



## INVESTING IN EQUAL OPPORTUNITY

WHAT WOULD IT TAKE TO BUILD THE BALANCE WHEEL?

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# INVESTING IN EQUAL OPPORTUNITY: WHAT WOULD IT TAKE TO BUILD THE BALANCE WHEEL?

*Jennifer King Rice, University of Maryland*

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*Education then, beyond all other devices of human origin, is the great equalizer of the conditions of men, the balance wheel of the social machinery.*

*Horace Mann, 1848*

## Executive Summary

More than 150 years ago Horace Mann persuasively reasoned that education is the “balance wheel” of the social structure. He argued that education should be free and universal. While much progress has been made in establishing a universal education system since Mann spoke those words, substantial disparities in educational resources, opportunities, and outcomes continue to undermine his vision—and ultimately our society.

This brief revisits Mann’s vision of education as the balance wheel of society. The purpose is to identify resources and supporting policies that would be required if we fully committed our schools to the goal of equal opportunity. The brief recognizes that the opportunity gap is grounded in a range of social and economic factors well beyond the control of schools and that serious efforts to promote equal opportunity must include a broader set of services. However, in the absence of policies to address those factors, it seems reasonable to consider what an education system fully committed to equal opportunity might look like.

The brief describes resources and services that are within the traditional education sphere as well as provisions and necessary resources that would expand the role of education to address student needs in ways that, in many cases, are already expected of schools. The paper concludes by discussing the challenges of pursuing equal opportunity in the current policy context that promotes high stakes accountability, resegregation, and privatization. Recommendations for an education system that aims to realize Mann’s vision of the balance wheel include the following.

- **Policymakers and the general public should recognize the broad goals of education including civic responsibility, democratic values, economic self-sufficiency, cultural competency and awareness, and social and economic opportunity.** Student achievement, while important, is a single narrow indicator. Equal opportunity requires a broader understanding of the social and economic forces that undermine individuals' life chances.
- **Policymakers should ensure that *all* schools have the fundamental educational resources they need to promote student success: effective teachers and principals, appropriate class size, challenging and culturally relevant curriculum and supportive instructional resources, sufficient quality time for learning and development, and up-to-date facilities and a safe environment.** The adequacy standards used by the courts is a legal floor, but equal opportunity will require a much greater commitment to ensuring that students from disadvantaged backgrounds have the highest quality educational resources.
- **Policymakers should expand the scope of schools in high-poverty neighborhoods to provide wrap around services including nutritional supports, health clinics, parental education, extended learning time, recreational programs, and other services needed to meet the social, physical, cognitive, and economic needs of both students and families.** Expanding the services and resources offered by schools has the potential to dramatically increase their impact. While schools account for less than a quarter of the variance in student achievement, public investment in a more comprehensive approach that addresses the multiple sources of disadvantage may position schools to have greater impact and more effectively promote equal opportunity.
- **Policymakers should promote a policy context that is supportive of equal opportunity: use achievement testing for formative rather than high-stakes purposes, avoid policies that allow for school resegregation, and renew the public commitment to *public* education.** The resources and services detailed in this brief are based on the best available research evidence, but to have significant impact they must be supported by policies sensitive to local circumstances, well supported by public resources, and carefully designed to avoid the many unintended consequences that so often result.

# INVESTING IN EQUAL OPPORTUNITY: WHAT WOULD IT TAKE TO BUILD THE BALANCE WHEEL?

## Introduction

Amidst the flurry of education policy debates about ESEA reauthorization, the expansion of charter schools, the adoption of the Common Core standards, teacher evaluation and compensation reforms, and other contemporary issues, stakeholders in partisan discussions often seem to have lost sight of the traditional and widely held assumption that universal public education is a social good, one worth significant public investment at local, state, and national levels.<sup>1</sup> In fact, Horace Mann, the 19<sup>th</sup> century champion of publically funded universal education, persuasively reasoned that education is the “balance wheel” of the social structure. He argued that education should be “universal, non-sectarian, free, and that its aims should be social efficiency, civic virtue, and character, rather than mere learning or the advancement of sectarian ends.”<sup>2</sup> “Build schools,” Mann argued, “... and you will make the happiness and greatness of the nation through the prosperity and morality of each of its citizens.”<sup>3</sup> His assertion that our collective well-being as a nation depends on an educated citizenry has important implications for equal educational opportunity. Mann viewed education as the “great equalizer of the conditions of men,”<sup>4</sup> and his vision is reflected at least in part in today’s heavy reliance on K-12 schooling as a substitute for a robust set of welfare programs.

