



UNITED STATES DEPARTMENT OF EDUCATION
OFFICE FOR CIVIL RIGHTS

THE ASSISTANT SECRETARY

October 1, 2014

Dear Colleague:

Sixty years ago the Supreme Court famously declared in *Brown v. Board of Education* that education “is a right which must be made available to all on equal terms.”¹ Today, I write to call your attention to disparities that persist in access to educational resources, and to help you address those disparities and comply with the legal obligation to provide students with equal access to these resources without regard to race, color, or national origin.^{*} This letter builds on the prior work shared by the U.S. Department of Education on this critical topic.²

Across the country, teachers, administrators, and local and State[†] officials are working tirelessly to improve our schools through exciting innovations in teacher recruitment, hiring, assignment, evaluation, support, development, and retention. They are also upgrading school facilities, expanding access to advanced courses, increasing the availability of technology in the classroom, and employing more well-prepared staff to support the work of excellent teachers. The Department applauds these efforts and will make every effort to support them while ensuring that the provision and allocation of educational resources afford equal educational opportunity for all students.³

^{*} This letter addresses legal obligations under Title VI of the Civil Rights Act of 1964 (Title VI), which prohibits discrimination on the basis of race, color, or national origin, in programs and activities receiving Federal financial assistance. 42 U.S.C. § 2000d, *et seq.* See also 34 C.F.R. Part 100 (implementing regulations). The Office for Civil Rights (OCR) also enforces statutes that prohibit discrimination on the basis of sex and disability, and under which recipients of Federal financial assistance have similar responsibilities regarding the obligation to provide comparable educational resources to all students without regard to their sex or disability. 20 U.S.C. § 1681 *et seq.* (sex), 34 C.F.R. Part 106 (implementing regulations); 29 U.S.C. § 794 (disability), 34 C.F.R. Part 104 (implementing regulations).

[†] Although this letter focuses on the resource equity obligations of school districts, States and individual schools that receive Federal funds must likewise comply with Title VI’s nondiscrimination requirements, including nondiscrimination in their provision and allocation of educational resources. Accordingly, OCR strongly encourages State education officials and school administrators to closely review this letter and to take proactive steps to ensure that the educational resources they provide are distributed in a manner that does not discriminate against students on the basis of race, color, or national origin. In particular, State education officials should examine policies and practices for resource allocation among districts to ensure that differences among districts do not have the unjustified effect of discriminating on the basis of race.

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The mission of the Office for Civil Rights is to ensure equal access to education and to promote educational excellence throughout the nation through vigorous enforcement of civil rights.

I. The Problem of Unequal Access to Educational Resources

Many States, school districts, and schools across the Nation have faced shrinking budgets that have made it increasingly difficult to provide the resources necessary to ensure a quality education for every student. Chronic and widespread racial disparities in access to rigorous courses, academic programs, and extracurricular activities; stable workforces of effective teachers, leaders, and support staff; safe and appropriate school buildings and facilities; and modern technology and high-quality instructional materials further hinder the education of students of color today.^{*} Below I highlight the negative effects these inequalities can have on student learning and encourage school officials to assess regularly disparities in educational resources in order to identify potential — and where it exists to end — unlawful discrimination, particularly in districts with schools where the racial compositions vary widely.[†]

Research confirms what we know intuitively — high-quality schools can make a dramatic difference in children’s lives, closing achievement gaps and providing students with the opportunity to succeed in college and their chosen careers.⁴ The allocation of school resources, however, too often exacerbates rather than remedies achievement and opportunity gaps.

^{*}This letter uses the term “students of color” rather than the term “minority students” to refer to students who identify as black, Latino, Asian, Native Hawaiian/Pacific Islander, American Indian/Alaska Native, and students of two or more races. Using “students of color” to refer to these students reflects the fact that in many school districts white students are in the minority. This letter also typically uses “Latino” to refer to people who identify as Hispanic or Latino and uses “black” to refer to people who identify as African-American or black. In addition, the terms “race” or “racial” includes race, color, and national origin; “policy” or “policies” includes policies, practices, and procedures; and “school” or “schools” includes an elementary or secondary school as well as a charter or “alternative” school that is a recipient of Federal financial assistance.

[†] This letter cites to leading scholarship in the field of education in the endnotes to demonstrate the importance of the resources discussed to the quality of education that students receive and to document the disparities in access to these resources across the Nation. These citations, however, are intended to illustrate the problems we face rather than to provide an exhaustive account of the state of the research. OCR weighed information gleaned from research alongside the experience of decades of OCR enforcement of civil rights protections in our schools to determine which resources to prioritize in this letter. As with all investigations, OCR retains discretion to investigate complaints of discrimination in access to resources not discussed in this letter and will consider the fact-specific contexts of all complaints in evaluating allegations of discrimination, including evidence that in a particular school or district, the relationship between resources, the quality of education, and student outcomes may not follow typical patterns.

Many school districts offer academic and co-curricular* programs that are differentiated based on academic rigor (*e.g.*, gifted and talented or college preparatory programs) or content (*e.g.*, business, health care, music, art, or career and technical education programs). These programs can improve student achievement and build specialized skills that help students move along a variety of pathways toward college- and career-readiness.⁵ For example, participation in high-quality arts programs, including music and visual arts, is valuable to all students.⁶ Students in more advanced courses tend to put in significantly more effort, and student effort is in turn correlated with higher achievement, regardless of the student's entering level of achievement and regardless of which courses the student takes.⁷ Additionally, extracurricular opportunities such as academic clubs, athletics, and other organizations continue to build students' academic and social skills outside of class. These extracurricular programs have benefits such as increasing physical fitness and building skills in disciplines like music, technology, and debate. And researchers have found that participation in organized, school-based, extracurricular activities is strongly related to improved student achievement.⁸

But schools serving more students of color are less likely to offer advanced courses and gifted and talented programs than schools serving mostly white populations, and students of color are less likely than their white peers to be enrolled in those courses and programs within schools that have those offerings.⁹ For example, almost one in five black high school students attend a high school that does not offer Advanced Placement (AP) courses, a higher proportion than any other racial group.¹⁰ Students with limited English proficiency (English language learners) are also underrepresented in AP courses according to data from the 2011-12 school year. In that year, English language learners represented five percent of high school students, but only two percent of the students enrolled in an AP course.¹¹ Similarly, of the high schools serving the most black and Latino students in the 2011-12 school year, only 74 percent offered Algebra II and only 66 percent offered chemistry. Comparable high-level opportunities were provided much more often in schools serving the fewest black and Latino students, where 83 percent offered Algebra II courses and 78 percent offered chemistry. Moreover, the percentages of black and Latino students enrolled in calculus courses did not closely match the percentages of black and Latino students enrolled in high schools. While black and Latino students represented 16 percent and 21 percent, respectively, of high school enrollment in 2011-12, they were only 8 percent and 12 percent, respectively, of the students enrolled in calculus.¹² Black and Latino students were also

* Co-curricular refers to programs that have components occurring during classroom time as well as outside-of-class requirements such as music courses with required concerts that happen outside of the normal school day. This term is meant to distinguish those out-of-class requirements from extracurricular activities that are not typically tied to a specific course. Many researchers include co-curricular activities in their investigations of the effects of extracurricular involvement on student achievement because the activities happen outside of normal classroom time. However, because these programs are fundamentally part of a student's school day, OCR considers co-curricular programs alongside other academic programs in evaluating the comparable provision of programs across the schools in a school district.

underrepresented in gifted and talented programs during the 2011-12 school year. In particular, schools offering such programs had an aggregate enrollment that was 15 percent black and 25 percent Latino, but their gifted and talented enrollment was only 9 percent black and 17 percent Latino.¹³ Further, the percentage of non-English language learners participating in gifted and talented programs was three-and-a-half times greater than the percentage of English language learners participating in these programs.¹⁴

The teachers, leaders, and support staff in a school are foundational to student learning and development. But disparities in the opportunity for students to benefit from strong teachers, leaders, and support staff — ones who, generally speaking, are qualified, experienced and accomplished — exist among and within districts, as well as among classes in the same school.¹⁵ Schools serving the most black and Latino students are 1.5 times more likely to employ teachers who are newest to the profession (who are on average less effective than their more experienced colleagues¹⁶) as compared to schools serving the fewest of those students.¹⁷ The unequal provision of strong teachers and stable teacher workforces too often disadvantages the schools with the most at-risk students as well as schools with the highest enrollments of students of color.¹⁸

The physical spaces where our children are educated are also important resources that influence the learning and development of all students, yet many of our Nation's schools have fallen into disrepair. Too often, school districts with higher enrollments of students of color invest thousands of dollars less per student in their facilities than those districts with predominantly white enrollments.¹⁹ While conditions have improved in some districts, older buildings with inadequate or poorly maintained heating, ventilation, and air conditioning (HVAC) systems still are more likely to house schools attended mostly by students of color, who in many instances are also low-income students.²⁰ Schools with the most students of color are more likely to have temporary, portable buildings and permanent buildings with poorer building conditions, including poorly maintained exterior features such as lighting and walls.²¹ Students of color must not be consigned to dilapidated, overcrowded school buildings that lack essential educational facilities, such as science laboratories, auditoriums, and athletic fields, and that may not be able to support the increasing infrastructure demands of rapidly expanding educational technologies while providing better facilities for other students.

In addition to facilities, access to instructional materials and technology for students and teachers can impact the quality of education as well as students' ability to engage with digital resources outside the classroom.²² Technology and other instructional tools and materials support teachers in properly delivering, enhancing and personalizing the curriculum. Access to these important instructional resources varies between high-poverty schools that are heavily populated with students of color and more affluent schools serving fewer students of color.²³ While gaps by race and income in student access to technology are narrowing at a national level, disparities persist regarding the number and quality of computers or mobile devices in the classroom, speed of internet access, and the extent to which teachers and staff are adequately prepared to teach

students using these technologies.²⁴ High-quality instructional materials for students and teachers, including digital learning materials, textbooks, library resources, and other materials, promote rigorous engagement with the curriculum, and so when school districts provide these resources they must ensure that students have comparable access to them without regard to race, color, or national origin.

Adequate funding is necessary to provide the programmatic, human, and physical resources described above.²⁵ Allocation of funding should be designed to ensure the availability of equal educational opportunities for students, which may require more or less funding depending upon the needs at a particular school. Intradistrict and interdistrict funding disparities often mirror differences in the racial and socioeconomic demographics of schools, particularly when adjusted to take into consideration regional wage variations and extra costs often associated with educating low-income children, English language learners, and students with disabilities. These disparities are often a result of funding systems that allocate less State and local funds to high-poverty schools that frequently have more students of color,²⁶ which can often be traced to a reliance on property tax revenue for school funding. Federal funds provided through Title I of the Elementary and Secondary Education Act of 1965, as amended (ESEA), are designed to provide additional resources on top of state and local funds.²⁷ As a result, OCR typically will not consider Title I funds in a resource equity analysis. OCR also notes that even counting Title I funds, many districts still allocate resources among schools inequitably.²⁸

Such disparities may be indicative of broader discriminatory policies or practices that, even if facially neutral, disadvantage students of color.²⁹ For example, teachers in high schools serving the highest percentage of black and Latino students during the 2011-12 school year were paid on average \$1,913 less per year than their colleagues in other schools within the same district that serve the lowest percentage of black and Latino students.³⁰

As discussed above, challenging and creative courses, programs, and extracurricular activities; effective and qualified teachers, leaders, and support staff; adequate facilities; updated technology; quality education materials; and sufficient funding — are critical to the success of students.³¹ Yet, disparities in the level of access to these resources often reflect the racial demographics of schools, with schools serving the most students of color having lower quality or fewer resources than schools serving largely white populations even within the same district. This letter, therefore, highlights the importance of protecting students from discrimination in the allocation of any of these educational resources. This letter also serves to support and inform education officials by clarifying their legal obligations, and by identifying resources that can guide proactive district and State efforts to assess relevant data and to examine policies and practices on resource allocation to ensure compliance with Title VI.

II. Legal Framework for Office for Civil Rights Enforcement Efforts

The Department’s Office for Civil Rights (OCR) enforces Title VI of the Civil Rights Act of 1964,³² which prohibits discrimination on the basis of race, color, or national origin, in programs and activities receiving Federal financial assistance.* School districts that receive Federal funds must not intentionally discriminate on the basis of race, color, or national origin, and must not implement facially neutral policies that have the unjustified effect of discriminating against students on the basis of race, color, or national origin.³³ In assessing the allocation of educational resources, OCR will investigate and analyze the evidence found under both theories of discrimination — intentional discrimination and disparate impact — to ensure that students are not subjected to unlawful discrimination.³⁴ Each theory is summarized in turn below.

A. Intentional Discrimination

Under Title VI, intentional discrimination in allocating educational resources on the basis of race, color, or national origin is unlawful. Such discrimination can include acting on a racially discriminatory motive, providing educational resources only to members of select races, adopting facially neutral policies with an invidious intent to target students of certain races, or applying a facially neutral policy in a discriminatory manner. Evidence of discriminatory intent can be proven through direct evidence or circumstantial evidence. For example, such evidence may include the existence of racial disparities that could not otherwise be explained, a history of discriminatory conduct towards members of a certain race, or the inconsistent application of resource allocation policies to schools with different racial demographics.³⁵

OCR applies the following analysis to determine whether a school district intentionally discriminated in the allocation of resources:

- 1) Did the school district treat a student, or group of students, differently with respect to providing access to educational resources as compared to another similarly situated student, or group of students, of a different race, color, or national origin (a *prima facie* case of discrimination)?

