

America's Promise Alliance

10 INDICATORS OF ACADEMIC ACHIEVEMENT AND YOUTH SUCCESS

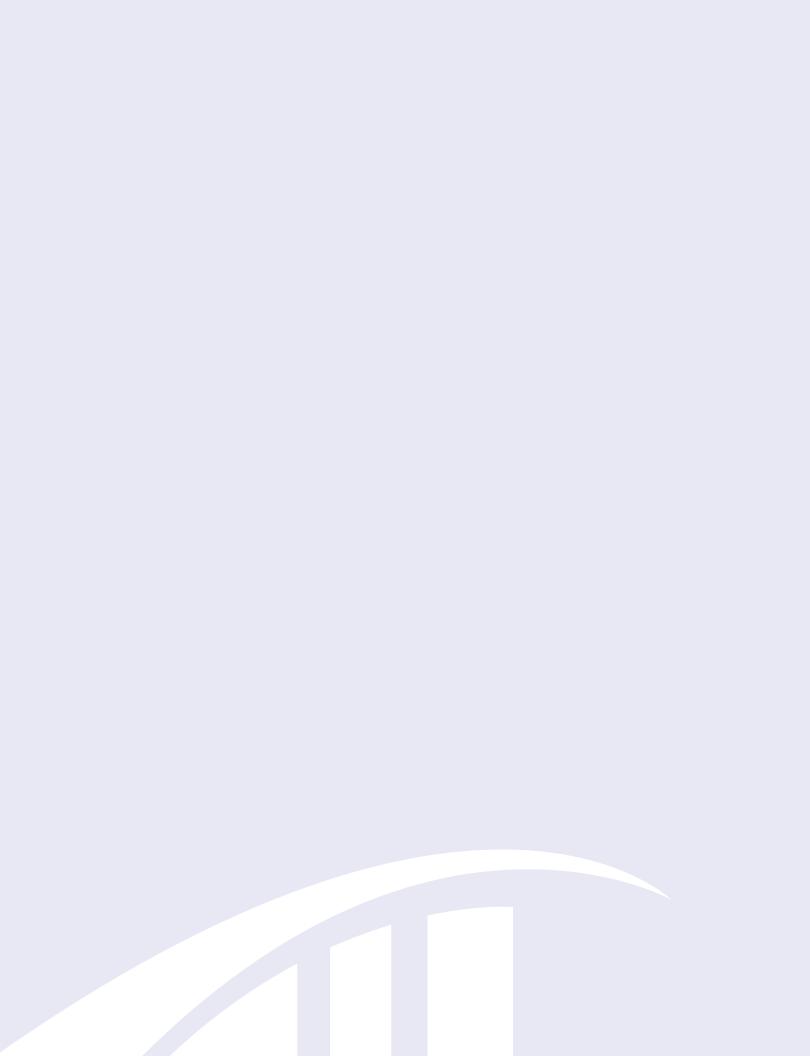
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Prepared by: Beth Gifford, Kelly Evans, Lisa Berlin, and Yu Bai Center for Child and Family Policy at Duke University



Center for Child and Family Policy **Duke University** Box 90545-0545 Durham, NC 27708-0264

www.childandfamilypolicy.duke.edu



OVERVIEW

Approximately one quarter of U.S. students do not graduate from high school with their peers. Failing to complete high school severely limits opportunities for employment and future financial stability. High school dropouts earn lower wages through their lifetime and work for fewer years. The costs to society of high school dropouts are also high and include lost tax revenue and a citizenship that is less civically engaged and more reliant on government subsidies.

The Grad Nation Campaign of the America's Promise Alliance aims to raise awareness of the dropout crisis and to mobilize action to improve the high school graduation rate.² The Alliance has established a goal that at least 90 percent of the class of 2020 will earn a high school diploma, with no high school graduating less than 80 percent of its students.³

During the next decade, it will be important to track the nation's progress toward this goal. This report identifies 10 national and state indicators of academic achievement and youth success that the scientific literature has shown to be important factors for future well-being. Each indicator is based on valid, reliable, and nationally-representative information that allows for tracking historical trends and is likely to be available in future years, so that progress can be monitored. We examine changes in each indicator over the most recent eight to ten years. The report also documents the achievement gap that persists across many educational domains. Reducing racial and ethnic gaps while raising the achievement of all youth is an important step in preparing the nation's youth for success. The 10 indicators are listed below, along with a brief description of their importance. The remainder of the report focuses on describing recent trends related to these indicators.

10 Indicators of Academic Achievement and Youth Success

- 1. High School Graduation
- 2. 9th to 10th Grade Promotion
- 3. Preschool Enrollment
- 4. 4th Grade Reading Proficiency
- 5. 8th Grade Math Proficiency

- 6. 8th Grade Science Proficiency
- 7. College Enrollment among Young Adults
- 8. Voting among Young Adults
- 9. Volunteering and Service among Young Adults
- 10. Participation in Extracurricular Activities

HIGH SCHOOL GRADUATION

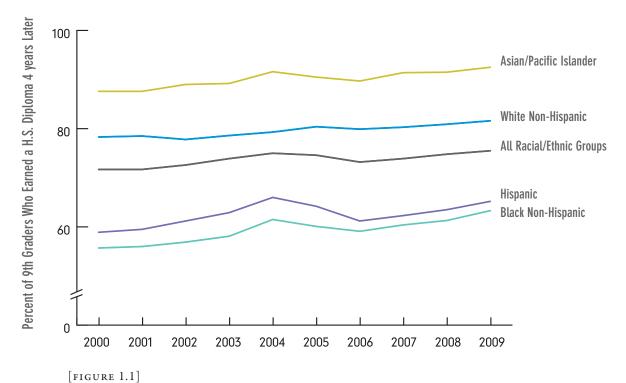
Rationale: High school graduates tend to be better prepared and to face fewer obstacles as they enter adulthood than those who drop out of high school. Compared to their less-educated peers, high school graduates earn higher wages, are less likely to be involved in criminal activity, are in better health, and are more involved in civic activities such as voting. High school graduates earn higher wages than high school dropouts, regardless of whether they attend college. Thus, promoting high school graduation for all youth has the potential to help individuals lead happier, healthier lives and to build a more informed, productive, and engaged citizenship.

Measure: The Average Freshman Graduation Rate (AFGR) estimates the percentage of students in an incoming 9th grade class who earn a regular high school diploma in four years. ¹² The size of the incoming 9th grade class is estimated as the average of the number of 8th graders five years earlier, the number of 9th graders four years earlier, and the number of 10th graders three years earlier. Information is provided by the U.S. Department of Education, National Center for Education Statistics, Common Core Data.

Findings:

- Between 2000 and 2009, the percentage of youth who received a high school diploma increased from 71.7 percent to 75.5 percent. Consistent with previous years, Asian/Pacific Islander students had the highest rates of high school completion in 2009 (92.5%), followed by White^a students (81.6%), Hispanic students (65.2%), and Black students (63.3%) (see Figure 1.1).
- The gap between White students and Black students narrowed by 4.3 percentage points, and the gap between White and Hispanic students narrowed by 3.1 percentage points, while the gap between Asian and White students increased by 1.7 percentage points (see Figure 1.2).
- Only one state, Wisconsin, has a graduation rate above the 90 percent goal (see Figure 1.3). Vermont, North Dakota, Minnesota, and Iowa were each above 85.0 percent. Three states (New Mexico, Mississippi, and Nevada) and the District of Columbia have graduation rates below 65.0 percent.

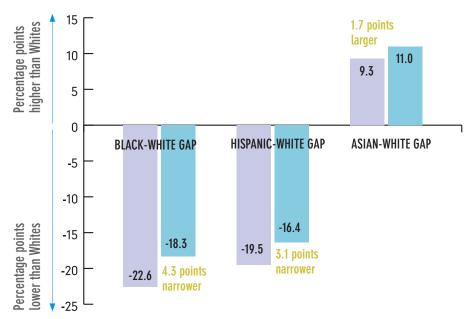
"White generally refers to White non-Hispanic students throughout the text. Black or African American refers to Black non-Hispanic students. Asian refers to Asian/Pacific Islander non-Hispanic students. However, the Monitoring the Future Study (used for Indicator 10) did not collect Hispanic ethnicity information prior to 2005. Therefore, Hispanics may have self-identified as another race, typically White.