While much progress has been made in establishing a universal education system since Mann spoke those words over 150 years ago, substantial disparities in educational resources, opportunities, and outcomes continue to undermine his vision—and ultimately our society. These persistent disparities, strongly correlated with race and class, have prompted decades of research aimed at defining equity in education and determining the collection of resources necessary to realize equitable educational opportunities for all children. Questions about such topics have been at the center of many policy debates, including how to identify appropriate educational aims, how to assess student mastery of them, and how to hold schools accountable for student learning. For example, the bipartisan NCLB legislation of 2001 prioritized educational opportunity by holding schools accountable for the performance of students in various subgroups. Grounded in the erroneous assumption that schools alone can close the achievement gap, NCLB and the policies in its wake have emphasized high-stakes test-based accountability, school choice, school reconstitution, and other largely punitive strategies to prompt school improvement. While some evidence suggests that progress has been made, the policy has not realized its stated goals and many disproportionately poor and minority children are still left behind.

This brief revisits Mann’s vision of education as the balance wheel of society. The purpose is to identify resources and supporting policies that would be required if we as a nation fully committed our schools to the goal of equal opportunity. Education clearly plays a critical role in creating later life opportunity, and schools have not only endured a great deal of blame for the achievement gap but also have been assigned the responsibility of closing it and correcting the social and economic disparities linked with race and class. However, since the Coleman report was released in 1966, we have known that schools account for less than a quarter of the variance in student achievement. So, while excellent schools staffed by capable and committed educators can certainly make a difference in reducing disparities, conventional educational services alone are not likely to close the gap.<sup>5</sup> The most sensible approach would inventory a range of social and economic policies to address the multiple factors well beyond school systems that contribute to the enduring opportunity gap—providing, for example, fair housing policies,<sup>6</sup> investments in distressed neighborhoods,<sup>7</sup> and policies that increase the income of poor families.<sup>8</sup> In the absence of such policies, however, we might at least consider what an education system fully committed to equal opportunity would look like.

The next section of this brief documents the broken social machinery in the U.S. and establishes education as a critical factor in ensuring equal opportunity to participate in society’s civic, social, and economic institutions. The following section draws on existing empirical evidence to identify fundamental educational resources needed to support equal opportunity. It details resources and services within the traditional education sphere as well as others that would be required to expand the role of education and allow schools to address student needs in ways that, although often already expected, have not been formally recognized and funded. The paper concludes by discussing the challenges of pursuing equal opportunity in the current education policy context and by outlining a set of policy recommendations that are not only within reach but essential if we are committed to realizing the potential of education as the balance wheel of America’s social machinery.

## The Broken Machine and the Education Imperative

The central idea behind Mann’s balance wheel metaphor is that equal opportunity to acquire a quality education is a prerequisite for equal opportunity to participate in the political, civic, and economic institutions of society—and that the well-being of a democratic society depends on broad participation in those institutions. An appropriate starting point for a discussion of how to provide equal educational opportunity is to ask *What is equal opportunity with respect to education, and how do we measure it?*

Much of the discourse around equal educational opportunity has focused squarely on the achievement gap. However: while the gap in student test scores is an important indicator of disparities, it offers only a glimpse into the problem. Offering an alternative perspective, Welner and Carter suggest that a more appropriate indicator is what they call “the opportunity gap,” which, in contrast, shifts our attention from outcomes to inputs—to the deficiencies in the foundational components of societies, schools, and communities that produce significant differences in educational—and ultimately socioeconomic—

outcomes.”<sup>9</sup> An additional weakness of relying on student test scores as an indicator of equality is that they are a single and arguably narrow measure of what we as a society expect our schools to teach. What about civic responsibility, democratic values, cultural competency and awareness, economic self-sufficiency, and social and economic mobility? Attention to those more abstract or distant outcomes typically extends beyond the domain of existing research and requires a broader social consensus on the fundamental goals of public education. While it’s important to recognize that narrow measures like student achievement may illustrate the problem, they may also distort the solution. For example, the narrow focus on the achievement gap may point to solutions aiming only to improve student test scores rather than to broader interventions addressing the underlying social, economic, and educational conditions required for students to thrive in school and beyond.