* This letter focuses on the comparable allocation and provision of educational resources regardless of students’ race, color, or national origin, but school districts should also be mindful of their obligation to take “affirmative steps” to help English language learners (ELLs) overcome language barriers so they can meaningfully participate in their schools’ educational programs. *See Lau v. Nichols*, 414 U.S. 563, 566 (1974). The obligation to take such affirmative steps does not diminish a district’s obligation to otherwise ensure equitable access to comparable educational resources for ELL students. OCR’s policies governing the treatment of English-language learners are available at www.ed.gov/ocr/ellresources.html.

2) Can the school district articulate a legitimate, nondiscriminatory, educational reason for the different treatment? If not, OCR could find that the district has intentionally discriminated on the basis of race. If yes, then

3) Is the allegedly nondiscriminatory reason a pretext for discrimination?³⁶ If so, OCR would find the district has intentionally discriminated on the basis of race.

In the context of a resource comparability investigation, this analysis for intentional discrimination may in practice take the following form, particularly in cases where there is no direct evidence of invidious purpose.

First, OCR would examine evidence regarding the quality, quantity, and availability of critical educational resources (as discussed in more detail below) to determine whether there are disparities among schools serving similarly situated students or among similarly situated students within the same school. Similarity of schools would be primarily judged by the size and grade level of the schools, whereas differences of student needs, programs, and other like factors would be relevant to the second prong of this analysis. Students would typically be considered similar if they are in the same grade and have generally comparable educational or academic needs. A *prima facie* case of intentional discrimination is demonstrated when the school district treats schools that are otherwise similar, but that have demonstrably different student populations with regard to race, color, or national origin, differently in terms of resource allocation, or when the school district gives similarly situated groups of students of different races within schools demonstrably different access to critical resources.

Second, school districts would then be given an opportunity to explain the different treatment, and OCR would assess whether there existed any legitimate, nondiscriminatory, educational explanation from the school district. OCR anticipates that in some school-level resource equity investigations, school districts may be able to explain differing resource allocations as arising from educational strategies such as the operation of themed programs at particular schools that may justify, for example, specialized training, courses, or technology supports at one school versus another. As another example, different resource allocations may also arise from appropriate targeting of capital improvement expenditures at the most dilapidated buildings in a district. A district might also explain that an alleged disparity among schools with regard to the allocation of a particular resource (such as laptops in the classroom) is part of a plan for allocating a broader category of resources (such as classroom-based technology) and present evidence that the broader plan leads to an equitable allocation overall.

However, if the school district cannot articulate a legitimate, nondiscriminatory, educational reason for different treatment, OCR could find that the district has intentionally discriminated based on race. If the school district provides an explanation, OCR would then assess whether the explanation is a pretext for unlawful discrimination — in other words, not the true reason for the different treatment but rather a mere cover for racial discrimination. Evidence that an explanation

is pretextual may include, but is not limited to, that the explanation does not conform to overall district or State policies regarding the provision of resources or that witnesses or documents credibly offer evidence that contradicts the explanation offered. For example, the actual purpose or explanation for the different treatment could be a stereotype about a particular race not opting for or valuing advanced coursework. If OCR finds that the reason for the different treatment is pretextual, then the recipient would be found in violation of Title VI.

B. Disparate Impact

School districts also violate Title VI if they adopt facially neutral policies that are not intended to discriminate based on race, color, or national origin, but do have an unjustified, adverse disparate impact on students based on race, color, or national origin.³⁷ In determining whether a facially neutral policy or practice has an unjustified, adverse disparate impact in allocating educational resources that violates Title VI, OCR applies the following analysis:

- 1) Does the school district have a facially neutral policy or practice that produces an adverse impact on students of a particular race, color, or national origin when compared to other students?
- 2) Can the school district demonstrate that the policy or practice is necessary to meet an important educational goal?³⁸ In conducting the second step of this inquiry OCR will consider both the importance of the educational goal and the tightness of the fit between the goal and the policy or practice employed to achieve it. If the policy or practice is not necessary to serve an important educational goal, OCR would find that the school district has engaged in discrimination. If the policy or practice is necessary to serve an important educational goal, then OCR would ask
- 3) Are there comparably effective alternative policies or practices that would meet the school district's stated educational goal with less of a discriminatory effect on the disproportionately affected racial group; or, is the identified justification a pretext for discrimination?³⁹ If the answer to either question is yes, then OCR would find that the school district had engaged in discrimination. If no, then OCR would likely not find sufficient evidence to determine that the school district had engaged in discrimination.

Applying this disparate impact framework, OCR would not find unlawful discrimination based solely upon the existence of a quantitative or qualitative racial disparity resulting from a facially neutral policy. Nevertheless, OCR will investigate and ascertain whether such disparities are the result of unlawful discrimination under Title VI.

The first prong of this analysis requires OCR to identify a policy or practice that creates racial disparities in access to educational resources that are important to the quality of education a student receives, such that the disparity has an adverse impact on a racially defined group of students. Relying in part on research, OCR generally considers each of the educational resources

discussed in this letter to provide a benefit and that its inequitable allocation tends to be adverse to students who are under-resourced. Additionally, OCR would also consider the school district's decision to provide a particular resource to students, such as technology or a gifted and talented program, as evidence that the district believes the resource is important. OCR would expect these resources to be equitably provided without regard to students' race, color, or national origin. Furthermore, OCR may consider indicia of the quality of education when determining adverse impact including, but not limited to, student achievement outcomes, graduation and retention-in-grade rates, and student and parent surveys. Finally, OCR would consider evidence offered by the school district that, in the specific factual context of its schools, a difference in certain resources does not adversely impact the quality of education.

If OCR identifies a policy or practice that creates adverse racial disparities, OCR looks to the school district for a substantial, legitimate, educational justification for the policy or practice. A district may offer a justification such as a policy of offering a diverse range of educational programs, of targeting resources to underperforming schools, or of piloting programs in one school before expanding them to more schools. As another example, school-based budgeting may allow for different choices at the school level regarding budgeting for resources such as instructional materials and staff positions, so that different combinations of resources at different schools would not necessarily represent resource inequity among those schools; in such a situation, OCR would investigate, among other things, whether the district's overall system for allocating funds to schools was equitable. OCR will assess the explanation identified, giving some deference to the expertise of the educators making those decisions. If OCR accepts the justification, OCR will work with the school district to identify whether the district could implement a workable alternative with a less racially disparate impact.

III. Office for Civil Rights Investigations

Again, Title VI prohibits discrimination in the allocation and provision of educational resources.⁴⁰ Therefore, OCR investigates complaints and conducts proactive investigations to determine whether school districts are discriminating against students based on race, color, or national origin in their allocation of educational resources. Such investigations may include, but are not limited to, analyses of any or all of the resources discussed in this letter, depending on the fact-specific context in a particular case. Sound educational judgments made by State and local education officials, as well as budgetary constraints, may lead school districts to prioritize certain resources or the needs of certain schools, but such decisions cannot reflect unlawful race discrimination, in purpose or effect. OCR's legal determinations will necessarily be context-specific and will require a holistic analysis of both quantitative and qualitative factual findings, including an evaluation of evidence presented that the quality of education students receive in a particular school or district is equitable despite apparent resource inequities in some areas. OCR's investigations recognize that States, districts, and schools have a significant amount of flexibility and variation in how they operate and that compliance with Title VI does not require a specific approach to ensuring equitable access to comparable resources.

In its investigations, OCR focuses on the scope and severity of resource disparities, and on a district's processes for allocating resources to determine the extent to which the district is exacerbating or eliminating such disparities. OCR may compare a school's resources against district averages and against district schools serving the most and the fewest students of a particular race or national origin to assess whether alleged resource disparities are, in fact, correlated with the race, color, or national origin of students. OCR also recognizes that resources may appropriately be allocated differently to meet schools' differing needs. For example, an engineering-themed magnet school may invest more in computers than an arts-themed magnet school that invests more in musical instruments. Accordingly, OCR investigations are more likely to find school districts in violation of Title VI when it uncovers significant racial disparities in access to a particular education resource or patterns of racial inequality across a range of different types of resources.

Finally, OCR encourages districts to proactively identify and address racial disparities in resource allocation. School districts that take proactive, concrete, and effective steps to address the root causes of such disparities and to ensure that students are equitably served are more likely to be in compliance with Title VI. Further, the effectiveness of such efforts may reflect favorably on districts and inform any remedies OCR requires so that the district can build upon its efforts.

Note on School Funding

Although comparative funding levels are pertinent to the issue of educational resource comparability, they may not be conclusive evidence of compliance or non-compliance. The comparison of resources, including funds, allocated among schools is ultimately designed to measure the relative allocation of equal educational *opportunities* for students. The provision of equal opportunities may require more or less funding depending on the location of the school, the condition of existing facilities, and the particular needs of students such as English language learners and students with disabilities.* For example, older facilities generally require more money for annual maintenance than do newer facilities. Similarly, greater annual per-pupil library expenditures for one school may reflect an effort to correct years of underfunding of a library collection. Funding disparities that benefit students of a particular race, color, or national origin may also permissibly occur when districts are attempting to remedy past discrimination.

Much of the Federal funding provided to districts and schools comes from sources specified for a particular use such as special education, alternative language, or gifted programs. OCR may exclude these categorical resources from data used to determine comparability of regular education programs if those resources distort the comparisons for such programs.

* For example, students in special education may be served by more teachers and support staff than other students, and therefore districts may spend more on those students, but that does not mean that those students are inequitably receiving a disproportionate share of resources.

Lack of funds does not preclude the duty to act under Title VI. OCR may consider how States, districts, and schools distribute whatever funds and resources are available, as well as how they act to provide additional or sufficient funds, to ensure equal educational opportunities.

OCR generally focuses on funding via its impact on the other categories of educational resources discussed below. Simplistic comparisons of per-pupil expenditure levels are often a poor measure of resource comparability, and there are many factual circumstances that can create varying funding needs that justify differential spending patterns among schools. The ultimate issue is whether funding is provided to each school in the district so as to provide equal educational opportunities for all students.

A. Courses, Academic Programs, and Extracurricular Activities

Equal educational opportunity requires that all students, regardless of race, color, or national origin, have comparable access to the diverse range of courses, programs, and extracurricular activities offered in our Nation's schools. Students who have access to, and enroll in, rigorous courses are more likely to go on to complete postsecondary education.⁴¹ Further, completing college or other postsecondary education such as a technical certification is increasingly necessary for students to enter careers that will enable them to join the middle class.⁴² Therefore, OCR assesses the types, quantity, and quality of programs available to students across a school district to determine whether students of all races have equal access to comparable programs both among schools and among students within the same school. OCR generally considers a range of specialized programs, such as early childhood programs including preschool and Head Start, Advanced Placement and International Baccalaureate courses, gifted and talented programs, career and technical education programs, language immersion programs, online and distance learning opportunities, performing and visual arts, athletics, and extracurricular activities such as college-preparatory programs, clubs, and honor societies. These programs help students distinguish themselves and develop skills that will help them in college and in their careers.

OCR also examines the relative availability of the full panoply of high school courses that prepare students to graduate ready for college and careers, including the range of science, technology, engineering, and mathematics (STEM) courses, as well as middle and elementary school courses that prepare students for college- and career-preparatory high school courses. Further, OCR may consider the overall quality and adequacy of special education programs at the school level, including identification, evaluation, and placement procedures as well as the quality and appropriateness of services and supports provided to students with disabilities to determine whether schools serving more students of color have comparable supports and services in place for students with disabilities.

While differentiation among schools in a district may serve important educational goals, OCR evaluates whether students of different races in a district are able to equally access and

participate in a comparable variety of specialized programs — whether curricular, co-curricular, or extracurricular.* The selection of schools to offer particular programs and the resources made available for the success of those programs may not disproportionately deny access to students of a particular race or national origin. Also, the policies for recruitment and admission to particular schools or programs, both within and across schools, should not deny students equal access on the basis of their race.⁴³

Extracurricular activities, especially those that have been shown to support college and career readiness and high academic rigor, must be offered on a nondiscriminatory basis. OCR considers whether students of different races have equal access to extracurricular programs of similar quality across the district, including activities sponsored by the district but provided by outside organizations since school districts continue to have an obligation to provide equal educational opportunities for their students when working with third parties. OCR considers quantitative and qualitative factors including the number of extracurricular activities as well as their intensity and content; the types and relative quality of academic and co-curricular programs; the expertise of the teachers, coaches, and advisors who are implementing the programs; and the availability of the necessary materials such as books, uniforms, technology, and spaces. Where relevant, OCR also inquires into the district's policies and procedures for allowing students to gain access to programs offered at another school in the district.

