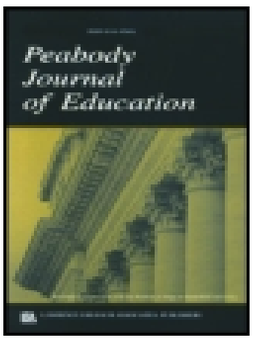

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The Ecology of Educational Equity: Implications for Policy

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ABSTRACT

Policy responses to disparities in education have proven to be largely inadequate in reducing persistent differences in academic outcomes, commonly referred to as the achievement gap. In this article, we identify some of the ways in which the fragmented nature of public policy generally, and education policy specifically, has contributed to the problem. We draw upon research from a variety of disciplines to argue that the most effective way to address the broad array of social and economic conditions impacting low-income children and their families is through the adoption of an ecological approach, similar to those used in public health. In order for education policies to promote equity in academic outcomes, they must explicitly address the ways in which race, class, language, and culture, as well as implementation processes, reproduce and reinforce disparities in academic achievement. We propose a new, comprehensive framework for equity-based education policy that makes it possible to respond to the social and economic factors that impact, and often undermine, efforts to improve academic outcomes. An analysis of California's Local Control Funding Formula (LCFF) and interviews with senior county leaders allows the authors to draw connections to the new policy framework, generating recommendations for strengthening education policies like LCFF.

Introduction

Despite several waves of reform, many schools throughout the United States continue to struggle in their efforts to bring about meaningful and measurable educational progress. Despite rising graduation rates in recent years (US Department of Education, NCES, 2018), serious challenges remain for schools serving the most disadvantaged students. Throughout the United States, underperformance is most evident among poor students generally, and African American and Latinx students particularly (Reardon, 2013). Since the adoption of No Child Left Behind (NCLB) in 2001, state and federal education policies have predominantly focused on strategies aimed at reducing racial and socioeconomic disparities in academic performance within schools. However, despite these efforts, large and persistent disparities remain.

Critics of NCLB have pointed out that policy approaches to address the so-called achievement gap have lacked a clear and consistent focus on how to address unequal access to educational opportunities and resources and how that influences academic outcomes (Boykin & Noguera, 2011). For example, national data show uneven access to rigorous course offerings for students by race (US Department of Education, 2014). Only 47% of American Indian/Alaska Native students and 57% of African American students have access to a full complement of courses necessary to be college ready, compared with 71% of their white and 81% of their Asian peers (Tsoi-A & Bryant, 2015).

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Similar racial disparities in educational opportunities are evident in a number of areas including school funding and resource distribution, access to quality pre-school, highly qualified teachers (as measured by licensing in core subjects), and facilities (Carter & Welner, 2013). While education policy has ostensibly been focused on reducing disparities in educational outcomes, relatively little attention has been paid to glaring gaps in educational opportunities such as these. Such omissions are particularly significant given the enormous challenges that remain in schools where students of color experience *de facto* segregation (Orfield & Ee, 2014). Latinx students, in particular, the fastest growing subgroup within the US population, are now the most isolated. Altogether, 84% of Latinx students attend schools where the majority of students are non-white and three-quarters of the students are poor (Orfield & Ee, 2014). Ironically, as state policies have focused on reducing disparities in student learning outcomes over the last several years, their efforts have not included strategies aimed at reducing segregation based on race and class (Orfield, Ee, Frankenberg, & Siegel-Hawley, 2016). Nor have they responded to the effects of concentrated poverty in the communities where many poor children reside (Center for Teaching and Learning, WestEd, 2018).

A wide variety of academic indicators – graduation rates, test scores in reading and math, college enrollment, etc. – continue to show that race and socioeconomic status are strong predictors of student academic outcomes in states like California (California Department of Education, 2017a; Fensterwald, 2017) and nationally (US Commission on Civil Rights, 2018). For example, 31% of African American and 37% of Latinx students met or exceeded standards for English language arts in 2016–17 in California, as compared to 76% of Asian and 64% of white students. Recent NAEP (National Assessment of Educational Progress) scores reveal similar patterns in California and several other states. For example, the gap between low-income students and their wealthier peers has remained wide and unchanged in fourth grade reading since 2002–03 (Fensterwald, 2017; NAEP, 2018). In California, the 27-point gap in average fourth-grade reading scores between white and Hispanic students in 2017 is among the largest in the nation. However, a closer look at data in California reveals that when adjusted for poverty, language, racial diversity, and special education, the state has actually made substantial increases in its NAEP scores (Urban Institute, 2018). This is significant given that the state has proportionally more low-income students and English learners than any other (Fensterwald, 2017; NAEP, 2018).

In this article, we argue that much of the ongoing failure of policies aimed at promoting higher levels of student achievement can be attributed to the fact that US education policies are largely inadequate at addressing the pervasive structural inequities in schools and societal factors outside of schools that profoundly impact their performance, as well as the achievement and well-being of children. The United States is just one of a few Western nations that relies almost exclusively upon schools to address the social and academic needs of students (Berliner, 2014; Morsy & Rothstein, 2015). It is also one of the few OECD nations that consistently allocate comparatively fewer public resources to educate the children of the poor versus the affluent (OECD, 2015).

Instead of extending support, for the last several years US education policy has relied upon academic standards and measures designed to increase accountability to elevate student achievement. (Fullan, 2007; Fullan & Quinn, 2015). Education historians Tyack and Cuban (1995) have attributed the historic shortcomings of US education reform policies to an unwillingness on the part of lawmakers to acknowledge that educational issues are inextricably tied to broader social and economic issues. In this article, we argue that a new, more comprehensive approach to education policy is needed to address this oversight.

We argue that education policy initiatives like NCLB, which have emphasized student achievement as the primary measure of school progress, have had limited impact on schools in low-income communities because they have not addressed the social and economic effects of poverty and the glaring differences in educational opportunities between poor children and their more affluent counterparts. Future education policy initiatives must focus on a broader set of ecological issues in order to address structural inequities that impact schools and healthy child development, particularly in areas where poverty is concentrated (Jones & Kahn, 2017). For this to occur, the

focus of education policy must be broadened to address the pervasive gaps in educational opportunities and the important links between the environmental conditions that students experience in their homes and communities that can impact their academic performance (Pelletier & Manna, 2017).

