Education Watch

MAINE

Key Education Facts and Figures

Achievement, Attainment and Opportunity
From Elementary School through College

Prepared by the Education Trust, Inc.

Fall 2006

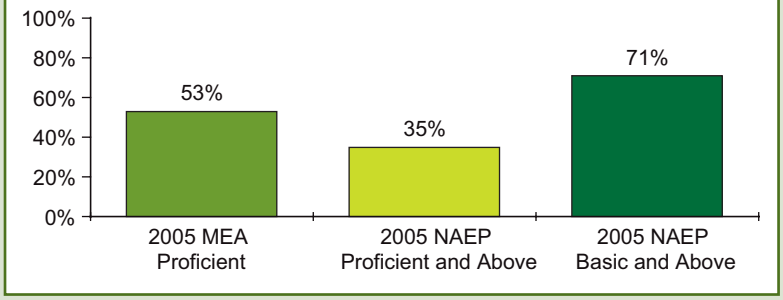
Maine Elementary Reading Achievement

Perhaps the most important task of elementary schools is to teach students to read well. Strong reading skills are the key to later success both in school and in life.

The following charts compare your state's reading performance on the 2005 state assessment and National Assessment of Educational Progress (NAEP). Be aware that some states have changed their standards, assessments, or both since 2005. Readers should investigate the most recent state assessment data to get a complete picture of student achievement.

Are students proficient in reading?

Grade 4 Overall Reading/ELA Performance
Maine Assessment and NAEP

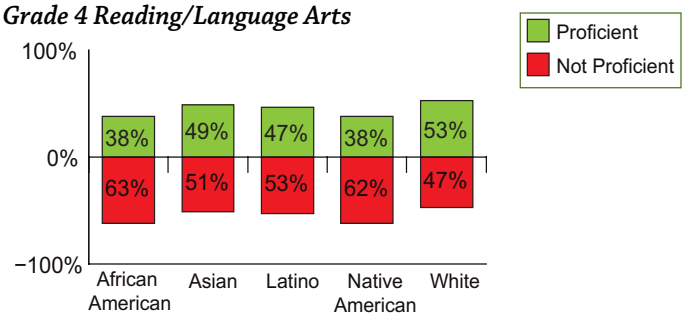


The bar on the left shows the percentage of students scoring at or above the proficient level, or state equivalent, on the state's elementary reading/ELA assessment. The bar in the middle shows the percentage of your state's fourth-graders performing at or above proficient on the National Assessment of Educational Progress (NAEP) in reading. Comparing the two is one way to get some perspective on the level and rigor of the state's assessment. The bar on the right shows the percentage of your state's fourth-graders performing at least at the basic level on NAEP.

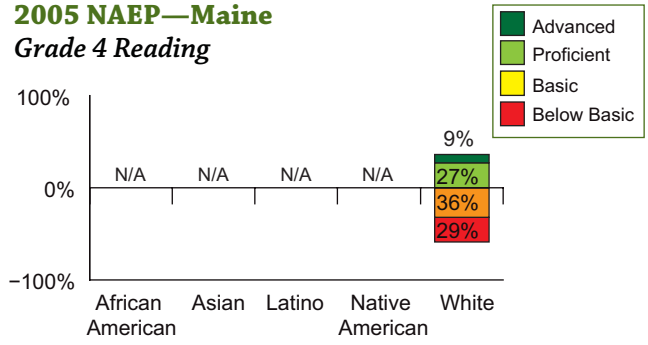
Do results vary by group?

It's also important to look underneath overall averages to see how different groups of students are performing. By looking at achievement data by group, states can draw attention to the students who need the most help. The charts below show the distance each group has to go in order to reach the proficient level on the state assessment and on NAEP.

2005 Maine Educational Assessment (MEA)
Grade 4 Reading/Language Arts



2005 NAEP—Maine
Grade 4 Reading



Is NAEP performance improving?

Grade 4 Reading

	NAEP Scale Score		Change from 1998-2005	
	1998	2005	State Change	Biggest Gainers
African American	N/A	N/A	N/A	23 (DE)
Asian	N/A	N/A	N/A	23 (MA, MN)
Latino	N/A	N/A	N/A	40 (DE)
Native American	N/A	N/A	N/A	10 (NM)
White	225	225	0	17 (DE)
All	225	225	0	19 (DE)

This table shows the amount of progress your state made on NAEP with each group of fourth-graders. The last column shows the amount of progress made by the biggest gaining state for that group over the same period of time. How does your state compare?

