

Montessori equity study underway

Can Montessori reduce economic and racial disparities?



BY **ELIZABETH PUNGELLO BRUNO, BARBARA CROCKETT, AND IHEOMA U. IRUKA**

The mission of the Brady Education Foundation (BEF) is to close the opportunity and achievement gaps via the funding of research and evaluation projects that bring practitioners and researchers together to inform private investment and public policy.

One of the Foundation's early projects was to fund an investigation of the impact of the Montessori approach in two public magnet schools in Hartford, CT. This work was led by Angeline Lillard from the University of Virginia (UVA). The study found a positive impact of Montessori overall, and the findings suggested that the Montessori approach may have the potential to close the economic and racial opportunity and achievement gaps.

Around the same time that these results were being released, the findings from a large study of Montessori education in South Carolina public schools led by Brooke Culclasure were published as well. Those findings also suggested that Montessori has a positive impact overall and may help to close these gaps.

Given the BEF Board's focus on seeking ways to effectively address the opportunity and achievement gaps, the results from these and other studies led the Board to issue a Request for Proposals (RFP) to conduct a large and rigorous, multi-site study to examine

Montessori's potential to reduce the economic and racial disparities, especially for children from low-income households and for Black/African American and Latinx children.

While the Hartford study was able to capitalize on lotteries and thus conduct a randomized control trial (the gold standard in research to investigate effects), it was relatively small in terms of the sample size and lacked the ethnic diversity needed to examine whether children of color equally benefited from Montessori. In addition, it could not compare income groups based upon a policy relevant income split (e.g., students who qualified for free and reduced lunch) and instead had to use a median income split of the sample to compare children from higher and lower income households. In contrast, the South Carolina study did have a large sample that was ethnically and economically diverse, but their quasi-experimental design limited the ability to conclusively confirm that Montessori was indeed effective in reducing the economic and racial disparities. Despite these limitations, the results of these and other studies were compelling enough to lead the BEF Board to embark on a larger Montessori initiative.

Just as BEF launched this initiative, Ann-Marie Faria and colleagues from the American Institutes of Research (AIR) and Angeline Lillard from UVA were awarded a grant from the U.S. Department of Education, Institute of Education Sciences (IES) to investigate the impact of Montessori education in the public sector on children's academic and social-emotional outcomes. Similar to the BEF Initiative, the AIR study will focus on the primary level (PK3–K); follow children for three years; include multiple sites across the

country; capitalize on lotteries in order to conduct an RCT; and examine impacts on achievement, executive functioning and socio-emotional outcomes. With two similar, large national studies, one could reasonably ask, "Why are both studies needed at this time?"

Although very alike in a number of important ways, these two projects differ in terms of their primary questions, which in turn has important implications for both who is invited to participate in the study as well as the team of investigators conducting it. The primary aim of the AIR/UVA study is to examine the impact of Montessori education in a sample representative of the general population and to explore how effects may change by variation in fidelity. This important study has the potential to provide much needed information concerning scaling up the Montessori approach in the public sector. The primary questions being investigated by the BEF initiative are focused on generating data that will inform ways to *close the economic and racial disparities in education achievement and success*. As such, the BEF study is by design working to invite large enough samples from under-represented and under-resourced communities to attempt to have the statistical power to examine Montessori's potential to reduce the effects of household income on children's outcomes and to provide equitable learning opportunities for all children.

In addition, given the focus on diverse populations, the BEF Board determined that the research teams conducting the work and the Advisory Board guiding the initiative need not only to have solid Montessori expertise and strong research experience, but

continues >

also to reflect the populations being studied at the leadership level. For too long, the vast amount of research conducted on children of color has been primarily designed and carried out by white researchers, which likely limits the types of information gathered and the interpretations of findings, often using a deficit lens. The opportunity and achievement gaps are one of the pernicious social problems in the U.S., requiring diverse expertise and experiences to find a solution. The success of this work, and subsequently policy drivers, depends on respectful collaboration across disciplines, practice, cultures and ethnicities, school systems, and geographic locations.

The RFP was issued in the summer of 2017, and three teams were eventually selected: Teams from Child Trends led by Diane Early and Joy Thompson and the Riley Institute at Furman University led by Brooke Culclasure and Delia Allen will collect data, and a team from the University of Kansas Center for Montessori Research led by Angela Murray, Jade Caines Lee and Neal Kingston will serve as the coordinating site for the Initiative. At this time, schools and families are being invited to participate, with plans to begin data collection in the fall of 2019.

Most recently, as part of this initiative, the BEF Board awarded two grants for measurement development. One of these grants has been awarded to the team at the University of Kansas Center for Montessori Research, led by Angela Murray and Carolyn Daoust, to support the continued development of a valid and reliable classroom observation instrument that will assess the implementation of Montessori practices, focusing specifically on teacher behaviors and the prepared environment. This tool will enable the research teams to account for variability in Montessori environments in their analysis and will be freely available for use in other research studies concerning Montessori.

The research teams and the advisory board will reflect the populations being studied at the leadership level

The second measurement development grant has been awarded to a team at Boston University, led by Stephanie Curenton, to support the continued development of the ACES-Snapshot (Assessing Classroom Sociocultural Equity Scale), a classroom observation instrument that provides information regarding how best to ensure that racially minoritized children, such as Blacks, Latinx, Asian/Pacific Islanders, and Native Americans, are being provided with equitable learning opportunities. As interactions and learning opportunities are critical for children's achievement, there is a need for a tool to support teachers focused attention on children who have historically been excluded from fully benefiting from classroom learning experience. An important goal of this work is to refine and validate the measure for use in Montessori classrooms. This is particularly critical as the same behaviors can have very different meanings in different contexts.

Much of the current push to expand public pre-K is driven by the goal of increasing access to early learning environments that set the foundation for life-long learning. As these early educational systems are being developed and expanded, it is the hope of the BEF Board that the information learned from this initiative will inform this work so that equitable learning opportunities can be provided for all children and the opportunity and achievement gaps are eliminated. We seek to use the results from this study to ensure that policies and practices focused on strengthening early childhood education, and education writ

large, is done with the ultimate goal of reducing economic and racial disparities and simultaneously ensuring that all children are meeting their potential from birth through adulthood.

Elizabeth Pungello Bruno, PhD, is the President of the Brady Education Foundation (BEF). She is also a former Montessori student and Montessori parent.

Barbara Crockett is the Executive Director of BEF. She is a former Montessori teacher, principal and parent.

Iheoma U. Iruka, PhD, is the Chief Research Innovation Officer and Director of the Center for Early Education Research and Evaluation at HighScope Education Research Foundation, as well as a BEF Board Member, a Montessori parent, and a partner with the National Center for Montessori in the Public Sector as a Senior Researcher.

MontessoriPublic

MontessoriPublic, the communications and advocacy platform for public Montessori is a publication of

NATIONAL CENTER for
MONTESSORI in the
PUBLIC SECTOR

Subscribe at montessoripublic.org

Noncommercial reproduction of this material is permitted and encouraged. Consult authors for rights to copyrighted articles.

Copyright 2019 National Center for Montessori in the Public Sector