The Future of Education Research at the Institute of Education Sciences in the U.S. Department of Education

July 7, 2021

<u>**Speaker Bios – Meeting #2, Day 2**</u>

<u>**Methods and Measures in Education Research**</u>

RYAN S. BAKER is an Associate Professor in the Teaching, Learning, and Leadership Division at the University of Pennsylvania Graduate School of Education. Dr. Baker researches how students use and learn from educational games, intelligent tutors, and other kinds of educational software. Drawing on the fields of educational data mining, learning analytics, and human–computer interaction, he develops methods for mining the data that come out of the interactions between students and educational software. He then uses this information to improve our understanding of how students respond to educational software, and how these responses influence their learning. Prior to joining Penn GSE, Dr. Baker was an associate professor in the Department of Human Development at Teachers College, Columbia University. While at Teachers College, he taught the "Big Data and Education" MOOC twice, with total enrollment of more than 50,000 students. He has served as founding president of the International Educational Data Mining Society, where he currently serves on the board of directors. He has been co-author on nine award-winning papers. He serves as co-lead of the Big Data in Education spoke of the NSF Northeast Big Data Hub.

DAVID J. FRANCIS is a Hugh Roy and Lillie Cranz Cullen Distinguished University Chair and a recipient of the University of Houston Teaching Excellence Award and a former member of the National Institute of Health's Behavioral Medicine Study Section. He is a Fellow of Division 5 (Measurement, Evaluation, and Statistics) of the American Psychology Association and current member of the Independent Review Panel for the National Assessment of Title I and the Technical Advisory Group of the What Works Clearing House. His areas of quantitative interest include modeling of individual growth, multi-level and mixture modeling, structural equation modeling, item response theory, and exploratory data analysis. Dr. Francis currently collaborates on multiple contracts and grants funded by NICHD, the Institute of Education Sciences of the U.S. Department of Education, the National Institute of Deafness and Communication Disorders, the Texas Education Agency, and the Houston Livestock Show and Rodeo. Dr. Francis is the Director of Texas Institute for Measurement, Evaluation and Statistics.

ODIS JOHNSON JR. is a Bloomberg Distinguished Professor at Johns Hopkins University, where he has faculty appointments in the Department of Health Policy and Management at the Bloomberg School of Public Health, the School of Education as Executive Director of the Center for Safe and Healthy Schools, and in the Department of Sociology at the Krieger School of Arts and Sciences. He also directs the Institute in Critical Quantitative, Computational, and Mixed Methodologies (ICQCM). Odis Johnson previously served as a faculty member at Washington University in St. Louis, and chaired the African American Studies Department at the University

of Maryland. His work on the interrelated topics of neighborhoods, social policy, and race have been funded by the National Science Foundation, National Institutes of Health, William T. Grant Foundation, and the Spencer Foundation. Odis Johnson's work and ideas about social change have been featured in prominent media outlets, including the *Oprah Magazine, Christian Science Monitor, CNN, The Washington Post, MSNBC, NPR, Teen Vogue, The Associated Press, Vox, The New Yorker, The New York Times, NBC News, The Chicago Tribune, SiriusXM*, and a variety of international and local news outlets.

ELIZABETH A. STUART is Associate Dean for Education and a Professor in the Department of Mental Health, with joint appointments in the departments of Biostatistics and Health Policy and Management at Johns Hopkins University. Dr. Stuart's primary research interests are in the development and use of methodology to better design and analyze the causal effects of public health interventions. Through this work, she aims to bridge statistical advances and research practice, working with mental health, education, and public health researchers to identify and solve methodological challenges. She has also been extensively involved in communicating the value of evidence and the need to balance rigor and relevance of evidence to broad audiences.

Understanding and Assessing Impact of Education Research Investments

ANA BAUMANN is a Research Assistant Professor at Washington University in St. Louis. Her research agenda focuses on identifying strategies to facilitate the implementation and dissemination of evidence-based interventions in low-resource settings nationally and globally. Baumann is a co-director of the Dissemination and Implementation Research Core (DIRC), a methods core at the Institute of Clinical and Translational Sciences (ICTS) that provides methodological expertise to advance translational research to inform and move efficacious health practices from clinical knowledge to routine care. Through DIRC, she has supported numerous investigators in receiving federally studies aiming to accelerate the use of evidence-based interventions or guidelines in different settings of care.

