

Edited by  
Rekha S. Rajan &  
Ivonne Chand O'Neal

**ARTS**  
—  
**EVALUATION**  
—  
**AND**  
—  
**ASSESSMENT**  
—

Measuring Impact in  
Schools and Communities

With Foreword by  
Michael Quinn Patton



# Arts Evaluation and Assessment

Rekha S. Rajan • Ivonne Chand O'Neal  
Editors

# Arts Evaluation and Assessment

Measuring Impact in Schools and Communities

palgrave  
macmillan

*Editors*

Rekha S. Rajan  
PANCH Research, LLC  
Chicago  
IL, USA

Ivonne Chand O'Neal  
MUSE Research, LLC  
Kensington  
MD, USA

ISBN 978-3-319-64115-7      ISBN 978-3-319-64116-4 (eBook)  
<https://doi.org/10.1007/978-3-319-64116-4>

Library of Congress Control Number: 2017955047

© The Editor(s) (if applicable) and The Author(s) 2018

This work is subject to copyright. All rights are solely and exclusively licensed by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use. The publisher, the authors and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, express or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Cover illustration: © zhazhin\_sergey / iStock / Getty Images Plus

Printed on acid-free paper

This Palgrave Macmillan imprint is published by Springer Nature  
The registered company is Springer International Publishing AG  
The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

*For our children,  
Jagan, Madhavi, Arjun, Isbaan, and Asha,  
The next generation of artists, innovators, scholars, and creative thinkers*

*As Editors of this collection, it is with deep respect and admiration that we pay tribute to Dr. James Catterall, who passed away during the publication of this book. Throughout his illustrious career, Dr. Catterall shared his love of the arts, his passion for creativity, and his intellectual curiosity. His numerous publications and contributions to the field included chapter contributions to the seminal work, *Champions of Change: The Impact of the Arts on Learning* (1999), which influenced a generation of arts researchers, educators, funding agencies, and students. His scholarship has changed the landscape of arts research, and we are profoundly honored to publish his last written work in these pages.*

*Rekha and Iyonne*

## FOREWORD BY MICHAEL QUINN PATTON

Evaluating music, theater, musical theater, dance, opera, and multimedia arts is a daunting and controversial challenge. The postulate that “beauty is in the eye of the beholder” has become axiomatic in modern society, a way of acknowledging that people have different tastes, value preferences, and responses to artistic creations of all kinds. Culture, education, religion, socioeconomic status, politics, and aesthetic sensibilities all come into play in valuing, interpreting, judging, and appreciating, or deprecating, artistic creations and endeavors. Now, add yet another layer of complexity by taking on the challenge of *evaluating arts programs*. This means evaluating the impacts of music, theater, musical theater, dance, opera, and multimedia arts on students, teachers, teaching artists, and administrators. That’s the challenge this book takes on—and does so with methodological creativity, rigor, and savvy.

This book is important because the arts are important and cannot be taken for granted. Evaluating arts programs must be understood in the larger context of enduring debate about the role of arts in education specifically and art’s contributions to society more generally. For another foundational aphorism is that *humans do not live by bread alone*. Art matters. Artistic expression and appreciation are at the core of what makes us human. The inclination, indeed, the compulsion and mandate to evaluate artistic expression, is also an essential trait of our shared humanity.

## AN ANCIENT FRAMEWORK FOR EVALUATION OF THE ARTS

The chapters in this book offer exemplary evaluation case studies of specific arts programs. The cases report on the goals of the program, identify key stakeholders for the evaluation, and present the primary evaluation questions, methods used, data collected, and key findings. The cases also report on how the findings were used by educators, policy makers, and funders. But how are you, the reader, to judge these evaluations of arts programs? Let me offer an ancient framework that emphasizes inspirational artistic criteria.

Greek philosopher Plato (428 B.C.E.–348 B.C.E.), student of Socrates and teacher of Aristotle, offered three noble and majestic evaluation criteria that still resonate today: truth, beauty, and justice. Ernest House, one of the field of evaluation’s pioneering thought leaders, has articulated how these criteria are still relevant today and can be applied to assess the validity of any evaluation:

Truth is the *attainment* of arguments soundly made, beauty is the *attainment* of coherence well wrought, and justice is the *attainment* of politics fairly done. (House, 2014, p. 31)

House argued that if an evaluation is untrue, or incoherent, or unjust, it is invalid. So an evaluation, any evaluation, must be true, coherent, and just. All three criteria are necessary, he insisted. Jane Davidson, one of the profession’s emergent thought leaders, has added her own provocative and inspirational twist to House’s criteria:

True “beauty” in evaluation is a clearly reasoned, well-crafted, coherent evaluation story that weaves all three of these together to unlock both truth and justice with breathtaking clarity. ...I’d like to flip House’s idea on its head. What if beauty wasn’t merely about how well the evaluative story is told? What if the *process* of creating a clear, compelling, and coherent (beautiful) evaluative story was in fact the key to unlocking validity (truth) and fairness (justice)? (Davidson, 2014, p. 43)

## ARTISTIC INSPIRATION THROUGH VALID EVALUATION

Mastery of artistic technique is but one element of meaningful and inspiring art. Methodological rigor is but one dimension of evaluation excellence. Art is too important to be reduced to technique, and evaluation is



too important to be reduced to method. Arts evaluation, then, must meet standards of evaluation excellence while offering inspiration for the value and meaningfulness of art to society. In my judgment, this book succeeds in fulfilling both aspirations. But judge for yourself, for beauty does, indeed, lie in the eye of the beholder, and both art and arts evaluation reveal truths and invite us to reflect on the meaning and manifestation of justice as experienced and portrayed through artistic creations and access to quality arts education.