B. Strong Teaching, Leadership, and Support

OCR examines a broad range of information sources when assessing whether a district discriminates based on race in providing access to strong teaching and instruction to its students including a variety of data related to the teachers, leaders, and staff in a district's schools. These sources can include data on teacher and leader effectiveness produced by teacher and leader evaluations and data on the relative stability of the teacher workforce across a district, including teacher turnover, absenteeism, use of substitutes, and vacancies. These sources can also include data on the following characteristics and qualifications of teachers: teachers' licensure and certification status, whether teachers have completed appropriate training and professional development, whether teachers are inexperienced, whether they are teaching out of their field, and other indicators of disparities in access to strong teachers.⁴⁴ Finally, strong school leadership and support staff play a critical role in recruiting and retaining teachers, as well as in ensuring that teachers are able to be effective in the classroom. These criteria are discussed in more detail below. A particular OCR investigation may focus on a small subset of these criteria where

* OCR recognizes that student or parent demand for specific programs and courses may differ among the schools in a district, so participation rates will reasonably differ. However, OCR considers whether students have been given reasonable notice of the availability of programs and whether districts accommodate interested students in low-demand schools.

appropriate, such as when the complainant's allegations are quite specific or where the adverse impact of the disparity in a particular area is clearly identifiable. But other investigations will rely upon a holistic analysis of these criteria to better gauge the totality of teacher and staff characteristics and the quality of instruction that students receive.

1. Teacher Effectiveness Data

Many States and school districts are in the process of developing evaluation systems that use multiple measures, including student growth, to provide important information about the effectiveness of teachers and principals. The Department considers these systems essential for a number of reasons, such as informing professional development and improving instructional practices, and has made development of these systems a key part of its equity-focused policies, including the principles for granting waivers from provisions of the Elementary and Secondary Education Act (ESEA), also known as ESEA flexibility. While there are many possible sources of information about student access to effective teaching, OCR may consider whether States and districts are developing high-quality evaluation systems. The data from these systems can enable States and districts to proactively help ensure that students of color are not being taught by ineffective teachers at higher rates than other students. For this reason, OCR recognizes that progress in the development and use of these systems may help demonstrate a commitment to the equitable allocation of resources. For example, evidence that States are including data on the allocation of effective teachers and strategies to address any inequitable allocation in their educator equity plans under Title I of the ESEA,⁴⁵ or evidence that school districts are implementing those strategies, would reflect favorably on a State or district in an OCR investigation.

2. Stability of Teacher Workforce

OCR may investigate a range of factors to determine whether students of color are more or less likely to attend schools with a stable teacher workforce. OCR may assess relative rates of teacher absenteeism⁴⁶ and the number and duration of teacher vacancies as part of investigating discrimination in student access to quality teaching. Because instruction by substitute teachers can disrupt the continuity of the classroom, OCR's Title VI nondiscrimination analysis includes comparisons of the number of school days, classes, and students taught by substitutes as well as assessments of whether schools make use of long-term substitutes where possible for planned teacher absences.*

* OCR investigations will of course consider a school district's explanations about causes of unusually high teacher absenteeism: for example, whether high teacher absenteeism rates at a school can be explained by a small number of teachers being absent for long periods of time because of pregnancy or long-term illness.

OCR may also consider teacher turnover rates when investigating discrimination in access to strong teaching.* While some forms of turnover may be desirable, such as incentivizing and encouraging highly effective teachers to move to struggling schools or to become school leaders, the instability for students caused by teachers leaving year after year, particularly when teachers leave mid-year, disrupts student learning and destabilizes school environments. In addition, schools with high turnover rates must repeatedly expend scarce resources for recruitment and professional support for new teachers. Excessive turnover at a specific school may also lead to the overrepresentation of inexperienced teachers, and it may suggest a lack of district oversight of deeper problems with the school environment (*e.g.*, lack of necessary teacher support and development, poor school leadership, school safety issues) that may impair the effectiveness of teachers. OCR also considers whether there are disparities among schools in the speed with which vacancies are filled in assessing student access to a stable teacher workforce.

3. Teacher Qualifications and Experience

The qualifications and credentials of teachers, amount of teacher experience, and frequency of teachers teaching in their area of expertise and certification may, upon further investigation, relate to equitable access to strong teachers.⁴⁷ Typically new teachers gain skill and effectiveness each year in their early careers until they become proficient educators. OCR recognizes that teacher experience is neither a direct measure of nor a perfect proxy for teacher effectiveness, and OCR acknowledges that some inexperienced teachers may be more effective than those who have more experience. Furthermore, developing high-quality pipelines of new teachers in high-need and rural schools can be an effective strategy for districts or schools seeking to improve outcomes, and OCR will take that into consideration as part of its investigations. In general, however, inexperienced teachers perform less well on average than their more experienced colleagues.⁴⁸ Therefore, OCR may consider the distribution of inexperienced teachers across a district as part of its overall evaluation of potential discrimination in access to strong teaching.

Other relevant qualifications that OCR may consider in investigations include whether teachers with emergency licenses or advanced certifications such as National Board Certification are more or less likely to teach in schools with more students of color. OCR considers whether, in a particular district, disparities in types of teacher certifications augment and reinforce patterns found in the totality of evidence that students are experiencing discrimination in access to strong teaching. Additionally, OCR considers whether teachers are teaching in or outside of their subject matter expertise, particularly in math, science, and foreign languages at the high-school

* OCR considers all relevant contextual factors in analyzing teacher turnover rates, including whether turnover in a particular year or specific position is an anomaly, and all investigations would consider any nondiscriminatory, educational justifications presented by a district for factual circumstances which, if unexplained, might constitute unlawful discrimination.

level.* Similarly, OCR examines whether teachers of English language learners, or of students who receive special education and related services, have the appropriate training to be effective in delivering language assistance or special education and related services, respectively.

OCR may also examine whether a district provides equitable resources to improve teacher quality and retention. Factors that OCR may evaluate include teacher orientation, mentoring, peer support, opportunities and time for professional collaboration, and professional-development programs, including participation in teacher learning communities, teacher retention programs including incentives for teachers in high-need schools, and any good faith efforts to use student performance data, teacher observation data, or other appropriate assessment data to improve instruction.

4. School Leadership

OCR recognizes the critical role school principals and other school leaders play in recruiting and retaining teachers and in fostering teacher effectiveness and overall school success. A growing body of research, including surveys of teachers, shows that principals and other school leaders play an important role in attracting strong teachers to a school, helping teachers become more effective, and retaining effective teachers.⁴⁹ Effective school leaders can create climates of high expectations and a sense of community.

OCR will consider whether there are racial disparities in student access to effective, well-prepared, and stable school leadership, and this will include both leaders in schools and district-level leaders who support groups of schools. As mentioned previously, OCR will take favorable notice of States and districts that have reliable leader evaluation systems and are implementing strategic plans to improve the allocation of effective leaders. OCR may also consider the stability of principals and other school leaders in schools across a district, including data about turnover, absenteeism, use of substitutes, and vacancies. OCR may also consider the following characteristics and qualifications of principals and other school leaders: their levels of experience, their credentials and certification, whether they have completed appropriate training and professional development, and other relevant characteristics.

5. Support Staff

In conjunction with its assessment of access to strong teachers and leaders, OCR may analyze access to high-quality non-instructional and other support staff in schools. These support staff strengthen teaching and learning by providing services to students and implementing

* To assess whether teachers are teaching in or outside of their subject matter expertise, OCR will determine whether the teacher has a major or minor in the subject, has demonstrated subject matter mastery by passing a valid test, or has satisfied an applicable State standard. At the elementary level, OCR would also consider whether teachers have certification, training, and/or education in elementary education.

individualized programs based on students' needs. OCR considers the staff-to-student ratios, training, certification, and years of experience of the support staff to determine whether these critical personnel are supporting students across a district on a nondiscriminatory basis.

For example, paraprofessionals* support teachers and students.† When prepared, deployed, and supervised appropriately, paraprofessionals help teachers to implement effective instructional practices such as smaller group and individualized instruction.⁵⁰ Paraprofessionals may also help lessen teachers' administrative burdens, giving teachers more time to plan and to directly educate students. These critical staff may also provide services and supports as part of IEPs for students with disabilities such as serving as readers, aides, or transportation personnel. OCR considers the ratio of pupils to paraprofessionals and the qualifications of those paraprofessionals (*e.g.*, high school or college diploma, paraprofessional certification). OCR also evaluates the amount of training, professional development, and supervision given to paraprofessionals and the roles that they play in the classroom. OCR's investigations then holistically evaluate whether a school district is providing equitable access to comparably qualified paraprofessionals to all students without regard to race.

Other non-instructional employees whom OCR may consider include school guidance counselors, school psychologists, librarians, specialized therapy providers for students with disabilities (*e.g.*, speech, physical, and occupational therapists), and social workers. The services these employees provide in academic development, social and emotional skill development, and college and career planning contribute to positive student outcomes.⁵¹ Yet low-income students and students of color are less likely to have access to counselors, and in turn to the information and tools necessary to make decisions about pursuing college or a career.⁵² OCR evaluates staff-to-student ratios for these positions and their training and professional qualifications. In addition, OCR looks at other staff members who help students enter the classroom ready to learn, such as social workers or other health professionals, and those who otherwise support the school environment.

* Paraprofessionals include a variety of instructional support positions that do not require a teaching credential or license. Their titles may vary and could include teacher's aide, assistant teacher, classroom aide, classroom assistant, instructional aide, etc.

† In a district-wide, comprehensive resource comparability investigation, OCR would take into account paraprofessionals and other non-instructional staff used for the support of special student populations, such as students with disabilities, English language learners, or gifted students. These investigations certainly consider relevant contextual factors that may affect quantitative comparisons such as higher salaries because of additional certification requirements or smaller staff-to-student ratios that may be required, for example, to implement individualized education programs (IEPs) of particular students with disabilities under the Individuals with Disabilities Education Act (IDEA). However, in some instances, OCR assessments will consider regular education staff separately from these specialized staff, in order to properly analyze potential discrimination in the provision of non-specialized, regular education programs.

C. School Facilities

OCR's investigations may examine those aspects of facilities that affect student achievement and educational outcomes to determine whether the distribution of facilities resources has the purpose or effect of discriminating on the basis of race, color, or national origin.

1. Physical Environment

Research has shown that the quality and condition of the physical spaces of a school are tied to student achievement and teacher retention.⁵³ Structurally sound and well-maintained schools can help students feel supported and valued. Students are generally better able to learn and remain engaged in instruction, and teachers are better able to do their jobs, in well-maintained classrooms that are well-lit, clean, spacious, and heated and air-conditioned as needed.⁵⁴ In contrast, when classrooms are too hot, too cold, overcrowded, dust-filled, or poorly ventilated, students and teachers suffer.⁵⁵ For example, asthma and other chronic health problems, which a facility's poor condition or surrounding environment may exacerbate, have been tied to increased absenteeism among students and teachers. The overall physical condition of the school, including features such as paint, maintenance of carpet and lockers, and the absence of vandalism, has also been linked to improved student achievement.⁵⁶

When investigating whether all students have equal access to comparable facilities, OCR therefore evaluates the overall physical condition of a district's facilities and the availability of sufficient maintenance staff. OCR also considers the location and surrounding environment of school buildings and facilities, as well as the availability and quality of transportation services provided to students.* OCR generally investigates a range of indicators regarding the general upkeep and quality of buildings to judge whether students of color are disproportionately attending schools that are in inferior physical condition or that are physically inaccessible to students with disabilities. OCR would also investigate whether language acquisition programs for English language learners are disproportionately placed or provided in lesser quality facilities.

2. Types and Design of Facilities

The relative quantity and quality of specialized spaces such as laboratories, auditoriums, and athletic facilities are also key considerations in investigating the equitable provision of facilities.⁵⁷ Students need proper laboratory facilities — with sufficient equipment, space, and ventilation — for safe and effective instruction in critical classes such as chemistry and biology.

* Even where transportation is provided to all students, comparable transportation services are not being provided if, for example, students of color, disproportionately, are burdened by unnecessarily longer rides or must ride in older buses that more frequently break down.

Performing-arts programs require practice and performing spaces. Athletic programs, including physical education courses, require proper facilities for practice and competition.

OCR does not mandate that schools have specific types of facilities or that every school in a district have exactly the same type and array of facilities. Instead, OCR investigates whether districts are providing equal access to comparable facilities. Different schools will have different programs and different facility needs, but the diverse needs of a district cannot justify distributing facilities resources in a way that has the purpose or effect of discriminating on the basis of race, color, or national origin.

D. Technology and Instructional Materials

When investigating resource comparability, OCR may evaluate the availability of digital and other instructional materials that enhance instruction, including library resources, computer programs, mobile applications, and textbooks. As discussed below, OCR considers how instructional materials vary between schools in number, quality, and accessibility and whether they are equally available to students without regard to race, color, or national origin.

1. Technology

Technology, when aligned with the curriculum and used appropriately, contributes to improved educational outcomes⁵⁸ and promotes technological literacy. OCR evaluates whether all students, regardless of race, have comparable access to the technological tools given to teachers and students, along with how those tools are supported and implemented.⁵⁹ OCR generally considers the number, type, and age of educational technology devices available in a school, such as laptops, tablets, and audio-visual equipment, among other resources. This assessment includes the availability and speed of internet access.