However we measure the opportunity gap, it is clear that inequality in America is growing. Trends in labor market outcomes demonstrate that disparities in American family incomes have been increasing over the past five decades.<sup>10</sup> The income gap between families in the top and bottom 20 percent of the income distribution has increased in 2011 dollars from \$59,324 in 1947 to \$177,844 in 2010—an increase of nearly 300 percent. Disparities in income associated with various levels of educational attainment have also been growing

*However we measure the opportunity gap, it is clear that inequality in America is growing.*

over time, suggesting that educational attainment is important in predicting labor market outcomes.<sup>11</sup> This is not good news for people with the least, or weakest, education. Perhaps even more troubling is that the income-achievement gap has been growing for at least the past 50 years; the achievement disparity between students

from families in the top half of the income distribution versus those in the bottom half has increased by 30-60 percent since the 1970s.<sup>12</sup> This growing achievement gap is, in part, a function of a stronger relationship between family income and rising achievement levels among students in wealthier families. The causal relationships here are complex, but the cycle is clear: poor educational opportunities lead to poor educational outcomes, which are associated with poor labor market outcomes, which in turn, lead to poor educational opportunities for the next generation.<sup>13</sup>

While labor market outcomes are relatively straightforward to measure, many other social outcomes that are more difficult to quantify are nevertheless similarly related to educational opportunity. For example, evidence shows an association between education levels and multiple benefits to both individuals and society, including better health outcomes, greater civic participation, reduced crime and incarceration, and reduced reliance on public assistance programs.<sup>14</sup> These social benefits not only contribute to a better functioning society, but they also have clear economic returns. Accounting for both the social benefits and costs, Belfield and Levin estimate the total social impact associated with an individual completing a high school degree compared to dropping out is \$490,560. The comparable impact of earning a bachelor’s degree is almost \$1.8 million.<sup>15</sup> Holzer and



colleagues estimate that the annual aggregate costs of child poverty amount to about \$500 billion, or 4 percent of the GDP.<sup>16</sup> The estimated returns on investing in education—and the estimated costs of not doing so—provide evidence supporting Mann’s theory of social efficiency resulting from public investment in universal education. Perhaps even more compelling than the economic justification for investing in equal opportunity are the implications for democracy—and the moral and ethical imperatives of a just society.

## Fundamental Educational Resources Required for Equal Opportunity

This section of the paper focuses on fundamental educational resources that are necessary—but not necessarily sufficient—for equal opportunity. It outlines what must be provided through an education system truly committed to and designed for ensuring equal opportunity for all students. Some of these resources are clearly within the bounds of the current education system; others require schools to take on expanded responsibilities. This discussion also considers how recent reform efforts promoted as means to equity and accountability have, in some cases, made matters worse for students in poverty and students of color.

### Ensuring Fundamental Resources within the Current School System

While there is no single recipe for success in all school communities, recent research has identified components of an *adequate* education—a first step toward equal educational opportunity. An adequate education is one that provides resources sufficient to ensure that all students, regardless of background or residential district, have the opportunity to realize a clearly defined set of goals.<sup>17</sup> Before further exploring the concept of adequacy, however, it is important to note that current measures of how well students might be meeting goals are problematic. First, while the stated goals of education may be broad (as in developing student interest in civic life, or their problem solving abilities), schools’ success is typically measured using standardized test scores and graduation rates—crude and narrow measures, to be sure, that offer little or no insight into many important goals. Further, since proficiency standards vary across states and, given the high-stakes environment introduced by NCLB, many states endorse standards substantially lower than national NAEP proficiency standards.<sup>18</sup>

To return to the topic of adequacy itself: it is important to note that the term is conceptually distinct from equality. Adequacy is a floor; it is the minimum level of resources needed to realize the stated goals of education. Equality, on the other hand, is “necessarily comparative or relational.”<sup>19</sup> Of course, these concepts could be closely connected if, for example, we were to assess the degree to which individuals have equal opportunity to realize defined outcomes, or if civic equality were considered an essential outcome of an adequate education.<sup>20</sup> Generally, however, equal opportunity tends to be the higher standard when the reference is to broader educational, social, and economic outcomes.



Taken together adequacy studies suggest, almost without exception, that additional resources are needed in poor school districts to provide all students the opportunity to realize specified educational outcomes.<sup>21</sup> The *Campaign for Fiscal Equity v. the State of New York* offers an illustration of how courts have used the concept of adequacy to identify a comprehensive and essential array of resources. In this lawsuit, plaintiffs successfully argued that the state's school finance system under-funded New York City public schools and, in so doing, denied its students their constitutional right. The case created a new constitutional standard for a "sound basic education," which NY State Supreme Court Justice DeGrasse, writing for the majority, defined as the "foundational skills that students need to become productive citizens capable of civic engagement and sustaining competitive employment." To ensure a sound basic education, the court held that the state must provide at least the following resources: (1) sufficient numbers of qualified teachers, principals, and other personnel; (2) appropriate class sizes; (3) adequate and accessible school buildings; (4) sufficient and up-to-date books, technology, and learning materials; (5) suitable curricula, including an expanded platform of programs to help at-risk students by giving them more time on task; (6) adequate resources for students with extraordinary needs; and (7) a safe orderly environment.<sup>22</sup>

Note that by citing this example I don't intend to suggest that other resources may not be essential to adequacy or equal opportunity; instead, in this discussion I mean to emphasize those resources well documented by research and, in many cases, supported by the courts. They include:

- Effective teachers and principals
- Appropriate class size
- Challenging and culturally relevant curriculum and supportive instructional resources
- Sufficient quality time for learning and development
- Up-to-date facilities and a safe environment.