Saint Paul, MNM

Michael Quinn Patton

## REFERENCES

- Davidson, E. J. (2014). How “beauty” can bring truth and justice to life. *New Directions for Evaluation*, 142 (Summer), 31–43.
- House, E. R. (2014). Origins of the ideas in *evaluating with validity*. *New Directions for Evaluation*, 142 (Summer), 9–16.

# CONTENTS

<b>1</b>	<b>An Introduction to Arts Evaluation</b>	<b>1</b>
	Rekha S. Rajan and Ivonne Chand O’Neal	
<b>2</b>	<b>A Step in the Right Direction: Early Lessons from a Longitudinal Study of Dance Education as a Developmental Catalyst</b>	<b>11</b>
	James S. Catterall, Julie E. Kendig, Linda T. Mesesan, Dawn S. Reese, and Kimberley G. Zanti	
<b>3</b>	<b>Everyday Arts for Special Education: Impact on Student Learning and Teacher Development</b>	<b>37</b>
	Rob Horowitz	
<b>4</b>	<b>Learning Through Music: A Five-Year Evaluation of the Cleveland Orchestra’s Learning Through Music Program</b>	<b>65</b>
	Hal Abeles and Mary Hafeli	
<b>5</b>	<b>Aging and the Healing Power of Choral Music: A Community-Responsive Evaluation of Vintage Voices</b>	<b>99</b>
	Daren Nyquist and Kylie Nicholas	

<b>6</b>	<b>Cultivating Sustainable School Culture: Tilling the Soil and Nourishing the Seeds Through the Arts</b>	<b>117</b>
	Ross Anderson and Christine Pitts	
<b>7</b>	<b>The Arts and Socioemotional Development: Evaluating a New Mandate for Arts Education</b>	<b>147</b>
	Steven J. Holochwost, Dennie Palmer Wolf, Kelly R. Fisher, Kerry O’Grady, and Kristen M. Gagnier	
<b>8</b>	<b>AP Research and the Arts: Evaluating a New Approach to College Preparation</b>	<b>181</b>
	Ivonne Chand O’Neal, Serena Magrogan, Lynnette Overby, and Greg Taylor	
<b>9</b>	<b>The Path to “Play the Past”: An Evaluation Journey</b>	<b>201</b>
	Wendy Jones and Jennifer Sly	
<b>10</b>	<b>The Best of Both Worlds: Using Multiple Evaluation Approaches to Build Capacity and Improve a Museum-Based Arts Program</b>	<b>223</b>
	Don Glass and Patti Saraniero	
<b>11</b>	<b>Stages, Sights &amp; Sounds: Evaluating Student Engagement with Live, Multimedia Arts Performance</b>	<b>249</b>
	Rekha S. Rajan and Jeanette E. Goddard	
<b>12</b>	<b>Accounting for Taste: Using Propensity Score Methods to Evaluate the Documentary Film, <i>Waiting for “Superman”</i></b>	<b>271</b>
	Johanna Blakley and Sheena Nahm	

<b>13</b>	<b>A Ship with Two Prows: Evaluating Professional Development for Contemporary Art Educators</b>	<b>297</b>
	Jessica C. Hamlin and Lois Hetland	
<b>14</b>	<b>Arts Policy and the Creative Economy</b>	<b>323</b>
	Ivonne Chand O’Neal, Brian Kisida, Laura Smyth, and Rekha S. Rajan	
	<b>Index</b>	<b>333</b>

## NOTES ON CONTRIBUTORS

**Hal Abeles** is Director and Professor of Music and Music Education at Teachers College, Columbia University where he also serves as the Co-director of the Center for Arts Education Research. He has written numerous articles and books on music education. He is the co-author of the *Foundations of Music Education* and the co-editor of *Critical Issues in Music Education: Contemporary Theory and Practice*. His research has focused on the evaluation of community-based arts organizations, the assessment of instrumental instruction, the sex-stereotyping of musical instruments, and the evaluation of applied music instructors. Dr. Abeles has served as program evaluator for numerous arts partnerships, including Carnegie Hall, The Cleveland Orchestra, the MacArthur Foundation, Arts Centered Education—Detroit, The Baltimore Symphony, Lincoln Center Institute, The William Penn Foundation, The New Jersey Symphony, The Hartford Symphony, and Amp Up—New York City.

**Ross Anderson** serves as PI for a multi-year federally funded arts education model development, research, and dissemination project working with five local middle schools to increase creative teaching and learning opportunities through rigorous integration of the arts across content areas. Mr. Anderson's work aims to develop the creative engagement of teachers and school communities, at large, in the design and delivery of learning that taps the diversity of students' talents, cultures, and interests. From a constructivist perspective, Ross researches the growth trajectory of skills and dispositions, such as creativity, persistence, self-efficacy, and motivation in school during adolescence. As Principal Researcher at

Inflexion, he serves as a strategic thought partner in support of responsive program development and evaluation, multimethod research, and cross-sector collaboration.

