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Monitoring Educational Equity

Educational attainment is a valued goal for all children in the United States, but disparities in educational attainment among population groups have characterized the United States throughout its history. In order to inform actions that can reduce disparities, information is needed to illuminate the level of disparities that exist, why they arise, and which children are most affected. A set of indicators—measures used to track performance and monitor change over time—can help provide this information.

A committee of the National Academies of Sciences, Engineering, and Medicine was formed to identify key indicators for measuring and monitoring the extent of equity in the nation's K–12 education system. The committee's report, *Monitoring Educational Equity* (2019), identifies 16 key indicators of equity and recommends a centralized, consistently reported system of indicators that can inform policies and practices to reduce disparities.

ABOUT EDUCATIONAL EQUITY

Educational attainment, including at a minimum high school completion and a postsecondary credential, is an important goal for all children, for the sake of both the individual and society. Failing to attain at least a high school education leaves individuals vulnerable to adverse consequences in adulthood, including a higher likelihood of unemployment, low-wage employment, poor health, and involvement in the criminal justice system—outcomes that have significant costs for the nation as a whole.

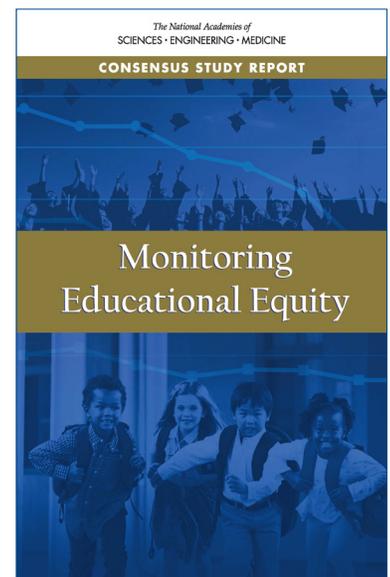
Disparities in educational attainment among population groups have long been present in the United States. Students from families that are white, have relatively high incomes, and are proficient in English have tended to have higher rates of educational attainment than other students. An education system that benefits certain groups over others misses out on the talent of the full population of students, resulting in a loss both for the excluded students and for society.

The history of U.S. Supreme Court decisions, constitutional amendments, and federal, state, and local legislation indicates (1) a recognition that population groups such as racial and ethnic minorities, children living in low-income families, children who are not proficient in English, and children with disabilities have experienced significant barriers to educational attainment, and (2) an expressed intent to remove barriers to education for all students.

Educational equity requires that educational opportunity be calibrated to need, which may include additional and tailored resources and supports to create conditions of true educational opportunity.

KEY EQUITY INDICATORS

Enacting change can be challenging, but it is nearly impossible if there is no information that documents existing problems. A carefully chosen set of equity indicators can highlight disparities, provide a way to explore potential causes, and point toward possible improvements. Systematically collected indicators can allow valid comparisons of schools, districts, and states across a number of important dimensions.



The purpose of a system of equity indicators is not to simply track progress toward educational goals, but to identify differences in critical outcomes and opportunities across key population groups, such as those based on gender, race and ethnicity, English-language proficiency, family income, and disability status.

However, the circumstances in which students live affect their academic engagement, academic progress, and educational attainment in important ways. If narrowing disparities in student outcomes is an imperative, schools cannot shirk the challenges arising from contextual factors that bear on learning, such as food and housing insecurity, exposure to violence, unsafe neighborhoods, adverse childhood experiences, and exposure to environmental toxins. Children also differ in their individual responses to stress. Addressing student needs, in light of their life circumstances, requires a wide variety of resources. It is a responsibility that needs to be shared by schools, school systems, community organizations, and service providers.

The report proposes 16 indicators of educational equity that fall into two categories. The first category of indicators measures and tracks disparities in student **outcomes**, such as kindergarten academic readiness, coursework performance, and on-time graduation. The second category should measure and track disparities in students' **access to resources and opportunities**, such as high-quality pre-K programs, effective teachers, rigorous curriculum, and nonacademic supports.

INDICATORS OF DISPARITIES IN STUDENT OUTCOMES

Kindergarten Readiness

Early childhood experiences set the stage for later academic success. Broadly speaking, kindergarten readiness is the set of foundational skills, behaviors, and knowledge that enable children to successfully transition into kindergarten and achieve academic success throughout the primary grades. From an equity perspective, monitoring kindergarten readiness is important because large between-group disparities become apparent well before children enter kindergarten and can have lasting effects.