The Average Freshman Graduation Rate by Race/Ethnicity 2000-2009

 $Source: Authors' \ tabulations \ of \ the \ U.S. \ Department \ of \ Education, \ National \ Center \ for \ Education \ Statistics, \ Common \ Core \ Data.$

Note: States that were missing information on the number of diplomas or estimated number of 9th graders four years earlier were omitted from analyses. Because estimates are based on population data, confidence intervals were not calculated. Differences are considered to be statistically significantly different.



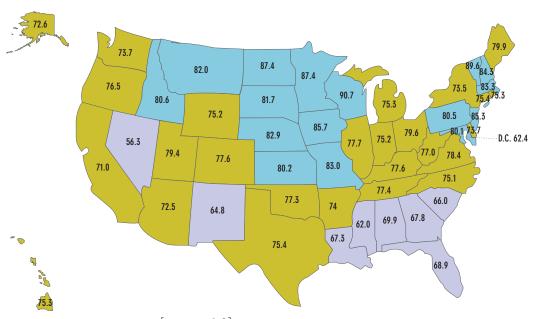
[FIGURE 1.2]

Changes in the Gap: Average Freshman Graduation Rate in 2000 and 2009



Source: Authors' tabulations of the U.S. Department of Education, National Center for Education Statistics, Common Core Data.

Note: States that were missing information on the number of diplomas or estimated number of 9th graders four years earlier were omitted from analyses.



[FIGURE 1.3]

Average Freshman Graduation Rate in 2009



Source: Stillwell, R. (2011). Public school graduates and dropouts from the Common Core of Data: School year 2008-09. Washington, DC, U.S. Department of Education, National Center for Education Statistics NCES 2011-312. Retrieved from http://nces.ed.gov/pubs2011/graduates/tables.asp, June 15, 2011.

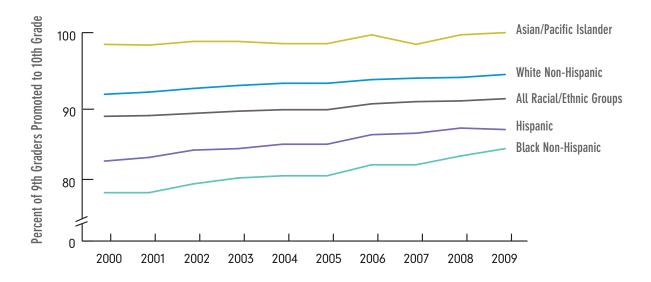
9TH TO 10TH GRADE PROMOTION

Rationale: For 80 percent of public school 9th graders, entering 9th grade marks a change from elementary/middle school to high school. ¹³ While some students thrive in the new environment, others do not. ¹⁴ Of all middle school and high school grades, 9th grade is most likely to be repeated. ¹⁵ Grade retention implies that youth are unprepared for the next grade level because they lack the necessary academic skills, coursework, or social skills. Several studies have found that falling behind in 9th grade greatly reduces the chances that youth will earn a high school diploma. ^{16,17} Thus, examining 9th to 10th grade promotion provides an early view of high school success.

Measure: The 9th to 10th grade promotion rate is the ratio of the number of 10th graders enrolled in a year to the number of 9th graders enrolled in the previous year. Data come from the U.S. Department of Education, National Center for Educational Statistics, Common Core Data.

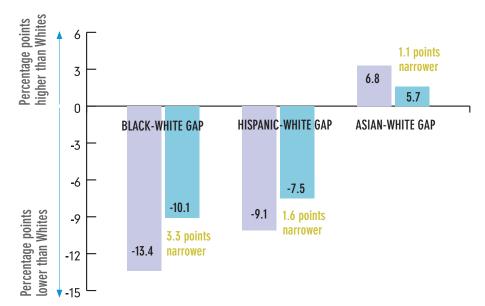
Findings:

- Between 2000 and 2009, the rate of 9th graders promoted to 10th grade increased from 88.7 percent to 91.0 percent. Asian/Pacific Islander students consistently had the highest rates of 9th to 10th grade promotion, followed by White students, Hispanic students, and Black students (see Figure 2.1).
- During this period, the racial and ethnic gaps narrowed (see Figure 2.2). While Black students were 13.4 percentage points less likely to be promoted than White students in 2000, the difference in 2009 lessened to 10.1 points. Similarly, the Hispanic-White gap in promotion rates narrowed from 9.1 percentage points to 7.5 percentage points. Even with the 9th to 10th grade promotion rate increasing for Asian students, the White-Asian gap narrowed by 1.1 percentage points.
- Thirty-four states have 9th to 10th grade promotion rates above 90.0 percent, with Minnesota, South Dakota, Oregon, Maine, and Wyoming having promotion rates at or above 98.0 percent (see Figure 2.3). The District of Columbia (61.8%) and Louisiana (79.9%) had promotion rates below 80.0 percent.



[FIGURE 2.1] 9th-10th Grade Promotion Rate by Race/Ethnicity 2000-2009

Source: Authors' tabulations of the U.S. Department of Education, National Center for Education Statistics, Common Core Data. Data retrieved from the Common Core Build a Table http://nces.ed.gov/ccd/bat/, June 15, 2011. Note: States that were missing 9th or 10th grade enrollment figures necessary for the calculation were excluded from analyses. Because estimates are based on population data, confidence intervals were not calculated. Differences are considered to be statistically significantly different.

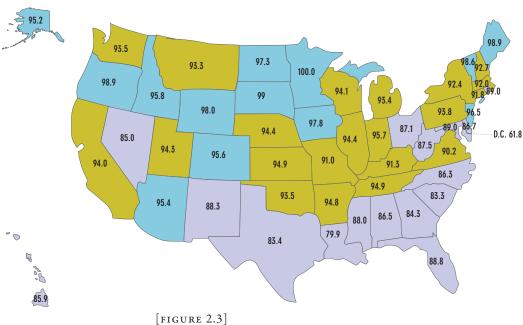


[FIGURE 2.2]

Changes in the Gap: 9th-10th Grade Promotion Rate in 2000 and 2009



Source: Authors' tabulations of the U.S. Department of Education, National Center for Education Statistics, Common Core Data. Data retrieved from the Common Core Build a Table http://nces.ed.gov/ccd/bat/, June 15, 2011. Note: States that were missing 9th or 10th grade enrollment figures necessary for the calculation were excluded from analyses. The "gap" and "changes in the gap" were calculated prior to rounding. Therefore, numbers may differ slightly from calculations made post-rounding.



9th-10th Grade Promotion Rate in 2009

Less than 90.0% 90.0% to 94.9% 95.0% and above

Source: Authors' tabulations of the U.S. Department of Education, National Center for Education Statistics, Common Core Data. Data retrieved from the Common Core Build a Table http://nces.ed.gov/ccd/bat/, June 15, 2011.

PRESCHOOL ENROLLMENT

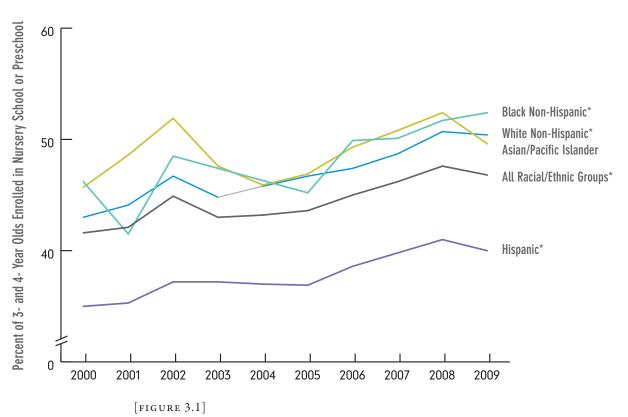
Rationale: Attending preschool is linked to improved school readiness and subsequent educational and life course outcomes. Participation in a high-quality preschool program has been associated with a host of later positive outcomes, such as higher test scores, reduced likelihood of grade retention, and higher rates of high school graduation.¹⁸⁻³⁰

Measure: Percentage of 3- and 4-year-olds enrolled in nursery school or preschool as reported in the U.S. Census Bureau's American Community Survey. This measure excluded 3- and 4-year-olds who are enrolled in kindergarten or elementary school.

