

RESEARCH ARTICLES

Paying the Instability Tax: A Spatial Systems Analysis of Structural Racism, School Finance, and K–12 Leadership Workforce Dynamics in Michigan

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ABSTRACT: Public education in the United States faces a compounding crisis of structural resource deprivation and severe organizational instability, issues that have historically been analyzed in isolation. This article proposes a unified spatial systems analysis that bridges macro-level public school finance structures with meso-level K–12 leadership workforce dynamics. Grounded in critical race theory (CRT) and utilizing a QuantCrit methodological framework, this research explicitly links the geographical and racialized distribution of capital to the ecological stability of school leaders. Highlighting the stark spatial inequities in Michigan—where resource-starved districts such as Detroit face an administrative glass cliff resulting in up to a 32% annual leadership churn—this agenda introduces the Stability Effect to demonstrate how chronic turnover imposes a severe instability tax on minoritized youth. To rigorously investigate these intersecting systemic crises, this article outlines a longitudinal, explanatory sequential mixed-methods design across six Midwestern states utilizing multiple indicator multiple causes (MIMIC) structural equation modeling. Ultimately, this agenda provides a data-informed rationale for policymakers to abandon race-neutral, localized, property-tax-reliant funding formulas in favor of progressive equalization frameworks designed to stabilize the educational workforce and promote spatial justice.

KEYWORDS: administrative turnover, critical race theory, leadership workforce dynamics, Michigan, QuantCrit, school finance, spatial equity, structural racism

Paying the Instability Tax: A Spatial Systems Analysis of Structural Racism, School Finance, and K–12 Leadership Workforce Dynamics in Michigan

Public education in the United States currently contends with a compounding crisis of structural resource deprivation and severe organizational instability (Caldwell et al.,

2022; Levin et al., 2019; Smart, 2026). Historically, educational policy research has treated these issues as distinct phenomena. Scholars have typically analyzed school finance disparities through macroeconomic frameworks and constitutional adequacy lenses (Baker & Corcoran, 2012; Jackson et al., 2016), while simultaneously evaluating workforce retention through localized, human resource management lenses (Bartanen & Grissom, 2019; Simon & Johnson, 2015). This article proposes a unified, multi-state research agenda that rejects this bifurcated approach.

Instead, it establishes a spatial systems analysis that bridges macro-level public school finance structures with meso-level leadership workforce dynamics (Smart, 2026). Guided by a commitment to data-informed educational policy and spatial justice, this agenda explicitly links the geographical and racialized distribution of capital to the ecological stability of the K–12 administrative workforce (Caldwell et al., 2021; Reardon et al., 2021).

The stability and effectiveness of K–12 education systems are fundamentally dependent on the quality and consistency of school leadership. A robust body of evidence confirms that principals are pivotal to school success, ranking second only to classroom instruction in their influence on student learning (Grissom et al., 2021; Leithwood et al., 2008). The impact of effective leadership is measurable and significant; principals substantially shape the organizational climate, teacher satisfaction, and school-wide retention (Bruch & Spillane, 2022). Research quantifies this effect, indicating that replacing a below-average principal (at the 25th percentile of effectiveness) with an above-average one (at the 75th percentile of effectiveness) yields nearly 3 additional months of student learning in reading and math annually (Grissom et al., 2021).