- **Indicator 1:** Disparities in Academic Readiness. **Constructs to measure:** Reading/literacy skills; numeracy/math skills.
- **Indicator 2:** Disparities in Self-Regulation and Attention Skills. **Constructs to measure:** Self-regulation skills; attention skills.

K–12 Learning and Engagement

What students learn and how they perform in school positions them for future success, both as they progress through the K–12 system and as they pursue postsecondary options. To benefit from instruction, students first have to be at school. The positive relationship between instruction time and learning is well documented. Course performance and test scores are well-documented as reliable and valid indicators of academic learning and progress toward educational attainment. Group differences along these dimensions are problematic because they have been found to predict a wide range of longer-term disparities that can impede students from reaching their full potential.

- **Indicator 3:** Disparities in Engagement in Schooling. **Constructs to measure:** Attendance/absenteeism; academic engagement.
- **Indicator 4:** Disparities in Performance in Coursework. **Constructs to measure:** Success in classes, accumulating credits (being on track to graduate); grades and GPA.
- **Indicator 5:** Disparities in Performance on Tests. **Constructs to measure:** Achievement in reading, math, and science; learning growth in reading, math, and science achievement.

Educational Attainment

Education is a critically important way for individuals to pursue their goals in life. On average, higher levels of education are associated with higher levels of financial, emotional, and physical well-being. Yet research consistently shows between-group differences in educational attainment related to people's race, ethnicity, and gender. Given the lifelong benefits, the committee's aspiration is for all students to earn a 2- or 4-year college degree. This goal includes high school graduation and readiness for postsecondary education.

- **Indicator 6:** Disparities in On-Time Graduation. **Constructs to measure:** On-time graduation.
- **Indicator 7:** Disparities in Postsecondary Readiness. **Constructs to measure:** Enrollment in college; entry into the workforce; enlistment in the military.

INDICATORS OF DISPARITIES IN ACCESS TO OPPORTUNITIES AND RESOURCES

Extent of Racial, Ethnic, and Economic Segregation

Segregation, both economic and racial and ethnic, poses one of the most formidable barriers to educational equity. Schools that are marked by concentrated poverty often lack the human, material, and curricular resources to meet the academic and socioemotional needs of their populations. Segregation brings racial differences in exposure to concentrated poverty,

leading to nonwhite students being in schools with higher rates of concentrated poverty than other students. This situation exacerbates racial disparities in educational outcomes.

- **Indicator 8:** Disparities in Students' Exposure to Racial, Ethnic, and Economic Segregation. **Construct to measure:** Racial segregation within and across schools.

Equitable Access to High-Quality Early Childhood Education

Early childhood education is a strong predictor of kindergarten readiness, and one of the most common and policy relevant out-of-home experiences that young children have. However, there are sizable differences in the availability of high-quality learning programs for children from lower-income families, families with parents with lower levels of educational attainment, and families in which the parents are not proficient in English, as compared to their more advantaged peers.

- **Indicator 9:** Disparities in Access to and Participation in High-Quality Early Childhood Education. **Constructs to measure:** Availability of licensed pre-K programs; participation in licensed pre-K programs.

Equitable Access to High-Quality Curricula and Instruction

Students' exposure to a rich and broad curriculum, challenging coursework, and inspired teaching is vital for their learning and development. There is widespread agreement that teachers are the most important in-school factor contributing to student outcomes. From an equity standpoint, the biggest concern is that teachers with more experience and credentials are currently not distributed equally or equitably among schools with different populations. Access to a full range of instructional resources is also essential for student learning, and wide disparities continue to persist.

- **Indicator 10:** Disparities in Access to Effective Teaching. **Constructs to measure:** Teachers' years of experience; teachers' credentials and certification; racial and ethnic diversity of the teaching force.
- **Indicator 11:** Disparities in Access to and Enrollment in Rigorous Coursework. **Constructs to measure:** Availability and enrollment in advanced, rigorous coursework; advanced placement, international baccalaureate, and dual enrollment programs; gifted and talented programs.
- **Indicator 12:** Disparities in Curricular Breadth. **Construct to measure:** Availability and enrollment in coursework in the arts, social sciences, sciences, and technology.
- **Indicator 13:** Disparities in Access to High-Quality Academic Supports. **Constructs to measure:** Access to and participation in formalized systems of tutoring or other types of academic supports, including special education services and services for English learners.