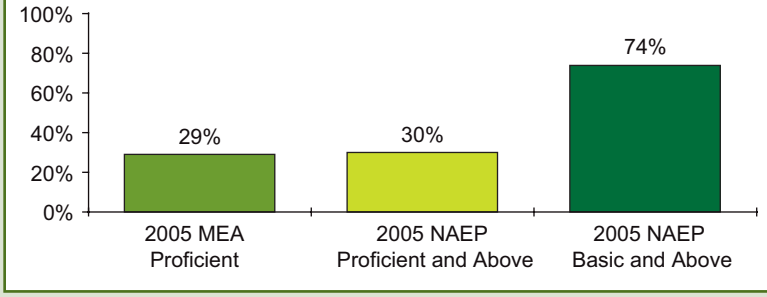
Maine Middle Grade Mathematics Achievement

To survive in our information society, all Americans need a solid foundation in mathematics. Middle schools play a particularly central role in assuring that students have not only mastered basic computation, but are also developing the mathematical thinking and problem-solving skills that are so important in the mathematics courses they will take in high school.

As we showed with reading on the previous page, the following charts compare students' mathematics performance on the 2005 state assessment and National Assessment of Educational Progress (NAEP).

Are students proficient in mathematics?

Grade 8 Overall Math Performance
Maine Assessment and NAEP

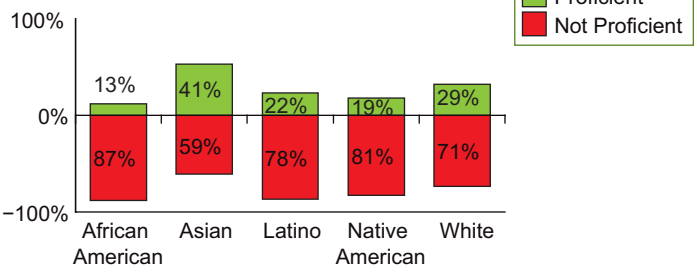


The bar on the left shows the percentage of students scoring at or above the proficient level, or the state equivalent, on the state's middle grades mathematics assessment. The bar in the middle shows the percentage of your state's eighth-graders performing at or above proficient on the National Assessment of Educational Progress (NAEP) in mathematics. Comparing the two is one way to get some perspective on the level and rigor of the state's assessment. The bar on the right shows the percentage of your state's eighth-graders performing at least at the basic level on NAEP.

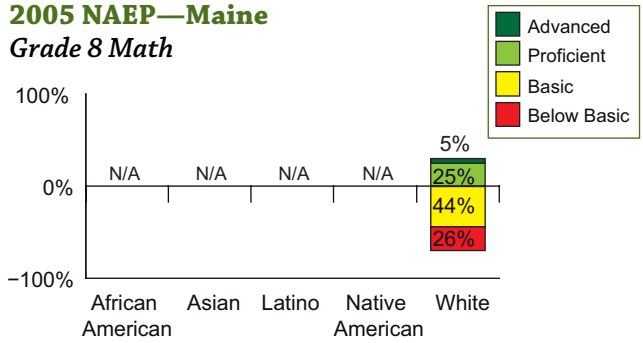
Do results vary by group?

It's also important to look underneath overall averages to see how different groups of students are performing. By looking at achievement data by group, states can draw attention to the students who need the most help. The charts below show the distance each group has to go in order to reach the proficient level on the state assessment and on NAEP.

2005 Maine Educational Assessment (MEA)
Grade 8 Math



2005 NAEP—Maine
Grade 8 Math



Is NAEP performance improving?

Grade 8 Mathematics

	NAEP Scale Score		Change from 2000-2005	
	2000	2005	State Change	Biggest Gainers
African American	N/A	N/A	N/A	17 (AZ)
Asian	N/A	N/A	N/A	22 (MA)
Latino	N/A	N/A	N/A	19 (MA, NE)
Native American	N/A	N/A	N/A	18 (ND)
White	281	281	0	17 (DC, SC)
All	281	281	0	16 (SC)

This table shows the amount of progress the state made with each group of eighth-graders on NAEP. The last column shows the amount of progress made by the biggest gaining state for that group over the same period of time. How does your state compare?