To support our case for a new policy approach, we review the research literature that examines the underlying factors that contribute to education inequities. We also examine research from the field of public health, which can be useful in the development of more comprehensive education policies and implementation strategies. Increasingly, public health strategies aimed at improving nutrition, safety, and a broad array of health outcomes have focused on the ways in which environmental conditions must be altered to improve access to health services. We adopt a similar approach presented in a new ecological framework for developing educational and social policies that can further efforts to promote education opportunity and student health. That framework is applied to a set of recommendation for existing equity policy initiatives such as California's new needs-based education funding formula, the Local Control Funding Formula (LCFF).

Understanding education inequities

In *Excellence Through Equity* (Blankstein, Noguera, & Kelly, 2016), the authors argue that equity in education is a "commitment to ensure that every student receives what he or she needs to succeed academically" (p. 3). Implicit in such a definition is the recognition that equity efforts must address the educational *and* social needs of students. Similarly, Simon, Malgorzata, and Beatriz (2007) describe what pursuing equity in educational outcomes and opportunities entails by spelling out three domains of equity: (1) the *design* of the education system (e.g., staffing, curriculum); (2) the educational *practices* utilized inside classrooms and across school systems; and (3) the distribution of *resources* (e.g., money, time, and human capital) that make it possible to further equity goals.

Although US education policy has embraced the goal of educational equity for many years – at least in its rhetoric – historically, schools in America have not been organized to meet the academic and social needs of students, nor have they been provided with access to the design, practice, and resources needed to achieve equity goals. Instead, public schools have been sites where inequality based on race, class, culture, and language have typically been manifest, and often reproduced (Barton & Coley, 2010; Carnoy & Levin, 1985). Although many US education policies have emphasized the need to ameliorate academic disparities associated with race, class, culture, and language (Delgado & Stefancic, 2017), there has been considerable ambiguity related to the root cause of these pervasive and persistent disparities. Lack of clarity about the causes of these disparities has made it difficult to generate agreement among schools, policymakers, and private foundations about what can be done to address them.

For some time now, there has been considerable evidence that a variety of "out-of-school" factors contribute to the persistence of academic disparities among students. For example, in his groundbreaking report on the factors that contributed to the underperformance of black students, sociologist James Coleman (1966) and his colleagues found that about two-thirds of the variation in student achievement could be explained by "out-of-school factors," while only one-third related to school quality. Subsequent studies have affirmed this finding (Jencks, 1979; Rothstein, 2003), and in some cases attributed an even more important role to factors external to schools (Johnson, 2014).

A number of critical studies have demonstrated that NCLB actually harmed efforts to promote higher student achievement because it prompted many schools to concentrate their efforts on improving academic achievement within schools, increasing student performance on standardized tests in Mathematics and English Language Arts (Wong, Wing, Martin, & Krishnamacharl, 2018). As the focus of education policy mandates narrowed under NCLB, many schools began to ignore the need to address the gaps in educational opportunities and the social and emotional needs of students. Unlike the original focus of the Elementary and Secondary Education Act (ESEA) of 1964, which directed federal education investments to schools in low-income communities in an

effort to compensate for the effects of poverty (Bishop, 2015), NCLB largely ignored the effects of poverty and inequities in learning opportunities. While some studies have found that NCLB generated statistically significant increases in the math achievement of fourth-graders in some states (Fuller, Gesicki, Kang, & Wright, 2006), a larger body of research has concluded that most schools in low-income areas were never provided with the resources to meet the law's ambitious statutory goal of universal proficiency across tested subjected areas (Dee & Jacob, 2011; Lee & Reeves, 2012; O'Day & Smith, 2016).

Figure 1 suggests how to reconceptualize an approach to education policy in a way that places reducing disparities based on race, class, culture, and language at the center of equity goals. In this formulation, we use Simon's et al.'s (2007) three dimensions of equity, along with an added fourth dimension, out-of-school factors (OSFs). Research from a variety of sources has identified the ways in which OSFs contribute to the persistence of unequal educational outcomes. For example, Berliner (2009) examines six different OSFs and their individual effects on student achievement: (1) low birth-weight and non-genetic prenatal influences on children; (2) inadequate medical, dental, and vision care, often a result of inadequate or no medical insurance; (3) food insecurity; (4) environmental pollutants; (5) family relations and family stress; and (6) neighborhood characteristics. Similarly, Rothstein (2002), Boykin and Noguera (2011), Balfanz, Bridgeland, Bruce, and Fox (2012), and others have identified a variety of factors external to schools that impact the academic and life trajectories of students. Recent research by Chetty, Hendren, and Katz (2016) has shown that low-income children who move to neighborhoods with comparatively more resources by age 8 can generate greater lifetime earnings than those peers who remain in low-income neighborhoods. Their findings reinforce prior studies showing that housing and neighborhood conditions play a significant role in determining the life outcomes for children, particularly during the early years of a child's life (before age 8) (Reardon, 2013; Yoshikawa et al., 2013).

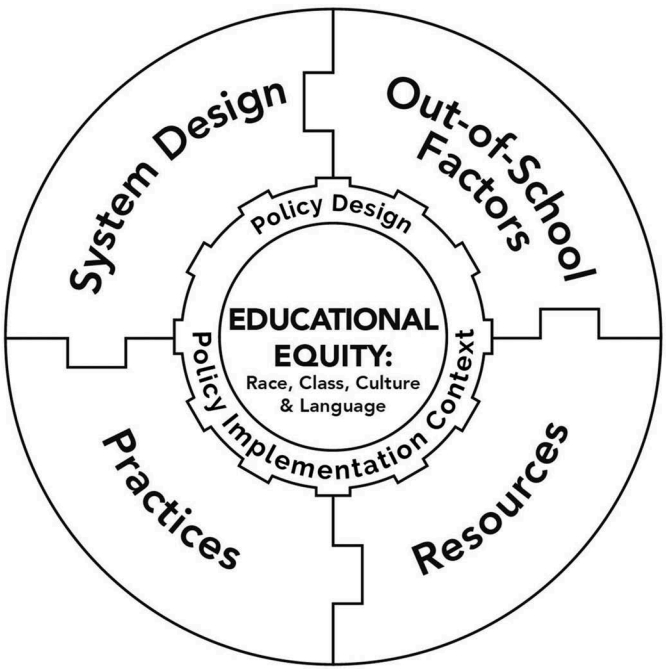

Figure 1. Broader conceptions of educational equity policy (Berliner, 2009; Blanchett, Klingner, & Harry, 2009; Datnow, Hubbard, & Mehan, 2005; Simon et al., 2007).