Findings:

• Between 2000 and 2009, preschool enrollment increased from 41.6 percent to 46.8 percent. In 2009, Asian (52.4%), White (50.4%), and Black (49.6%) children had similar rates of preschool attendance, while Hispanic children (36.4%) had the lowest rates of preschool attendance (see Figure 3.1). The rate of preschool enrollment was higher in 2009 relative to 2000 for all racial and ethnic groups except Asian children.

- In 2000, Hispanic 3- and 4-year-olds were less likely to attend preschool than White children (31.4% vs. 43.0%, respectively). While a higher percentage of White and Hispanic children attended preschool in 2009, the gap in enrollment was not statistically significantly different^b from 2000 (see Figure 3.2).
- Preschool enrollment among 3- and 4-year-olds was statistically significantly above 50.0 percent in five states including New Jersey, Connecticut, Massachusetts, New York, and Illinois. It was statistically equivalent to 50.0 percent in Virginia, Pennsylvania, Arkansas, Delaware, Georgia, Maryland, Florida, New Hampshire, Rhode Island, Mississippi, Vermont, Louisiana, and the District of Columbia. Preschool enrollment among 3- and 4-year-olds was statistically significantly below 30.0 percent in Nevada and below 40.0 percent in Arizona and Idaho. The rate of preschool enrollment was statically not different from 40.0 percent in North Dakota, West Virginia, Alaska, Montana, Maine, South Dakota, New Mexico, Utah, Indiana, Tennessee, Oklahoma, Texas, Washington, Oregon, Wisconsin, and Alabama.

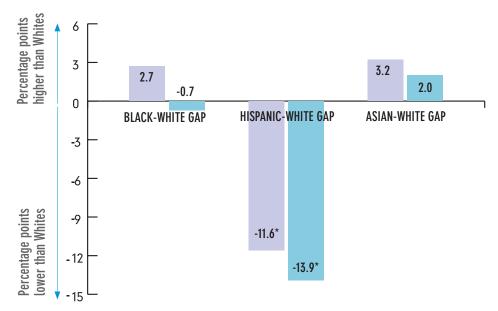


Preschool Enrollment by Race/Ethnicity 2000-2009

Source: Authors' tabulation of the U.S. Census Bureau's American Community Survey.

Note: * Indicates that 2000 and 2009 are statistically significantly different at p = .05 for that racial or ethnic group.

^b Please see technical documentation for the meaning of statistically significant differences.



[FIGURE 3.2]

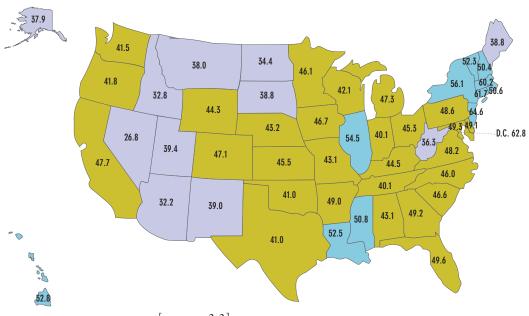
Changes in the Gap: Preschool Enrollment in 2000 and 2009



Source: Authors' tabulation of the U.S. Census Bureau's American Community Survey.

Note: Enrollment includes 3- and 4-year-olds enrolled in either nursery or preschool. The "gap" and "changes in the gap" were calculated prior to rounding. Therefore, numbers may differ slightly from calculations made post-rounding.

* Indicates statistically significant differences at the .05 level



[FIGURE 3.3]

Preschool Enrollment (3 year average, 2007-2009) Percent of 3- and 4-Year-Olds Enrolled

Less than 40.0%
40.0% to 49.9%
50.0% and above

Source: Authors' tabulation of the U.S. Census Bureau's American Community Survey.

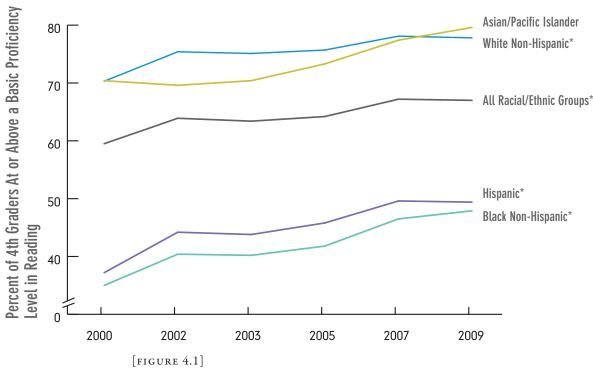
4TH GRADE READING PROFICIENCY

Rationale: Reading is a fundamental skill that helps individuals gain knowledge, communicate, and learn from one another. For school-aged children, better reading ability is associated with higher levels of school engagement and independent learning skills that promote success in other academic areas, such as social studies and science. ^{31,32} Early reading ability can place a student on an accelerated trajectory throughout his/her school years. ³³ Research has linked reading achievement to increased probability of earning a high school diploma, attending college, securing a job, earning a higher salary, and being civically engaged in adulthood. ^{34,35}

Measure: Percentage of 4th grade students who scored at or above basic proficiency on the reading test of the National Assessment of Educational Progress. The capabilities of 4th grade students performing at a basic proficiency level include locating relevant information in text, making simple inferences, identifying details from the text that support a given interpretation or conclusion, and interpreting a word's meaning based upon its use in the text.

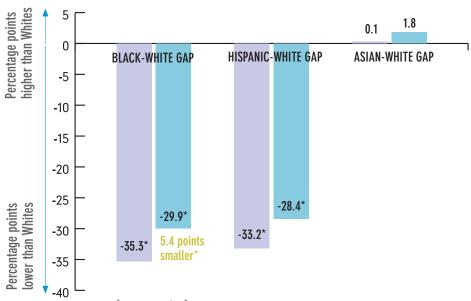
Findings:

- From 2000 to 2009, the percentage of 4th graders reading at or above a basic proficiency level has increased from 59.5 percent to 67.0 percent (see Figure 4.1). In 2009, relative to White children (77.8%), a smaller percentage of Black (47.9%) and Hispanic (49.4%) children, but a similar percentage of Asian children (79.6%), were reading at or above a proficient level.
- From 2000 to 2009, the gap between Black and White children narrowed by 5.4 percentage points, indicating some progress over the last decade (see Figure 4.2).
- Massachusetts had the highest percentage of 4th graders reading at or above a proficient level (80.1%). Ten states had 70.0 percent or more 4th grade students reading at or above a proficient level, and the value for 19 more states is statistically indistinguishable from 70.0 percent. In Indiana, Pennsylvania, South Dakota, Rhode Island, Iowa, Idaho, Washington, and Wisconsin, the percentage of 4th graders reading at or above a proficient level was not statistically significantly different from 70.0 percent. Fewer than 60.0 percent of 4th grade students are reading at a proficient level in the District of Columbia, Louisiana, New Mexico, California, Mississippi, Arizona, Hawaii, and Nevada. The rate for Alaska (59.0%) was not statistically significantly different from 60.0 percent.



4th Grade Reading Proficiency by Race/Ethnicity 2000-2009

Source: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), retrieved from http://nationsreportcard.gov June 1, 2011. Note: * Indicates that 2000 and 2009 are statistically significantly different at p = .05 for that racial or ethnic group.

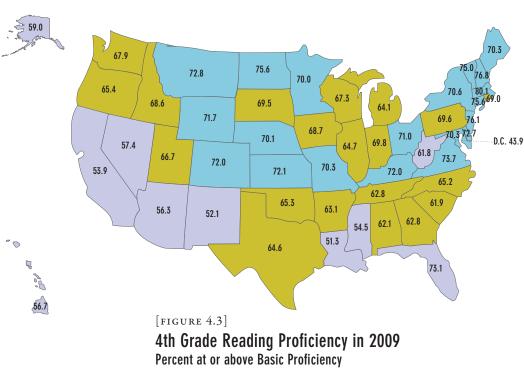


[FIGURE 4.2]

Changes in the Gap: 4th Graders At or Above Basic Proficiency in Reading in 2000 and 2009



Source: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), retrieved from http://nationsreportcard.govJune 1, 2011. Note: The "gap" and "changes in the gap" were calculated prior to rounding. Therefore, numbers may differ slightly from calculations made post-rounding. * Indicates statistically significant differences at the .05 level.



Less than 60.0%

60.0% to 69.9%
70.0% and above

Source: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), retrieved from http://nationsreportcard.gov June 1, 2011.