NAEP Grade 4 Reading

The win-win pattern most state residents will want to see is rising student achievement combined with narrowing gaps between student groups. On these pages, we show where your state is in meeting this twofold goal with respect to low-income students.

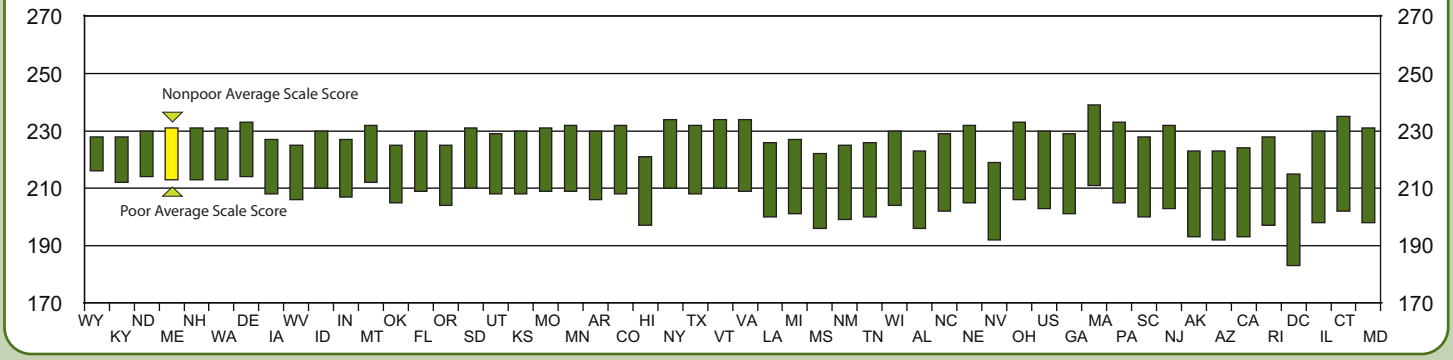
Readers should note that progress on one part of the goal does not necessarily mean progress on the other. For example, a state can have a narrow achievement gap between poor and nonpoor students, but the achievement levels of both groups are low. Likewise, low-income achievement can be high relative to other states, but low in relation to nonpoor achievement in their own state, leaving a large gap. The best situation is progress on both fronts.

How does your state's gap between poor and nonpoor students compare?

The chart below shows the reading achievement gap between your state's poor and nonpoor students on NAEP. The top of each bar represents the average scale score for nonpoor students and the bottom is that for low-income students.

2005 Grade 4 NAEP Reading

Distance Between Poor and Nonpoor Average Scale Score From Smallest to Largest Gap

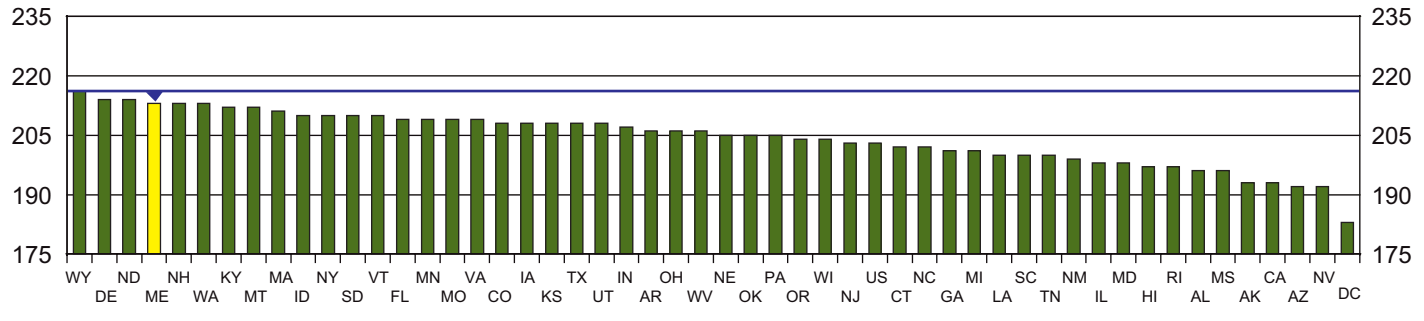


How do low-income scores in your state compare?

