National Academies of Sciences, Engineering and Medicine consensus committee that authored the report, *Changing Expectations for the K-12 Teacher Workforce: Policies, Preservice Education, Professional Development, and the Workplace* (2020). Ms. Neill is completing a Ph.D. in science curriculum and instruction at the University of Oklahoma.

HO NGUYEN, M.Ed., is the Program Administrator for the math and computer science department at San Francisco Unified School District. For over two decades, Ho has worked to support math instruction in San Francisco, first as a high school math teacher, then as a content specialist at the high school level, and now as a central office administrator. In the SFUSD math

department, Ho supports math teachers at the secondary level through professional development and instructional coaching in addition to policy development and support. Ho was instrumental in beginning the Complex Instruction program in SFUSD, joining secondary mathematics teachers into an equity centered community. He has a Masters in Urban Education and Leadership from the University of California, Berkeley. Ho has presented his work in SFUSD at multiple conferences including the Council of Great City Schools, California Math Council - North, the National Council of Teachers of Mathematics, and the National Council of Supervisors of Mathematics.

FIKILE NXUMALO, Ph.D., is an assistant professor in the <u>Department of Curriculum</u>, <u>Teaching & Learning</u> at the Ontario Institute for Studies in Education, University of Toronto, where she directs the <u>Childhood Place Pedagogy Lab</u>. She is also affiliated faculty in the <u>School of the Environment</u>. Her scholarship focuses on developing anti-colonial environmental and place-based education. Dr. Nxumalo received her M.Sc. from Simon Fraser University, and a Ph.D. in early childhood education from the University of Victoria.

MEGAN SCHRAUBEN, MS, is the MiSTEM Network Executive Director for the State of Michigan which includes facilitating the activities of the Governor's MiSTEM Advisory Council and managing state and federal dollars for STEM programming. The state office for MiSTEM is housed at the Department of Labor and Economic Opportunity (LEO) and coordinates efforts with the MI Department of Education (MDE). Megan holds a B.S. in physics and mathematics education from the University of Michigan and a Masters of Applied Science from Michigan Technological University. During her tenures at these institutions, her passion for integrated STEM instruction grew out of research internships at CERN in Switzerland, Fermilab near Chicago, the NSCL at MSU, and a teaching/engineering position in Santa Cruz, Bolivia. Prior to coming to LEO, Megan taught high school physics and math in Jackson, MI, was Director of the Mathematics and Science Center in Jackson County, then moved to the MDE where she was the Integrated Instruction Consultant. Megan has also served on the board for the Council of State Science Supervisors.

CLAUS VON ZASTROW is a senior policy director at Education Commission of the States. Dr. von Zastrow works with his Education Commission of the States colleagues to promote timely and relevant education policy and research. He has held senior positions in education organizations for more than 20 years and has spent much of that time helping diverse stakeholders find consensus on important education issues. Dr. von Zastrow is dedicated to ensuring that state leaders have the information and guidance they need to make the best possible decisions affecting young people.