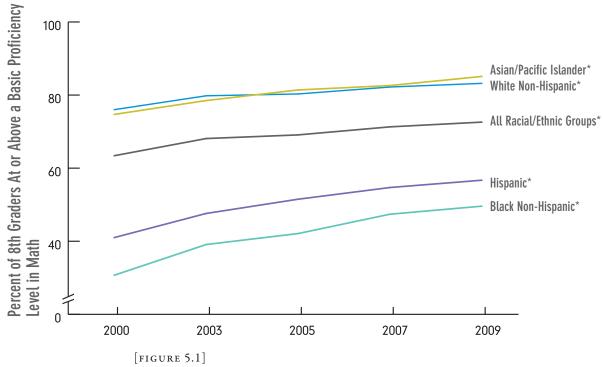
8TH GRADE MATH PROFICIENCY

Rationale: Basic mathematics skills provide a valuable tool for problem-solving and decision-making. A few examples of everyday tasks that involve math include following a recipe, making decisions while shopping, and calculating the resources needed to complete a project. Mathematics skills learned in elementary and middle school prepare youth for rigorous high school math. Better math skills have been associated with higher earnings and higher probabilities of graduating from high school and college. ^{36,37}

Measure: Percentage of 8th grade students who scored at or above basic proficiency on the math test of the National Assessment of Educational Progress. Basic proficiency in 8th grade mathematics includes problem-solving using fundamental algebraic and informal geometric concepts, as well as completing problems with prompts such as diagrams, charts, and graphs.

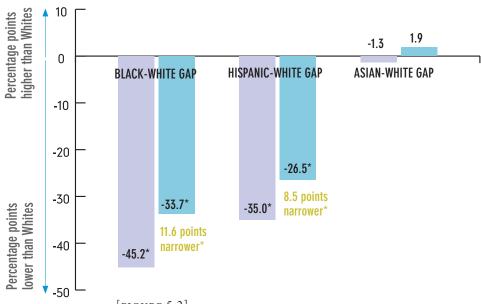
Findings:

- From 2000 to 2009, the percentage of 8th graders who are proficient in math increased from 63.4 percent to 72.6 percent (see Figure 5.1). In 2009, a similar percentage of Asian and White students were performing at or above a proficient level (85.1% and 83.2%, respectively), but the math skills of Hispanic students (56.7%) and Black students (49.6%) lagged behind.
- During this period, both the Black-White and the Hispanic-White gap narrowed (by 11.6 and 8.5 percentage points, respectively) (see Figure 5.2).
- North Dakota (86.4%) and Massachusetts (85.2%) had the highest percentage of 8th graders who performed at or above a proficient level in math (see Figure 5.3). Twelve jurisdictions had statistically significantly less than 70.0 percent of 8th graders performing at or above a basic proficiency level in 8th grade math, including the District of Columbia, Mississippi, Alabama, California, New Mexico, West Virginia, Louisiana, Nevada, Tennessee, Hawaii, Arkansas, and Georgia. The percentage of 8th graders performing at or above proficiency in math was not statistically significantly different from 70.0 percent in Arizona, Oklahoma, Michigan, Rhode Island, South Carolina, Florida, Kentucky, Illinois, and New York.



8th Grade Math Proficiency by Race/Ethnicity 2000-2009

Source: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), retrieved from http://nationsreportcard.gov June 1, 2011. Note: * Indicates that 2000 and 2009 are statistically significantly different at p = .05 for that racial or ethnic group.

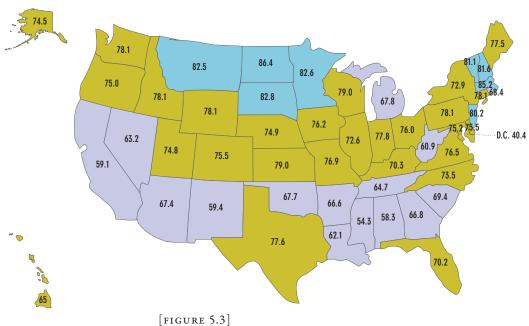


[FIGURE 5.2]

Changes in the Gap: 8th Graders At or Above Basic Proficiency in Math in 2000 and 2009



Source: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), retrieved from http://nationsreportcard.gov June 1, 2011. Note: The "gap" and "changes in the gap" were calculated prior to rounding. Therefore, numbers may differ slightly from calculations made post-rounding. * Indicates statistically significant differences at the .05 level.



8th Grade Math Proficiency in 2009 Percent at or above Basic Proficiency

Less than 70.0% 70.0% to 79.9% 80.0% and above

Source: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), retrieved from http://nationsreportcard.gov June 1, 2011.

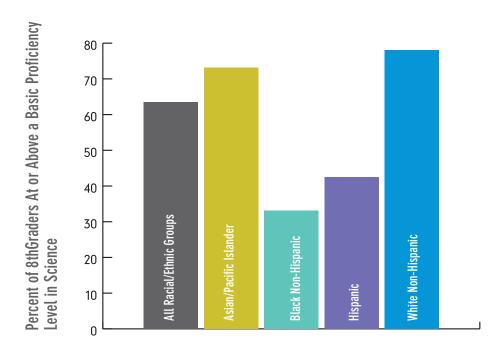
8TH GRADE SCIENCE PROFICIENCY

Rationale: Science and technology skills are vital for national security, medical advancements, and energy and food production, to name a few critical areas. The number of jobs involving science and engineering has grown in recent years. ³⁸⁻⁴⁰ Preparing for these jobs begins early in a child's academic career. Acquiring knowledge and skills through elementary and middle school will prepare students for rigorous high school curricula leading to college and career readiness.

Measure: Percentage of 8th grade students who scored at or above basic proficiency on the science test of the National Assessment of Educational Progress. Basic proficiency represents "partial mastery of prerequisite knowledge and skills that are fundamental for proficient work". ⁴¹ The science test covers three content areas: physical science, life science, and earth and space sciences.

Findings:

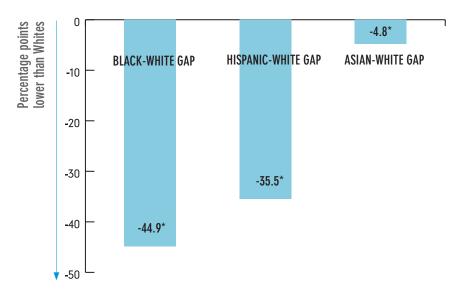
- In 2009, the first year of a new assessment approach for the science assessment, 63.5 percent of all 8th graders were performing at or above a basic proficiency level. A higher percentage of White students (78.0%) than Asian (73.2%), Hispanic (42.5%), and Black (33.1%) students were performing at or above basic proficiency in science (see Figure 6.1).
- The Black-White and Hispanic-White gaps on this measure are particularly large: 44.9 and 35.5 percentage points, respectively (see Figure 6.2).
- In ten states the percentage of 8th graders performing at or above a basic proficiency level in science was statistically significantly above 70.0 percent, including North Dakota, Montana, South Dakota, New Hampshire, Minnesota, Wyoming, Massachusetts, Maine, Ohio, and Wisconsin. In 13 states (Indiana, Pennsylvania, Oregon, Washington, Connecticut, New Jersey, Virginia, Colorado, Missouri, Kentucky, Iowa, Idaho, and Utah) the estimated percentage of 8th graders performing at or above basic proficiency was not statistically significantly different from 70.0 percent. In only one state, Mississippi (41.4%), the percentage was below 50.0 percent.



[FIGURE 6.1]

8th Grade Science Proficiency by Race/Ethnicity in 2009

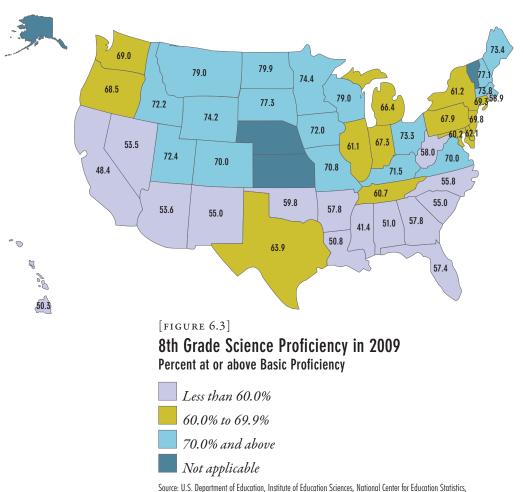
Source: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), retrieved from http://nationsreportcard.gov June 27, 2011.