Some states are far more successful teaching low-income students than others. The following chart shows the average scale scores of low-income fourth-graders across states.

2005 Grade 4 NAEP Reading Average Scale Score (Low-Income)

From Highest to Lowest Performing



Questions to think about: How does the performance of this group of students in your state compare across states? How does the gap size compare across states?

How Does Maine Achievement Compare?

NAEP Grade 8 Mathematics

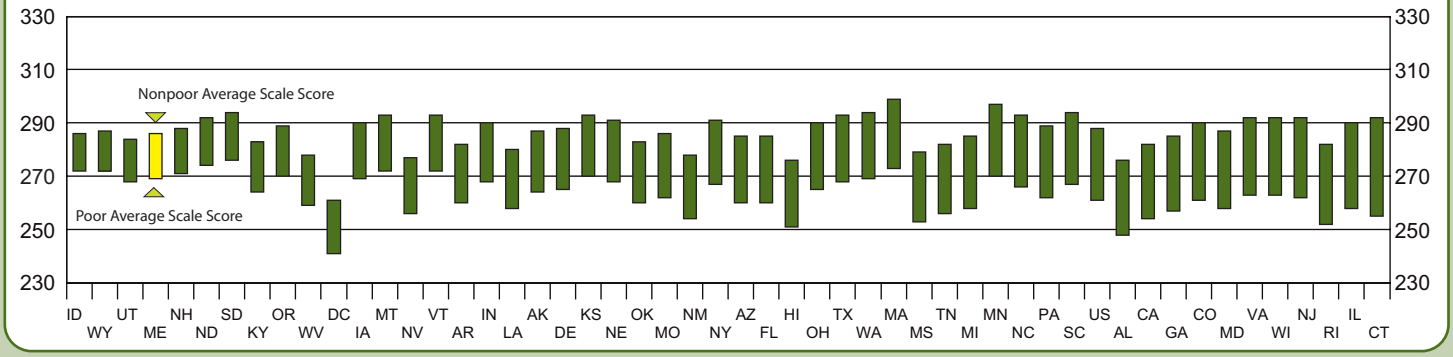
These charts examine the achievement of low-income students.

How does your state's gap between poor and nonpoor students compare?

The chart below shows the mathematics achievement gap between your state's poor and nonpoor students on NAEP. The top of each bar represents the average scale score for nonpoor students and the bottom is that for low-income students.

2005 Grade 8 NAEP Math

Distance Between Poor and Nonpoor Average Scale Score From Smallest to Largest Gap

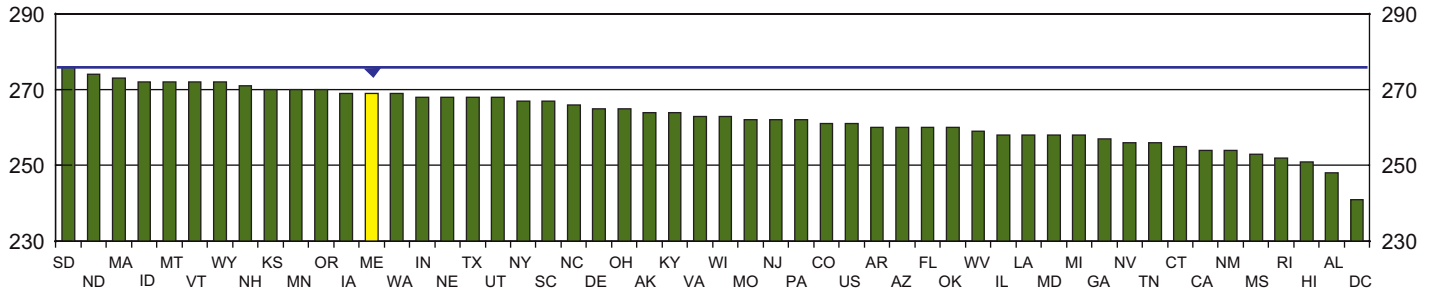


How do low-income scores in your state compare?

Some states are far more successful teaching low-income students than others. The following chart shows the average scale scores of low-income eighth-graders across states.

2005 Grade 8 NAEP Math Average Scale Score (Low-Income)

From Highest to Lowest Performing



Questions to think about: How does the performance of this group of students in your state compare across states? How does the gap size compare across states?