Research on OSFs beckons education decision-makers to devise strategies that counter deep and persistent racial disparities evident in American schools and to implement policies that address the other domains and sectors that reinforce educational disparities throughout American society. Racial disparities in American society are observable in many areas, including: income and wages (Halfon, Larson, Son, Lu, & Bethell, 2017), access to stable and affordable housing (Hughes, Matsui, Tschudy, Pollack, & Keet, 2017), transportation (Tyndall, 2017), mental health services (Hodgkinson, Godoy, Beers, & Lewin, 2017), and access to healthy food (Akom, 2011). Likewise, racial disparities are also evident in the hardships that beset marginalized populations – such as rates of incarceration and arrests (Beck & Blumstein, 2018); health patterns such as morbidity, life expectancy, and infant mortality rates (Mathews, Ely, & Driscoll, 2018); and homelessness. Although correlations do not establish causation, research on racial disparities in health has shown that such patterns are often complicated by the ways in which they interact with each other (Williams & Collins, 2001). Drawing upon the lessons learned from this research, one might conclude that efforts to reduce disparities in education cannot be carried out in isolation.

Race has long been recognized as a variable that is consistently present in the various manifestations of educational disparities, but most educational policies have failed to address the structural forms of racism and discrimination that are present in schools and society. Bonilla-Silva has described (2017) structural racism as barriers that are rooted in a history of racial oppression as well as practices that are embedded in the operation of economic and social institutions. Examples of structural racism are typically manifest in geographic and environmental conditions (Akom, 2011), access to health and vital social services (Phelan & Link, 2015), and in access to financial resources and high-wage jobs (Florida & Mellander, 2016). In the post–Civil Rights era, barriers to opportunities and services are sustained by policies that are apparently race neutral but exact a disparate racial impact. Similarly, barriers to opportunities in education are often disguised by policies that appear to be color blind, but consistently place low-income students of color at a disadvantage.

A new policy framework for educational equity

In order for public policy to advance equity goals, it must take local context into account. This means addressing the profound influence of economic factors like poverty, demographic factors like immigration, and the way these and other conditions affect schools. Ideally, if such an understanding were present when policies were formulated, a more contextualized approach to policy implementation would be adopted to ensure that the objectives of policy can be realized. This is precisely what the architects of California's LCFF have attempted to accomplish to allow locals to determine the appropriate use of resources based on need.

In analyzing the merits of such an approach to education policy, it is helpful to draw upon Uri Bronfenbrenner's (1979, 1986) ecological framework on child development. Bronfenbrenner's framework was designed to address the ways in which environmental factors influence the development, health, and wellness of children. His bio-ecological perspective acknowledges the ways in which people, processes, and systems interact to influence child development (Bronfenbrenner & Morris, 2007). He writes, "It is a basic premise of ecological systems theory that development [human] is a function of forces emanating from multiple settings and from the relations among these settings" (p. 817). The ecosystem impacts children and their development at multiple levels – micro (interpersonal), meso (school-community), and macro (society and social institutions). Bronfenbrenner's (1979, 1986) framework provides insights into the strategies that are needed at each level to support the healthy development of children (see Figure 2). Despite the compelling logic behind such a framework, rarely have education policies been conceived in such a manner. Bronfenbrenner's framework can be especially helpful in advancing equity goals, making it possible to account for the effects of adverse conditions on a child's development at the micro, meso, and macro level.

The *Portrait of Los Angeles County* (Social Science Research Council, 2017) illustrates how an ecological lens and corresponding analysis to address inequities (Bronfenbrenner, 1979, 1986) can be

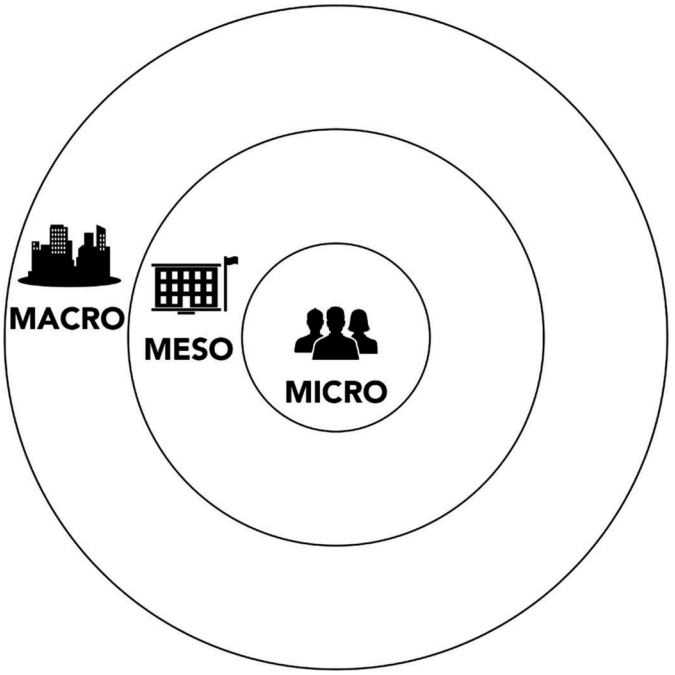

Figure 2. Student ecologies that impact development (Bronfenbrenner, 1979, 1986).

valuable. According to the report, Los Angeles (LA) County comprises five distinct regions: Glittering LA, Elite Enclave LA, Main Street LA, Struggling LA, and Precarious LA (p. 11). Poverty rates and a wide variety of health problems are clustered in Struggling and Precarious LA, the two regions where school failure and poor student achievement are also concentrated. Were the report to provide a closer analysis at the school (meso) and student (micro) and not just the (macro) or system level, it would undoubtedly also reveal higher rates of adversity and vulnerability for kids. Doing so would more vividly capture the environmental conditions in different settings that shape the lives of young people and their families. Race must be incorporated as a vital variable in this ecological framework to address the effects of structural racism that contribute to the persistence of pervasive racial disparities in achievement and discipline.

The roughly 180 instructional days and 1,000 instructional hours of school time in traditional public schools represent a significant but limited period in which school systems can support children and families (Education Commission of the States, 2011) in places like Struggling and Precarious LA. The needs of students in poverty are manifold. Poor children in such communities experience a disproportionate number of health hardships (e.g., asthma, diabetes, trauma) and difficulties securing adequate food, housing, and in some cases clean air and water. Schools in such communities also serve a greater concentration of English learners (including undocumented students and those who are unaccompanied minors) and students with special needs (Mordechay, 2017). Not surprisingly, many schools in poor communities find themselves overwhelmed by the need to find ways to address the array of complex academic and social issues that originate in the family and community and may be exacerbated by indifference and inefficiency at the societal and institutional levels (Jones & Kahn, 2017).