Additional important factors when considering comparable access to technology include its use to support the school's curriculum, its availability for teachers and students, the use of appropriate technology to support the accessibility of instruction for students with disabilities, and the provision of professional development for teachers on how to use technology to increase student engagement and achievement.⁶⁰ OCR may consider the amount and type of professional development available to teachers, in addition to other services for teachers such as technical support. Key considerations in evaluating whether districts provide comparable access to technology include whether the technology is located within the classroom and how many hours a week students have access to the technology during and after school. For those districts or schools where access to the internet or to other technology outside of school hours is a necessary or presumed aspect of what is expected from students, OCR also examines the extent to which students have access to necessary technology outside of school and how school districts support

students who do not have internet access at home, such as through providing wireless access via a Wi-Fi hotspot at school that is available outside of school hours.*

2. Other Instructional Materials

OCR may also evaluate whether students have comparable access to other materials schools use to instruct students. For example, adequately resourced school libraries (or library media centers) provide teachers and students with up-to-date resource collections and tools to access and navigate those resources.⁶¹ OCR considers the size, content, and age of a school's library collection, including print, video, and digital resources. Student learning from library resources is maximized when the content of the collection is aligned with the curriculum. The availability of information through online databases and internet access is also important in modern school libraries. OCR also considers how often students and teachers have the opportunity to use a library.

A range of other materials can support instruction, such as textbooks, graphing calculators, digital materials and simulations, and hands-on science and math materials. Diverse instructional materials are necessary to deliver certain curricula and can help teachers reach students with different learning needs. OCR may consider the quantity of learning materials available per pupil, the quality of those materials in terms of their age and alignment with the curriculum, and the availability of those materials during and outside of the school day.

IV. Steps to Prevent and Remedy Discrimination in the Provision of Educational Resources

A. Self-Assessment and Monitoring of Title VI Compliance

OCR strongly recommends that school districts proactively assess their policies and practices to ensure that students are receiving educational resources without regard to their race, color, or national origin, including the resources discussed in this letter, as Title VI requires. Periodic self-evaluation enables districts to identify barriers to equal educational opportunity and avoid unnecessary delay in taking corrective action. An effective assessment should incorporate the principles that are outlined in this letter. OCR's Civil Rights Data Collection (CRDC) can help

* Disparities in such support, or inattention to the disparities in internet access at home, may be cause for concern if students need internet access outside of school hours to be successful in the classroom.

inform a district's self-assessment of resource comparability.* In addition, a district's self-assessment of resource comparability may also be informed by any data and analysis considered or strategies undertaken by a State or district in connection with the statutory obligations under the ESEA to ensure that "poor and minority children are not taught at higher rates than other children by inexperienced, unqualified, or out-of-field teachers."⁶²

Self-assessment may include notice to the school community of rights and responsibilities under Title VI and the procedure by which students, parents, and employees may report concerns. Ideally, the district would designate one or more employees to coordinate the district's compliance with Title VI, including self-assessments of resource comparability. Designating one person responsible for overseeing compliance may aid in identifying and addressing any patterns or systemic problems that arise during the assessment and review of any complaints of discrimination. The self-evaluation and monitoring process provides a good opportunity to assess compliance with other aspects of Title VI as well as obligations under other civil rights laws.

School districts that choose to conduct a comprehensive resource equity self-assessment should use reliable methods. (A list of some available materials that school districts may wish to consult in conjunction with such an assessment is available on OCR's website at www.ed.gov/ocr/resourcecomparability.html.) Districts need to ensure that their methods accurately measure and compare the relevant populations' access to and benefit from educational resources. For example, when examining teacher equity, districts should examine the full range of teacher characteristics using multiple measures. They should also consider barriers to students receiving effective teaching, efforts to improve the quality of teachers, and use and quality of teacher retention programs.

Also, districts conducting such a self-assessment should review the policies that govern how resources are distributed to schools and within schools. As one specific example, many districts have policies for determining when and where to build or renovate facilities. Such policies must be nondiscriminatory, and may also be used to remedy inequalities in existing facilities. One policy that may help districts reach comparability is prioritizing the improvement of resources for the schools that need it most rather than simply ensuring that funding and other resources are equally distributed moving forward. Finally, school districts should look at Title VI compliance

* The CRDC is available at <http://ocrdata.ed.gov>. A sample of nearly 7,000 districts was part of the 2009-10 CRDC, and the 2011-12 collection is a universal collection from all school districts and charter schools. The 2013-14 CRDC will also be a universal collection. Of particular interest with respect to resource comparability, it contains data at the district and school levels on student demographics, enrollment in selected academic programs and courses, the number of teachers in their first and second years of teaching, the number of teachers with State certification, teacher absenteeism, teacher salaries, and both personnel and non-personnel expenditures per student. While thus capturing critical data points, the CRDC is limited in scope by OCR's recognition of the cumulative burden of a recurring, universal data collection, and thus the CRDC cannot purport to cover the full range of information that would potentially be relevant to a district's self-assessment of resource comparability.

not only across schools, but also within schools to ensure that students have comparable access regardless of race to the educational resources available in the school such as rigorous academic programs and innovative technology.

The measures described in this letter should be used to compare how educational benefits and burdens are allotted based on the race, color, or national origin of students. If a district's self-assessment identifies significant inequities, districts should take steps calculated to eliminate the inequities and remedy their effects in accordance with the remedial principles discussed below. Such proactive efforts may help a school district avoid a Title VI violation or give the district an opportunity to remedy a violation on its own.

B. Principles Guiding OCR Enforcement and Remedies

If OCR finds that a school district's allocation of educational resources violates Title VI, OCR, as it does in all of its cases, will work with the school district to attempt to resolve the matter in a cooperative fashion. A range of remedies may resolve non-compliance, depending on the facts of each case. In attempting to reach such resolutions, OCR is guided by the following principles:

- Remedies must effectively end the discrimination and eliminate its effects.
- Remedies must be implemented in a timeframe that is prompt and appropriate given the nature and difficulty of the corrective actions at issue.
- OCR encourages school districts to work cooperatively with leaders, teachers, and support staff (and their unions and associations).

C. Courses, Academic Programs, and Extracurricular Activities

When a school district is not providing comparable access to high-quality programs to all students, a variety of approaches can be used to remedy the discrimination. Those remedies could include:

- Developing additional programs for schools where those programs were previously lacking.
- Providing additional training for teachers so they can teach or lead missing courses or programs, allowing the district to expand offerings without having to hire new staff.
- Locating specialized academic programs so they are centrally located or equitably available.
- Ensuring that financial resources are available to support the success of established programs.

- Simplifying requirements for participation in programs at schools other than the school where a student is primarily enrolled and providing assistance with transportation and scheduling.
- Enhancing, through training, the capacity of school personnel and the school community (*e.g.*, principals or PTAs) to raise funds and other resources from outside sources and ensuring that differences in outside source funding do not result in inequitable allocation of opportunities.
- Pairing or grouping schools for the purpose of raising and distributing outside resources.
- Encouraging all students with strong academic performance, assessed through multiple measures, to enroll in advanced coursework and programs, for example, through a policy change from opt-in to opt-out placement into advanced courses.
- Forming partnerships with universities, community-based organizations, and businesses on behalf of schools with limited access to outside resources.

Also, to prevent discrimination from recurring, a district may need to revise its policies and procedures regarding how new programs are developed and located in order to ensure continued equal access for all students to comparable programs.

D. Strong Teaching, Leadership, and Support

If the violation relates to ineffective teachers, leaders, or support staff, remedies that help develop, attract, and retain strong teachers, leaders, and support staff may include:

- School districts can increase effective teaching at particular schools by focusing on supporting the teachers already assigned to that school and preventing excessive turnover. Such efforts can include augmenting existing orientation, mentoring, peer support, or professional-development efforts. For example, a school district could develop a special mentoring program that assigns senior teachers from the same school — or master teachers from across the school district — to assist promising teachers at struggling schools. The school district could also provide teachers at those schools with more preparation time or afford those teachers greater participation in teacher learning communities.
- Assigning a principal or other school leader proven to be effective to a school that has fewer effective teachers can lift the performance of the teachers at that school. Strong leadership increases teacher effectiveness through the direct supervision, training, and mentoring of teachers. In addition, the tone and expectations that principals and other school leaders set for the school, and for the teachers who work there, can have a significant impact on teacher morale and performance. An effective principal or other

school leader may attract effective teachers not only from other schools within the district, but also from teaching training programs and from schools outside of the district.

- Improving the entire system of human capital management for a school district can help to ensure the district and all of its schools have valid and reliable data about teacher and principal effectiveness to help them recruit, develop, and retain the educators they need in all schools.
- School environments, physical and cultural, sometimes contribute to a discriminatory allocation of effective teachers. Thus improving working conditions and school climate can be part of remedying inequitable allocations of effective teachers.
- Districts can provide incentives for effective teachers, including those with more experience or quality training, to choose to teach in hard-to-staff schools, such as additional planning time, monetary incentives, or other benefits. Making such incentives available to effective teachers already in these schools as well as those choosing to transfer to such schools could help stabilize their teacher workforce and attract more experienced and effective teachers.
- OCR will work with school districts to identify remedies that do not conflict with staffing policies or vested teacher rights. When a district's adherence to collective bargaining agreements or State law has caused or contributed to discrimination against students on the basis of race, color, or national origin, Federal civil rights obligations may require a school district to renegotiate agreements, revise its personnel policies, or take other steps to remedy the discrimination.⁶³ OCR will work with school districts to think creatively in remedying discrimination in effective teaching and to develop solutions that increase effective teaching district- and school-wide, rather than merely shifting resources among the schools in the district.
- School districts' and statewide hiring policies that contribute to or fail to address discrimination in the allocation of effective teachers and support staff should be revised. For example, hiring early (*e.g.*, in the spring rather than the summer or fall) for a new school year, even if this in some cases requires hiring before specific school vacancies have been identified, can lead to higher quality personnel.

- Even seemingly minor procedural rules that help hard-to-staff schools and districts fill vacancies earlier can significantly influence the relative allocation of quality staff, and therefore changes in such rules may be required to remedy discrimination.*

E. Technology, Instructional Materials, and School Facilities

Ensuring the nondiscriminatory allocation of and access to physical resources such as technology, instructional materials, and, particularly, facilities across school districts may require significant financial investment from the district, which may not always be readily available. As a result, OCR generally focuses on forward-looking remedies that target financial resources to the schools, and therefore the students, harmed by discrimination.[†] Where construction or other significant capital expenditures would be required, OCR understands that gaps in resource comparability cannot be remedied immediately. At the same time, lack of funding is not a defense for noncompliance with Federal civil rights obligations. Therefore, if a violation is found, a district will be expected to put in place a clear plan for remedying the inequality in a timely fashion. For example:

- School districts may need to purchase additional textbooks, computers, or other materials for schools that have fallen behind in the quality or quantity of these resources.
- School districts may need to ensure that all schools are properly maintained, which would necessitate employing sufficient custodial staff to adequately care for the facilities.
- Schools that have been neglected or are otherwise in worse condition than other schools may need to allocate additional maintenance dollars to restore a basic level of cleanliness and usability.

In some cases, remedies might include finding ways for schools to share facilities such as athletic fields or auditoriums if that can be done without placing additional burdens in areas such as scheduling and transportation disproportionately on the same students who were being denied the facilities in the first place. Generally, OCR would accept sharing of facilities and other physical resources only as a last resort or as a temporary measure while the district and local officials raised the capital funds to provide additional facilities. However, in some cases, such as disparities existing between two schools already co-located within one larger building, sharing of facilities and other physical resources may be both a necessary and an acceptable solution so

* For example, prioritizing and streamlining the administrative processes for filling a vacancy at hard-to-staff schools may help overcome some of the staffing challenges they face by allowing vacancies to be posted earlier, leading to longer available selection periods and larger and more qualified applicant pools.

[†] OCR may consider, in designing short-term portions of remedies, that some physical resources are not permanent fixtures — computers, books, tables, chairs, etc. Therefore, remedies could include shifting some resources to other locations if it is truly not financially possible to reach comparability through additional investment.

long as it does not perpetuate, or inhibit the expeditious remediation of, the disparities that gave rise to the Title VI violation.

V. Conclusion

We appreciate your attention to ensuring that students of all races and national origin backgrounds have equal access to effective teaching, adequate facilities, and quality instructional programs and support, and thus have an equal opportunity to attain the academic success upon which our future depends. We encourage you to share this information with other decision-makers so you can examine together how to best promote the educational excellence of all students.

If you have questions or need technical assistance, please contact the OCR regional office serving your State or territory by visiting www.ed.gov/ocr or call OCR's Customer Service Team at 1-800-421-3481; TDD: 800-877-8339, or for a list of additional sources of technical assistance visit www.ed.gov/ocr/resourcecomparability.html. We look forward to continuing our work together to ensure equal access to education for all of America's students.

Yours sincerely,

/s/

Catherine E. Lhamon
Assistant Secretary for Civil Rights

Endnotes

¹ *Brown v. Bd. of Educ. of Topeka (No. 1.)*, 347 U.S. 483, 493 (1954).