While these broad sets of resources are not particularly contentious, the policies needed to support them often are. Equal opportunity requires smart, carefully crafted policies designed to guarantee that these fundamental resources are available to all students, especially those from disadvantaged backgrounds.

### *Effective Teachers and Principals*

***Every student needs good teachers.*** Empirical evidence is clear that teachers are the most important school resource required to produce high-quality educational opportunities for all students.<sup>23</sup> However, many schools and classrooms lack high-quality teachers, and the problem is most pronounced in urban schools serving large concentrations of high-poverty students. These schools experience higher rates of

turnover than their non-urban counterparts; the teachers they lose tend to have better qualifications than those who stay; and, the teachers hired to fill the vacancies tend to be less experienced and less qualified than those they are replacing.<sup>24</sup> In the end, these schools find themselves serving some of the highest need students with many of the least-qualified teachers.

While education policy over the past several decades has focused heavily on teachers, policymakers continue to wrestle with the concurrent challenges of how to expand the pool of qualified teacher candidates, recruit teachers to the schools where they are needed

*Teachers are the most important school resource required to produce high-quality educational opportunities for all students.*

most, and retain qualified and effective teachers over time.<sup>25</sup> Some policies in the name of equity have had perverse effects on equitable staffing practices. For example, NCLB and other high-stakes accountability policies that publically indict educators for low student performance often have the effect of driving the best teachers away

from the schools that need them the most. A recent review of school reconstitution as a mechanism for turning around low-performing schools found that newly hired staffs were often less equipped to handle their responsibilities than the educators they replaced. The study concluded that this strategy can exacerbate the challenges of staffing chronically low-performing schools if policies are not carefully designed to support the work of educators in those settings.<sup>26</sup> High-stakes accountability policies also have impacted the quality and preparation of individuals entering the teaching profession in unanticipated and sometimes perverse ways. NCLB's "highly qualified teacher" (HQT) requirement spurred an unprecedented emergence of alternative teacher certification programs. While research shows that the nature of the preparation matters (for example, pre-service pedagogical coursework and clinical training are associated with teacher effectiveness<sup>27</sup>), the wide variability in requirements across certification programs has largely distorted the meaning and value of that credential. The HQT requirement has also blurred the distinction between teacher quality and teacher qualifications.<sup>28</sup> Research has found that districts and schools with a surplus of "highly qualified" teachers have the luxury of considering other quality-related traits in their hiring practices, while those with a shortage are forced to focus on qualifications for compliance purposes.<sup>29</sup>

Targeted policies that address school capacity and working conditions have the potential to contribute to more equitable staffing. Promising policies that could be targeted to difficult-to-staff schools include induction programs, mentoring, and site-specific professional development;<sup>30</sup> more planning time with colleagues to coordinate curriculum and discuss the needs of individual students;<sup>31</sup> and, higher pay for more challenging assignments.<sup>32</sup> Rewards for high performance in difficult settings might also be helpful—but they would require first the ability to measure teacher performance in ways that meet validity and reliability standards, an issue not yet resolved. In addition, improved working conditions related to planning time, workload, influence over school policy, administrative support, class size, instructional materials, and school resources have been found to be

associated with teacher retention.<sup>33</sup> While more research is needed on the effects of targeting such policies to difficult-to-staff schools, existing evidence on working conditions and teacher efficacy suggests that efforts to create more supportive and productive environments have the potential to improve the capacity and performance of educators in difficult-to-staff and chronically low-performing schools.