Jenson and Fraser (2006) present an ecologically based public health model for treating the causes rather than the symptoms of education inequality. Their model considers the factors that influence the health and wellness of children by identifying those that contribute to *risk, resilience*, and *protection* (Rutter, 2001). With a risk and resilience orientation, educators are encouraged to respond

early to the needs of children who exhibit a number of potentially negative risk factors or adverse childhood experiences (ACE) (e.g., recurrent exposure to toxic stress). Rutter (2001) also shows that by promoting protective factors that have been shown to support resilience, it is possible to reduce or ameliorate risk (Rutter, 2001). Protective factors – or interventions such as mental health supports and access to healthy foods, mentors, and tutoring – can help to build the strengths of a person or community and can mitigate against potentially negative influences. Similarly, Balfanz et al. (2012) have shown that such an approach can have strong applications to education when guided by policies that deliberately address the academic, social, emotional, and health needs of children. Combined, all three constructs (*risk, resilience, protective factors*) have strong connections to more integrated policies that reflect the academic, social, emotional, and health needs of children.

Overlooked in Jenson and Fraser (2006) and Rutter's (2001) ideas around risk, resilience, and protective factors is the need to identify the most appropriate entities to provide services to students and families who need support. Figure 3 conceptualizes how county offices of education might fulfill this role as they assist school districts in their pursuit of greater educational equity. In the following section of this article, we examine how California's LCFF, a funding strategy designed to improve academic outcomes for low-income students, foster youth, homeless youth, and English learners, is being used to further state educational equity goals. We present a case study that examines the role of county governments in a new role to provide technical support to school districts in implementing this ambitious new law.

In the analysis presented, we consider how important connections between community service providers, school districts, and county offices of education are being forged to function as what Honig and Hatch (2004) calls "boundary spanners." Ideally, boundary spanners operate in non-traditional roles to bring about more collaborative education policies. Collaborative education policies call for "new roles and relationships among schools, community agencies, and school district central offices as well as other public bureaucracies, to expand learning and other outcomes for

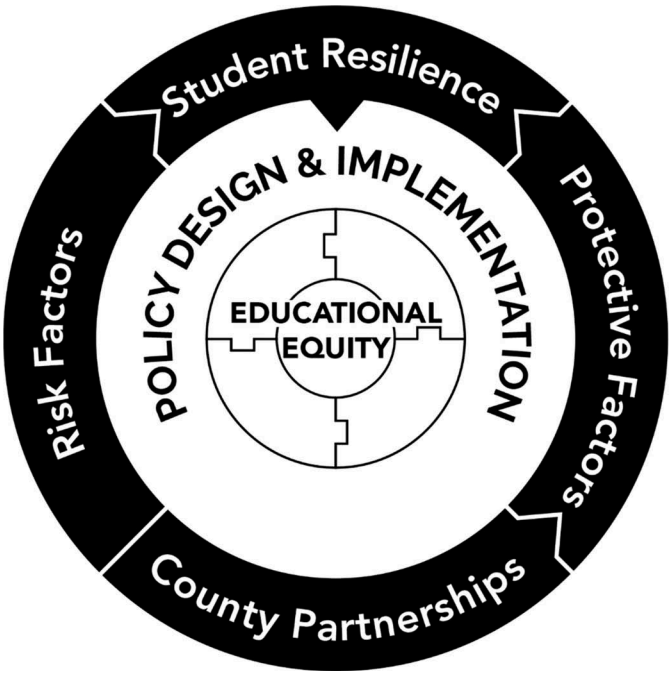

Figure 3. Bridging educational equity and risk, resilience, and protective policy models (Berliner, 2009; Blanchett et al., 2009; Datnow et al., 2005; Jenson & Fraser, 2006; Simon et al., 2007).

school-age children and their families" (Honig, 2006, p. 358). The case study makes it possible to examine whether the new LCFF policy is producing partnerships that are likely to be effective in addressing the broad set of adverse influences (OSFs) that impact the development of young people. In California, county offices of education find themselves in new roles as central actors responsible for monitoring the implementation of a comprehensive approach to student development, health, and wellness. At present, relatively little is known about their potential to serve as intermediaries that can provide technical assistance needed by school districts.

Examination of California's school finance policy strategy through an ecological lens

Since 2013, California has made the pursuit of equity an explicit goal of education policy. LCFF directs targeted state funds to districts that serve a disproportionate share of the most disadvantaged students (Affeldt, 2015; California Department of Education, 2017c). In keeping with the aim of the policy, local actors (i.e., school districts) are charged with the responsibility of determining how best to utilize resources. LCFF assumes that local districts know how best to prioritize the use of additional funds to serve disadvantaged students. However, the policy does not delineate any strategy for addressing the social and economic conditions outside of school (OSFs) that may impact a schools ability to serve its students. This is a significant omission, especially when one considers that the needs of homeless students and children in foster care are prioritized under LCFF. While such students generally experience greater hardships and risks, the challenges they and other economically disadvantaged students face cannot be addressed by schools alone. Given that poor children generally reside in poor, socially isolated neighborhoods (Fiel, 2013), an ecological framework to guide the development and implementation of policy to support low-income children is necessary. In California, low-income students constitute 58% of the student population in the state (California Department of Education, 2018b). Latinx students represent 54% of the school population (California Department of Education, 2017a), and a significant number of these students are classified as low-income and English learners (California Department of Education, 2018b).

LCFF replaces the previous K-12 finance system, which relied upon an array of categorical funding streams to provide districts with targeted revenue designated for high-needs students. Under the new law, districts are required to prioritize resources for disadvantaged students: those eligible for free or reduced-price meals (FRPM), foster youth, homeless youth, and English learners (EL) (Hill & Ugo, 2015). They also have greater flexibility in determining how supplemental funds are spent. LCFF charges county offices of education (COEs) with oversight responsibility for reviewing and approving district spending plans, referred to as Local Control Accountability Plans (LCAPs) (California Department of Education, 2017b). Districts are required to explain how their LCAPs will utilize LCFF resources to generate progress on a number of academic and whole-school performance indicators (e.g., student attendance and student suspensions) (California Department of Education, 2017b).

A recent study shows that LCFF has resulted in a 6% increase in graduation rates for low-income students (Johnson & Tanner, 2018). Such a development is a promising result for an ambitious new statewide policy initiative still in its infancy. However, there is also evidence that some districts are struggling to set clear priorities (Fuller & Tobben, 2014) and to demonstrate that with additional funding for high-need students, clear, measurable progress can be achieved.