In earlier times, young people with weak reading and math skills could still find good jobs if they were willing to work hard. Now a high school diploma is the bare minimum for young people. Most will also want at least some postsecondary education or training in order to succeed in today's marketplace.

Student Demographics, 2005

Population and enrollments: These data offer a picture of the student population in this state. Comparing the demographic distribution of students across each educational level shows what happens to children as they journey through the education system. Significant differences should raise questions about equity.

	Population, age 5-24*	Public K-12	Two-Year Colleges	Four-Year Colleges
African American	1%	2%	2%	1%
Asian	1%	1%	1%	1%
Latino	1%	1%	1%	1%
Native American	1%	1%	1%	2%
White	94%	95%	79%	88%
Other	2%	N/A	17%	7%
Number	336,084	198,820	17,961	55,215

* Census 2000, Most recent data.

Participation and Success in Advanced Placement, 2005

Composition of AP test takers: Students take Advanced Placement (AP) exams after completing year-long AP courses, typically among the highest level offered in high schools. In a system where all students have equal access to these opportunities, the percentage of test-takers by race and ethnicity would be proportional to their representation in public K-12 enrollment.

Who Takes AP Tests?

Example: *Of all AP test takers, this proportion were African Americans.*

	Public K-12 Enrollment	Calculus AB	English Language and Composition	Biology
African American	2%	0%	0%	1%
Asian	1%	8%	3%	3%
Latino	1%	1%	1%	1%
Native American	1%	1%	1%	1%
White	95%	91%	96%	94%
Number	198,820	975	784	636

Success rates of AP test takers: While AP test taking offers a picture of access to AP coursework, relative achievement on these exams is an important measure of student/teacher preparedness. Huge variability in the proportion of test takers that earn a 3 or greater should raise questions about the quality of instruction or educational resources provided in courses labeled Advanced Placement.

Who Scores a 3,4, or 5?

Example: *Of all African Americans who took the AP Calculus exam, this percent scored a 3, 4 or 5.*

	Calculus AB	English Language and Composition	Biology
African American	N/A	N/A	N/A
Asian	46%	N/A	N/A
Latino	N/A	N/A	N/A
Native American	N/A	N/A	N/A
White	58%	62%	64%
Overall	57%	62%	63%

Maine High School and College Success

Who makes it through high school?

On-Time High School Graduation Rates, 2003

African American	N/A
Asian	30%
Latino	N/A
Native American	N/A
White	73%
Overall	74%

The high school diploma represents a basic certification of knowledge and skills. This table shows the probability that a student in the ninth grade will complete high school on time with a regular diploma.

Who makes it through college?

For young people today good jobs increasingly require at least some postsecondary training with the greatest advantage going to those with a B.A. or better. In the last decade, college-going rates skyrocketed. Below we offer several indicators of post-secondary trends in your state compared to the performance of the top states on each indicator.

Participation and Persistence in Postsecondary

	Maine	Top States*
H.S. freshmen enrolling in any U.S. college w/in 4 years, 2002	38%	53%
1st year community college students returning their 2nd year, 2004	62%	62%
Freshmen at 4 year colleges returning their sophomore year, 2004	75%	82%
First-time full-time freshmen completing a BA within 6 years, 2005	60%	67%

* Top States = Median of Top 5 Performing States

In order to determine equity in attainment rates, we provide official six-year graduation rates for students in your state's largest public university. We also provide 4- and 6-year college-graduation rates statewide. Taken together, these indicators should paint a fairly representative picture of who makes it through college.

6-Year Graduation Rates at Largest State University, 2005

(first-time, full-time freshmen, fall 1999)

	University Of Maine
African American	44%
Asian	33%
Latino	39%
Native American	30%
White	54%
Overall	53%

4- and 6-Year College-Graduation Rates Statewide, 2003 and 2005

(first-time, full-time freshmen, fall 1999)

	4 Years	6 Years
African American	50%	62%
Asian	61%	75%
Latino	38%	50%
White	45%	60%
Other	37%	53%
Overall	44%	60%

Differences in achievement and attainment between groups of students are often rooted in differences in the availability of educational resources. To begin to understand achievement gaps between groups of students, states and districts should look at the distribution of qualified teachers, challenging curricula, and funds.