[FIGURE 6.2]

Gap: 8th Graders At or Above Basic Proficiency in Science in 2009

Source: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), retrieved from http://nationsreportcard.gov June 27, 2011. Note: The "gap" and "changes in the gap" were calculated prior to rounding. Therefore, numbers may differ slightly from calculations made post-rounding. * Indicates statistically significant differences at the .05 level.



COLLEGE ENROLLMENT

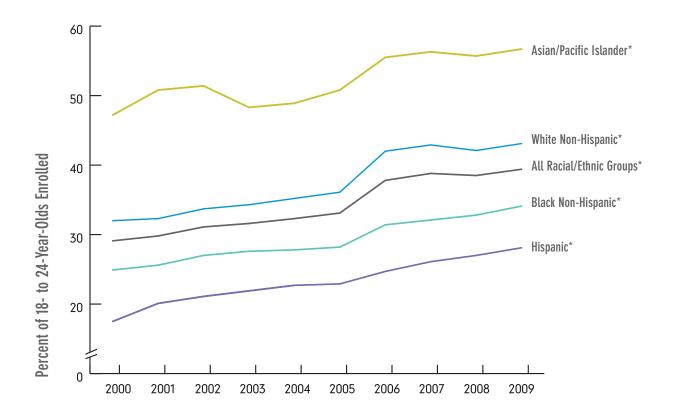
Rationale: Post-secondary education, whether or not it leads to a college degree, has been associated with a greater likelihood of employment, higher median incomes than those earned by high school graduates, decreased reliance on government welfare services, and reduced likelihood of criminal activity. 42-44

Measure: Percentage of 18- to 24-year-olds enrolled in college full-time or part-time. Data come from the U.S. Census Bureau's American Community Survey.

Findings:

• Among 18- to 24-year-olds, full- or part-time college enrollment increased from 29.1 percent to 39.4 percent between 2000 and 2009 (see Figure 7.1). In 2009, Asian (56.7%) young adults were enrolled in college at higher rates than any other racial or ethnic group. Hispanic (28.1%) young adults were enrolled in college at lower rates than any

- other racial or ethnic group. White (43.1%) young adults were enrolled in college at higher rates than Black (34.1%) young adults.
- The gaps in college enrollment between White young adults and the other racial and ethnic groups did not change from 2000 to 2009 (see Figure 7.2).
- College enrollment rates of young adults were statistically significantly above 40.0 percent for seventeen states (California, Illinois, Nebraska, Maine, Wisconsin, New Jersey, Delaware, Iowa, Pennsylvania, Michigan, New Hampshire, New York, Connecticut, North Dakota, Vermont, Massachusetts, and Rhode Island) (see Figure 7.3). Enrollment rates were not statistically significantly different from 40.0 percent for the District of Columbia, Kansas, Virginia, Maryland, Indiana, Ohio, Minnesota, and Utah. Two states (Alaska and Nevada) had college enrollment rates among young adults at less than 30.0 percent.

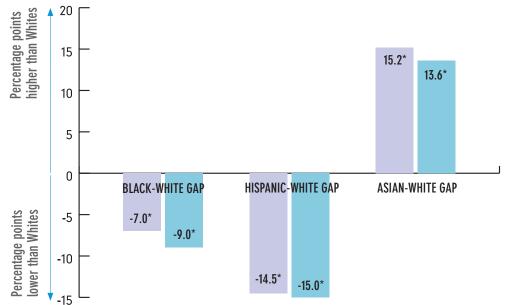


[FIGURE 7.1]

College Enrollment Among Young Adults by Race/Ethnicity 2000-2009

Source: Authors tabulations of the U.S. Census Bureau's American Community Survey. Note: Enrollment includes full- or part-time enrollment in a 2- or 4- year program.

Note: * Indicates that 2000 and 2009 are statistically significantly different at p = .05 for that racial or ethnic group.



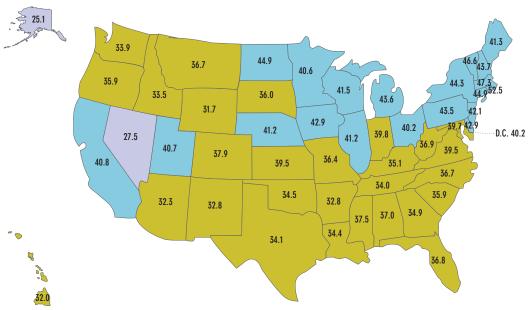
[FIGURE 7.2]

Changes in the Gap: College Enrollment Among Young Adults in 2000 and 2009



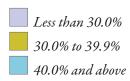
Source: Authors tabulations of the U.S. Census Bureau's American Community Survey.

Note: Enrollment includes full- or part-time enrollment in a 2- or 4- year program for 18- to 24-year-olds. The "gap" and "changes in the gap" were calculated prior to rounding. Therefore, numbers may differ slightly from calculations made post-rounding. * Indicates statistically significant differences at the .05 level.



[FIGURE 7.3]

College Enrollment Among Young Adults (2007-2009) Percent of 18- to 24-Year-Olds Enrolled



Source: Authors tabulations of the U.S. Census Bureau's American Community Survey.

Note: Enrollment includes full- or part-time enrollment in a 2- or 4- year program for 18- to 24-year-olds.

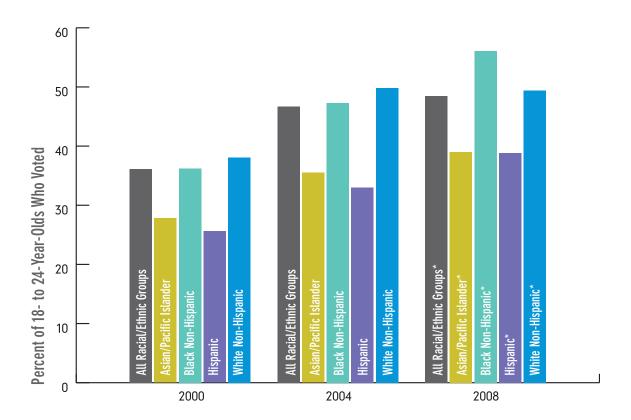
VOTING AMONG YOUNG ADULTS

Rationale: Youth who are civically engaged tend to perform better in school, attain higher levels of education, and participate more in community activities as adults. ^{8,45,46} Voting is one way that youth can be civically engaged and can voice their opinions and concerns in ways that influence policy.

Measure: Percentage of 18- to 24-year-olds who voted during a presidential election year (2000, 2004, 2008), according to the November supplement of the U.S. Census Bureau's Current Population Survey.

Findings:

- The percentage of young adults voting in presidential elections increased from 36.1 percent in 2000 to 48.5 percent in 2008. White and Black youth voted more than Hispanic and Asian/Pacific Islander youth. There was also a greater increase over time in voting by White and Black youth than by Hispanic and Asian/Pacific Islander youth (see Figure 8.1).
- The Black-White gap in voting among young adults grew between 2000 and 2008, with Black young adults 6.7 percentage points more likely to vote than White young adults in 2008 (see Figure 8.2).

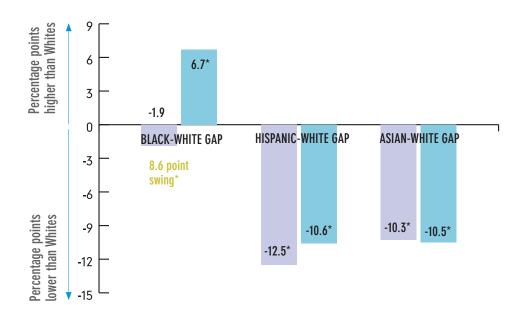


[figure 8.1]

Voting Among Young Adults by Race/Ethnicity 2000-2008

Presidential Election Years Only

Source: Author's tabulations of the November Supplement of the U.S. Census Bureau's Current Population Survey. Note: * Indicates that 2000 and 2008 are statistically significantly different at p = .05 for that racial or ethnic group.



[FIGURE 8.2]

Changes in the Gap: Voting Among Young Adults in 2000 and 2008 Presidential Election Years Only



Source: Author's tabulations of the November Supplement of the U.S. Census Bureau's Current Population Survey.