Design and methods

Guided by Bronfenbrenner's (1979, 1986) ecological framework, we conducted interviews with senior-level COE officials from five counties to test our assumptions related to the promise and the limitations of LCFF. We sought to ascertain how LCFF funds were being prioritized for high-need students to address disparities in educational opportunities among schools (e.g., the presence of teachers certified in content areas, Advanced Placement courses, lab science, pre-school). We also

were curious about the emerging role of COEs and their potential to advise school districts on how to address factors that extend beyond the school setting. Building on earlier qualitative research (Humphrey et al., 2017; Koppich, Humphrey, & Marsh, 2015) that documented *what* districts were doing, we undertook this research to understand *how* COEs were operationalizing their equity goals.

The overarching research question that guided this inquiry is: *How is equity being defined and operationalized through the LCFF implementation process?* We also sought to know *who* was involved in setting budgetary priorities, given that one of the assumptions behind the creation of LCFF was that local actors would have greater insight than state officials into how to direct funds. We wanted to know as well whether the inclusion of key stakeholders – parents, teachers, students, etc. – influenced how districts set LCFF spending priorities.

Focus group interviews with COE officials provided a unique window into understanding how educational equity was being implemented into policy at the district level. To explore the proposed ecological framework, we have presented in this article (Figure 3), we interviewed 20 individuals from five different COEs in California. Collectively, these five COEs are responsible for serving over 3.3 million students, 206 of 1,024 districts statewide, and more than half the state's 6.2 million students. All five counties have significant proportions of low-income students, foster youth, and EL students (see Table 6). Each county presents its own unique set of challenging characteristics when viewed through the lens of the Global Goals standards, an effort endorsed by the United Nations and 193 countries to reach 17 goals and 169 targets by 2030. Those goals take into account OSFs like housing, neighborhood conditions, health, and well-being as indicators of student and community success (Social Science Research Council, 2017). Tables 1, 2, 3, 4 and 5 illustrate glaring patterns of social, political, and economic inequities that divide LA County across racial lines. We selected a handful of these variables in the Human Development Index to illuminate how conditions in home and community environments, access to resources, and health services are correlated with achievement patterns. Table 6 presents a summary table of the demographics of students served in the five counties in this study, including LA County. Table 7 summarizes the racial and ethnic composition of all five counties.

Table 1. Los Angeles County Human Development Index.

	Los Angeles County	Men	Women	Asian	Black	Latino	White
HDI Index* (out of 10)	5.43	5.17	5.48	7.37	4.54	4.32	6.96
Life Expectancy at Birth (years)	82.1	79.6	84.5	87.3	75.6	84.4	80.9
Education Index (out of 10)	4.96	4.82	5.10	7.12	4.64	2.80	7.02
Median Earnings ($)	30,654	32,444	26,652	38,016	32,433	22,617	38,016

Source: Global Goals Dashboard – *A Portrait of Los Angeles County*, 2017–18.
*The Human Development Index (HDI) covers three broad areas: a long and healthy life, access to knowledge, and a decent standard of living.

Table 2. Los Angeles County poverty, 2017–18.

	Los Angeles County	Men	Women	Asian	Black	Latino	White
Poverty (% in households with incomes below federal poverty line)	16.6	15.5	17.8	12.1	22.0	20.9	10.3
Child Poverty (% of children in households with incomes below 200% of federal poverty line)	50.8	50.4	51.2	32.5	56.3	63.0	22.6
Snap Benefits (% of households based on race of household head)	9.2	N/A	N/A	3.0	14.7	22.6	3.8

Source: Global Goals Dashboard – *A Portrait of Los Angeles County*, 2017–18.

Table 3. Los Angeles County good health and well-being, 2017–18.

	Los Angeles County	Men	Women	Asian	Black	Latino	White
Low Birth-Weight Babies (% based on race of mother)	7.0	N/A	N/A	6.7	12.1	6.5	6.5
No Health Insurance (% of total population)	11.2	12.7	9.8	7.8	7.3	16.3	5.4

Source: Global Goals Dashboard – *A Portrait of Los Angeles County*, 2017–18.

Table 4. Los Angeles County access to justice, 2017–18.

	Los Angeles County	Men	Women	Asian	Black	Latino	White
Juvenile Felony Arrests (Ages 10–17 per 1,000 youth)	3.5	5.8	1.2	N/A	17.5	2.9	1.7
Jail (Average daily population per 100,000 adults 16 and older)	263.2	479.4	75.7	10.8	1,009.0	272.1	175.5
Homicide Victims (per 100,000 residents)	5.9	10.1	1.6	1.3	26.5	5.4	3.3

Source: Global Goals Dashboard – *A Portrait of Los Angeles County*, 2017–18.

Table 5. Los Angeles County quality education, 2017–18.

	Los Angeles County	Men	Women	Asian	Black	Latino	White
Pre-School Enrollment (% of 3- and 4-year-olds)	56.1	56.7	55.5	62.0	58.0	50.5	70.8
On-Time Graduation (% of high school freshmen who graduate in 4 years)	81.6	78.2	85.0	93.9	72.7	79.7	86.9

Source: Global Goals Dashboard – *A Portrait of Los Angeles County*, 2017–18.

Table 6. Selected characteristics of five county offices of education for 2017–18.

	Los Angeles County	San Diego County	Orange County	Riverside County	San Bernardino County
Number of districts	80	42	28	23	31
Total enrollment	1,500,000	500,000	485,000	429,000	403,000
Free and Reduced-Price Meal Eligible (FRPM) enrollment	69.3%	51.39%	48.38%	64.90%	71.24%
Foster enrollment	1.729%	0.629%	0.566%	1.363%	1.662%
EL enrollment	20.5%	21.46%	24.33%	20.18%	18.29%

Source: Data from http://dq.cde.ca.gov/.

Table 7. Selected characteristics of five county offices of education for 2017–18.

Race/Ethnicity by Percentage of Enrollment	Los Angeles County	San Diego County	Orange County	Riverside County	San Bernardino County
African American	7.5%	4.5%	1.3%	6.1%	8.3%
American Indian/Alaska Native	0.2%	0.5%	0.2%	0.5%	0.5%
Asian	7.7%	6.1%	16.4%	3.1%	3.7%
Latinx	64.9%	48.2%	49.1%	63.8%	64.9%
Pacific Islander	0.3%	0.5%	0.3%	0.4%	0.4%
White	14.0%	30.3%	26%	20%	20.8%
Two or More Races	2.3%	5.3%	3.7%	3%	2%
Not Reported	0.8%	0.7%	0.8%	0.8%	3%

Source: Data from http://dq.cde.ca.gov/.