***Every school needs good leaders.*** One of the most important factors in attracting, developing, and retaining good teachers is having high-quality, stable school leadership.<sup>34</sup> We know from existing research that “effective principals influence a variety of school outcomes, including student achievement, through their recruitment and motivation of quality teachers, their ability to identify and articulate school vision and goals, their effective allocation of resources, and their development of organizational structures to support instruction and learning.”<sup>35</sup> The principal’s job is complex and multidimensional, and the effectiveness of principals depends, in part, on their sense of efficacy on particular kinds of tasks and on their ability to allocate their time appropriately across daily responsibilities. In particular, time spent on organizational management is associated with positive school outcomes measured by test score gains as well as by teacher and parent assessments of school climate.<sup>36</sup> Further, principals must be prepared to evaluate teachers and to use multiple sources of data to guide teacher and school improvement. Research shows that principals’ subjective evaluations of teachers may offer valuable information on teacher performance beyond what student test scores alone can capture, including contributions to the school’s culture, the development of other teachers, and student outcomes like enthusiasm and persistence.<sup>37</sup>

Research has also shown that principal quality is most important in high-poverty and low-performing schools, but quality principals are inequitably distributed across schools.<sup>38</sup> Low-income students, students of color, and low-performing students are more likely to attend a school that has a “first-year principal, a principal with less average experience, a temporary or interim principal, a principal without at least a master’s degree, and a principal that went to a less selective college as compared to their more advantaged counterparts.”<sup>39</sup> There is, however, some good news among the findings on the distribution of principals. Evidence suggests that effective principals are likely to remain in their schools, even if those schools are characterized by high poverty or low achievement. So, “the common view that the best [principals] leave the most needy schools is not supported” by the evidence.<sup>40</sup> While high-poverty and low-achieving schools may be most likely to have inexperienced principals, if the principals are effective they are likely to remain. These findings underscore the importance of policies that create conditions and target resources for recruiting effective principals and helping them succeed in high-poverty and low-performing schools.

### ***Appropriate Class Size***

In addition to high-quality educators, students need to be in classes that are structured to support their learning. Studies have shown that small classes can have a substantial effect on student performance, that the effects are greatest for low-income and minority students

in the early grades, and that the effects persist over time.<sup>41</sup> Evidence also suggests that more years in small classes are important for sustaining long-term effects.<sup>42</sup> Critics of small classes argue that across-the-board class size reduction can be a costly intervention with modest effect sizes.<sup>43</sup> However, to the extent that class size reductions are targeted to the students, grades, and subjects where they have the greatest impact, the costs decrease and the effects increase.<sup>44</sup> While some analyses have positioned teacher quality and small classes as alternative investments, with most favoring investing in teacher quality,<sup>45</sup> both teacher quality and smaller classes are necessary provisions in disadvantaged schools. Small classes have been shown to provide an environment for effective teachers to work with individuals and small groups, to experiment with innovative instructional practices, and to engage students in whole group discourse.<sup>46</sup> Small classes are also associated with more instructional time and less time spent on discipline, with the effects most pronounced in classes of lower-performing students.<sup>47</sup>

While smaller classes provide an environment conducive to classroom instruction that can result in higher achievement for poor and minority students, they also presumably create conditions for greater connections with teachers. To the extent that these teachers operate within an ethic of caring, these interactions may result in broader outcomes related to motivation, confidence, and persistence.<sup>48</sup>

### *Challenging and Culturally Relevant Curriculum and Instructional Resources*

All students need to be exposed to curriculum that is challenging and culturally relevant, and they need to have access to instructional resources that support their learning. In order to ensure a solid foundation for learning, students need strong, individualized reading and math interventions in the early grades. According to Slavin, Karweit, and Wasik, “success in the early grades does not guarantee success throughout the school years and beyond, but failure in the early grades does virtually guarantee failure in later schooling.”<sup>49</sup> Key factors for early success include effective teachers and high-quality individual tutoring for students experiencing difficulties.<sup>50</sup>

As students move through school, tracking and variable access to advanced courses contribute to unequal opportunity. Too often students from poor and minority families are placed in unchallenging courses that are unlikely to provide access to future educational opportunities enjoyed by their more affluent peers. These differences in course taking can have profound effects on student outcomes. In fact, one study of high school tracking found that “the difference in achievement between tracks [within schools] exceeds the difference in achievement between students and dropouts, suggesting that cognitive skill development is affected more by where one is in school than by whether or not one is in school.”<sup>51</sup> In many cases, this sorting occurs through formal tracking that sometimes begins at young ages and that grants access to more advanced courses as students progress through middle and high school.<sup>52</sup> In other cases, schools serving less advantaged students simply have fewer advanced course offerings for students to take.<sup>53</sup> Schools that are smaller, that are located in more rural areas, and that serve higher concentrations of low-income and minority students are less likely to offer AP courses, for

example, compared to other schools.<sup>54</sup> While overall advanced course-taking rates have increased for all demographic groups, increases have been most pronounced for females, whites, Asians, and students from middle and higher income families. As a result, demographic disparities in advanced course taking have actually increased.<sup>55</sup>