**Johanna Blakley** is the managing director at the Norman Lear Center, a think tank that explores the convergence of entertainment, commerce, and society. Based at the University of Southern California's Annenberg School for Communication and Journalism, she is co-principal investigator on the Media Impact Project, a hub for collecting, developing, and sharing approaches for measuring the impact of media. Blakley received her Ph.D. in English from the University of California, Santa Barbara, and she teaches courses on transmedia storytelling at USC.

**James S. Catterall** In July 2011, Dr. Catterall co-founded the Centers for Research on Creativity based in Los Angeles and London, UK. Dr. Catterall is Professor Emeritus and past Chair of the Faculty at the UCLA Graduate School of Education and Information Studies and an Affiliate Faculty member at the UCLA Center for Culture, Brain, and Development. The author of groundbreaking research and analysis in arts education, Dr. Catterall focused on measurement of children's cognitive and social development and motivation in the context of learning in the arts, before expanding his research into the burgeoning field of creativity and youth development. He is the author of *The Creativity Playbook* (2015) and *Doing Well and Doing Good by Doing Art*, a 12-year longitudinal study of the effects of learning in the arts on the achievements and values of young adults (2009). In 2012, Dr. Catterall and colleagues Prof. Susan Dumais (LSU) and Prof. Gillian Hampden-Thompson (York University, UK) published *The Arts and Achievement in At-risk Youth: Findings from Four Longitudinal Studies*, published by the National Endowment for the Arts. Professor Catterall holds degrees in economics (with honors) from Princeton University and Public Policy Analysis from the University of Minnesota; he holds a Ph.D. in Educational Policy Analysis/Learning Studies from Stanford University. He is an accomplished cellist and bassist and performs with the Topanga Symphony Orchestra. On page vii, please read the editors' tribute to Dr. James Catterall (1948–2017). May he rest in peace.

**Kelly Fisher** is the Director of Dissemination, Translation, and Education at the Johns Hopkins University Science of Learning Institute and an Assistant Professor of Education. Kelly's research draws upon multiple disciplines—developmental science, industrial-organizational psychology, implementation science, education, and public policy—to improve learn-

ing and development in children and adults. Kelly also works with community organizations, businesses, and government to translate the science of learning research into new educational programming and evaluate its effectiveness. Prior to her current position, Kelly was an Executive Branch Science and Technology Fellow in Washington, DC, a fellowship sponsored by the Society for Research and Child Development (SRCD) and the American Association for the Advancement in Science (AAAS), where she initiated and directed research aimed at improving the understanding of organizational capacity and data-driven decision making in early childhood programs. Kelly received a Ph.D. in Developmental Psychology from Temple University and a M.S. in Industrial-Organizational Psychology from Missouri State University.

**Kristin Gagnier** is the Outreach and Evaluation Specialist at the Science of Learning Institute and Assistant Research Scientist in the Department of Cognitive Science at Johns Hopkins University. Kristin oversees the institute's mission of connecting science to practice. She partners with schools, museums, government organizations, and policymakers to advance research and translate the science of learning research into evidence-informed practices. Kristin's work is motivated by her passion for improving learning outcomes by connecting research and practice and based on her interdisciplinary training in cognitive science, psychology, and education.

**Don Glass** Ph.D., is a visual artist, learning designer, and developmental evaluator based in Washington, DC area. His work focuses on the integration of *inclusive arts curriculum design* and *developmental evaluation* strategies into the ongoing professional development of educators in and outside of schools. Central to this work are clear, meaningful learning goals, systems of assessment and feedback, and supports and options to address learning variability and foster expert learning. Dr. Glass is currently the Research Manager for the Kennedy Center and has held positions at the National Commission on Teaching and America's Future and the Annenberg Institute for School Reform at Brown University. He was also a Universal Design for Learning Leadership Fellow at Boston College. As an independent consultant, he has done design and evaluation projects for a wide range of arts and cultural organizations.

**Jeanette Goddard** holds a Ph.D. in Comparative Literature from the University of Wisconsin, Madison. While her scholarly work focuses on comedies in early modern Europe, as an ACLS public fellow she curated education-focused public programming for the Chicago Humanities

Festival. She is currently an assistant professor of the Humanities and Communication Department at Trine University and a board member of the University's Humanities Institute.

**Mary Hafeli** is Director and Professor of Art and Art Education at Teachers College, Columbia University. She is the author of *Exploring Studio Materials: Teaching Creative Art Making to Children* and co-editor of *Conversations in Art: The Dialectics of Teaching and Learning*. She has also written numerous articles and book chapters on art education. Current research projects include a study of youth and adult perspectives on “good” teaching in art and visual and literary art forms and practices as methods in qualitative research. A recipient of the Manual Barkan Memorial Award, the Mary Rouse Award, and the Marilyn Zurmuehlen Award, all from the National Art Education Association for scholarly contributions to the field, she serves as chair of the National Art Education Association's Research Commission.

**Jessica Hamlin** is a Clinical Assistant Professor in the Art+Education program at the Steinhardt School for Culture, Education, and Human Development at New York University. She previously served as Art21's Director of Education facilitating professional development and programming as well as generating curriculum and resources for educators across disciplines. Her work is focused on the intersections between contemporary art, critical pedagogy, and public education.