² See generally Dear Colleague Letter from Secretary Riley on Resource Equity (January 19, 2001) (citing evidence that students in school districts with higher percentages of students of color have access to fewer and lower-quality resources than students in districts with fewer students of color and summarizing the obligation under Title VI to allocate resources in a nondiscriminatory manner), available at www.ed.gov/about/offices/list/ocr/letters/colleague-200101-title-vi.pdf; U.S. Department of Education, *For Each and Every Child — A Strategy for Education Equity and Excellence*, Washington, D.C. (2013) [hereinafter *Equity Commission Report*] available at <http://www2.ed.gov/about/bdscomm/list/eec/equity-excellence-commission-report.pdf>. The Equity and Excellence Commission was a congressionally mandated convening of 27 leading education experts, researchers, and policymakers representing a wide array of perspectives on education reform. The Equity Commission Report, offered by the Equity and Excellence Commission to the Secretary of Education, details the problems of education inequality and offers unanimous policy recommendations at the local, State, and Federal levels addressing these problems.

³ The Department has determined that this Dear Colleague Letter is a “significant guidance document” under the Office of Management and Budget’s Final Bulletin for Agency Good Guidance Practices, 72 Fed. Reg. 3432 (Jan. 25, 2007), available at www.whitehouse.gov/sites/default/files/omb/fedreg/2007/012507_good_guidance.pdf. This and other policy guidance is issued to provide recipients with information to assist them in meeting their obligations, and to provide members of the public with information about their rights, under the civil rights laws and implementing regulations that we enforce. The Department’s legal authority is based on those laws. This guidance does not add requirements to applicable law, but provides information and examples to inform recipients about how the Department evaluates whether covered entities are complying with their legal obligations. If you are interested in commenting on this guidance, please send an e-mail with your comments to OCR@ed.gov, or write to the following address: Office for Civil Rights, U.S. Department of Education, 400 Maryland Avenue, S.W., Washington, D.C. 20202.

⁴ See Will Dobbie & Roland G. Fryer, *Are High-Quality Schools Enough to Increase Achievement Among the Poor? Evidence from the Harlem Children’s Zone*, AM. ECON. J. APPLIED ECON. (July 2011) at 158-87 (showing that the effect of the quality of the school is distinguishable from the effects of neighborhood poverty and the existence of wrap-around services in explaining the increase in student achievement seen in the Harlem Children’s Zone). See also *Equity Commission Report*, *supra* note 2, at 14:

Our education system, legally desegregated more than a half century ago, is ever more segregated by wealth and income, and often again by race. Ten million students in America’s poorest communities—and millions more African American, Latino, Asian American, Pacific Islander, American Indian and Alaska Native students who are not poor—are having their lives unjustly and irredeemably blighted by a system that consigns them to the lowest-performing teachers, the most run-down facilities, and academic expectations and opportunities considerably lower than what we expect of other students. These vestiges of segregation, discrimination and inequality are unfinished business for our Nation.

Admittedly, many of these disadvantaged students enter school far behind their more advantaged peers. But instead of getting deadly serious about remedying that fact—by making sure such students are in high-quality early childhood and pre-K programs, attend schools staffed with teachers and leaders who have the skills and knowledge to help each student reach high standards, get after-school counseling or tutorial assistance or the eyeglasses they need to see the smart board—the current American system exacerbates the problem by giving these children less of everything that makes a difference in education.

⁵ See William C. Symonds, Robert B. Schwartz, and Ronald Ferguson (2011), “Pathways to Prosperity: Meeting the Challenge of Preparing Young Americans for the 21st Century” Report issued by the Pathways to Prosperity Project, Harvard Graduate School of Education; C. Adelman, *The Toolbox Revisited: Paths to Degree Completion From High School Through College*, (2006), Washington, D.C.: U.S. Department of Education; Wayne Camera, *College Persistence, Graduation, and Remediation*, (Mar. 2003), <http://research.collegeboard.org/sites/default/files/publications/2012/7/researchnote-2003-19-college-persistence-graduation-remediation.pdf>; David K. Cohen et al., *Resources, Instruction, and Research*, 25 EDUC. EVALUATION & POL’Y ANALYSIS 119 (2003).

Ninety-two percent of the States reported having higher graduation rates for career and technical education students, as compared to the overall State graduation rate of all students in their respective States for program years 2008-09 and 2009-10. See Carl D. Perkins *Career and Technical Education Act of 2006, Report to Congress on State Performance, Program Year 2008–09*, Washington, D.C., 2012, at http://cte.ed.gov/docs/Rpt_to_Congress/Perkins_RTC_2008-09.pdf, pp. 37–40; Carl D. Perkins *Career and Technical Education Act of 2006, Report to Congress on State Performance, Program Year 2009–10*, Washington, D.C., 2013, at http://cte.ed.gov/docs/Rpt_to_Congress/Perkins_RTC_2009-10.pdf, p. 34 and pp. 36–39.

The importance of equitable access to comparable educational offerings in both curricular and extracurricular programs is well established in a long line of U.S. Supreme Court decisions in the context of desegregation at the elementary and secondary education level, as well as in higher-education desegregation. See, e.g., *Green v. County School Bd. of New Kent County, Va.*, 391 U.S. 430 (1968) (extracurricular programs identified as one of six factors to evaluate in determining whether a school district has fully eliminated the vestiges of *de jure* segregation); *United States v. Fordice*, 505 U.S. 717 (1992) (reaffirming the legal standards regarding the affirmative duty to dismantle *de jure* segregation at the higher education level, including whether unnecessary duplication of educational programs at formerly segregated postsecondary institutions and failure to provide comparable, though differentiated, specialized programs is a vestige of that discrimination that contributes to any continual racial identifiability of those institutions).

⁶ See Christopher M. Johnson & Jenny E. Memmott, *Examination of Relationships between Participation in School Music Programs of Differing Quality and Standardized Tests Results*, 54 J. RES. MUSIC EDUC. 293 (2006); Daryl W. Kinney, *Selected Demographic Variables, School Music Participation, and Achievement Test Scores of Urban Middle School Students*, 56 J. RES. MUSIC EDUC. 145 (2008); Allan G. Richards, *Arts and Academic Achievement in Reading: Functions and Implications*, ART EDUC., Nov. 2003, at 19-23; but see Ellen Winner & Monica Cooper, *Mute Those Claims: No Evidence (Yet) for a Causal Link between Arts Study and Academic Achievement*, J. AESTHETIC EDUC., Autumn – Winter 2000, at 11-75 (finding research support for a positive correlation between arts study and academic achievement in correlational studies, although not in experimental design studies to date).

⁷ William Carbonaro, *Tracking, Students’ Effort, and Academic Achievement*, 78 SOC. EDUC. 27 (2005).

⁸ See *Equity Commission Report*, supra note 2, at 32 (“After-school, extended-day, summer and other extended-learning experiences can both stem learning loss and accelerate student achievement.”); Jaime L. Del Razo & Michelle Renée, *Expanding Equity through More and Better Learning Time*, *The Next Four Years: Recommendations for Federal Educ. Pol’y*, Winter/Spring 2013, at 29 (“Schools using evidence-based [extended learning time] practices and supporting programs have improved student achievement across several student subgroups”) (citing Susan J. Bodilly & Megan K. Beckett, *Making Out-of-School-Time Matter Evidence for an Action Agenda*, (2005), www.rand.org/pubs/monographs/MG242.html; Ann Duffett et al., *All Work and No Play? Listening to What Kids and Parents Really Want from Out-of-School Time* (2004), www.wallacefoundation.org/knowledge-center/after-school/key-research/Documents/All-Work-and-No-Play.pdf; American Youth Policy Forum. (2006). *Helping Youth Succeed Through Out of School Time Programs*. Washington, DC: American Youth Policy Forum) available at <http://vue.annenberginstitute.org/sites/default/files/issuePDF/VUE36.pdf>; Beckett A. Broh, *Linking Extracurricular Programming to Academic Achievement: Who Benefits and Why?*, 75 SOC. EDUC. 69 (2002); Amy F. Feldman & Jennifer L. Matjasko, *The Role of School Based Extracurricular Activities in Adolescent Development: A Comprehensive Review and Future Directions*, 75 REV. EDUC. RES. 159 (2005); James B. Schreiber & Elisha A. Chambers, *After School Pursuits, Ethnicity, and Achievement for 8th- and 10th- Grade Students*, 96 J. EDUC. RES.

90 (2002); Simone Travis O'Bryan et al., *Bringing Parents Back In: African American Parental Involvement, Extracurricular Participation, and Educational Policy*, 75 J. NEGRO EDUC. 401 (2006); Endya B. Stewart, *Individual and School Structural Effects on African American High School Students' Academic Achievement*, HIGH SCH. J., Dec. 2007 – Jan. 2008, at 16-34.

⁹ Adelman, *supra* note 5; Grace Kao & Jennifer S. Thompson, *Racial and Ethnic Stratification in Educational Achievement and Attainment*, 29 ANN. REV. SOC. 417 (2003); C. Adelman, *Answers in the Tool Box: Academic Intensity, Attendance Patterns, and Bachelor's Degree Attainment*, (1999), Washington, DC: U.S. Department of Education.

¹⁰ Philip Handwerk et al., *Access to Success: Patterns of Advanced Placement Participation in U.S. High Schools*, (July 2008), www.ets.org/Media/Research/pdf/PIC-ACCESS.pdf (finding six percent of Asian students, 12 percent of Latino students, and 14 percent of white students attend high schools without any Advanced Placement courses).

¹¹ U.S. Department of Education, Office for Civil Rights, *Civil Rights Data Collection: 2011-12: Data Snapshot: College and Career Readiness*, (Mar. 21, 2014), www.ed.gov/ocr/docs/crdc-college-and-career-readiness-snapshot.pdf.

¹² *Id.* Schools with the highest and lowest combined black and Latino enrollment are in the top and bottom quintiles, respectively, within the district in terms of combined black and Latino enrollment.

¹³ *Id.*

¹⁴ *Id.*

¹⁵ Donald Boyd et al., *The Narrowing Gap in New York City Teacher Qualification and Its Implications for Student Achievement in High Poverty Schools*, 27 J. POL'Y ANALYSIS & MGMT. 793, 794 (2008) (“A growing literature finds that teachers ‘sort’ very unequally across schools, with the least-experienced teachers and those with the poorest academic records often found in schools with the highest concentrations of low-income, low-performing, and minority students.”); Charles T. Clotfelter et al., *Teacher Credentials and Student Achievement in High School: A Cross Subject Analysis with Student Fixed Effects*, 45 J. HUM. RESOURCES 655, 656-57 (2010) (“[T]he uneven distribution of teacher credentials by race and socio-economic status of high school students...means that minority students and those with less well-educated parents do not have equal access to a high quality education at the high school level.”); Eric Isenberg et al. (2013), *Access to Effective Teaching for Disadvantaged Students* (NCEE 2014-4001), 41, National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education, available at <http://ies.ed.gov/ncee/pubs/20144001/pdf/20144001.pdf> (study of 29 geographically diverse districts found significant disparities in access to effective teachers for students receiving free- and reduced-price lunch (FRL). The study estimated that by providing all students with equal access to effective teachers, “[t]he difference in student achievement between FRL and non-FRL students would decrease from 28 percentile points to 26 percentile points in ELA and from 26 percentile points to 24 percentile points in math.” Similar disparities based on race and national origin were found in the 15 study districts in which at least 15 percent of the students were white and 15 percent of the students identify as the same non-white race or national origin.); Corey Koedel & Julian R. Betts, *Re Examining the Role of Teacher Quality in the Educational Production Function* (Apr. 2007), http://economics.missouri.edu/working-papers/2007/wp0708_koedel.pdf (concluding that in one district 80% of the variation in teacher quality was within elementary schools rather than between schools); Daniel Aaronson et al., *Teachers and Student Achievement in the Chicago Public High Schools*, 25 J. LAB. ECON. 95 (2007) (another district-level study finding more variation in teacher quality between schools than within schools); Charles T. Clotfelter et al., *Who Teaches Whom? Race and the Distribution of Novice Teachers*, 24 ECON. EDU. REV. 377, 391 (2005) (“Within districts, novice teachers are disproportionately assigned to schools and to the classrooms within schools that disproportionately serve black students.”); Steven G. Rivkin et al., *Teachers, Schools, and Academic Achievement*, 73 ECONOMETRICA 417, 421 (2005) (“[M]uch of the variation in teacher quality exists within rather than between schools.”). Since research is mixed on whether within-school or between-school comparisons are more likely to find disparities in teacher quality, OCR retains discretion to focus on either or both comparisons depending on relevant contextual factors including, but not limited to, the specific allegations of discrimination in a complaint.

¹⁶ Clotfelter (2005), *supra* note 15, at 379 (“It seems reasonable to conclude from this previous research that teachers with no prior experience are undoubtedly on average less effective than other teachers.”). See more discussion in text accompanying note 48, *infra*.

¹⁷ U.S. Department of Education, Office for Civil Rights, *Civil Rights Data Collection: 2011-12: Data Snapshot: Teacher Equity*, (Mar. 21, 2014), www.ed.gov/ocr/docs/crdoc-teacher-equity-snapshot.pdf. This analysis compares the percentage of teachers in their first or second years of teaching in schools with the highest and lowest combined black and Latino enrollment in the 2011-12 CRDC. Schools with the highest and lowest combined black and Latino enrollment are in the top and bottom quintiles, respectively, within the district in terms of combined black and Latino enrollment. Specifically, six percent of teachers in the top quintile of schools, ranked by percentage of black and Latino enrollment, are in their first or second year of teaching, compared to four percent of teachers in the lowest quintile.