Students also must have access to culturally relevant curriculum and culturally responsive teaching in order to have equal opportunity. Carter explains that “educators would be remiss in ignoring the sociocultural aspects of schooling and thus assuming that a one-size-fits-all model works for all students. If we want to understand why the experiments with equality of opportunity policies have not produced certain anticipated returns, we must comprehend why ‘access’ alone is not enough and why the social and cultural ‘stuff’ matter.”<sup>56</sup> The content of the curriculum should be affirming and relatable for all students, and teachers should be prepared to engage in culturally-responsive teaching practices that account for the language, culture, and socio-emotional perspectives of their students.<sup>57</sup> However, these principles have been undermined by state testing requirements that have narrowed the curriculum and by centralized curriculum standards that have shifted curricular decisions away from local communities.<sup>58</sup>

Further, instructional resources like textbooks, materials and technology are necessary to ensure equal opportunity. In the current information-based society, technology is a key competency for social and economic participation, and an essential ingredient in an education designed to realize equal opportunity.<sup>59</sup> Technology—including laptops, tablets, and software—as well as professional development designed to teach teachers how to effectively implement it is critical. As Warschauer describes, “New technologies are widely viewed as having the potential to either alleviate or exacerbate existing inequalities.”<sup>60</sup> Evidence suggests that even when student-computer ratios are similar, low-SES schools tend to have educators who are less equipped to use technology in productive ways, and differences in how technology is used can translate into unequal opportunities. For example, research has found that schools serving low SES students are more likely to use technology to drill basic skills related to standardized tests, while schools serving higher SES students are more likely to use technology to support interdisciplinary research projects and other activities that develop problem solving skills and creative capacities.<sup>61</sup> Further, to the extent that online access is provided to the most advanced students as a privilege or reward, inequities are increased.<sup>62</sup>

### *Sufficient School Time for Learning and Development*

While the amount of allocated school time is largely standardized across the nation, the amount of *quality learning time* varies considerably.<sup>63</sup> Poor children tend to receive disproportionately less instructional time in core subjects and advanced courses, and they are often enrolled in schools where poor educational resources and organizational conditions undermine the quality of learning time. Data from the Program for International Student Assessment (PISA) reveal inequities in learning time among different categories of U.S. students. Compared to students from the highest quartile of the economic, social and cultural status (SES) index, students from the lowest quartile spend

an average of 1.45 (19 percent) fewer hours on mathematics each week.<sup>64</sup> This deficit of learning time cannot be explained by higher allocations to other subjects. These students also spend less time learning science and language. Students in the lowest SES quartile spend an average of 1.98 (28 percent) fewer hours learning science each week, and an average of 1.76 (23 percent) fewer hours learning language. The most significant source of the disparity in average learning time is regular school lessons. Compared to students in the highest SES quartile, students in the lowest quartile receive 26 percent less regular school lesson time in math, 32 percent less time in science, and 29 percent less time in language.

The disparities in learning time despite relatively uniform allocations of time to schooling may be related to a variety of contextual factors that disadvantage schools serving relatively large concentrations of poor and minority students. For instance, schools that have more skilled administrators may have more efficient scheduling and, consequently, better within school allocations of learning time.<sup>65</sup> Likewise, schools that are staffed by more effective teachers are likely to make the best use of class time for high-quality instruction. As discussed above in the section on teachers and principals, these factors associated with more and better learning time tend to favor students from more advantaged backgrounds.

### *Up-to-Date Facilities and Safe Environments*

In his 1991 book, *Savage Inequalities*, as well as several books since then, Jonathon Kozol documented the severe and troubling disparities that continue to exist in the quality of schools attended by students in poor communities compared to those in wealthier neighborhoods.<sup>66</sup> The schools in his book were segregated and unequal, and Kozol's in-depth analysis revealed a bleak picture illustrating how stark differences in school facilities sent messages to children about their worth and potential. More recent evidence indicates that poor facilities are related to lower test scores,<sup>67</sup> lower productivity and retention of teachers,<sup>68</sup> and unhealthy environments that affect children's health, motivation, and performance.<sup>69</sup> Facilities are also essential complementary resources for other provisions described in this brief. For example, up-to-date and safe environments are needed to attract and retain educators, to accommodate smaller classes, and to provide the infrastructure required for instructional technologies.

### **Expanding the Scope of Education**

Fully addressing and providing public resources to amend the inequities discussed in the previous section would be a good start, but policies and resources that expand the role of schools are needed to help equalize out-of-school disparities and enhance equal opportunity. Additional public investments must be made to support the growth and development of children in ways that prepare students to be successful in school and in life.