Note: Young adults included individuals 18 to 24 years of age. The "gap" and "changes in the gap" were calculated prior to rounding.

Therefore, numbers may differ slightly from calculations made post-rounding. * Indicates statistically significant differences at the .05 level.

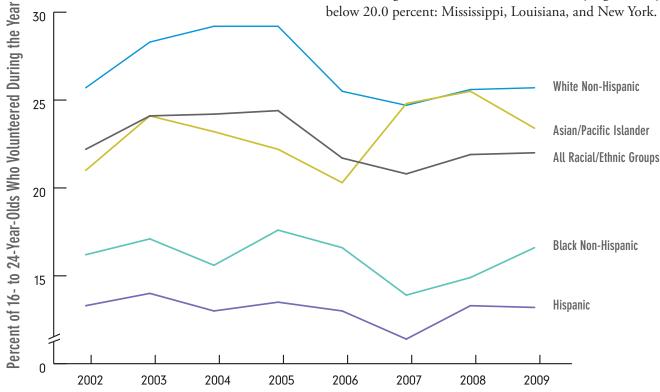
VOLUNTEERING AND SERVICE AMONG YOUNG ADULTS

Rationale: Youth who are civically engaged tend to perform better in school, to attain higher levels of education, and to participate in community activities as adults. ^{8,45,46} Community volunteer and service activities are one way that youth can be civically involved. Individuals who volunteer benefit by gaining community connections and social capital and through experiencing feelings of good will. Society benefits from the services and labor that the volunteers perform. Individuals who volunteer as youth are more likely to volunteer and to vote as adults. ⁴⁵⁻⁴⁷

Measure: Percentage of 16- to 24-year-olds who volunteered at least once during the previous 12 months. Data come from the September supplement of the U.S. Census Bureau's Current Population Survey.

Findings:

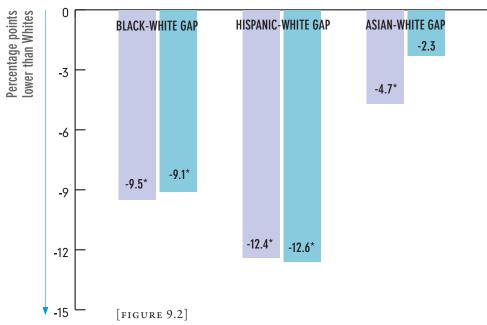
- Youth volunteer rates fluctuated only slightly between 2002 and 2009, with approximately 22 percent of 16- to 24-year-olds volunteering (see Figure 9.1). Whites and Asians volunteered at the highest rates (25.7% and 23.4%, respectively), compared to Black (16.6%) and Hispanic (13.2%) youth.
- Between 2000 and 2009, a gap persisted in volunteering rates for Black relative to White young adults (about 9 percentage points) and for Hispanic relative to White young adults (about 12 percentage points) (see Figure 9.2). The gap in volunteering rates between Asian and White young adults did not change during this time.
- The rate of volunteering was statistically significantly higher than 30.0 percent in only one state, Utah, and was statistically the equivalent to 30.0 percent in the District of Columbia, Alaska, Connecticut, Montana, Wyoming, Idaho, South Dakota, Oregon, Kansas, North Dakota, Minnesota, Vermont, Nebraska, Iowa, Wisconsin, Maine, and Washington. Three states were statistically significantly below 20.0 percent: Mississippi, Louisiana, and New York.



[FIGURE 9.1]

Volunteering Among Young Adults by Race/Ethnicity 2002-2009

Source: Authors tabulations of the U.S. Census Bureau's American Community Survey. Note: Enrollment includes full- or part-time enrollment in a 2- or 4- year program. Note: The 2009 rate of volunteering did not differ from the 2000 rate for each racial and ethnic group.

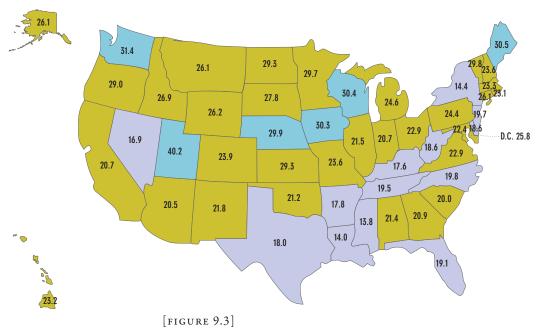


Changes in the Gap: Volunteering Among Young Adults in 2002 and 2009



Source: Authors' tabulations of the September supplement of the U.S. Census Bureau's Current Population Survey.

Note: Young adults included individuals 16 to 24 years of age. The "gap" and "changes in the gap" were calculated prior to rounding. Therefore, numbers may differ slightly from calculations made post-rounding. For each racial and ethnic group the value in 2009 did not differ from the value in 2002 (p = .05).



Volunteering Among Young Adults (2007-2009)
Percent of 16- to 24-Year-Olds who Volunteered

Less than 20.0%
20.0% to 29.9%
30.0% and above

Source: Authors' tabulations of the September supplement of the U.S. Census Bureau's Current Population Survey.

PARTICIPATION IN EXTRACURRICULAR ACTIVITIES

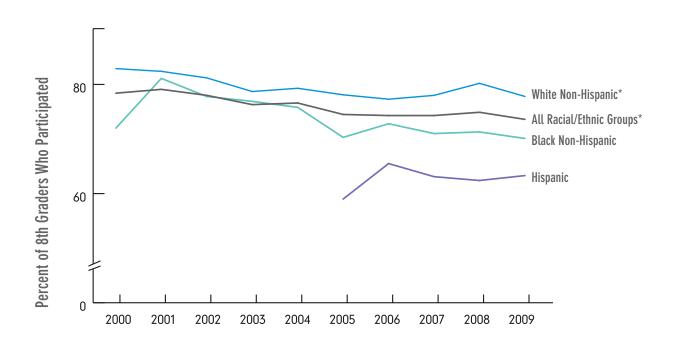
Rationale: Structured activities offer youth the opportunity to participate in enriching activities and to interact with adult role models. Students who participate in out-of-school activities are more likely to earn a high school diploma and to have higher grades than those who do not participate. The middle school years may be particularly important, because early adolescence is the time when most future dropouts begin to disengage from school. Students who participate in extracurricular activities are more likely to be optimistic about their futures, to have higher self-esteem, to be civically engaged, and to enroll in post-secondary education and earn a post-secondary degree. 46,53-57

Measure: Percentage of 8th graders who participated in school activities to a "moderate," "considerable," or "great" extent (relative to "not at all" or "to a slight extent"). Participation in school newspaper or yearbook, music or other performing arts, athletic teams, and other school clubs or activities was

considered. Data come from the Monitoring the Future Study of the Institute for Social Research, University of Michigan. Data on Hispanic ethnicity is not available prior to 2005.

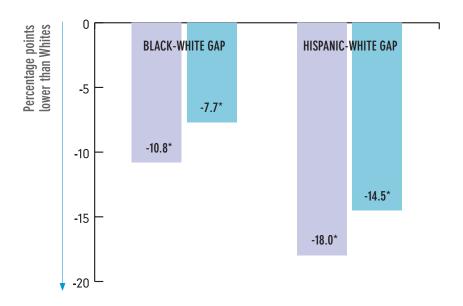
Findings:

- Eighth graders' participation in school activities declined slightly between 2000 and 2009 from 78.4 percent to 73.6 percent (see Figure 10.1). In 2009, White students were more likely than Black students to participate at least moderately in school activities (77.8% vs. 70.1%). Black students, however, participated more than Hispanic students (70.1% vs. 63.3%).
- The gap in participation in extracurricular activities between Black and White students persisted in 2000 and 2009 (see Figure 10.2). Similarly, the size of the Hispanic-White gap in extracurricular participation in 2009 was not statically significantly different from the size of the gap in 2005.



[FIGURE 10.1]
8th Grade Participation in School Activities by Race/Ethnicity 2000-2009

Source: Authors' tabulations of the Monitoring the Future Survey, Institute for Social Research, University of Michigan. Note: * Indicates that 2000 and 2009 are statistically significantly different at p = .05 for that racial or ethnic group. For Hispanics, the difference between 2005 and 2009 was not statistically significant.