BECKY FRANCIS is Chief Executive Officer of the Education Endowment Foundation. She was previously Director of the UCL Institute of Education (IOE), which is ranked #1 in the world for education in the international QS rankings. Her prior roles include Professor of Education and Social Justice at King's College London, Director of Education at the RSA and Standing Advisor to the Parliamentary Education Select Committee. Throughout her career, Becky has sought to maximise the impact of academic research by working closely with teachers and policy-makers. She has spearheaded high-profile research programmes assessing the impact of major reforms in the English school system on educational inequalities, and is sought out internationally as an advisor to Governments on education policy.

ADAM GAMORAN is president of the William T. Grant Foundation, a charitable organization that supports research on programs, policies, and practices to reduce inequality in youth outcomes, and on ways to improve the use of research evidence in youth-related policies and practices. Previously, he held the John D. MacArthur Chair in Sociology and Educational Policy Studies at the University of Wisconsin-Madison where, among other roles, he chaired the department of sociology, directed the Wisconsin Center for Education Research, and spent three decades engaged in research on educational inequality and school reform. He is a past grantee of the Institute of Education Sciences, the National Science Foundation, the National Institute of

Child Health and Human Development, and several private funders. His research contributions have been honored by the Association for Public Policy Analysis and Management, the American Educational Research Association, and the Sociology of Education Section of the American Sociological Association. He is an elected member of the American Academy of Arts and Sciences and of the National Academy of Education, which he currently serves as vice president. He was also twice appointed by President Barack Obama to serve on the National Board for Education Sciences. For the U.S. Department of Education, he chaired the Independent Advisory Panel of the National Assessment of Career and Technical Education from 2007-2011. For the National Academies of Science, Engineering, and Medicine (NASEM), he served on the Board on International Comparative Studies of Education (1998-2003) and the Board on Science Education (2006-2012), returning to the latter as chair from 2014-2020. He also chaired the NASEM committees on Highly Successful Schools and Programs in K-12 Education (2010-2011) and on the Evaluation Framework for Successful K-12 STEM Education (2012), and served as review coordinator for several reports. For the National Academy of Education, he chaired a committee to examine uses of the longitudinal surveys of the National Center for Education Statistics by the education research community, which yielded a series of essays on innovative uses of longitudinal education surveys. Dr. Gamoran received his Ph.D. in education from the University of Chicago.

Training and Retaining the Next Generation of Education Researchers

CURTIS D. BYRD was appointed as the Special Advisor to the Provost at Georgia State University in 2020. Dr. Byrd uses his expertise to consult and provide leadership in Georgia State faculty and graduate student diversity and inclusion efforts. He has amassed over 25 years in faculty and student diversity and inclusion programming on college campuses. Most recently he has served as a research associate and consultant for the HBCU STEM Undergraduate Success Center at Morehouse College. In November 2019 he assisted in the writing of a $9 million dollar HBCU UP proposal, sponsored by the National Science Foundation. Prior to his time at Morehouse he served for eight years as the Assistant Dean of Graduate Studies and Sr. Associate Director of Graduate Enrollment at Clark Atlanta University. Before this he served as Director of Special Programs (Undergraduate Research) and Associate Director of the McNair Scholars program at University of Florida and Director of the McNair Scholars Program at Georgia State. Prior to his time working for the U.S. Department of Education-TRIO programs, for seven years he was Executive Director of the Peach State Louis Stokes Alliance for Minority Participation (National Science Foundation) and Director of (Minority) Graduate Recruitment and Retention at the University of Georgia. While at UGA, the African American graduate student population nearly doubled under his leadership. Dr. Byrd's honors and appointments include the following: serving on the National Advisory Board for Ronald E. McNair Post-Baccalaureate Achievement Program, conference co-chair of the Annual National SAEOPP McNair Conference in Atlanta, GA, and being awarded the National Association of Graduate Admissions Professionals (NAGAP) Enrollment Management grant for his doctoral research on Innovative Strategies for Diversifying the Professoriate. Further, he has two publications in the NAGAP Journal *Prospectives* in 2005 & 2016. For three years (2013-2016) Byrd served as an Action Research Consultant for the Southern Regional Educational Board's Doctoral Scholars Program (DSP). His work with SREB-DSP created a sustained relationship with the National Association of Diversity Officers in Higher Education and programming to enhance their efforts

in faculty diversity. He has several publications on innovative strategies to diversify graduate students and faculty ranks, and currently is working on a book called *Academic Pipeline Programs-Diversifying Pathways from the Bachelors to the Professoriate*. Byrd and his co-author (Dr. Rihana S. Mason also at Georgia State) created an assessment tool (THRIVE Inventory) to review diversity pathway initiatives. Further, he has had many speaking engagements over the years at a variety of conferences and universities. Most recently he presented on a panel discussion on "Best Practices in Minority Faculty Recruitment and Retention" at the Association of American Colleges and Universities. Dr. Byrd earned both his B.S. in Psychology and M.Ed. in Higher Education at Iowa State University. In 2016, he graduated with his Doctor of Education (Ed.D.) in Adult Leadership Education degree from the University of Georgia.