**Lois Hetland** is Professor of Art Education at the Massachusetts College of Art and Design and a cognitive psychologist, researcher, and artist-teacher. She taught PK-12 students for 17 years before focusing on undergraduates, graduate students, and practicing educators. Her research addresses arts cognition and professional practice in education venues, and she consults frequently across the USA and internationally on arts education, arts-integration, and arts assessment. She is co-author of *Studio Thinking 2: The Real Benefits of Visual Arts Education* (2013, 2nd Edition) and is now co-authoring *Studio Thinking in the Elementary School*, due out in 2018.

**Steven Holochwost** is a developmental psychologist whose work examines the effects of poverty and its correlates on children's development and how programs and policies can mitigate those effects. Over the past ten years, he has worked in government, academia, and research firms as a researcher and program evaluator focusing on education, with an emphasis



on early childhood education and access to high-quality arts education. His areas of specialization include the use of mixed quantitative and qualitative methods in program evaluation, the application of advanced analytics to longitudinal data, and the incorporation of physiological measurement into studies of child development. Dr. Holochwost is Senior Research Scientist and Associate Principal at WolfBrown. Before joining WolfBrown, Dr. Holochwost was Associate Director of Research at the Early Learning Center and, prior to that, Senior Assistant Child Advocate with the Office of the Child Advocate for the State of New Jersey.

**Rob Horowitz** is a consultant to arts organizations, school districts, and foundations. He is a contributing author to *Champions of Change: The Impact of the Arts on Learning*, published by the President’s Committee on the Arts and Humanities and the Arts Education Partnership, and *Critical Links: Learning in the Arts and Student Academic and Social Development*, a compendium of 62 studies of arts learning and its connections to broader human development. As a consultant for Jazz at Lincoln Center, he wrote the instructional content of *Jazz in the Schools*, a National Endowment for the Arts curriculum that “explores jazz as an indigenous American art form and a means to understand American history.” Dr. Horowitz helped develop numerous educational partnerships throughout the country and has conducted over 100 program evaluations for organizations, such as the Kennedy Center, National Endowment for the Arts, Jazz at Lincoln Center, Carnegie Hall, and ArtsConnection, and has served as researcher for numerous federal, state, and private grants.

**Wendy A. Jones** Former Director of Education, Minnesota Historical Society, has over 29 years’ experience developing educational programs and exhibitions. She led numerous initiatives to transform MNHS’s delivery of learning experiences to diverse audiences across varied platforms, including live interpretation, museum theater, static exhibits, interactive video conferencing, and mobile technology. She is a passionate proponent of free-choice learning, audience-centered design, and DIY evaluation, and she strives to be a “space maker” who gives her teams room for failure and growth. One of the best decisions she ever made was to hire Jennifer Sly to lead the *Play the Past* project.

**Julie Kendig** B.F.A., M.A., is pursuing a Ph.D. in education with a focus on social justice at Claremont Graduate University. She has served as a Research Associate at the Centers for Research on Creativity, where, in

addition to working with The Wooden Floor, she was the lead researcher to the California Arts Council's arts for incarcerated youth programs and worked with the Alameda County Office of Education through a US Department of Education Arts in Education Model Development and Dissemination grant. Ms. Kendig is also the Education Director at a creative youth development organization called A.R.T.S. (A Reason to Survive) in National City, CA. Ms. Kendig volunteers for the San Diego Housing Commission's Homeless Division and Habitat for Humanity and stays active in a local reader's theatre group.

**Brian Kisida** is an Assistant Research Professor in the Department of Economics and the Truman School of Public Affairs at the University of Missouri. He has over a decade of experience in rigorous program evaluation and policy analysis. He has extensive experience conducting randomized controlled trials and has co-authored multiple experimental impact evaluation reports through the Institute of Education Sciences at the US Department of Education.

The dominant theme of his research focuses on identifying effective educational options and experiences for at-risk students that can close the achievement gap, the experience gap, and the attainment gap. Increasingly, his research agenda has evolved toward examining policy outcomes broader than student achievement on standardized tests, such as non-cognitive outcomes, cultural and social capital, student engagement, civic outcomes, and long-term educational attainment. His academic publications include articles in the *Journal of Policy Analysis and Management*, *Sociology of Education*, *Educational Researcher*, *Journal of Research on Educational Effectiveness*, *Economics of Education Review*, *Policy Studies Journal*, *School Effectiveness and School Improvement*, and *Education and Urban Society*. His work has been cited in congressional testimony before the US House and Senate, and it has appeared in numerous media outlets, including *The New York Times*, *USA Today*, *The Washington Post*, *The Wall Street Journal*, and *CNN*.

**Serena Magrogan** has been in the field of education for over 20 years. She transitioned from a biochemistry research setting to one of secondary science education, where she spent 15 years teaching in both urban and suburban high schools. Currently, Magrogan is a Senior Director for the College Board's AP Curriculum, Instruction, and Assessment division. She currently manages the AP Chemistry and AP Research courses worldwide. She works on preserving and improving the quality and validity of

the AP Program's core deliverables of the curriculum, exam, and the professional development content for both courses and continues to create these deliverables by leading committees of subject-matter experts and practitioners.