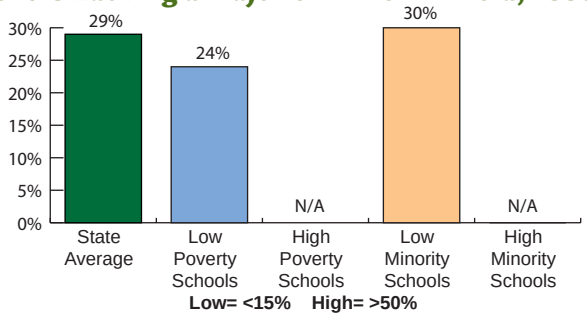
Qualified Teachers

Who teaches whom?

Research is very clear: Good teachers make good schools. Students who get several effective teachers in a row will soar no matter what their family backgrounds, while students who have even two ineffective teachers in a row rarely recover.

Under the No Child Left Behind Act (NCLB), every state and school district must make sure that low-income students have their fair share of qualified and experienced teachers. Readers should investigate their state's plan for doing this.

Percentage of Maine Secondary Classes Taught by Teachers Lacking a Major or Minor in Field, 1999-2000



This chart shows one measure of the distribution of teacher talent in this state. According to national survey data, about 1 in 4 of all secondary classrooms are taught by teachers lacking either a major or minor in the subject area. Classrooms in high-poverty schools and high-minority schools are far more likely than those in low-poverty or low-minority schools to be taught by teachers out of their field of expertise.

Challenging Curriculum

Employers have joined higher education in the demand for individuals with high-level knowledge and skills. All students need a rigorous curriculum in order to be prepared for success whether they choose college or work after high school. Yet too few students have the opportunity to gain these skills through rigorous math and science courses.

High Level Course-Taking, 2004

Course-taking is an indicator of the amount of access students have to challenging subject matter. States should examine differences in access for different student groups.

	Maine	Top States*
8th graders taking Algebra	N/A	35%
9th-12th graders taking at least 1 upper-level math course	N/A	64%
9th-12th graders taking at least 1 upper-level science course	N/A	40%

* Top States = Median of Top 5 Performing States

Opportunity Gaps in Maine

Special student placements, 2002

School programs vary a great deal in their level of curriculum and instruction. If there is equity in placements, the number of Latino students, for example, placed in gifted and talented programs should be proportional to Latinos enrolled in K-12. Although suspensions are not precisely an academic program, we include data about them because too often they represent a placement out of the system altogether.

Example for reading this chart: Of all students enrolled in gifted and talented programs in your state, this proportion were African Americans.

	% Public K-12 Enrollment	% Gifted and Talented	% Special Education	% Suspensions
African American	2%	1%	1%	2%
Asian	1%	1%	0%	1%
Latino	1%	0%	1%	1%
Native American	1%	0%	1%	1%
White	96%	98%	98%	96%

Investments

Funding Gaps: Education Dollars by District Poverty Enrollment, 2003

Many states spend considerably less money, in terms of state and local resources, on the education of poor children than they do on other children.

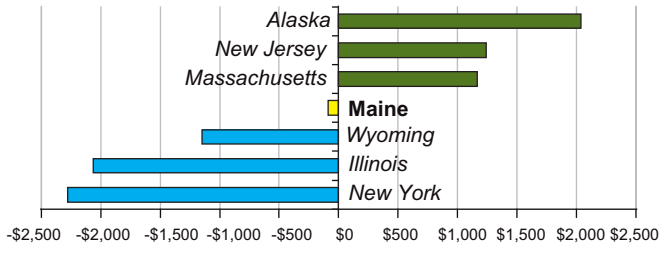
The chart on the left shows the dollar difference between per-student funding in high- and low-poverty districts in your state. Some states, like Illinois, have funding gaps of more than $2,000 per student. Other states, like Massachusetts, actually provide more resources to high-poverty districts.

In absolute dollars, your state has a funding gap of:

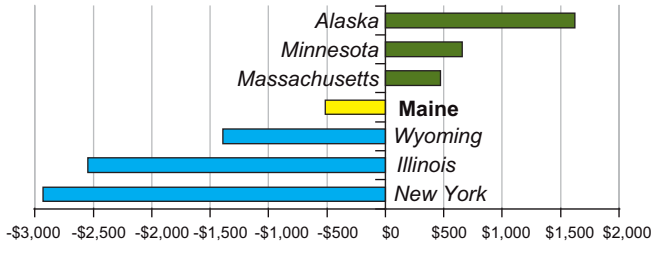
- $ 89 per student;
- $ 2,225 for a typical classroom of 25 students;
- $ 35,600 for a typical elementary school of 400 students; and,
- $ 133,500 for a typical high school of 1,500 students.