## *Extended Time for Learning and Development*

The disparities in out-of-school learning opportunities that are “off-the-record” further disadvantage students who are already disadvantaged by deficient learning time in school. More advantaged students receive significantly more structured educational activities outside of school time (such as science camps, family vacations, and high-quality after-school programs); they typically have better educated parents able to more actively participate in their education—to develop their reading and vocabulary skills at a younger age, for example, and to extend their learning time into the evenings by providing homework help. These supplemental learning opportunities have been shown to exacerbate the achievement gap. The most poignant illustration is the well-documented summer learning gap. Low-income students experience greater amounts of summer learning loss in reading and mathematics as a result of slower learning rates in the summer.<sup>70</sup>

Not surprisingly, children from different SES groups spend unequal amounts of out-of-school time on academic work. PISA data show that the amount of time dedicated to individual study is directly correlated with SES.<sup>71</sup> Compared to students in the lowest quartile, those in the highest SES quartile spend an average of 36 more minutes each week studying math, 41 more minutes each week studying science, and 42 more minutes each week studying language. The greater time dedicated to individual study among high SES students more than offsets the average additional time offered to low SES students in out-of-school programs.

In addition to these disparities in the quantity of out-of-school learning time, the quality of that out-of-school time also varies. Students from more affluent backgrounds are exposed to learning resources including books, computers, museum visits, and other social, cultural, and academic experiences that are better aligned with the skills and experiences most valued in most public schools.<sup>72</sup> These children are from families who have the resources to provide costly supplemental instruction through high-quality private tutoring programs and subject-interest camps and courses. Further, they have constant access to greater stocks of human, cultural, and social capital; simply being around educated adults like their parents and peers from educated families during out-of-school time may affect a student’s academic performance.<sup>73</sup> High-quality extended day and year programs must be part of a broader reform agenda to improve equal opportunity.

## *High Quality Early Childhood Education and Services*

High-quality early childhood education is a necessary factor in the equal opportunity equation. Research demonstrates that the income-achievement gap is large when children enter kindergarten and persists as students progress through school.<sup>74</sup> Consequently, efforts must be made to ensure that all students are ready to learn when they begin their formal education. While the evidence on the effects of early childhood education has been uneven, longitudinal studies (the Perry Preschool Study, the Abecedarian Study, and the Chicago Longitudinal Study) of *high-quality* early childhood education programs reveal



positive effects on academic achievement, attitudes, social behaviors, high school graduation, and later adult economic outcomes, health, and social behaviors.<sup>75</sup> High-quality early childhood programs include a wide range of services to support children and their families, including: high standards; capable, committed and well-paid teachers; on-site supervision and professional development; an engaging curriculum that attends to students' social, emotional, and cognitive development; and small classes.<sup>76</sup> While these sorts of programs can be expensive, they have been shown to have financial returns that far exceed their costs.<sup>77</sup>

Equal opportunity requires substantial investments in young children. Universal, publically-funded high-quality preschool is a first step. In addition, prenatal care, early nutrition, health supports, parental education, and paid parental leave have the potential to support the healthy cognitive, social, and emotional development of children so they are positioned to benefit from K-12 schooling.

### *Community Schools and Wrap-around Services*

Since the opportunity gap is grounded in a range of social and economic factors, serious efforts to promote equal opportunity must include a broader set of services than schools have typically provided.<sup>78</sup> School-based programs that offer medical and dental care, psychological support, recreational activities, and social services for all children have long been shown to significantly impact students' ability to benefit from educational offerings.<sup>79</sup> These wrap-around services are a hallmark of a community schools, defined as “both a place and a set of partnerships between the school and other community resources. Its integrated focus on academics, health and social services, youth and community development and community engagement leads to improved student learning, stronger families, and healthier communities.”<sup>80</sup> By aligning school and community resources, these locally-based initiatives have become “a promising strategy for improving student outcomes by providing wraparound services that meet the social, physical, cognitive, and economic needs of both students and families.”<sup>81</sup>

The Harlem Children's Zone (HCZ) is perhaps the most touted example of a holistic, neighborhood-based community school. The HCZ components include: early childhood programs with parenting classes; academic advisors and afterschool sessions; fitness, health and nutrition programs; family counseling; community center; and an employment and technology center that teaches job-related skills to teens and adults. While the philosophy behind community schools and wrap-around services is compelling, evidence on the impact of the HCZ has been mixed.<sup>82</sup> A more recent, in-depth study of one district's community schools shows more positive effects, including high participation rates among the most socioeconomically disadvantaged students, gains in English language development scores among program participants, and positive attitudes about school among middle school students.<sup>83</sup> Family engagement and extended learning programs were associated with increases in students' perceptions of their school as a supportive environment—which were, in turn, linked to students' motivation and academic confidence, both of which were related to gains in achievement. Findings from these

programs suggest that wrap-around services targeting the needs of the local community may have a range of positive effects.