We conducted focus groups (Berg, 2004) in person and by phone with county superintendents, assistant superintendents, senior cabinet members, and staff responsible for developing LCFF spending plans. Each COE identified officials to participate in focus group interviews based on their involvement in the LCFF process. Since LCFF is still a relatively new policy, we were not surprised to learn that COEs used different organizational structures to support implementation and monitoring of school districts. For this reason, we didn't interview individuals with identical job titles in each COE. Rather, we interviewed senior leaders who were directly involved in the LCFF process. We used a semi-structured interview protocol (Patton, 2005), with each interview lasting one to two hours. To develop questions, we drew upon the framing constructs related to educational equity (Berliner, 2009; Blanchett et al., 2009; Simon et al., 2007) and the ecology of social policy (Bronfenbrenner, 1979, 1986; Jenson & Fraser, 2006). We also used our interviews with COE officials to help us to ascertain their perceptions of the effectiveness of the law as an equity lever for the student groups it was intended to benefit (e.g., low-income students, foster youth, homeless youth, English learners).

The state of California has not established guidelines or best practices on how LCFF funds should be used. For this reason, there is considerable variation in the local plans developed by school districts to prioritize the use of funds. Some districts have chosen to invest in wrap-around social supports, while others have applied funds to address the lack of professional capacity needed to implement effective educational interventions to vulnerable groups (e.g., EL and special education students), and to improve their ability to offer courses that could increase college readiness and preparation (e.g., Advanced Placement courses, lab science, pre-school).

LCFF was touted by Governor Brown and members of the California State Board of Education as a way to empower local actors with additional resources. With great fanfare, Brown announced that the law would bring sweeping changes to education in California:

> We are bringing government closer to the people, to the classroom where real decisions are made and directing the money where the need and the challenge is greatest. This is a good day for California, it's a good day for school kids and it's a good day for our future. (Governor Edmund G. Brown, 2013)

In the following section, we present findings from county interviews. We also provide a summary of recommendations of what appear to be the most effective drivers that can be supported with LCFF funds to address in-school and out-of-school factors simultaneously and in partnership with stakeholders outside of schools.

Findings

Current state investments to implement LCFF effectively are insufficient

There is growing recognition that if districts are expected to address in-school and out-of-school conditions that influence student achievement concurrently, more resources (e.g., money, human capital, time) will need to be directed to local school districts, particularly those that are most affected by poverty. The complexity involved in efforts to respond effectively to the needs of disadvantaged students requires districts to enlist the support of community stakeholders outside of the public school system. For example, in some school districts community stakeholders – such as local colleges, businesses, and non-profit organizations – serve as key allies in responding to the needs of disadvantaged students. However, not all school districts have been able to forge such partnerships. One COE official explained the need for partnerships in this way:

> I think people are really starting to understand on a much wider scale how complex the work is for districts and schools. And that understanding I think is beneficial not only to improve a process of working with stakeholders. It almost branches out of, you know, this idea of because we all went to school, we think we understand how school works. It's a lot more complex than that. And building that understanding on a grander basis, I think is beneficial for moving forward at a larger scale.

When COE officials were asked what should change in the design of the law to improve its efficacy as a driver of equitable learning outcomes, a number of respondents expressed concerns about the state's lack of investment in the capacity of district leadership. COEs are expected to be the primary provider of technical support to districts. To accomplish this task, additional resources must be allocated to COEs so that they are able to work directly with districts in providing additional support for high-need students. One official explained the lack of capacity in the COE like this:

> If we're going to really be able to focus on the needs of the high-need districts, we must have resources for that. Last year, for all the county offices, we received about $20 million, which if you think of the 6.2 million kids in the state, that's not a lot of money.

Consistent with earlier research (Chu & Cabral, 2015), COEs shared the struggles they experienced in meeting increased demands generated by LCFF. There's a strong concern among COE officials that LCFF has become an unfunded state mandate. One county leader explained the dilemma of having so few resources to provide districts with the technical support they need: "There's no legislative provision for ongoing funding for county offices to do this work. This is mandated work and there's no funding." Districts and counties now have a clearer sense of the scope of supports needed for serving their most vulnerable student populations. They also see the limitations of current policy conceived without a focus on OSFs and recognize that even with additional funding they are often not able to implement strategies to address inequities in academic outcomes. As one county official explained, "the fact of the matter is that if you've got resources, then you can be more comprehensive in addressing needs. It's just a fact of life."

County capacity to support districts and schools is uneven

County leaders acknowledge that funding differences across the counties can impair their ability to provide support to districts. As one county official explained: "[There are] 58 counties in the state and they're all at different levels of funds at the core in terms of what they can provide to their districts." COE capacity is tied to the availability of human capital and staffing, and professional expertise (Schön, 2017) among COE officials. In order for COEs to respond effectively to the needs of school districts, COE staff must have the technical and adaptive (Daly & Chrispeels, 2008) capacity to perform the various aspects of their job.

Stakeholder engagement in the decision-making process related to the allocation of LCFF is a requirement of the law. To avoid lawsuits (several districts have already been sued for failing to meet the law's requirement for inclusion), many districts have requested assistance from COEs to bolster their stakeholder engagement efforts. However, some COEs readily admit that they lack the expertise to help districts improve engagement to ensure that key actors are involved in the decision-making process. One COE official described this difficulty in the following manner:

> One of the requests we've seen increase at the county office is technical assistance in helping our districts with parental engagement strategies as well as going out and doing focus groups and interviews with our parent community. They come to us as a resource to help them with that.

In some areas, lack of professional capacity at the COE is compounded by the vast geographic areas they are responsible for within some of the larger counties. For example, some of the COEs we interviewed serve students and families distributed across thousands of square miles. In these areas, face-to-face conversations are often difficult to arrange. One county official elaborated on the problem of geography:

> Sometimes we work with a district on a day-to-day basis that might be the west end, high desert, and so the whole width and breadth of how you actually support districts that are so far away is a challenge… we're constantly looking at new ways and technologies and building networks to support them. But it is a vast county and very different in each of the regions, which is something we have to always account for.

Despite challenges such as these, county officials still described the work they are doing with school districts through LCFF as meaningful and important. Some suggested that a culture shift was occurring as a result of LCFF that has led to more collaborative decision making and partnerships. This shift represents a significant pivot from the top-down accountability structures that characterized relations between schools and COEs under NCLB.