JULIE POSSELT is an Associate Professor of higher education in the USC Rossier School of Education and was a 2015-2017 National Academy of Education/ Spencer Foundation postdoctoral research fellow. Rooted in sociological and organizational theory, her research program uses mixed methods to examine institutionalized inequalities in higher education and organizational efforts aimed at reducing inequities and encouraging diversity. She focuses on selective sectors of higher education— graduate education, STEM fields, and elite undergraduate institutions—where longstanding practices and cultural norms are being negotiated to better identify talent and educate students in a changing society. She was the recipient of the 2018 American Educational Research Association's Early Career Award and the 2017 Association for the Study of Higher Education's Early Career/ Promising Scholar Award. Her book, *Inside Graduate Admissions: Merit, Diversity, and Faculty Gatekeeping* (2016, Harvard University Press), was based on an award-winning ethnographic study of faculty judgment in 10 highly ranked doctoral programs in three universities. This work has led to thriving research-practice partnerships with universities, disciplinary societies, graduate schools & programs, and other associations that are re-examining how we evaluate students and scholars for key academic opportunities— and support those who are in the system. Partners include the University of California, American Physics Society, and the Council of Graduate Schools. Her current scholarship, funded by three grants from the National Science Foundation and one from the Mellon Foundation, examines movements for equity and inclusion in graduate education and the humanistic and physical science disciplines. Posselt recently completed a National Academy of Education postdoctoral fellowship for the first national study of graduate student mental health. This concurrent mixed methods project identified factors associated with depression and anxiety; investigated the roles of discrimination, competitiveness, and faculty support in graduate student wellbeing; and measures disparities within and across academic disciplines. She has published research in the *American Educational Research Journal*, *Annual Review of Sociology, Research in Higher Education*, *Journal of Higher Education*, *Teachers College Record, Higher Education: Handbook of Theory and Research*, and the *Chronicle of Higher Education*, among others. Her work has been highlighted in *Science*, *The Atlantic, New York Times, Slate, Times Higher Education (UK), Insider Higher Ed,* among others. She is a member of the *Journal of Higher Education*'s and *Journal of Diversity in Higher Education*'s editorial review boards, and is program chair for the 2019 Sociology of Education Association meeting. Posselt earned her PhD from the University of Michigan.

SEAN REARDON is the endowed Professor of Poverty and Inequality in Education and is Professor (by courtesy) of Sociology at Stanford University. His research focuses on the causes,

patterns, trends, and consequences of social and educational inequality, the effects of educational policy on educational and social inequality, and in applied statistical methods for educational research. Reardon is the developer of the Stanford Education Data Archive (SEDA). Based on 300 million standardized test scores, SEDA provides measures of educational opportunity, average test score performance, academic achievement gaps, and other information for every public school district in the US. Professor Reardon received his doctorate in education in 1997 from Harvard University. He is a member of the National Academy of Education and the American Academy of Arts and Sciences. He is also a recipient of the William T. Grant Foundation Scholar Award, the National Academy of Education Postdoctoral Fellowship, and an Andrew Carnegie Fellow.

KATHARINE O. STRUNK is a professor of education policy and, by courtesy, economics, and the Clifford E. Erickson Distinguished Chair in Education and the faculty director of the Michigan State University Education Policy Innovation Collaborative (EPIC). She is also president-elect of the Association for Education Finance and Policy (AEFP). Strunk's current research through EPIC is focused on working with local and state education agencies on studies that will help them inform policy and practice. Rooted in the fields of economics and public policy, Strunk's work centers on structures that are central to district operations and policy and the ways these structures affect policymakers' decisions and outcomes. Her research focuses on three areas under the broad umbrella of K-12 education governance: teachers' unions and the collective bargaining agreements they negotiate with school districts, teacher labor markets and accountability policies. Strunk's most recent work includes studying teacher labor market responses to policy reforms in Michigan, teacher, school and district accountability and support policies in the Los Angeles Unified School District and throughout Michigan, and portfolio management reforms in Los Angeles, Denver and New Orleans.