[FIGURE 10.2]

Changes in the Gap: 8th Grade Participation in School Activities in 2000 and 2009



Source: Authors' tabulations of the Monitoring the Future Survey, Institute for Social Research, University of Michigan. Note: The "gap" and "changes in the gap" were calculated prior to rounding. Therefore, numbers may differ slightly from calculations made post-rounding. * Indicates statistically significant differences at the .05 level.

SUMMARY

Examining the status of America's youth according to these 10 indicators begins to provide insight into how American children are progressing. Raising cause for serious concern, in 2009, about one quarter of all students (24.5%) did not graduate from high school, and 9.0 percent of 9th grade students were not promoted to the 10th grade. These indicators also provide some cause for optimism. Between 2000 and 2009, the national high school graduation rate increased by 3.3 percentage points, and the 9th to 10th grade promotion rate increased by 2.3 percentage points. In addition, between 2000 and 2009, there were increases in the percentage of 4th graders performing at or above proficiency in reading (from 59.5% to 67.7%) and the percentage of 8th graders performing at or above proficiency in math (from 63.4% to 72.6%).

Racial and ethnic gaps in achievement were evident in 2009 in many key measures. High school graduation rates were markedly lower for Black (63.3%) and Hispanic (65.2%) students than for White (81.6%) or Asian students (92.5%). Although the Black-White and Hispanic-White gaps narrowed by 4.3 and 3.1 percentage points, respectively, between 2000 and 2009, the need for more rapid progress is evident. In 2009, Black-White and Hispanic-White achievement gaps were evident in other indicators of academic success, including 9th to 10th grade promotion, preschool enrollment, 4th grade reading proficiency levels, 8th grade math and science proficiency levels,

and college enrollment, with White youth having consistently higher rates. Between 2000 and 2009, little progress was made in closing these gaps, with the exception of a small narrowing of a) the 9th to 10th grade promotion rate for Black and Hispanic youth; and b) the percentage of Black 4th graders reading at or above basic proficiency.

These disparities are mirrored in other areas related to youth success. For example, White young adults were more likely to volunteer than Black and Hispanic young adults in 2009. These racial and ethnic gaps did not change over time. Similarly, in 2009 a higher percentage of White 8th graders participated in extracurricular activities than did Black or Hispanic youth. These gaps did not improve from 2000 to 2009. One notable exception to the trend observed in other indicators is that, in 2008, a higher percentage of Black young adults aged 18 to 24 voted in the presidential election than White young adults.

The existing information sources from which child indicators are drawn are enormously valuable, if imperfect. Continuing to expand and refine these data sources will increase their power for characterizing the state of America's children and, in turn, increase their utility for policymaking purposes. Continuing to track these child indicators over time is crucial for informing the priorities of America's Promise Alliance and for the nation as a whole.

TECHNICAL DOCUMENTATION

This section briefly describes the methods and statistical approaches used throughout this report to make inferences about how the country and the states are performing on key indicators of academic success.

Two types of data are used in this report: survey data that provide samples of the population and administrative data from the entire population. The surveys used in this report, such as the American Community Survey, are carefully designed to produce estimates for the U.S. population. Because the numbers are estimates and the true value is unknown, 95 percent confidence intervals were calculated. A confidence interval captures the precision of the estimate. A smaller interval indicates a more precise estimate. The confidence interval provides a tool for determining whether two estimates are statistically significantly different. For example, it is estimated that 52.4 percent of Asian 3- and 4-year-olds were enrolled in preschool in 2009; and the confidence interval for this estimate is between 50.3 percent to 54.4 percent. For White 3- and 4-year olds, 50.4 percent were estimated to be enrolled and the confidence interval is 49.8 percent to 50.9 percent. Because the White and Asian confidence intervals overlap, we cannot say that enrollment rates for Asians and Whites are statistically significantly different. However, for Hispanic children, the estimated enrollment rate is 36.4 percent, and the confidence interval is 35.5 percent to 37.3 percent. Because the confidence intervals do not overlap, we can say that a lower percentage of Hispanic youth were enrolled in preschool. Terms such as lower, lowest, higher, and highest imply that a statistical test was conducted (with the exception of the map legends as described below).

In contrast to estimates based on survey data, the administrative information included in the Common Core of Data from the

National Center for Education Statistics is designed to capture enrollment and number of diplomas given by all public schools in the country. Because this is population data rather than a sample of the population, tests of statistical significance were not conducted to determine if two rates differed. It is worth noting that in some years some states did not report information on enrollment and/or diplomas. Consistent with the approach used by the National Center for Education Statistics, only states that had valid data for each year necessary to calculate the averaged freshman graduation rate and the 9th to 10th grade promotion rate were included.

For comparing the amount of change over time (e.g., Figure 3.2-10.2), a difference-in-difference approach was used.⁵⁸ This is a statistical test that compares the amount of change experienced by one group with the amount of change experienced by another group. As in all analyses of survey data, survey weights were used to reflect the design of each survey.

In the maps (e.g., Figure 1.3-10.3), the mean value of a three-year average is presented. A three-year average was chosen because it provides a larger sample size to make estimates for each of the states. Each map displays the numerical value of the mean for each state. The text that accompanies the maps accounts for the 95 percent confidence interval. However, the legend in the map is simply based on the mean value. For example, in South Dakota in 2007-2009, an estimated 38.8 percent of 3- and 4-year-olds were enrolled in preschool. The confidence interval for this range is 31.5 percent to 46.2 percent, which overlaps 40.0 percent. In Figure 3.3 this value is shaded purple, consistent with the "less than 40.0 percent" category; however, the text acknowledges that this rate is not statistically different from 40.0 percent.