> What I've observed is a lot more of people trying to figure things out together. The word *thought partner*, having groups of people just come and sit with you and say, *We have to figure this out*. Because there used to be, for lack of a better term, arrogance that, we know the answer to the question we just need people to do it. And I think what we realize now is that it's [student learning and school improvement] complex and there are answers to questions that may work in this environment but not in that one; and we watch kids who aren't learning based on what we believe to be a well-researched program, and then we have to ask ourselves the question: So what is it that we might do?

Changes in practices are difficult to achieve, even with targeted resources

In interviews with COE officials, there was recognition that simply having access to more funds was not enough for district officials to improve the academic or developmental outcomes of high-need students and students of color. The ability of local district leaders to initiate reforms to support student learning can be limited in many communities and classrooms. While many schools need more counseling, health, and social services, recruiting talented professionals is often a challenge. Structures are often needed to support them as well. Adult belief systems and biases toward students of color, and low-income students generally, present a strong barrier to operationalizing the intent of LCFF to address social, racial, and linguistic disparities in student achievement.

This parallels the research literature showing that educators often have more positive expectations for white children than for students of color (Tenenbaum & Ruck, 2007). Statewide, people of color comprise 35% of California's teaching force (California Department of Education, 2017a). In many districts, it is clear that a mostly white teaching force might benefit from access to training to help them address racial bias in their instruction (Dee, 2004). Several COEs highlighted the role of adults in perpetuating learning gaps for students of color as something that will need to change in order for more targeted resources to lead to improved learning outcomes. One COE official put it this way: "We've got to get out of this mode of thinking that some kids can, and some kids can't… it's a change in belief system, how we go and educate children."

Changes in belief system aren't only needed at the classroom or school site level. As one senior official explained:

> The narrative and mindset have to occur in district offices as well to make a shift from "those kids" to "our kids." We have some districts in our county that, in the past, prior to LCFF, received a specific amount of money for these specific kids and quite honestly, they were called "those kids." That's how they were referred to, and the culture of the district was exactly that. "Those kids." Now, they're no longer *those* kids. "We have this money, this is our data, these are their needs," and it's beginning to – and I say beginning … beginning to transform a culture that is even beyond a district and into the immediate community and society. And that those are not "*those* kids," that they're "*our* kids." And we're going to make these decisions with this money that, quite honestly, we could make almost any decision we could want; but now we're going to have hard conversations about – How do we truly and most effectively serve our kids?

Changes in practices are often difficult to carry out when district officials don't possess a clear, well-conceived change strategy. In the absence of such a strategy, they are more likely to rely upon strategies they have used in the past to guide their efforts to eliminate gaps in student achievement, despite the fact that these strategies have not worked. Additionally, school districts do not have much time to devise new approaches to improve academic outcomes. Superintendents and school boards are often expected to produce progress quickly. Under such pressure, it can be difficult to devise a well-conceived plan to improve schools, elevate the performance of students, and respond to the challenges present in the local environment.

Another COE official described these constraints in this way:

> I think the complexity is that the funds may be there to do something different, but the mindset hasn't shifted yet to catch up with this new idea. That is, in the very beginning you are given an opportunity to change the trajectory of your student achievement in your district; but at the same time, there are patterns that have been in place for many years, for whatever particular reason. To shift the people in the organization to think differently, I think, is complex. It requires the art of persuasion on those who lead so that they can help with this shift or change in mindset. I think that might be the complexity piece for me in terms of – we have been given the green light to do different, but each organization is going to need time to begin to shape that understanding of what doing different means to actually catch up to the intent of what LCFF is allowing districts to be able to do and be or become.

COE officials report that in many districts there is a lack of efficacy among traditional district leaders (e.g., superintendents and other senior officials) to implement practices that can motivate and engage students to positively impact academic outcomes. As one county cabinet member put it, "It all boils down to the leadership at the district level, or specifically cabinet, and the direction of the superintendent. Depending on their capacity, things will happen, or things will not happen." Many of the COE officials we interviewed recognize the current limitations in district capacity. However, they also see a vital role for COEs to take a lead in the training and to develop new tools that will improve district capacity in the central office, at the school site, and classroom level. This service mindset in county COEs represents a significant shift from the past, when they were primarily charged with ensuring that district officials were in compliance with state policies, particularly related to the use of funds. The shift in focus is challenging COE leaders to rethink how they engage and support districts. One county official explains further:

> What's paramount to me is that we are focusing our attention on the kids who need the most help. We can't do that without modeling some type of daily protocol here at the county. To see where our districts are progressing and where they aren't. Because if we're truly here to support them, then we need to be in the service business of making sure that districts are making their targets and desired outcomes. We allocate our personnel, our resources to go in and work with superintendents, work with principals, and provide coaching and support. They need people on the ground providing that support and almost being an interpreter between educators and kids and having those thoughtful conversations around how they're responding to certain elements of conversation with adults and really understanding what a kid is and what they do need. We need to make sure that they are not only progressing towards some of those goals that they've identified but even helping identify, maybe, a different set of targets that they need to be in front of.

Stronger cooperation and coordination to address OSFs is needed

Interviews with COE officials revealed a strong emphasis on the need for integrated student supports that research shows can be effective in supporting disadvantaged students, both in and out of school (Oakes, Maier, & Daniel, 2017). The COE officials we interviewed stated there were a growing number of cases of students who arrive at school profoundly impacted by poverty, trauma, and adverse child experiences.

As district leaders have become more willing to acknowledge the hardships experienced by students who have experienced trauma, homelessness, or mental illness, they have also become more keenly aware that they must take action to ensure that the system can respond to the needs of such students. Ideally, they must do so in a way that will also have a positive impact on student learning. Addressing the micro, meso, and macro (Bronfenbrenner, 1979, 1986) factors and conditions that affect a child's development is complicated because it requires the creation of new partnerships.

One COE official we interviewed offered unique insight on how this could be done. As a former district superintendent, he shared how schools could prioritize the use of LCFF funds to enact comprehensive strategies that support vulnerable students. Such a strategy is based on the assumption that students who don't feel safe or healthy cannot do their best work.

> We used LCFF money to hire social workers, to hire new people to get families paired up with those sources that they didn't know existed. We did whatever it took to support kids, but the needs exceed the resources available. We don't look at this as just an academic issue. We look at every single aspect of what the children need to address gaps … we built stronger partnerships with some of our health agencies and made some grants, and we have a community health center.