¹⁸ Frank Adamson & Linda Darling-Hammond, *Funding Disparities and the Inequitable Distribution of Teachers: Evaluating Sources and Solutions*, EDUC. POL’Y ANALYSIS ARCHIVES, Nov. 19, 2012, at 30-32, available at <http://epaa.asu.edu/ojs/article/view/1053> (documenting inequalities in the allocation of high-quality teachers and in teacher salaries, as well as finding that teacher qualifications are related to student achievement, even when controlling for demographic variables known to impact student achievement); Charles T. Clotfelter et al., *Teacher Credentials and Student Achievement: Longitudinal Analysis with Student Fixed Effects*, 26 ECON. EDUC. REV. 673, 673 (2007) (“Taken together the various teacher credentials exhibit quite large effects on math achievement, whether compared to the effects of changes in class size or to the socio-economic characteristics of students.”); Rivkin *supra* note 15, at 419 (“The results reveal large differences among teachers in their impacts on achievement and show that high quality instruction throughout primary school could substantially offset disadvantages associated with low socioeconomic background.”); see also Erik A. Hanushek, *The Economic Value of Higher Teacher Quality*, 30 ECON. EDUC. REV. 466, 467 (2011) (“Some teachers year after year produce bigger gains in student learning than other teachers. The magnitude of the differences is truly large, with some teachers producing 1½ years of gain in achievement in an academic year while others with equivalent students produce only ½ year of gain.”); Daniel Aaronson et al., *Teachers and Student Achievement in the Chicago Public High Schools*, 25 J. LAB. ECON. 95 (2007) (finding that the difference between teachers in the 90th and 10th percentile in quality is nine-tenths of a year of gain in achievement while the difference between teachers in the 75th and 25th percentile is four-tenths of a year).

¹⁹ Mary W. Filardo, *Growth and Disparity: A Decade of U.S. Public School Construction*, (Oct. 2006), www.ncef.org/pubs/GrowthandDisparity.pdf.

²⁰ U.S. Department of Education, National Center for Education Statistics, Issue Brief, *How Old are America’s Public Schools?*, (January 1999), <http://nces.ed.gov/pubs99/1999048.pdf> (finding that older schools enroll more low-income students and are concentrated in the urban fringe); U.S. Department of Education, National Center for Education Statistics, *Condition of America’s Public School Facilities: 1999*, NCES 2000-032, by Laurie Lewis et al. (June 2000), <http://nces.ed.gov/pubs2000/2000032.pdf> (“GAO reported that in 1994, the largest proportion of schools reporting deficient school conditions was in central cities serving more than 50 percent minority students or 70 percent or more poor students.”) (citing United States General Accounting Office, *School Facilities: Condition of America’s Schools*, (Feb. 1995), Report to Congressional Requesters, www.gao.gov/assets/230/220864.pdf).

A recent update to the 2000 study from the National Center for Education Statistics show that racial disparities in access to comparable facilities still exist, though with some disparities actually favoring students of color; the clearest disparities were found between schools that are over 50 percent students of color and schools with 21 to 49 percent students of color. Debbie Alexander & Laurie Lewis (2014). *Condition of America’s Public School Facilities: 2012–13*, NCES 2014-022, U.S. Department of Education, National Center for Education Statistics, <http://nces.ed.gov/pubs2014/2014022.pdf>.

²¹ Forty-five percent of schools with over 50 percent students of color have temporary, portable buildings compared with only 13 percent of schools with less than 6 percent students of color and 32 percent of schools with 21 to 49 percent students of color. Twenty percent of schools with over 50 percent of students of color have exterior walls and finishes in fair or poor condition, compared with only 15 percent for schools with 21 to 49 percent students of

color. Similarly, 31 percent of schools with a majority of students of color have fair or poor quality exterior lighting, compared to 26 percent of schools with 21 to 49 percent students of color. See Alexander & Lewis, *supra* note 20.

²² See, e.g., Larissa Campuzano et al., *Effectiveness of Reading and Mathematics Software Products: Findings From Two Student Cohorts*, (NCEE 2009-4041). National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education (Feb. 2009), <http://ies.ed.gov/ncee/pubs/20094041/pdf/20094041.pdf> (an experimental design study with mixed results on the benefits to student achievement tied to specific technology interventions finding statistically significant and positive effects on student achievement from a Grade 4 reading intervention, but no statistically significant effects on student achievement from Grade 1 reading, Grade 6 math, and Algebra 1 software interventions). The research in this area is still developing. There are, however, independent benefits to technological literacy as a skill beyond potential benefits to reading and math outcomes. OCR has concluded that equitable access to technology in the classroom is an educational benefit that school districts should provide to students regardless of their race, color, or national origin.

²³ Linda Darling-Hammond, *The Color Line in American Education: Race, Resources, and Student Achievement*, 1 DUBOIS REV. SOC. SCI. RES. ON RACE 213 (2004); Louis Harris, Report on the Status of Public Education in California, (May 2004), <http://idea.gseis.ucla.edu/publications/files/Harris.pdf>; Jeannie Oakes & Marisa Saunders, *Education's Most Basic Tools: Access to Textbooks and Instructional Materials in California's Public Schools*, 106 TEACHERS C. REC. 1967 (2004).

²⁴ Lucinda Gray et al., *Educational Technology in U.S. Public Schools: Fall 2008*, (Apr. 2010), (NCES 2010-034), U.S. Department of Education, National Center for Education Statistics. <http://nces.ed.gov/pubs2010/2010034.pdf>; John Wells & Laurie Lewis, *Internet Access in U.S. Public Schools and Classrooms: 1994-2005*, (November 2006), U.S. Department of Education, National Center for Education Statistics, <http://nces.ed.gov/pubs2007/2007020.pdf>; Michael Eskenazi et al., *The Dynamics of Resources, Demographics, and Behavior in the New York City Public Schools*, (October 2003), <http://stage.web.fordham.edu/images/ncsc/equityorexclusion.pdf>.

²⁵ Dennis J. Condrón & Vincent J. Roscigno, *Disparities Within: Unequal Spending and Achievement in an Urban School District*, 76 SOC. EDUC. 18, 30 (2003) (“[S]chools that spend more exhibit higher levels of academic achievement.... A \$1,000 increase in local instructional spending per student leads to from about 6 percent to about 10 percent more students passing the proficiency tests.... [W]e found that higher spending promotes achievement through particular school resources. Instructional spending from local sources and operations/maintenance spending both promote achievement through the school’s physical condition and the degree of order/consistency in the learning environment.”); Spyros Konstantopoulos & Vicki Chun, *What Are the Long-Term Effects of Small Classes on the Achievement Gap? Evidence from the Lasting Benefits Study*, 116 AM. J. EDUC. 125 (2009) (evaluating class size reduction as a resource allocation strategy by “examin[ing] the long-term effects of small classes on the achievement gap in mathematics, reading, and science scores” and finding that “longer exposure to small classes in early grades increases student achievement in later grades for all students and for low achievers in particular”); Latika Chadhaury, *Education Inputs, Student Performance and School Finance Reform in Michigan*, 28 ECON. EDUC. REV. 98, 98 (2009) (“The findings of this paper suggest that there is a causal relationship between spending and test performance... [A]lthough the results on the beneficial effects of class size are inconclusive, higher teacher salary does appear to positively impact test performance. Overall, the findings suggest that school finance reforms, which increase expenditures, might be more effective if spending increases are targeted toward increasing teacher salaries that are perhaps a crude proxy for teacher quality.”); David N. Figlio, *Can Public Schools Buy Better-Qualified Teachers?*, 55 INDUS. & LAB. RELATIONS REV. 686, 697 (2002) (finding a “positive, statistically significant relationship between changes in a [non-union] school district’s teacher salaries and its likelihood of recruiting higher-qualified teachers, measured in terms of college selectivity as well as subject matter expertise.”); Susanna Loeb & Marianne Page, *Examining the Link Between Teacher Wages and Student Outcomes: The Importance of Alternative Labor Market Opportunities and Non-Pecuniary Variation*, 82 REV. ECON. & STAT. 393, 393 (2000) (“[O]nce we adjust for labor market factors, we estimate that raising teacher wages by 10% reduces high school dropout rates by 3% to 4%. Our findings suggest that previous studies have failed to produce robust estimates because they lack adequate controls for non-wage aspects of teaching and market differences in alternative occupational opportunities.”); Marta Elliott, *School Finance and Opportunities to Learn: Does Money Well Spent Enhance Students’ Achievement?*, 71 SOC. EDUC. 223, 239 (1998) (“The findings of this study ... provide firm

support for the position that money does, in fact, affect students' achievement. Both the math and science analyses confirm that money matters and that teaching practices and classroom resources matter. . . . In the case of science, the results . . . provid[e] strong evidence that how money is spent affects what takes place in the classroom, which, in turn, affects students' learning. In addition to hiring more educated teachers, money can be used to train teachers to emphasize inquiry skills and to purchase an adequate amount of science equipment in relatively good condition.”); Deborah A. Verstegen & Richard A. King, *The Relationship Between School Spending and Student Achievement: A Review and Analysis of 35 Years of Production Function Research*, 24 J. EDUC. FIN. 243, 262 (1998) (“[T]here are clear relationships between funding and achievement emerging from the recent body of production function research. These studies provide further evidence that money matters in producing educational outcomes.”).

²⁶ Bruce D. Baker, David G. Sciarra, & Danielle Farrie, *Is School Funding Fair?: A National Report Card*, 3d Ed., Education Law Center, January 2014. available at www.schoolfundingfairness.org; Robert Bifulco, *District-Level Black-White Funding Disparities in the United States, 1987*, 31 J. EDUC. FIN. 172, 192 (2005) (“The estimates of black-white funding disparities presented here indicate that the average black student’s district has between 3% and 16% less funding than it needs to provide its students an equal expectation of achieving the same standards as students in the average white student’s district.”); Condrón & Roscigno, *supra* note 25, at 32 (“[I]nequality in spending appears to correspond to the racial and class composition of schools. Schools with the highest proportions of poor students are particularly disadvantaged, while race is somewhat less salient. This inequality appears to be a result of an allocation dynamic through which fewer *local* dollars land in high-poverty schools, weakening the intended compensatory effect of federal Title I funds.”); Bruce D. Baker & Preston C. Green III, *Tricks of the Trade: State Legislative Actions in School Finance Policy That Perpetuate Racial Disparities in the Post-Brown Era*, 111 AM. J. EDUC. 372, 406 (2005) (“We have found that racially neutral state aid policies in two formerly de jure segregated states, Alabama and Kansas, have caused racial funding disparities.”).

²⁷ See 20 U.S.C. § 6321(c). Title I funds must supplement, not supplant, the funds provided from non-Federal sources for the education of Title I participants, and school districts are obligated to support schools equitably in the provision of non-Federal funds.

²⁸ Condrón & Roscigno, *supra* note 25, at 29 (“Given the unequal distribution of local resources, however, the Federal funds are not able to bring the disadvantaged schools up to the level of total per-student spending found in disproportionately white and higher-SES schools. Title I money, in other words, does not make up for existing local inequality in the allocation of resources.”).

²⁹ *But see* Joydeep Roy, *Impact of School Finance Reform on Resource Equalization and Academic Performance: Evidence from Michigan*, 6 EDUC. FIN. POL’Y 137, 163, 165 (2011) (finding Michigan’s school finance reform reduced inter-district spending inequalities and was associated with “significant positive improvement in performance in the lowest-spending districts,” but there was “suggestive evidence that the constraints imposed . . . on discretionary increases in spending had a negative effect on student performance in the highest-spending districts.”) (suggesting that remedies focusing only on funding systems may not be sufficient to improve educational outcomes because of unintended adverse consequences).

³⁰ *Data Snapshot: Teacher Equity*, *supra* note 17 (This analysis compares the average teacher salaries at schools with the highest and lowest combined black and Latino enrollment. Schools with the highest and lowest combined black and Latino enrollment are in the top and bottom quintiles, respectively, within the district in terms of combined black and Latino enrollment.)

Similarly, a 2011 U.S. Department of Education study found that many high-poverty schools do not receive an equitable share of State and local funds from their school districts, based on school-level expenditure data for 2007-08 that States and districts reported in response to a requirement under the *American Recovery and Reinvestment Act*. The study found that more than 40 percent of schools that received Federal Title I funding to serve disadvantaged students spent less State and local funding on teachers and other personnel than non-Title I schools at the same grade level in the same school district, leaving students in these high-poverty Title I schools with a resource disadvantage. Title I of the ESEA includes a “Comparability of Services” provision that requires districts to provide services in Title I schools from State and local funds that are at least comparable to those provided in non-Title I schools. See P.L. 107-110 Section 1120A(c). Federal Title I funds are designed to provide extra funding for the education of disadvantaged children, on top of an equitable State and local funding base.