REFERENCES

- 1. Cohen, M.A., & Piquero, A.R. (2009). New evidence on the monetary value of saving a high risk youth. Journal of Quantitative Criminology, 25, 25-249.
- 2. Balfanz, R., Bridgeland, J.M., Moore, L.A., & Fox, J.H. (2010). Building a grad nation: Progress and Challenge in ending the high school dropout epidemic. Washington DC: Civic Enterprises, Everyone Graduates Center at Johns Hopkins University, America's Promise Alliance.
- 3. America's Promise Alliance. Dropout Crisis Facts & Figures. 2011. http://www.americaspromise.org/News-and-Events/News-and-Features/2011-News/July/~/media/Files/News/Final_DropoutCrisis_July2011.ashx (downloaded August 16, 2011].
- 4. Angrist, J.D., & Krueger, A.B. (1991). Does compulsory school attendance affect schooling and earnings? Quarterly Journal of Economics, 106(4), 979-1014.
- 5. Ashenfelter, O., & Rouse, C. (1999). Schooling, intelligence, and income in America: Cracks in the Bell Curve. Cambridge, MA: National Bureau of Economic Research, 6902
- 6. Cutler, D.M., & Lleras-Muney, A. (2006). Education and health: Evaluating theories and evidence. Cambridge, MA: National Bureau of Economic Research, 12352.
- 7. Caspi, A., Wright, B.R.E., Moffitt, T.E., & Silva, P.A. (1998). Early failure in the labor market: Childhood and adolescent predictors of unemployment in the transition to adulthood. American Sociological Review, 63(3), 424-451.
- 8. Dee, T.S. (2004). Are there civic returns to education? Journal of Public Economics, 88(9-10), 1679-1720.
- 9. Lochner, L., & Moretti, E. (2004). The effect of education on crime: Evidence from prison inmates, arrests, and self-reports. The American Economic Review, 94(1), 155-189.
- 10. Coley, R. (1995). Dreams defferred: High school dropouts in the United States. Policy Information Report. Princeton, NJ: Educational Testing Services.
- 11. Rouse, C.E. The labor market consequences of an inadequate education. NBER2005.
- 12. Aud, S., (Ed.) (2011). The condition of education 2011 in brief. Washington, D.C.: U.S. Department of Education, National Center for Education Statistics.
- 13. Neild, R.C. (2009). Falling off track during the transition to high school: What we know and what can be done. Future of Children, 19(1), 53-76.
- 14. Kinney, D.A. (1993). From nerds to normals: The recovery of identity among adolescents from middle school to high school. Sociology of Education, 66(1), 21-40.
- 15. West, T.C. (2009). Still a freshman: Examining the prevalence and characteristics of ninth-grade retention across six states. Baltimore: Johns Hopkins University Center for Social Organization of Schools.
- 16. Neild, R.C., Stoner-Eby, S., & Furstenberg, F. (2008). Connecting entrance and departure: The transition to ninth grade and high school dropout. Education and Urban Society, 40(5), 543-569.
- 17. Allensworth, E.M., & Easton, J.Q. (2005). The on-track indicator as a predictor of high school graduation. Chicago: Consortium on Chicago School Research at the University of Chicago.
- 18. Zill, N., Resnick, G., Kim, K., et al. (2003). Head Start FACES 2000: A whole-child perspective on program performance. Washington, DC: Administration for Children Youth and Families, U.S. Department of Health and Human Services.
- 19. Puma, M., Bell, S., Cook, R., et al. (2005). Head Start impact study: First year findings. Washington, DC: Administration for Children Youth and Families, U.S. Department of Health and Human Services.
- 20. Magnuson, K.A., Meyers, M.K., Ruhm, C.J., & Waldfogel, J. (2004). Inequality in preschool education and school readiness. American Educational Research Journal, 41(1), 115-157.
- 21. Magnuson, K.A., Ruhm, C., & Waldfogel, J. (2007). Does prekindergarten improve school preparation and performance. Economics of Education Review, 26(1), 33-51.
- 22. Barnett, W.S., Lamy, C., & Jung, K. (2005). The effects of state prekindergarten programs on young children's school readiness in five states. New Brunswick, NJ: The National Institute for Early Education Research, Rutgers University.
- 23. Gormley, W.T., & Gayer, T. (2005). Promoting school readiness in Oklahoma: An evaluation of Tulsa's pre-K program. Journal of Human Resources, 40(3), 533-558.
- 24. Gormley, W.T., Gayer, T., Phillips, D., & Dawson, B. (2005). The effects of universal pre-k on cognitive development. Developmental Psychology, 41(6), 872-884.
- 25. Henry, G., Henderson, L., Ponder, B., Gordon, C., Mashburn, A., & Rickman, D. (2003). Report of the Findings from the Early Childhood Study: 2001-02. Atlanta, GA: Andrew Young School of Policy Studies, Georgia State University.
- 26. Campbell, F.A., & Ramey, C.T. (1995). Cognitive and school outcomes for high-risk African-American students at middle adolescence. American Educational Research Journal, 32(4), 743-772.
- 27. Kirp, D.L. (2004). Life way after Head Start. New York Times Magazine. New York, NY: The New York Times, 32-38.
- 28. Ramey, C.T., Campbell, F.A., Burchinal, M., Skinner, M.L., Gardner, D.M., & Ramey, S.L. (2000). Persistent effects of early childhood education on high-risk children and their mothers. Applied Development Science, 4(1), 2-14.
- 29. Schweinhart, L.J. (2004). The High/Scope Perry Preschool study through age 40: Summary, conclusions, and frequently asked questions. Ypsilanti, MI: High/Scope Educational Research Foundation.
- 30. Melhuish, E.C., Sylva, K., Sammons, P., et al. (2008). The early years: Preschool influences on mathematics achievement. Science, 321, 1161-1162.
- 31. Morgan, P.L., Farkas, G., Tufis, P.A., & Sperling, R.A. (2008). Are reading and behavior problems risk factors for each other. Journal of Learning Disabilities, 41(5), 417-436.
- 32. Casteel, C.P., & Isom, B.A. (1994). Reciprocal processes in science and literacy learning. The Reading Teacher, 47(7), 538-545.
- 33. Li-Grinin, C.P., Votruba-Drzal, E., Maldonado-Carreno, C., & Haas, K. (2010). Children's early approaches to learning and academic trajectories through fifth grade. Developmental Psychology, 46(5), 1062-1077.
- 34. Lesnick, J., Goerge, R.M., Smithgall, C., & Gwynne, J. (2010). A longitudinal analysis of third-grade students in Chiago in 1996-1997 and their educational outcomes. Chicago: Chapin Hall at the University of Chicago.
- 35. Kutner, M., Greenberg, E., Jin, Y., et al. (2007). Literacy in everday life: Results from the 2003 National Assessment of Adult Literacy. Washington DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education.
- 36. Tyler, J.H., & Willett, J.B. (2000). Do the cognitive skills of school dropouts matter in the labor market? The Journal of human Resources, 35(4), 749-754.
- 37. Rose, H., & Betts, J.R. (2001). Math matters: The links between high school curriculum, college graduation, and earnings. San Francisco, CA: Public Policy Institute of California.
- 38. National Science Board (2003). The science and engineering workforce: Realizing America's potential. Arlington, VA: National Science Foundation.
- 39. National Science Board (2004). An emerging and critical problem of the science and engineering labor force: A companion to science and engineering indicators 2004. Arlington, VA: National Science Foundation
- 40. National Science Board (2010). Science and Engineering Indicators: 2010. Arlington, VA: National Science Foundation.
- 41. National Center for Education Statistics (2011). Science 2009: National Assessment of Educational Progress at grades 4, 8 and 12. Washington DC: Institute of Education, U.S. Department of Education
- 42. Lochner, L. (2004). Education, work, and crime: A human capital approach. International Economic Review, 45(3), 811-843.
- 43. Day, J.C., & Newburger, E.C. (2002). The big payoff: Educational attainment and synthetic estimates of work-life earnings. Washington, DC: U.S. Census Bureau.
- 44. London, R.A. (2006). The Role of Postsecondary Education in Welfare Recipients' Paths to Self-Sufficiency. The Journal of Higher Education, 77(3), 472-496.
- 45. Dávila, A., & Mora, M.T. (2007). Civic engagement and high school academic progress: An analysis using NELS data: The Center for Information & Research on Civic Learning & Engagement.
- 46. Hart, D., Donnelly, T.M., Youniss, J., & Alkins, R. (2007). High school community service as a predictor of adult voting and volunteering, American Educational Research Journal, 44(1), 197-219.
- 47. Nesbit, R.B., & Jeffrey, L. (2010). Public Administration Review, 70 (Sp. Iss. SI Suppl. 1): S107-S113. [Duplicate] At Your Service? Volunteering and National Service in 2020. Public Administration Review, 70 (Sp. Iss. SI Suppl. 1): S107-S113.
- 48. McNeal, R.B., Jr. (1995). Extracurricular activities and high school dropouts. Sociology of Education, 68(1), 62-80.
- 49. Mahoney, J.L., & Cairns, R.B. (1997). Do extracurricular activities protect against early school dropout? Developmental Psychology, 33(2), 241-253.
- 50. Schmidt, J.A., Shumow, L., & Kackar, H. (2007). Adolescents' participation in service activities and its impact on academic, behavioral, and civic outcomes. Journal of Youth and Adolescence, 36(2), 127–140.
- 51. Barber, B.L., Eccles, J.S., & Stone, M.R. (2001). Whatever happened to the jock, the brain, and the princess? Young adult pathways linked to adolescent activity involvement and social identity. Journal of Adolescent Research, 16(5), 429-455.
- 52. Eccles, J.S. & Barber, B.L. (1999). Student council, volunteering, basketball, or marching band: What kind of extracurricular involvement matters? Journal of Adolescent Research, 14(1), 10-43.
- 53. Gardner, M., Roth, J., & Brooks-Gunn, J. (2008). Adolescents' participation in organized activities and developmental success 2 and 8 years after high school: Do sponsorship, duration, and intensity matter? Developmental Psychology, 44(3), 814–830.
- 54. Swanson, C.B. (2002). Spending time or investing time? Involvement in high school curricular and extracurricular activities as strategic action. Rationality and Society, 14, 431-471.
- 55. Zaff, J.F., Moore, K.A., Papillo, A.R., & Williams, S. (2003). Implications of extracurricular activity participation during adolescence on positive outcomes. Journal of Adolescent Research, 18, 599.
- 56. Kort-Butler, L.A., & Hagewen, K.J. (2011). School-based extracirricular activity involvement and adolescent self-esteem: A growth curve analysis. Journal of Youth and Adolescence, 40(5), 568-581.
- 57. Jordan, W.J., & Nettles, S.M. (2000). How students invest their time outside of school: Effects on school-related outcomes. Social Psychology of Education, 3(4), 217–243.
- 58. Khandker, S.R., Koolwal, B.B., & Samad, H.A. (2010). 14. Double-difference method. Handbook on impact evaluation: Quantative methods and practices: The International Bank for Reconstruction and Development/The World Bank, 193-208.





Center for Child and Family Policy Duke University Box 90545-0545 Durham, NC 27708-0264