Other COE officials spoke to the need for districts to utilize LCFF funds to invest in mental health specialists, homeless youth services, and new district–county–non-profit interagency partnerships. Speaking to the importance of such an approach, another COE official described some of the positive change the county has seen as a result of LCFF:

> We're working more now with county agencies like First 5 [the pre-school agency] and the Department of Public Health and Children and Family Services. We've always been partners with them, as with the sheriff's office, but now, they're concrete partnerships that the county has been able to enter into to serve districts… but there are vastly increased demands for services that we can't keep up with as poverty and homelessness increases. We have deepened the dialogue about what the districts are saying that they want, but we aren't always able to meet the demand with LCFF resources.

Another COE leader highlighted the need for early intervention strategies and partnerships that make it possible for schools to address OSFs. Recognizing the importance of expanding access to pre-school, this official argued that if done well, increased access to quality pre-school can help mitigate some of the challenges facing low-income families. He explained:

> Poverty is one of the greatest needs in terms of families and making ends meet. It has a huge impact on the educational life for the student starting from pre-school. So, we now have a county-wide pre-school effort. We want to ensure that kids have foundations in reading. Just to try to up the ante, increasing their likelihood to make it to third-grade literacy.

While each county could point to strong examples of cooperation and coordination that suggest an ecological model of education is emerging, we learned through our interviews that in many areas, school–community and school–agency partnerships were rare and just beginning to emerge. Interviewees didn't reveal any specific county-wide efforts to increase the number or scale of districts with the capability to address OSFs.

Conclusion: Utilizing comprehensive equity drivers to guide education policy and implementation

Interviews with COE officials reinforced the central argument of this article: if schools in high-poverty communities are to be more successful in responding to the educational needs of their students, they will need more resources and they will need to be supported by a more integrated, ecological approach to policy that reinforces equity goals. The findings also suggest that policies designed to further educational equity must be based on clear definitions and measurable goals related to achievement. The state's new accountability dashboard (California Department of Education, California School Dashboard, 2018a) represents a step in this direction. It has broadened the criteria used to evaluate schools and incorporated indicators that affirm the importance of student wellness and positive school cultures. However, the state should also offer more explicit guidance and recommendations on the practices, programs, and strategies that are most likely to further educational equity goals.

While the state has been precise about which groups are to be targeted with resources, it has left it to local school officials to figure out how best to meet those groups' needs. Clear and consistent recommendations on the types of interventions and supports that are most likely to improve academic and development outcomes should be made more widely available to county and local education decision makers. Such an approach could help in reducing confusion and even misuse of LCFF funds without becoming overly prescriptive.

Given the needs present in communities with the greatest concentration of poverty, education policies must be crafted with stronger connections to other social policies (e.g., health, housing, welfare). However, districts will need help in designing such policies. Given the significant role that county offices of education are playing in monitoring and guiding districts in the use of LCFF funds, COEs must be encouraged to work closely with other departments within county government (e.g., Human Services, Health, Mental Health, Recreation, Probation) to address the needs of vulnerable populations (e.g., homeless youth and youth in foster care). Working in strategic partnership with

non-profits, private foundations, local businesses, community groups, hospitals, and universities, county government should devise place-based intervention and support strategies to advance equity-based goals.

Ultimately, to further equity goals in a sustainable manner, state governments will have to embrace and support a commitment to local capacity-building efforts. There is ample evidence that schools heavily impacted by poverty cannot be improved through pressure and accountability (Wong et al., 2018). Underresourced and frequently overwhelmed, schools in low-income communities need investments in personnel and services to become more effective and responsive to community needs.

LCFF is crafted based on the assumption that decisions about how best to meet the needs of disadvantaged children and schools should be made by those who theoretically know them best. While this may sometimes be the case, there are also many scenarios where those who lead and work in local school districts are not representative or well connected to the communities they serve. Implementing ambitious equity initiatives like LCFF without adequate guidance and support in how to engage diverse communities will increase the likelihood that targeted communities may not benefit the intended target of the law – high-need students. In several school districts, questions about whether LCFF dollars are reaching targeted populations have been raised, and in some cases, have resulted in legal inquiries (Humphrey et al., 2017). However, beyond fiscal accountability, there is a clear need for greater technical support and guidance on how to redesign education systems more equitably, to realign practices and resources (Simon et al., 2007), and to help make stronger connections to health and social services (Basch, 2011).

LCFF has only been in place for six years. It is perhaps still too early to determine whether or not it will dramatically expand access to quality learning opportunities, let alone result in desired changes in educational outcomes and school performance (Humphrey et al., 2014). The education field embraces the spirit of the law in the same way we heard from this county official: "It takes more to educate students who are underserved. It does help close the equity gap by providing opportunities for those students to have access to more resources."

However, LCFF will not reach its full potential as a profound driver for educational equity based on race, income, language, and culture without stronger connections to existing policy efforts in health, mental health, child welfare, and juvenile justice that serve students and families. In his analysis of the links between health to student learning, Basch (2011) describes the limitations of the isolated approaches to student achievement and wellness that have been historically utilized:

> No matter how well teachers are prepared to teach, no matter what accountability measures are put in place, no matter what governing structures are established for schools, educational progress will be profoundly limited if students are not motivated and able to learn. Particular health problems play a major role in limiting the motivation and ability to learn of urban minority youth. This is why reducing these disparities through a coordinated approach warrants validation as a cohesive school improvement initiative to close the achievement gap. (p. 593)

All education stakeholders, including researchers, should consider ways to broaden notions of what educational equity is and how it can be prioritized at scale through more comprehensive and aligned approaches to policy. States and localities are already leading the way to model such approaches. The Association of Supervision and Curriculum Development (ASCD), the Centers for the Disease Control, and 31 states are beginning to implement efforts on a small scale that link departments and agencies like education, health, housing, and family-serving entities, showing what's possible for connecting social policies in more deliberate ways.[1]

California's commitment to LCFF is likely to reach $18 billion in additional funding by 2020 (Johnson & Tanner, 2018). Ensuring that additional funds are invested wisely and effectively will be essential to sustain the pursuit of equity goals and result in clear evidence of impact. Educational

[1]More information about the Whole Child, Whole School, Whole Community Model is available from ASCD at http://www.ascd.org/ASCD/pdf/siteASCD/wholechild/WSCC_Examples_Publication.pdf.

policies that are based upon an ecological framework are essential if we are to effectively address the broad array of challenges facing the most disadvantaged children, helping to mitigate the adverse conditions that low-income students of color are more likely to face in their neighborhoods and schools.

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