

# Perspectives on Quantifying School Desegregation

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## **Abstract**

This article will take a critical computational approach to the question of school desegregation in recognition of the anniversary of the 1954 *Brown v. Board of Education* U.S. Supreme Court decision. Using a conceptual replication of the 1974 work of Michael Giles titled ‘Measuring School Desegregation’ published in the *Journal of Negro Education* (JNE), this article examines perspectives on mathematical modeling and engages a series of empirical models related to Giles’ initial framing on the quantification of school desegregation policies. The analysis reveals how attributed models may or may not account for the complex interplay of systems to which school desegregation has been attributed within the research literature. Each model is related to a main theme or themes from the extant literature on school desegregation to generate a broader commentary on the various methodological insights and limitations provided by increasingly interdisciplinary perspectives. This article will examine those methods that take quantification and mathematical modeling as further tools of insight to understanding longstanding problems of injustice and inequity. Implications for researchers and public policy will be provided.

*Keywords:* *Brown v. Board of Education*, desegregation, segregation, race, mathematical modeling