Equitable Access to Supportive School and Classroom Environments

To thrive academically, students also need physically and emotionally safe learning environments, with a range of supports that pave the way for them to succeed by addressing their socioemotional and academic needs.

- **Indicator 14:** Disparities in School Climate. **Construct to measure:** Perceptions of safety, academic support, academically focused culture, and teacher-student trust.
- **Indicator 15:** Disparities in Nonexclusionary Discipline Practices. **Construct to measure:** Out-of-school suspensions and expulsions.
- **Indicator 16:** Disparities in Nonacademic Supports for Student Success. **Construct to measure:** Supports for emotional, behavioral, mental, and physical health.

RECOMMENDATIONS

The indicators identified in the report should to be collected on a broad scale across the country, with reporting mechanisms designed to regularly and systematically inform stakeholders at the national, state, and local levels about the status of educational equity in the United States. The system envisioned would have the same level of priority as the National Assessment of Educational Progress, with annual reports that allow the country to monitor progress in making education more equitable from pre-K to grade 12 to the transition to postsecondary education.

RECOMMENDATION 1: The federal government should coordinate with states, school districts, and educational intermediaries to incorporate the committee's proposed 16 indicators of educational equity into their relevant data collection and reporting activities, strategic priorities, and plans to meet the equity aspects of the Every Student Succeeds Act.

RECOMMENDATION 2: To ensure nationwide coverage and comparability, the federal government should work with states, school districts, and educational intermediaries to develop a national system of education equity indicators. Such a system should be the source of regular reports on the indicators and bring visibility to the longstanding disparities in education outcomes in the United States and should highlight both where progress is being made and where more progress is needed.

RECOMMENDATION 3: In designing the recommended indicator system, the federal government, in coordination with states, school districts, and educational intermediaries, should take care that the system enables reporting of indicators for

historically disadvantaged groups of students and for specific combinations of demographic characteristics, such as race and ethnicity by gender. The system also should have the characteristics of effective systems of educational equity indicators identified by the committee.

RECOMMENDATION 4: Governmental and philanthropic funders should work with researchers to develop indicators of the existence and effectiveness of systems of cross-agency integrated services that address context-related impediments to student success, such as trauma and chronic stress created by adversity. The indicators and measures should encompass screening, intervention, and supports delivered not only by school systems, but also by other child-serving agencies.

RECOMMENDATION 5: Public and private funders should support detailed design and implementation work for a comprehensive set of equity indicators, including an operational prototype. This work should involve (1) self-selected “early adopter” states and districts; (2) intermediaries, such as the Council of Great City Schools, the Council of Chief State School Officers, and the National Governor’s Association; (3) stakeholder representatives; and (4) researchers. This work should focus on cataloguing the available data sources, determining areas of overlap and gaps, and seeking consensus on appropriate paths forward toward expanding the indicator system to a broader set of states and districts.

RECOMMENDATION 6: Public or private funders, or both, should establish an independent entity to govern the committee’s proposed education equity indicators. The responsibilities of this entity would include establishing and maintaining a system of research, evaluation, and development to drive continuous improvement in the indicators, measures of them, reporting and dissemination of results, and the system generally. This entity might be structured like the National Assessment Governing Board and might report on both levels of the various outcomes the committee proposes and equity gaps in those indicators, as the Governing Board currently does with the National Assessment of Educational Progress.

COMMITTEE ON DEVELOPING INDICATORS OF EDUCATIONAL EQUITY

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For More Information . . . This Consensus Study Report Highlights was prepared by the Board on Testing and Assessment and the Committee on National Statistics based on *Monitoring Educational Equity* (2019). The study was sponsored by the American Educational Research Association, the Atlantic Philanthropies, the Ford Foundation, the Spencer Foundation, the W.K. Kellogg Foundation, the William T. Grant Foundation, and the U.S. Department of Education. Any opinions, findings, conclusions, or recommendations expressed in this publication do not necessarily reflect the views of any organization or agency that provided support for the project. Copies of the Consensus Study Report are available from the National Academies Press, (800) 624-6242.

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