**Linda T. Mesesan** brings over 30 years of experience in the nonprofit sector to her work as an independent consultant in program planning, organizational development, fundraising, and grant writing. She provides services to nonprofits in Los Angeles and Orange County, with special focus in the field of creative youth development. Prior to her consulting business, Linda worked in the field of public policy education as a program planner and fundraiser for Town Hall Los Angeles and the Los Angeles World Affairs Council. Linda received her Bachelor of Arts in Political Science from Loyola Marymount University.

**Sheena Nahm** is a cultural anthropologist who focuses on health, education, media and social change. Dr. Nahm is adjunct faculty in Anthropology and Sociology for The New School. She holds a Bachelor's degree in Biological Basis of Behavior and in Anthropology from the University of Pennsylvania, a Master's degree in Public Health from Drexel University, and an M.A. and Ph.D. in Socio-cultural Anthropology with a Critical Theory Emphasis from the University of California, Irvine.

**Kylie Nicholas** is a Senior Research Analyst for The Improve Group, an evaluation and research firm in Saint Paul, Minnesota. Ms. Nicholas has a strong background in conducting research on social justice programs, and she has conducted evaluations in the areas of museums and performing arts, public health, health disparity, and human services. She received her Master of Public Affairs from the School of Public and Environmental Affairs at Indiana University where she focused her studies on policy analysis and health policy.

**Daren Nyquist** currently serves as Research and Evaluation Director for The Improve Group, an evaluation and research firm in Saint Paul, Minnesota. With a background rooted in community engagement and evaluation, Mr. Nyquist understands that the best evaluations seek to be inclusive and make room for a wide variety of stakeholder perspectives. He has managed research projects for prominent public and private sector organizations with a focus on health care and the provision of services to seniors and people with disabilities. Mr. Nyquist obtained his Master of Public Policy from the University of Minnesota—Twin Cities.

**Kerry O’Grady** is a Research Fellow at WolfBrown and is currently pursuing a Ph.D. in Education at Johns Hopkins University, where her research involves an epistemological investigation of artistic processes and socioemotional dispositions. She has taught visual art at the high school and university levels and has engaged students in curatorial projects and collaborative art-making. In addition, she has directed university art galleries and a museum education department to engage diverse audiences in dialogue around visual arts. She has a B.A. in art and anthropology from Connecticut College, an M.A.T. in art education from Tufts University and the School of the Museum of Fine Arts, Boston, and an M.F.A. in studio art from UMass Amherst. Her artistic practice informs her research, writing, and teaching.

**Ivonne Chand O’Neal** Ph.D. is the Founder and Principal of MUSE Research, LLC, a creativity research think tank which provides arts assessment, research design, and arts evaluation services for multinational companies. She currently serves as Chief Research Strategist for Crayola, and is also Senior Research Fellow for Creativity Testing Services, a creativity assessment firm examining creativity with such organizations as Red Bull, Lego, and Disney.

Prior to her current position, Chand O’Neal served as founding Director of Research and Evaluation for the John F. Kennedy Center for the Performing Arts where she created the Center’s first comprehensive research agenda of over 25 research studies designed to examine the impact of the arts on society on local, national, and international scales. Her work has been featured by the NEA, The Washington Post, and various news outlets. Preceding her tenure at the Kennedy Center, she held a joint appointment as Co-Investigator and Research Director at the David Geffen UCLA School of Medicine, where she examined the effects of acute cocaine administration on the creative process. Her work in applications of creativity research led to her term as Associate Curator for the Museum of Creativity.

Chand O’Neal earned her Ph.D. in Cognitive Psychology with emphasis on Creativity, Arts Integration, and Program Evaluation at Claremont Graduate University. She sits on the Editorial Board for the Creativity Research Journal, the Research Advisory Board for the University of Pennsylvania’s Human Flourishing Initiative, the College Board’s Development Committee for AP Research, and serves as Co-Chair for the Arts, Culture, and Audiences Topical Interest Group for the American

Evaluation Association. She has also worked actively with the entertainment industry (Disney Channel, NBC, TNBC) to increase the use of creative thinking skills in educational television programming for children and teens.

**Lynnette Young Overby** Ph.D. is Deputy Director of the University of Delaware Community Engagement Initiative and a Professor of Theatre and Dance. She is the author, coauthor, or coeditor of 40+ publications including 12 books and the 2016 Human Kinetics publication—*Public Scholarship in Dance*. Her honors include the 2004 Leadership Award from the National Dance Education Organization. Dr. Overby is currently collaborating with literary historian P. Gabrielle Foreman on a long-term “Performing African American History” research project. “Sketches: The Life of Harriet E. Wilson in Dance, Poetry and Music” is based on research by Foreman, who edited Wilson’s 1859 book *Our Nig*. Their collaboration continued in 2014 with the premiere of “Dave the Potter” a multidisciplinary work designed to honor the history and creativity of an enslaved potter and poet, David Drake, through performance. The current project “Same Story Different Countries” extended the work to South Africa.

**Christine Pitts** is a research scientist from NWEA. She works on analyzing the efficacy of assessment systems and leadership practices in schools. Her work includes assessment design for social, emotional, and learning skills. Her research as a Ph.D. candidate in Educational Methodology, Policy, and Leadership at the University of Oregon focuses on education policy and longitudinal social networks.

**Rekha S. Rajan** is co-director for PANCH Research, LLC (Chicago, IL), an international consulting firm specializing in biomedical, health, education, arts research, and program evaluation. Her interdisciplinary team has led projects for several agencies, including the National Endowment for the Arts (NEA) and the National Institute of Aging.

