



COMMITTEE ON NATIONAL STATISTICS
DIVISION OF BEHAVIORAL AND SOCIAL SCIENCES AND EDUCATION

National Academies of Sciences, Engineering, and Medicine Reports on Indicators of Educational Equity

CONGRESSIONAL BRIEFING
OCTOBER 20, 2020

Indicators of Disparities		What to Measure	Part of Required Federal Reporting?
Pre-K Education	Access to and participation in high-quality pre-K programs (opportunity)	Group differences in availability of and participation in licensed pre-K programs	No
	Academic readiness (outcome)	Group differences in reading, literacy, numeracy, and math skills	No
	Self-regulation and attention skills (outcome)	Group differences in self-regulation and attention skills	No
K-12 Education	Access to effective teaching (opportunity)	Group differences in exposure to novice, experienced, and certified teachers Racial and ethnic diversity of the teaching force	Partly
	Access to rigorous coursework (opportunity)	Group differences in availability of and enrollment in advanced, rigorous coursework; Advanced Placement, International Baccalaureate, and dual enrollment programs; and gifted and talented programs	Yes
	Curricular breadth (opportunity)	Group differences in availability of and enrollment in coursework in the arts, social sciences, sciences, technology, and world languages	No
	Access to high-quality academic supports (opportunity)	Group differences in access to and participation in formalized systems of tutoring or other types of academic supports, including special education services and services for English learners	No
	Students' exposure to racial, ethnic, and economic segregation (opportunity)	Group differences in exposure to concentrated poverty in schools Extent of racial segregation within and across schools	Partly
	School climate (opportunity)	Group differences in access to strong climates, as measured by perceptions of safety, academic support, academically focused culture, and teacher-student trust	No
	Nonexclusionary discipline practices (opportunity)	Group differences in out-of-school suspensions and expulsions	Yes
	Nonacademic supports for student success (opportunity)	Group differences in supports for emotional, behavioral, mental, and physical health	Yes
	Engagement in schooling (outcome)	Group differences in school attendance, absenteeism, and academic engagement	Partly
	Performance in coursework (outcome)	Group difference in success in classes, accumulating credits, grades, and grade point averages (GPAs)	Yes
	Performance on tests (outcome)	Group differences in achievement levels and learning growth in reading, math, and science	Yes
Educational Attainment	On-time graduation (outcome)	Group differences in on-time graduation	Yes
	Postsecondary readiness (outcome)	Group differences in enrollment in college, entry into the workforce, or enlistment in the military	Partly

Committee's Charge

The committee will develop a set of indicators around equity in educational outcomes and relevant inputs for pre-K through the transition to post-secondary education. In doing so, the committee will:

- Examine existing indicator systems in education and child well-being.
- Review a wide range of research related to these systems and the types of outcomes that are important for the education system to achieve
- Examine research on school and non-school inputs that are related to those outcomes, the extent of inequality in these inputs and outcomes, and interventions that have been shown to improve outcomes.



Vision for a National System of Educational Equity Indicators

- Reports are issued on a regular basis
- Stakeholders know what to expect and when to expect it
- Results receive national attention and inform policy nationwide
- Results are reported by state and district



Committee's Definition of Educational Equity

Educational equity exists when there is:

- Parity between student groups in terms of educational outcomes, such as high school graduation or access to a resource such as high-quality teachers;
- A fit between resources and student needs; and
- Adequate effort to mitigate the effects of structural disadvantages that disproportionately affect different student groups



Committee's Definition of an Indicator

An indicator is a measure used to track progress toward objectives or monitor the health of an economic, environmental, social, or cultural condition over time.

Examples:

- Unemployment rates
- Air quality indexes
- High school graduation rates



The Indicators

- Span from pre-K through grade 12
- Include key educational outcomes and access to learning opportunities and resources
- Are designed to measure differences along key demographic characteristics



Intended Uses of the Indicators by States and School Districts

1. Monitor important group-level differences in learning opportunities and outcomes.
2. Identify patterns and causes of inequity in the education system.
3. Analyze and adjust relevant policies and practices to increase equity.
4. Match supports and interventions to the specific needs of the student population.
5. Evaluate and enhance capacity to meet the academic and nonacademic needs of students.
6. Pursue funding and other resources to address needs related to educational equity.



Two Essential and Related Types of Indicators

Indicators that measure disparities in student outcomes

- Including academic achievement, educational attainment, and engagement in schooling;

Indicators of disparities in access to educational resources and opportunities

- Including the structural aspects of school systems that may influence opportunity to learn, exacerbate existing disparities in family and community contexts, and contribute to unequal outcomes for students



Indicators Related to Pre-K Education

Indicators of Disparities in Student Outcomes	Indicators of Disparities in Access to Resources and Opportunities
Academic Readiness Self-Regulation and Attention Skills	Access to and Participation in High- Quality Pre-K Programs



Indicators Related to K-12 Education

Indicators of Disparities in Student Outcomes	Indicators of Disparities in Access to Resources and Opportunities
Engagement in Schooling Performance in Coursework Performance on Standardized Tests On-Time Graduation Postsecondary Readiness	Students' Exposure to Racial, Ethnic, and Economic Segregation Access to Effective Teaching Access to and Enrollment in Rigorous Coursework Curricular Breadth Access to High-Quality Academic Supports (e.g. tutoring) Nonacademic Supports for Student Success (e.g., counseling, access to social/health services) School Climate Nonexclusionary Discipline Practices



Indicators Related to K-12 Education

Indicators of Disparities in Student Outcomes	Indicators of Disparities in Access to Resources and Opportunities
<p>Engagement in Schooling</p> <p>Performance in Coursework</p> <p>Performance on Standardized Tests</p> <p>On-Time Graduation</p> <p>Postsecondary Readiness</p>	<p>Students' Exposure to Racial, Ethnic, and Economic Segregation</p> <p>Access to Effective Teaching</p> <p>Access to and Enrollment in Rigorous Coursework</p> <p>Curricular Breadth</p> <p>Access to High-Quality Academic Supports (e.g. tutoring)</p> <p>Nonacademic Supports for Student Success (e.g., counseling, access to social/health services)</p> <p>School Climate</p> <p>Non-exclusionary Discipline Practices</p>



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- *The system evolves as technical issues are resolved and research offers more guidance*



Committee's Recommendations*

The federal government should:

1. Coordinate efforts to incorporate indicators into data collection, reporting activities, strategic priorities, and ESSA.
2. Lead efforts to ensure nationwide coverage and comparability and enable regular reporting.

*(*Paraphrased)*



Committee's Recommendations* (cont.)

3. A system of educational equity indicators should enable reporting of disaggregated results and have the crucial characteristics of effective indicator systems.
4. Indicators are needed to document the existence and effectiveness of integrated, cross-agency services.

*(*Paraphrased)*



Committee's Recommendations* (cont.)

5. Public and private funders should support design and implementation work, including an operational prototype.
6. An independent entity is needed to provide governance.

*(*Paraphrased)*