## Realizing Equal Opportunity in a Challenging Policy Context: Conclusions and Recommendations

For too long, America has been the “land of opportunity” for only a subset of its population. Economic and social opportunities are largely limited to those who come from economically and socially privileged classes—those who have had access to excellent educational opportunities by virtue not necessarily of their ability, but of the circumstances they were born into. This situation is far from Mann’s vision of universal education as the balance wheel of the social machinery, and the result is a far cry from the “social efficiency” and “civic virtue” promised.

In many cases, trends in the current education policy environment undermine progress toward equal opportunity. For example, the climate of high-stakes accountability and the national focus on achievement testing as the primary measure of student and school performance have had a number of perverse effects. These policy emphases have narrowed the curriculum, intensified the challenges of staffing schools serving high concentrations of students in poverty with high-quality educators, and centralized decision-making about curriculum and instruction. These effects are most damaging in low-SES schools. Another troubling trend is the continued racial segregation of schools. Failure to enforce desegregation policies coupled with policies like school choice and tracking that have allowed (and perhaps promoted) racial segregation hamper efforts to equalize opportunities and promote democratic education.<sup>84</sup> Another concerning trend is the current policy emphasis on the privatization of education—whether through supplemental educational services, charter schools, or vouchers. While some carefully constructed and well-resourced approaches may be acceptable on equity grounds,<sup>85</sup> many of these policies create conditions that allow for resegregation and unequal opportunities, undermining the democratic purposes of public education. A serious commitment to Mann’s vision of education as the balance wheel would require serious reconsideration of these policy directions.

An essential first step involves recognizing the broad goals of public education and identifying the fundamental resources—within education systems and beyond—required to meet those goals. The goals should go beyond student achievement to include broad outcomes like civic responsibility, democratic values, economic self-sufficiency, cultural competency and awareness, and social and economic mobility. Taken together, these outcomes contribute to Mann’s vision of a functional democracy and social efficiency. While schools alone cannot close the opportunity gap, this brief explores what it would take if we really tried to realize Mann’s view of education as the great equalizer. It argues for a greater commitment to the education resources that matter most, an expanded scope of services to support poor children, and a more supportive policy context to promote goals of equal opportunity, democracy, and social efficiency.

While the resources and services outlined in this brief may come with a significant price tag, if the interventions are effective they could easily pay for themselves in the economic returns they ultimately generate. However, the real justification for these investments is our nation's commitment to equity, and the recognition that our public education system is a key mechanism for leveling the playing field so that every child, regardless of background, has a fair opportunity to participate in our social, political, and economic institutions. Not only it is our moral obligation, but the health of our democracy and the prosperity of our society depend on it. Specific recommendations follow.

- **Policymakers and the general public should recognize the broad goals of education including civic responsibility, democratic values, economic self-sufficiency, cultural competency and awareness, and social and economic opportunity.** Student achievement, while important, is a single narrow indicator. Equal opportunity requires a broader understanding of the social and economic forces that undermine individuals' life chances.
- **Policymakers should ensure that *all* schools have the fundamental school resources they need to promote student success: effective teachers and principals, appropriate class size, challenging and culturally relevant curriculum and supportive instructional resources, sufficient quality time for learning and development, and up-to-date facilities and a safe environment.** The adequacy standards used by the courts is a legal floor, but equal opportunity will require a much greater commitment to ensuring that students from disadvantaged backgrounds have the highest quality educational resources.
- **Policymakers should expand the scope of schools in high-poverty neighborhoods to provide wrap around services including nutritional supports, health clinics, parental education, extended learning time, recreational programs, and other services needed to meet the social, physical, cognitive, and economic needs of both students and families.** Expanding the services and resources offered by schools has the potential to dramatically increase their impact. While schools account for less than a quarter of the variance in student achievement, public investment in a more comprehensive approach that addresses the multiple sources of disadvantage may position schools to have greater impact and more effectively promote equal opportunity.
- **Policymakers should promote a policy context that is supportive of equal opportunity: use achievement testing for formative rather than high-stakes purposes, avoid policies that allow for school resegregation, and renew the public commitment to *public* education.** The resources and services detailed in this brief are based on the best available research evidence, but to have significant impact they must be supported by policies sensitive to local circumstances, well supported by public resources, and carefully designed to avoid the many unintended consequences that so often result.

## Notes and References

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