Rajan is a nationally recognized arts education specialist and is Visiting Associate Professor of Research and Program Director for the Masters in Grant Writing, Management, and Evaluation at Concordia University Chicago. She is the author of over 50 evaluations, articles, and books, including *Integrating the Performing Arts in Grades K–5*, *Grant Writing, From Backpacks to Broadway*, and the forthcoming *Musical Theater in Schools* with Oxford University Press.

She serves as the editor for *General Music Today*, is on the editorial board for the *Music Educators Journal*, and is a co-program chair for the Teaching of Evaluation Topical Interest Group for the American Evaluation Association. Rajan sits on various appointed councils for the arts and education, including the Illinois Core Arts Standards Steering Committee with Arts Alliance Illinois and the Kindergarten Individual Development Survey (KIDS) Advisory Committee for the Illinois State Board of Education. Her research has been featured in *Education Week*, on *National Public Radio*, with the NEA and the National Head Start Association. Rajan is the recipient of numerous grants including a two-year research award from the NEA and a grant from the Chicago Community Trust to study audience response to musical theater performance. She is also a professional singer and actress with performances including Mabel in *The Pirates of Penzance*, Lili in *Carnival!*, and a guest role on *Chicago P.D.* on NBC. She received her doctorate in Music Education from Teachers College, Columbia University.

**Dawn S. Reese** is the Chief Executive Officer of The Wooden Floor. She has leveraged her years of business and nonprofit management experience to be a life-changer for low-income youth and help propel The Wooden Floor forward. Since 2009, Dawn's unique blend of talent and experience working in business, arts, education, and technology adds to the mission-driven, business-minded focus of The Wooden Floor. Dawn led the efforts to take The Wooden Floor's model national and signed their first licensed partner in Washington, DC, as well as heading their local expansion plans to add a second location in Santa Ana. Dawn received the 2016 *Center for Leadership Award for Innovation* from California State University Fullerton and the 2015 *Difference Makers Award for Small Nonprofit Person of the Year* from the Santa Ana Chamber of Commerce. Prior to The Wooden Floor, Dawn worked for Opera Pacific and was the Managing Director. Dawn serves on several Board of Directors and advisory committees for arts, education, and social sector issues. Dawn is a coach, mentor, consultant, and national conference presenter on the topics of strategic planning, board governance, creative youth development, as well as college access. Dawn received her Bachelor of Arts in Psychology from California State University Long Beach.

**Patti Saraniero** is principal of Moxie Research, a program evaluation and consulting practice that collaborates with arts, cultural, STEM, and education organizations. Dr. Saraniero works on large- and small-scale projects

to identify and address questions leading to effective learning programs and experiences. Her work with clients frequently leads to multiple projects with them, creating deep and rich working relationships. Dr. Saraniero has worked in and with large and small arts organizations, including running the education programs at La Jolla Playhouse and the Old Globe Theatre. She is on faculty in the Non-Profit Leadership and Management graduate program at the University of San Diego and in the graduate theater program at the University of California, San Diego. She currently serves as board president of the San Diego Cooperative Charter Schools.

**Jennifer Sly** Manager of Digital Learning and Assessment, Minnesota Historical Society, has been working at the intersection of technology, community development, and youth empowerment for the past 20 years. She managed the development of the *Play the Past* project and leads other digital learning initiatives at MNHS. Over the years, she has had the most fun working in partnership with the Minnesota Historical Society, the Institute of Museums and Library Services, NASA, the United Nations, the MIT Media Lab, and the youth of Queensbridge and Swaziland. She loves using audience research and new technologies to design transformational digital experiences. The favorite part of her work is trying things out, and then trying them out again.

**Laura Smyth** Ph.D., has over two decades of experience in the arts and education field as a teacher, researcher, and program specialist. She is currently the Program Director for the California Alliance for Arts Education's Title I Initiative. She began her career as a third-grade teacher in Houston, TX, and later earned her Ph.D. from Stanford University, where she studied with Dr. Shirley Brice Heath. With Heath, she co-wrote the resource guide *ArtShow: Youth and Community Development*, and later helped design the nation's first master's degree in arts management with a focus on community and youth development at Columbia College Chicago. Laura also served for three years as Senior Associate for Communications and Partnerships at the Arts Education Partnership. Laura is interested in the intersection of in-school and out-of-school time, partnership between community and youth organizations, Title I and education equity, and making research and policy information accessible to a general audience.

**Greg Taylor** Ph.D. is Professor of Cinema Studies at Purchase College, SUNY, where he also served as the Director of the Conservatory of Theatre Arts from 2010–2016. He is the author of *Artists in the Audience*:

*Cults, Camp, and American Film Criticism* (Princeton University Press), along with numerous articles on criticism, cinema, modernism, and taste. He is currently completing his first novel.