However, the current Title I comparability provision has loopholes that allow districts to mask spending disparities between schools. For a description of the resulting within-district disparities, see U.S. Department of Education, Office of Planning, Evaluation and Policy Development, Policy and Program Studies Service, *Comparability of State and Local Expenditures Among Schools Within Districts: A Report From the Study of School-Level Expenditures*, by Ruth Heuer & Stephanie Stullich, (Nov. 2011), <http://www2.ed.gov/rschstat/eval/title-i/school-level-expenditures/school-level-expenditures.pdf>.

³¹ See generally, *Equity Commission Report*, *supra* note 2.

³² 42 U.S.C. § 2000d *et seq.* See also 34 C.F.R. Part 100 (implementing regulations).

³³ 34 C.F.R. § 100.3(a), (b). Under the regulations implementing Title VI, districts are prohibited from unjustifiably “utiliz[ing] criteria or methods of administration which have the effect of subjecting individuals to discrimination because of their race, color, or national origin, or have the effect of defeating or substantially impairing accomplishment of the objectives of the program as respect individuals of a particular race, color, or national origin.” 34 C.F.R. § 100.3(b)(2). See also Memorandum from Ralph F. Boyd, Jr., Assistant Attorney General, to Heads of Departments and Agencies, General Counsels and Civil Rights Directors (Oct. 26, 2001)), at 2, available at www.justice.gov/crt/about/cor/lep/Oct26memorandum.pdf. Although the Supreme Court in *Alexander v. Sandoval* held that private individuals have no right to sue to enforce the disparate-impact provision of the Title VI regulations, it did not undermine the validity of the regulations or otherwise limit the government’s authority and responsibility to enforce Title VI regulations. See 532 U.S. 275 (2001).

³⁴ Note that Title VI not only prohibits direct violations by recipients of Federal funds, but also violations “through contractual or other arrangements.” 34 C.F.R. § 100.3(b). Thus, school districts cannot avoid their nondiscrimination obligations by delegating responsibility to third parties.

³⁵ See, e.g., *Village of Arlington Heights v. Metro. Hous. Dev. Corp.*, 429 U.S. 252, 265-68 (1977) (identifying a non-exhaustive list of factors that may serve as indicia of discriminatory intent). For further discussion of this topic, see Dear Colleague Letter from Assistant Secretary for Civil Rights Catherine E. Lhamon and Acting Assistant Attorney General for Civil Rights Jocelyn Samuels on Nondiscriminatory Administration of School Discipline (Discipline DCL) (Jan. 8, 2014), at 7-10, available at <http://www2.ed.gov/about/offices/list/ocr/letters/colleague-201401-title-vi.pdf>.

³⁶ See generally *Elston v. Talladega County Bd. of Educ.*, 997 F.2d 1394 (11th Cir. 1993); U.S. Department of Justice, *Title VI Legal Manual*, (Jan. 11, 2001), www.justice.gov/crt/about/cor/coord/vimanual.php; U.S. Department of Education, *Racial Incidents and Harassment against Students at Educational Institutions*, 59 Fed. Reg. 11,448 (Mar. 10, 1994). See also *McDonnell Douglas Corp. v. Green*, 411 U.S. 792 (1973) (an employment discrimination case setting forth a three-part test that also applies in the context of discrimination in education under Title VI and Title IV of the Civil Rights Act of 1964 in court and administrative litigation to determine whether an institution has engaged in prohibited discrimination). See also Discipline DCL, *supra* note 35, at 8-10.

³⁷ See Discipline DCL, *supra* note 35, at 11-13.

³⁸ See *Elston*, 997 F.2d at 1411-12 (explaining that courts have required schools to demonstrate an “educational necessity” for the challenged program, practice, or procedure). In analyzing discrimination under the disparate impact framework, OCR uses “substantial, legitimate educational justification”, “necessary to meet an important educational goal”, and “educational necessity” to convey the same standard regarding the justification for a disparate impact by a recipient that will be acceptable to OCR.

³⁹ See *Elston*, 997 F.2d at 1413.

⁴⁰ Cases interpreting the U.S. Constitution’s Equal Protection Clause and Title VI support the importance of resource allocation among schools within a district in assessing whether the district is in compliance with its Federal civil rights obligations. See, e.g., *Green v. County School Bd. of New Kent County, Va.*, 391 U.S. 430 (1968) (setting forth six factors for evaluating whether districts have achieved “unitary status” by eliminating the vestiges of *de jure* segregation: student assignment, faculty, staff, facilities, extracurricular activities, and transportation); *Swann v. Charlotte-Mecklenburg Bd. of Educ.*, 402 U.S. 1 (1971) (articulating guidelines for courts to help school districts convert racially separate school systems into constitutionally acceptable systems, particularly with respect to new

school construction, faculty assignment, and transportation); *Freeman v. Pitts*, 503 U.S. 467 (1992) (adding relative quality of education to the six *Green* factors used in assessing unitary status); *Bd. of Educ. of Oklahoma City Public Schools v. Dowell*, 498 U.S. 237 (1991) (directing district court to consider student assignments and “every facet of school operations — faculty, staff, transportation, extra-curricular activities and facilities” in considering whether the vestiges of school system’s *de jure* segregation had been eliminated).

Numerous State courts have also deemed inequitable access to these educational resources unlawful under their State constitutions. *See, e.g., Rose v. Council for Better Educ., Inc.*, 790 S.W.2d 186, 198 (Ky. 1989) (teacher pay, student-teacher ratios, school facilities, instructional materials); *Edgewood Indep. Sch. Dist. v. Kirby*, 777 S.W.2d 391, 393 (Tex. 1989) (teacher and school leadership experience, teacher aides, student-teacher ratios, class sizes, school facilities, libraries, broader curriculum, advanced courses, technology, counseling and support services, educational programs, extracurricular activities); *Tenn. Small Sch. Sys. v. McWherter*, 851 S.W. 2d 139, 143-46 (Tenn. 1993) (teacher training and experience, school facilities, equipment and supplies, science labs, libraries, textbooks, AP courses, educational programs, athletic and extracurricular activities); *McDuffy v. Sec’y of Executive Office of Educ.*, 615 N.E.2d 516, 617 (Mass. 1993) (class sizes, teacher quality, retention, and training, quantity of staff and guidance counselors, library quality, updated curriculum, academic programs, student services); *Campbell County Sch. Dist. v. State*, 907 P.2d 1238, 1279 (Wyo. 1995) (class size, school size, student-teacher ratios, textbooks, computers, programs for at-risk and talented students, educational standards); *DeRolph v. State*, 677 N.E.2d 733, 742-45 (Ohio 1997) (teachers, student-teacher ratios, school facilities, computers, software, and technology training instructional materials, AP and honors courses); *Abbott ex rel. Abbott v. Burke*, 710 A.2d 450 (N.J. 1998) (full-day kindergarten, high-quality preschool, school facilities, specialized instructional rooms for art and music, technology, after-school and summer-school programs); *Abbott ex rel. Abbott v. Burke*, 748 A.2d 82, 88-93 (N.J. 2000) (educational standards, qualified and certified teachers, class size, student-teacher ratios, preschool programs); *Campaign for Fiscal Equity, Inc. v. State*, 801 N.E.2d 326, 332-40 (N.Y. 2003) (teaching quality and training, facilities, instrumentalities of learning); *Hoke County Bd. of Educ. v. State*, 599 S.E.2d 365, 390 (N.C. 2004) (teachers, principals, instructional resources, support programs); *Columbia Falls Elementary Sch. Dist. No. 6 v. State*, 109 P.3d 257, 263 (Mont. 2005) (teacher salaries and retention, programs, staff, school facilities).

⁴¹ *See Adelman, supra* note 5, at 26-41 (concluding that among students who attend any postsecondary education, those whose high school curriculum was more academically intense were more likely to complete a bachelor’s degree).

⁴² *See Symonds et al., supra* note 5, at 1-3 (“In 2008, median earnings of workers with bachelor’s degrees were 65 percent higher than those of high school graduates (\$55,700 vs. \$33,800). Similarly, workers with associate’s degrees earned 73 percent more than those who had not completed high school (\$42,000 vs. \$24,300).”) (citing Sandy Baum, Jennifer Ma, and Kathleen Payea, *Education Pays 2010: The Benefits of Higher Education for Individuals and Society*, 2010, College Board Advocacy & Policy Center, available at <http://trends.collegeboard.org/sites/default/files/education-pays-2010-full-report.pdf>).

⁴³ *See* OCR’s Dear Colleague Letter from Assistant Secretary Stephanie J. Monroe regarding Title VI and access to rigorous courses including Advanced Placement (May 22, 2008), available at www.ed.gov/ocr/letters/colleague-20080522.html. OCR has extensive enforcement experience in assessing access to advanced coursework, including gifted and talented courses, STEM courses, and AP and IB courses. Recent resolutions from some of those investigations may be found on OCR’s website at www.ed.gov/ocr.

⁴⁴ Federal courts have repeatedly required equitable allocation of resources such as teacher experience and teacher training in order to achieve equal educational opportunities for students under the Fourteenth Amendment. *See, e.g., Pitts v. Freeman*, 887 F.2d 1438, 1450 (11th Cir. 1989); *United States v. Lawrence County Sch. Dist.*, 799 F.2d 1031, 1041 (5th Cir. 1986); *Morgan v. Kerrigan*, 509 F.2d 599, 600-01 (1st Cir. 1975); *United States v. Board of Sch. Comm’rs*, 332 F. Supp. 655, 680 (S.D. Ind. 1971), *affirmed by* 474 F.2d 81 (7th Cir. 1973); *Hobson v. Hansen*, 327 F. Supp. 844, 855 (D.D.C. 1971); *Spangler v. Pasadena City Board of Educ.*, 311 F. Supp. 501, 524 (C.D. Cal. 1970); *Kelley v. Altheimer, Arkansas Pub. Sch. Dist.*, 378 F.2d 483, 499 (8th Cir. 1967); *Lee v. Macon County Bd. of Educ.*, 267 F. Supp. 458, 489 (M.D. Ala. 1967), *affirmed sub nom Wallace v. United States*, 389 U.S. 215 (1967). Congress has likewise focused on these factors, providing, as part of ESEA, that school districts are required to “ensure, through incentives for voluntary transfers, the provision of professional development, recruitment

programs, or other effective strategies, that low-income students and minority students are not taught at higher rates than other students by unqualified, out-of-field, or inexperienced teachers.” 20 U.S.C. § 1112(c)(1)(L).

⁴⁵ On July 7, 2014, Secretary Arne Duncan announced the Excellent Educators for All Initiative, and one key component is the revised comprehensive educator equity plans to be developed by State educational agencies to comply with Title I of ESEA. See Letter from Secretary Duncan to Chief State School Officers at <http://www2.ed.gov/policy/elsec/guid/secletter/140707.html> and announcement of initiative at www.ed.gov/news/press-releases/new-initiative-provide-all-students-access-great-educators.

⁴⁶ See Nithya Joseph, et al. *Roll Call: The Importance of Teacher Attendance*, The National Council on Teacher Quality, (June 2014), www.nctq.org/dmsView/RollCall_TeacherAttendance (using data from 50 largest school districts on teacher absences, this study found that on average teachers miss 11 school days, which is troubling since prior research regarding the impact of teacher absenteeism on student achievement showed a significant impact on students when teachers were absent for more than 10 days) (citing Reagan T. Miller, et al., *Do Teacher Absences Impact Student Achievement? Longitudinal Evidence from One Urban School District* (2008), EDUC. EVAL. & POL’Y ANAL. 30, 181, available at <http://epa.sagepub.com/content/30/2/181.full.pdf>).

⁴⁷ OCR recognizes that the current state of the empirical research has demonstrated only weak support for the importance of teacher qualifications (such as route of certification, experience, subject matter expertise, and other training) to teachers’ effectiveness in the classroom, if the sole criterion taken into account is a student growth, “value added” metric. However, some studies previously highlighted in this letter have shown a relationship between such teacher characteristics and the quality of education students are receiving. See *supra* section I on pages 2-5 and accompanying notes. OCR considers these teacher characteristics in assessing equitable access to effective teaching.

⁴⁸ Gary T. Henry et al., *Portal Report: Teacher Preparation and Student Test Scores in North Carolina*, 9, (June 2010), [http://publicpolicy.unc.edu/Research/teacher Portals Teacher Preparation and Student Test Scores in North Carolina 2.pdf](http://publicpolicy.unc.edu/Research/teacher%20Portals%20Teacher%20Preparation%20and%20Student%20Test%20Scores%20in%20North%20Carolina%20.pdf). (“Teachers in their first year of experience produced student test score gains that were significantly worse than those produced by teachers with five or more years of experience.”); Douglas O. Staiger & John E. Rockoff, *Searching for Effective Teachers with Imperfect Information*, 24 J. ECON. PERSP. 97, 102-103 (2010) (“In both Los Angeles and New York, teacher effects on student achievement appear to rise rapidly during the first several years on the job and then flatten out. This finding has been replicated in a number of states and districts.”); Clotfelter (2007), *supra* note 18, at 666 (“Thus we conclude that teachers with some experience are more effective than novice teachers.”); Rivkin, *supra* note 15, at 449 (“There appear to be important gains in teaching quality in the first year of experience and smaller gains over the next few career years. However, there is little evidence that improvements continue after the first three years.”). OCR recognizes that some inexperienced teachers may provide relatively more effective teaching than other inexperienced teachers. See, e.g., Melissa A. Clark, Hanley S. Chiang, Tim Silva, Sheena McConnell, Kathy Sonnenfeld, Anastasia Erbe, and Michael Puma, *The Effectiveness of Secondary Math Teachers from Teach For America and the Teaching Fellows Programs* (NCEE 2013-4015) (2013), National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education, available at <http://ies.ed.gov/ncee/pubs/20134015/pdf/20134015.pdf>; Clotfelter et al. (2010), *supra* note 15; Linda Cavaluzzo, *Is National Board Certification an Effective Signal of Teacher Quality?* The CNA Corporation (2004) available at www.nbpts.org/sites/default/files/documents/research/Cavalluzzo_IsNBCAnEffectiveSignalofTeachingQuality.pdf (finding robust evidence that National Board Certification is a reliable indicator of teacher quality). But see Jill Constantine, et al., *An Evaluation of Teachers Trained Through Different Routes to Certification, Final Report* (NCEE 2009-4043) (2009) National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education, available at <http://ies.ed.gov/ncee/pubs/20094043/pdf/20094043.pdf> (report based on a random assignment study found no difference in the performance of traditionally certified teachers and teachers who were alternatively certified with very low coursework requirements).