At the core of this inquiry is the Stability Effect—the measurable, longitudinal relationship between consistent school leadership and the trajectory of youth success. Yet the profession is currently navigating systemic challenges, including high rates of attrition, a shrinking pipeline, and a persistent lack of diversity, all of which severely undermine educational progress in high-need urban contexts. Nationally, approximately 18% of principals leave their positions each year (Levin et al., 2019). Data from the 2021–22 Principal Follow-up Survey found that 16% of principals left their position following the 2020–21 school year alone (Taie & Xu, 2022). When a district suffers from chronic leadership turnover, it imposes an instability tax on its students (Bartanen & Grissom, 2019). Frequent leadership changes create a disruptive effect that harms the entire school ecosystem, degrading the instructional environment, eroding institutional memory, and accelerating teacher attrition (Simon & Johnson, 2015). The financial implications of this churn are also substantial, with the organizational costs associated with replacing a principal estimated at \$75,000 per occurrence (Levin et al., 2019). By evaluating public school financing systems across six Midwestern states—Illinois, Michigan, Minnesota, Pennsylvania, Ohio, and Wisconsin—this research agenda aims to provide policymakers with an empirical roadmap to stabilize the educational workforce and eliminate this instability tax.

Theoretical Framework and Literature Review

To unpack the interlocking legal and fiscal structures that govern educational access, this research agenda relies on critical race theory (CRT) as its primary analytical tool (Ladson-Billings & Tate, 1995). CRT scholars posit that institutions either knowingly or unknowingly provide the public rationale to justify, explain, legitimize, or tolerate racism. When applied to education finance, CRT exposes how seemingly objective, colorblind funding formulas preserve historical advantages for dominant socioeconomic groups while ignoring the compounding cost factors associated with concentrated poverty and racial segregation (Caldwell et al., 2021).

A foundational tenet of this framework is the conceptualization of whiteness as property, which, in the educational landscape, manifests as the legal right to exclude minoritized populations from well-resourced geographic spaces (Harris, 1993). Because public school funding systems have historically relied on localized property taxation, the boundaries established by municipal redlining and discriminatory mortgage lending are effectively transformed into localized fiscal capacity. Decades of public policy and private actions have systematically excluded communities of color—especially Black populations—from wealth-building opportunities. Consequently, the intersectionality of race and class dictates that students of color disproportionately attend high-poverty public schools that suffer from severe resource starvation (Crenshaw, 1991).

Structural Starvation and the Exodus from the Principalship

When state finance systems fail to adequately equalize local property wealth, this structural starvation directly undermines human resource management (Smart, 2026). The exodus from the principalship is driven by increasingly complex, stressful, and often unsustainable working conditions. Leaders are now expected to navigate complex sociopolitical issues, coordinate mental health and social services, and manage significant operational challenges. Consequently, principals report stress levels significantly higher than those found in the general working population (Steiner & Woo, 2021). Role ambiguity is particularly acute in urban contexts, where principals must navigate conflicting demands; research highlights the significant stress generated by the misalignment between a principal's actions and the expectations of internal stakeholders (Smart, 2026; DeMatthews et al., 2021). Furthermore, the pressures of high-stakes accountability systems can create environments in which leaders feel overly scrutinized, contributing significantly to burnout and job dissatisfaction (Kraft et al., 2020).

Incoming school principals in resource-starved districts are placed on an operational glass cliff, entering precarious leadership positions in which severe fiscal deficits and dilapidated school infrastructure drastically increase the likelihood of professional burnout and voluntary departure (Gümüş et al., 2021; Ryan & Haslam, 2005). Utilizing the framework of racialized organizations (Ray, 2019), research suggests that school districts often operate with implicit biases in hiring and performance evaluations, maintaining organizational cultures that systematically favor the advancement of White candidates while disadvantaging highly qualified educators of color (Grissom & Bartanen, 2019). The homogeneity of the leadership workforce is not merely a matter of representation; it is a critical issue of effectiveness. Principals of color are associated with improved academic outcomes, higher expectations, and lower rates of exclusionary discipline for students of color (Lindsay & Hart, 2021). Moreover, leadership diversity has a positive impact that cascades through the teaching workforce, as principals of color are significantly more effective at recruiting and retaining teachers of color (Bartanen & Grissom, 2023).

The Illuminating Case of Detroit, Michigan

The historical and contemporary educational landscape of Detroit, Michigan, serves as a powerful example of how spatial isolation and structural funding deficits interact to destabilize an entire school ecosystem. In Michigan, these challenges are deeply rooted in structural barriers created by the intersection of the public school finance system, racial segregation, and housing policy, which combine to create profound resource disparities, particularly for Black students (Caldwell et al., 2022).

