Madhabi Chatterji: Research Themes

1. Improving Evidence Standards, Evidence-Gathering, and Evidence Synthesis Methods to support Evidence-based Practices and Policies
Since 2004, I’ve written extensively on the need for evaluating the merits and utility of traditional study designs for making causal inferences about interventions or programs in field settings, searching for improved models and methods for determining “what works” in education, health and other applied fields. For “complex social programs”, I have proposed a counter-methodology, the Extended Term Mixed Methods (ETMM) design (see Educational Researcher, 2004/05), for performing impact evaluations. My latest thinking on this theme focuses on interventions outside education. See publications in Health Education & Behavior (2014) and Evaluation and Program Planning (2016).

2. Assessment Design, Validation and Validity Issues
My studies in this strand go back to my earliest days as a practicing scholar and professional and focus on issues of assessment design and construct validation. Here, I have developed a unified, user-centered, and iterative framework for designing instruments guided by the contexts of assessment use, called the “Process Model”. More generally, I am interested in investigating measurement challenges and validity issues in established instruments and assessment systems, with particular attention to how validity challenges arise in new contexts of use. With colleagues in the global mental health field, for instance, I recently conducted critical reviews of the quality of existing instruments tapping mental health constructs in Arab-speaking populations. For a recent edited work on Validity and Test Use and AERI’s recent conference proceedings, see here and here.

3. Standards-based Education Reforms, Educational Equity and Closing Achievement Gaps
I have long-standing interests in educational reforms and evidence-based approaches to the design of standards-based curricula, curriculum-based assessments and school-based interventions that help reduce learning gaps in disadvantaged or disenfranchised students and adults, or improve conditions in other ways. Between 2002-04, I analyzed a national data set in the U.S. for evidence of early reading and mathematics achievement gaps in kindergartners. As a Fulbright Research Scholar in 2008, I studied educational equity issues in selected primary schools of W. Bengal, India and Bangladesh. The Proximal Assessment for Learner Diagnosis (PALD) approach to reduce learning gaps—a teacher-mediated, formative diagnostic assessment intervention—is another example of an NSF-sponsored research project on this theme (2006-2012). Two PALD studies can be found here and here. For a recent example of a national standards-based curriculum design and evaluation effort in health information technology, see here.

4. Assessment Policy: Promoting Meaningful Use
At the Assessment and Evaluation Research Initiative (AERI: www.tc.edu/aeri), our aim is to promote meaningful use of assessment and evaluation information, across disciplines and internationally. For a recent example of our work in translating educational assessment information for practitioner and policymaker audiences, see my 2014 Education Week op-ed and blog, Assessing the Assessments under Conferences and Forums (www.tc.edu/aeri)
INTERESTED APPLICANTS FOR THE INTERDISCIPLINARY STUDIES IN EDUCATION DOCTORAL PROGRAM AT TEACHERS COLLEGE MAY CONTACT ME DIRECTLY AT: mb1434@tc.columbia.edu