⁴⁹ See, e.g., Jason A. Grissom, *Can Good Principals Keep Teachers in Disadvantaged Schools? Linking Principal Effectiveness to Teacher Satisfaction and Turnover in Hard to Staff Environments*, 113 TCHRS. C. REC. 2552, 2552-

2585 (2011) (“Regression results show that principal effectiveness is associated with greater teacher satisfaction and a lower probability that the teacher leaves the school within a year. Moreover the positive impacts of principal effectiveness on these teacher outcomes are even greater in disadvantaged schools.”); Anthony T. Milanowski, et al., *Recruiting New Teachers to Urban School Districts: What Incentives Will Work?*, INT’L J. EDUC. POL’Y & L., 2009 at 1-13 (Survey data showed that “many working conditions factors, especially principal support, had more influence on simulated job choice than pay level..”); Gregory F. Branch, et al., *Estimating the Effect of Leaders on Public Sector Productivity: The Case of School Principals* (Feb. 2012) (CALDER Working Paper 66) (on file at The American Institutes for Research, Washington, D.C.); Damon Cark, et al., *School Principals and School Performance* (Dec. 2009) (CALDER Working Paper 38) (on file at The Urban Institute. Washington, D.C.)

⁵⁰ Samuel D. Miller, *Partners-in-Reading: Using Classroom Assistants to Provide Tutorial Assistance to Struggling First-Grade Readers*, JOURNAL OF EDUCATION FOR STUDENTS PLACED AT RISK (JESPAR), 8:3, 333-349 (2003); Daniel K. Lapsley, et al., *Teacher Aids, Class Size and Academic Achievement: A Preliminary Evaluation of Indiana’s Prime Time* (2002) (unpublished paper presented at American Educational Research Association Annual Meeting); Marie C. Keel, et al., *Using Paraprofessionals to Deliver Direct Instruction Reading Programs*, 18 EFFECTIVE SCH. PRAC. 16, 16-22 (1999).

⁵¹ Susan C. Whiston & Robert F. Quinby, *Review of School Counseling Outcome Research*, 46 PSYCHOL. IN SCH. 267, 267-272 (2009); Gregg Brigman & Chari Campbell, *Helping Students Improve Academic Achievement and School Behavior*, 7 PROF. SCH. COUNSELING 91, 91-98 (2003); C.A. Sink & H.R. Stroh, *Raising Achievement Test Scores of Early Elementary School Students Through Comprehensive School Counseling Programs*, 6 PROF. SCH. COUNSELING 350, 350-364 (2003); R.T. Lapan, et al., *Preparing Rural Adolescents for Post-High School Transitions*, 81 J. COUNSELING & DEV. 329, 329-342 (2003); Greg Goodman & Phillip Young, *The Value of Extracurricular Support in Increased Student Achievement: An Assessment of a Pupil Personnel Model Including School Counselors and School Psychologists Concerning Student Achievement as Measured by an Academic Performance Index*, Educational Research Quarterly, Sept. 2006, at 3-13; Barnett Berry et al., *Teacher Effectiveness: The Conditions that Matter Most and a Look to the Future*, Center for Teaching Quality, Mar. 2012, at 11-12, <http://files.eric.ed.gov/fulltext/ED509720.pdf> (“Many students from high-needs communities come to school with an array of family and personal problems (e.g., abuse, neighborhood violence, food insecurity or actual hunger, lack of proper clothes to wear). These are not excuses for not learning, but they are realities, and teachers need support in connecting the teaching of academic content to the socio-emotional and physical needs of students.”).

By engaging students with a range of high-quality resources, librarians contribute to student achievement. *See, e.g.*, Briana Hovendick Francis, et al., *School Librarians Continue to Help Students Achieve Standards: The Third Colorado Study* (Closer Look Report), Colorado State Library, Library Research Service (2010), available at www.lrs.org/documents/closer_look/CO3_2010_Closer_Look_Report.pdf; Ester G. Smith, *Texas School Libraries: Standards, Resources, Services, and Students’ Performance*, EGS Research & Consulting (April 2001), available at www.tsl.texas.gov/sites/default/files/public/tslac/ld/pubs/schlibsurvey/survey.pdf; Keith Lance, et al., *The Impact of School Library Media Centers on Academic Achievement* (Hi Willow Research and Publishing) (1993).

⁵² Patricia M. McDonough, *Counseling and College Counseling in America’s High Schools*, National Association for College Admissions Counseling (October 17, 2013), <http://inpathways.net/McDonough%20Report.pdf>, (“[R]epeated studies have found that improving counseling would have a significant impact on college access for low income, rural, and urban students as well as students of color. Specifically, if counselors begin actively supporting students and their families in middle school in preparing for college, as opposed to simply disseminating information, this will increase students’ chances of enrolling in a four-year college.”) (citations omitted); John Brittain & Callie Kozlak, *Racial Disparities in Educational Opportunities in the United States*, 6 SEATTLE J. SOC. JUST. 605, 605-608 (2008) (“[S]chools with a high concentration of poor and minority students lack access to guidance counselors who are important to assisting students and parents in making informed decisions about important curricular choices. Therefore, low-income and minority students often find themselves ill-prepared or ineligible for postsecondary education.”) Valerie E. Lee & Ruth B. Ekstrom, *Student Access to Guidance Counseling in High School*, 24 AM. EDUC. RES. J. 287, 287-310 (1987).

⁵³ Lawrence O. Picus, et al., *Understanding the Relationship Between Student Achievement and the Quality of Educational Facilities: Evidence from Wyoming*, 80 PEABODY J. EDUC. 71, 71-95 (2005); Mary W. Filardo, et al., *Growth and Disparity: A Decade of U.S. Public School Construction, Building Educational Success Together (BEST)* (February 24, 2012) www.ncef.org/pubs/GrowthandDisparity.pdf; Grayce Cheng, et al., *Facilities: Fairness & Effects, Evidence and Recommendations Concerning the Impact of School Facilities on Civil Rights and Student Achievement*, Submission to the U.S. Department of Education Excellence & Equity Commission (Feb. 24, 2012), www.21csf.org/csf-home/publications/ImpactSchoolFacilitiesCivilRightsAug2011.pdf; American Federation of Teachers, *Building Minds, Minding Buildings: Turning Crumbling Schools into Environments for Learning*, (Jan. 20, 2014), www.aft.org/pdfs/psrp/bmmbcrumbling1106.pdf; Carol Cash & Travis Twiford, *Improving Student Achievement and School Facilities in a Time of Limited Funding*, (Feb. 24, 2012), <http://cnx.org/content/m23100/>; U.S. Department of Education, Policy and Program Studies Service, 2004-06, *A Summary of Scientific Findings on Adverse Effects of Indoor Environments on Students' Health, Academic Performance and Attendance*, (2004); Mark Schneider., *Do School Facilities Affect Academic Outcomes?* National Clearinghouse for Educational Facilities, (Feb. 24, 2012), www.ncef.org/pubs/outcomes.pdf; Glen I. Earthman, *School Facility Conditions and Student Academic Achievement*, wws-RR008-1002 UCLA Inst. For Democracy, Educ., & Access (2002); Sean O'Sullivan, *A Study of the Relationship Between Building Conditions and Student Academic Achievement in Pennsylvania's High Schools* (Aug. 28, 2006) (unpublished Ph.D. in Educational Leadership and Policy Studies dissertation, Virginia Polytechnic Institute & State University) (on file with Virginia Tech library).

⁵⁴ Cynthia Uline & Megan Tschannen-Moran, *The Walls Speak: The Interplay of Quality Facilities, School Climate, and Student Achievement*, 46 J. OF EDUC. ADMIN. 55, 55-73 (2008).

⁵⁵ Glen I. Earthman, *Prioritization of 31 Criteria for School Building Adequacy*, American Civil Liberties Union Foundation of Maryland (Feb. 25, 2012), www.schoolfunding.info/policy/facilities/ACLUfacilities_report1-04.pdf (expert report prepared based on review of extensive bibliography, own research, and years of experience in the field) (concluding that studies have shown that properly functioning HVAC systems that enable classrooms to be air-conditioned are correlated with improved student achievement); A. N. Myhrvold, et al., *Indoor Environment in Schools — Pupils Health and Performance in Regard to CO2 Concentrations*, The 7th Int'l Conf. on Indoor Air Quality & Climate, at 369, 369-371.

⁵⁶ Glen I. Earthman, Education Oversight Committee for South Carolina, *The Relationship of School Facilities Conditions to Selected Student Academic Outcomes: A Study of South Carolina Public Schools*, http://dc.statelibrary.sc.gov/bitstream/handle/10827/5176/EOC_Relationship_of_School_Facilities_2001.pdf?sequence=1 (2001); Glen I. Earthman, *The Effect of the Condition of School Facilities on Student Academic Achievement*, Expert Report prepared for Williams v. California (May 23, 2012), www.decentschools.org/expert_reports/earthman_report.pdf.

⁵⁷ See, e.g., C. Kenneth Tanner, *The Influence of School Architecture on Academic Achievement*, 38 J. OF EDUC. ADMIN. 309, 309-330 (2000); C. Kenneth Tanner, *Explaining Relationships Among Student Outcomes and the School's Physical Environment*, 19 J. OF ADVANCED ACAD. 444, 444-471 (2008).

⁵⁸ Qing Li & Xin Ma, *A Meta-Analysis of the Effects of Computer Technology on School Students' Mathematics Learning*, 22 EDUC. PSYCHOL. REV. 215, 215-244 (2010); James Cengiz Gulek & Hakan Demirtas, *Learning with Technology: The Impact of Laptop Use on Student Achievement*, THE J. OF TECH., LEARNING & ASSESSMENT, January 2005, at 5; James A. Kulik, *Effects of Using Instructional Technology in Elementary and Secondary Schools: What Controlled Evaluation Studies Say*, SRI International (2003), <http://citeseerx.ist.psu.edu/viewdoc/download?rep=rep1&type=pdf&doi=10.1.1.207.3105>.

⁵⁹ Although this letter is not intended to address Section 504 of the Rehabilitation Act of 1973 or Title II of the Americans with Disabilities Act, school districts must ensure that students with disabilities have equal access to the benefits of educational technologies in the classroom. See OCR's Dear Colleague Letter and Frequently Asked Questions from Assistant Secretary Russlynn Ali on the June 2010 DCL (May 16, 2011), available at www.ed.gov/ocr/letters/colleague-201105-ese.html and www.ed.gov/ocr/docs/dcl-ebook-faq-201105.html.

⁶⁰ See Pamela Cantrell, et al., *The Effects of Differentiated Technology Integration on Student Achievement in Middle School Science Classrooms*, INT'L. J. TECH. IN TEACHING & LEARNING, 36, 36-54 (2007); Gerald Knezek &

Rhoda Christensen, *Effect of Technology-Based Programs on First- and Second-Grade Reading Achievement*, COMPUTERS IN SCH., 23, 23-41 (2007); Lowther, et al., *Freedom to Learn Program: Michigan 2005-2006 Evaluation Report*, Center for Research in Education Policy (2007),

www.memphis.edu/crep/pdfs/Michigan_Freedom_to_Learn_Laptop_Program.pdf.

⁶¹ Keith Curry Lance, et al., *How Students, Teachers & Principals Benefit from Strong School Libraries: The Indiana Study*, RSL Research Group (2007), www.ilfonline.org/resource/resmgr/aisle/infinalreportnextsteps.pdf; Robert Burgin & Pauletta Brown Bracy, *An Essential Connection: How Quality School Library Media Programs Improve Student Achievement in North Carolina*, R.B. Software & Consulting (2003), www.rburgin.com/ncschools2003/NCSchoolStudy.pdf; Keith Lance, et al., *The Impact of School Library Media Centers on Academic Achievement* (Hi Willow Research and Publishing) (1993).

⁶² See 20 U.S.C. §§ 6311(b)(8)(C), 6312(c)(1)(L).

⁶³ Note that “contractual or other arrangements” cannot justify a school practice that results in denial of educational benefits on the basis of race, color, or national origin. 34 C.F.R. § 100.3(b).