The staffing crisis in this region has reached critical mass. For the 2025–2026 school year, the Michigan Department of Education (MDE) officially identified school

administrators as a critical shortage discipline (MDE, 2024). Statewide mobility data reveal that while traditional public schools experienced an 18% turnover rate, charter schools (public school academies) experienced a staggering 32% administrator turnover rate (Education Policy Innovation Collaborative, 2023). This disparity is crucial for the Detroit context, which features a high concentration of charter schools.

Regional data illustrate severe spatial and financial inequities driving this turnover (see Table 1). Administrators in the more affluent Oakland County earn significantly more—averaging \$121,738 annually—than those in Wayne County, who average \$113,811 (MI School Data, 2024a).

Table 1: *Spatial and Demographic Disparities in Michigan K–12 Leadership Workforce Dynamics, 2023–2024*

Structural indicator	Affluent/ suburban (Oakland County)	Resource-deprived/ urban (Wayne County/DPSCD)	Statewide aggregate
Mean administrative compensation	\$121,738	\$113,811	N/A
Leadership attrition rate (traditional)	Sub-average	Disproportionately elevated	18%
Leadership attrition rate (charter/PSA)	N/A	32%	N/A
Enrolled Black/African American youth	Marginal representation	79.7%	N/A
White administrative representation	Predominantly White	Severe demographic misalignment	86.0%

Note: Data compiled from the Michigan Department of Education, MI School Data (2024a, 2024b), and the Education Policy Innovation Collaborative (2023). DPSCD = Detroit Public Schools Community District; PSA = public school academy.

Compounding the financial inequities is a profound demographic mismatch between administrators and the student population. Statewide, school administrators are overwhelmingly White, at 86.0% (MI School Data, 2024a). In stark contrast, the student population in the Detroit Public Schools Community District (DPSCD) in 2023–24 was 79.7% Black or African American (MI School Data, 2024b). Analyzing the broader teacher pipeline—the primary source of future administrators—reveals significant structural challenges. For example, while 30% of White students progress from initial education courses to student teaching, only 7% of Black students do so (Education Trust-Midwest, 2025).

The resulting leadership vacuum severely compromises instructional quality. Students in Michigan’s highest-poverty districts are 16 times more likely to have a teacher with emergency or temporary credentials than their peers in the wealthiest districts (Education Trust-Midwest, 2025). Furthermore, in districts serving majority Black student populations, students are nearly four times more likely to have an out-of-field or emergency-credentialed teacher compared to primarily White districts (Education Trust-Midwest, 2025; Smart, 2026).

Strategic Policy Implications and Rationale

The ultimate objective of this unified research agenda is to generate actionable, empirical toolkits that state legislators, superintendents, and advocacy organizations can use to reconstruct state education finance policy. State governments must abandon colorblind, race-neutral allocation formulas and foundation plans that ignore the historical realities of geographical segregation. State aid formulas must be fundamentally redesigned around progressive equalization frameworks that allocate revenue based on intersectional indicators of student need and regional disparities in property wealth.

Furthermore, state departments of education must actively mitigate the administrative glass cliff by introducing targeted financial stability grants for hard-to-staff, high-poverty school districts (Smart, 2026). Policy interventions must focus on improving physical school infrastructure, optimizing student-to-administrator ratios, and establishing robust, competitive compensation structures designed to attract and retain experienced, diverse leaders. Stabilizing the educational leadership workforce provides a protective buffer for the instructional core, significantly lowering teacher turnover and fostering the continuous learning environments required to improve youth success. By providing data-informed roadmaps to dismantle the structural links between local property wealth and educational quality, this research agenda seeks to ensure that a child's geographic location no longer dictates their path toward academic and economic attainment.

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