**Dennie Wolf** Ph.D. is a principal at WolfBrown and brings over 40 years of experience in the fields of research and evaluation to the work of building equitable learning opportunities for children, youth, and families. She graduated from Harvard University where she trained in developmental psychology and served as a researcher at Harvard Project Zero for more than a decade, leading studies on the early development of artistic and symbolic capacities. While continuing her work as a researcher, Wolf has expanded her work to include planning and evaluating a number of collective impact projects designed to build municipal and regional systems that support equitable creative learning in and out of school time (e.g., Big Thought in Dallas, Right Brain in Portland, or the Arts Expansion Initiative in Boston, Arts Assessment Project in Seattle). Through this work, Wolf has published widely on issues of assessment, participatory evaluation, as well as artistic and imaginative development, consistently arguing that creative work is a human need and a human right.

**Kim Zanti** is the Assistant Director of the Centers for Research on Creativity, where she contributes to all aspects of the business, including evaluation plan design, field research, report writing and editing, project management, and business operations. Prior to joining CRoC, Kim enjoyed a 20-year career in the public benefit arts arena with such agencies and organizations as the Los Angeles County Arts Commission and Will Geer's Theatricum Botanicum in Topanga, CA. She has served as a development consultant to Arts for LA and the California State Summer School for the Arts Foundation, and currently, serves as a development consultant to Get Lit—Words Ignite and Pacific Resident Theatre. Kim is a published writer and founder of Transport Topanga Literary Festival. She holds a Bachelor's Degree in Psychology from Towson University in Baltimore, Maryland.



# LIST OF FIGURES

Fig. 2.1	Theory of change model for The Wooden Floor The triangles represent the direction students progress as they participate in programming. The concentric circles are the program offerings, with dance being the central focus of the organization's work. The arrows show aspects and approaches to the program offerings as well as define the outcomes. Figure 2.1 is from the federal copyright for <i>The Wooden Floor: From here, you can step anywhere</i> by The Wooden Floor for Youth Movement, 2014, Santa Ana, CA. Reprinted with permission	18
Fig. 4.1	Third grade oral test interview protocol for Duke Ellington unit	71
Fig. 4.2	CAER music teaching self-concept inventory	84
Fig. 6.1	ArtCore model theory of change	120
Fig. 6.2	Procedures for AMAIA implementation in practice	127
Fig. 6.3	ArtCore instructional design guidelines	134
Fig. 6.4	Tripartite model of arts integration	136
Fig. 7.1	Schematic of data collection schedules for quasi-experimental and delayed-implementation designs. Note: Gray bars indicate when the program was in operation. "Pre-Collect" and "Post-Collect" refer to pre- and post-program data collection, respectively. The symbol $\checkmark$ indicates that pre- or post-program data collection occurred for a given group at a particular point in time, while the symbol O indicates that it did not	163
Fig. 7.2a	Observed values of growth mindset. Note: Error bars correspond to two standard errors about the mean. Multilevel models indicated a trend-level effect of <i>group</i> (1 = treatment) on post-program scores ( $B = 0.08$ , $p = 0.083$ ), corresponding to a modest effect size ( $d = 0.13$ )	165

Fig. 7.2b	Observed values of artistic goal orientation. Note: Error bars correspond to two standard errors about the mean. Multilevel models indicated a trend-level effect of <i>group</i> (1 = treatment) on post-program scores ( $B = 0.36$ , $p = 0.086$ ), corresponding to a moderate effect size ( $d = 0.46$ )	166
Fig. 7.3	Differences in growth mindset among younger students. Note: Type III test of fixed effects indicated that there was a significant interaction between <i>age</i> and <i>group</i> in predicting post-program growth mindset scores ( $F(1, 462) = 3.73$ , $p = 0.038$ ). Post-hoc probing revealed significant differences in model-implied post-program scores among younger students. For illustrative purposes, model-implied post-program scores for both groups are depicted relative to a common model-implied origin (or intercept) that disregarded group status. The difference in growth mindset scores post-program corresponded to a moderate effect ( $d = 0.30$ )	167
Fig. 7.4	Differences in school engagement among students with high pre-program scores. Note: Type III test of fixed effects indicated that there was a significant interaction between <i>pre-program engagement scores</i> and <i>group</i> in predicting post-program growth mindset scores ( $F(1, 514) = 4.89$ , $p = 0.027$ ). Post hoc probing revealed significant differences in model-implied post-program scores among students with higher pre-program scores. For illustrative purposes, model-implied post-program scores for both groups are depicted relative to a common model-implied origin (or intercept) that disregarded group status. The difference in growth mindset scores post-program corresponded to a moderate effect ( $d = 0.46$ )	168
Fig. 7.5	Observed quality of instruction with respect to SEL by program. Note: Each column represents a program. Program names have been removed	169
Fig. 8.1	Timeline of AP Research Formative Evaluation	184
Fig. 8.2	Instructional framework for AP Capstone	186
Fig. 9.1	Personal choice, such as getting to select your own pumpkin to take home with you, was a common theme in students' drawings of their favorite field trips (Minnesota Historical Society, 2010)	206
Fig. 9.2	As students drill for ore in the iron mine, they get feedback in their devices on the quality of their work and associated earnings. Charlie Vaughan, photographer (Minnesota Historical Society, 2014)	214

Fig. 9.3	Each student creates an online “digital backpack” as they play the game. It is a repository for the items they collect and the historical characters they meet, and it shows their progress in each hub. (Minnesota Historical Society, 2014)	215
Fig. 9.4	Students collaborate in the fur trade hub and use critical thinking to negotiate profitable trades. Brady Willette, photographer (Minnesota Historical Society, 2014)	218
Fig. 10.1	The A–B–A evaluation design	225
Fig. 10.2	Root cause analysis	238
Fig. 11.1	Photo from the production <i>The Adventures of Alvin Sputnik</i> . Pictured Tim Watts. Photo credit to Michelle Robin Anderson. Photo provided courtesy of Laura Colby of Elsie Management	252
Fig. 11.2	Student post-program survey template	255
Fig. 11.3	Student attitudes towards live performance (pre-program and post-program)	261
Fig. 12.1	PSM survey flow	279
Fig. 12.2	Using PSM and social networks to evaluate an artistic intervention	282
Fig. 12.3	Distribution of propensity scores between viewers and non-viewers of <i>Waiting for “Superman”</i>	284
Fig. 13.1	Diagram of roles, relationships, and fields of influence for Art21 Educators evaluation	312
Fig. 14.1	Top contributors to arts and cultural GDP selected industries (2012) (in millions). Source: Arts and Cultural Production Satellite Account (ACPSA), U.S. Bureau of Economic Analysis (2015)	324

## LIST OF TABLES

Table 2.1	2014 Baseline scale scores, all students	23
Table 2.2	2014 Pro-social behavior scores by age and gender	24
Table 2.3	2016 Longitudinal survey data, two-year gains, all groups	25
Table 2.4	2016 Rank order of scale gains	26
Table 2.5	2016 Longitudinal survey data, two-year gains by age group, boys only	27
Table 2.6	2016 Longitudinal survey data, two-year gains by age group, girls only	29
Table 3.1	EASE teacher cohorts: Levels of program support over five years	41
Table 3.2	Activities for teachers at different program levels	42
Table 3.3	EASE impact study samples	47
Table 3.4	Fidelity of implementation	49
Table 3.5	Baseline equivalence of treatment and control groups	53
Table 3.6	Impact estimates	54
Table 3.7	Student assessment	55
Table 3.8	Researcher ratings of teaching indicators	59
Table 4.1	Program goals and outcomes and assessment tools	68
Table 4.2	Timeline of administration of assessment tools	69
Table 5.1	Vintage Voices evaluation work plan	104
Table 5.2	Protocol for Vintage Voices post-performance participant focus groups	107
Table 5.3	Qualitative evaluation findings	109
Table 6.1	Component definitions of the ArtCore measure of adoption, intensity, and adaptation	126
Table 6.2	Descriptive results of teacher-level factors included across implementation framework components	128

Table 6.3	Results from the ArtCore measure of adoption, intensity, and adaptation during the ArtCore developmental evaluation study in five middle schools	131
Table 6.4	Participation at each school across different activities included in each component	132
Table 7.1	Scales for the observational measure	159
Table 7.2	Results of the pilot study	161
Table 7.3	Distribution of students surveyed by group	162
Table 7.4	Summary of effects for a selection of programs	170
Table 9.1	Questions during the design phase addressed a wide range of issues	209
Table 9.2	Minnesota History Center field trip student demographics	212
Table 9.3	Fiscal year 2015 Play the Past (PTP) teacher survey results	220
Table 10.1	Data collection overview	228
Table 10.2	Evaluation use of data	229
Table 10.3	Examples from the structured observation checklist	233
Table 10.4	Year One results by program objective	234
Table 10.5	Content standards addressed by visual art instructional activities	236
Table 10.6	Content standards addressed by science instructional activities	237
Table 10.7	Frequency distribution of content knowledge of science, math, and arts ( $n = 6$ )	240
Table 10.8	Ranking of the most relevant Next Generation Science Standards (NGSS) with the strength of curricular connections to the visual arts	241
Table 10.9	Basic curriculum map	242
Table 10.10	External evaluation findings, comparing Years One and Two	244
Table 12.1	Sample questions from the <i>Waiting for "Superman"</i> survey instrument	281
Table 12.2	The PSM model for viewers of <i>Waiting for "Superman"</i>	285
Table 12.3	Demographics of viewers of <i>Waiting for "Superman"</i>	286
Table 13.1	Art21 Educators program goals	307
Table 13.2	A theory of change for learning across roles and contexts, based on the Art21 Educators' program evaluation	318

## An Introduction to Arts Evaluation

*Rekha S. Rajan and Ivonne Chand O'Neal*

Arts evaluation is a term that is both innovative and daunting. The inception of any arts organization, program, performance, exhibition, or collection comes with the need for assessing the value of these experiences and understanding how people appreciate and interpret different art forms. When we attend the opening of a new gallery, we bring expectations for the visual art we will examine and analyze. When we attend the opening of a new concert, play, dance, or musical, we prepare to experience the performing arts in new and exciting ways. When we spend our weekends at the local movie theater, we expect to be entertained and transported by film. When students prepare for a visit from a teaching artist, they anticipate learning about the arts, engaging and participating, in addition to diving into their daily curriculum.

In that sense, as participants, audience members, and patrons of various arts forms, we are constantly evaluating what the arts mean in our lives (Rajan, 2015). These informal assessments help to shape our own understanding of the arts, help us to learn about the arts, and learn from the arts, even if we are not formally doing so. As such, the idea of evaluating the arts should seem simple and obvious, right?

---

R.S. Rajan (✉)  
PANCH Research, LLC, Chicago, IL, USA

I.C. O'Neal  
MUSE Research, LLC, Kensington, MD, USA