These absolute numbers, however, underestimate the relative inequity poor students face. It is generally accepted that poor children need more support to reach the same standards as their more advantaged peers. The chart on the right shows the dollar difference between high- and low-poverty districts using a 40% adjustment for low-income students. This adjusted measure gives a more accurate comparison of the relative capacity of different districts to effectively serve their students.

Gap Between Highest and Lowest Poverty Districts *(no adjustment for low-income students)*



Gap Between Highest and Lowest Poverty Districts *(40% adjustment for low-income students)*



College Affordability Gaps, 2005

College costs often discourage students with limited means from seeking further education. States can lessen this problem by targeting their aid dollars to low-income students and by providing affordable colleges within the reach of low-income families.

	Maine	Top States*
Amount state provides to low-income students for every $1 of federal Pell grants	$0.27	$0.82
Share of income that poorest families need to pay for tuition at lowest priced colleges	28%	7%

* Top States = Median of Top 5 Performing States

Online Data Resources from the Education Trust

These easy-to-use, fully interactive online data tools are available on our website at www.edtrust.org:

Education Watch Online

EdWatch Online, our state and national data site, allows users to compare student achievement and opportunity data across states and for the nation.

Dispelling the Myth Online

Dispelling the Myth Online allows users to mine school-level achievement data in almost every state. This tool allows you to use the demographic and performance criteria of your choice to conduct searches for high-performing or high-improving schools serving large proportions of low-income and minority students.

College Results Online

College Results Online provides graduation rates for all four-year public or private non-profit colleges and universities in the country. Users can see how the graduation rate of a selected institution compares to those of other similar institutions. Users can also see graduation rates broken down by students' race, ethnicity, and gender within a single institution and how overall graduation rates at individual colleges and universities have increased or declined over time.

The Education Trust was created to promote high academic achievement for all students at all levels, pre-kindergarten through college. While we know that all institutions could better serve their students, our work focuses on the schools and colleges most often left behind in efforts to improve education: those serving Latino, African American, Native American and low-income families.

Achievement

Pages 2-3

- **National Assessment of Educational Progress (NAEP), 2005**
  National Center for Education Statistics, NAEP Data Explorer. http://nces.ed.gov/nationsreportcard/nde/
  Notes:
  - NAEP data are not reported for racial/ethnic groups where the sample size is too small for a reliable estimate.
  - NAEP scale score changes may not be statistically significant.
- **State Assessments, 2005**
  Data collected from state department of education Websites except for Hawaii, Maine, and Nebraska. Data from these states are from the Consolidated State Performance Report for 2004-05, submitted to the U.S. Department of Education on March 6, 2006.

Pages 4-5

- **National Assessment of Educational Progress (NAEP), 2005**
  National Center for Education Statistics, NAEP Data Explorer. http://nces.ed.gov/nationsreportcard/nde/
  Notes:
  - In NAEP family income cross-state graphs, low-income status is defined as eligibility for the federal free or reduced-price lunch program.
  - In all NAEP cross-state graphs, states that share the same gap size or average scale score are ordered alphabetically.

Attainment

Page 6

- **Population, Age 5-24, 2000**
  U.S. Census, American Fact Finder, 2000. http://www.census.gov
  Note:
  - Population percentages are for 2000, the most recent year available, while public K-12, two-year college, and six-year college enrollment percentages are for 2004-05, so caution should be used when making direct comparisons.
- **Public K-12 Enrollment, 2005**
  National Center for Education Statistics, Common Core of Data. http://nces.ed.gov/ccd/
  Notes:
  - K-12 enrollment percentages are for the 2004-05 school year for all states and the District of Columbia, except for Nevada. The 2004-05 data were not available for Nevada, so 2003-04 data is used instead.
  - K-12 enrollment racial distribution is based on the sum of African-American, Asian, Latino, Native American, and White students in the state. Unlike population age 5-24, two-year college enrollment, and four-year-college enrollment, K-12 enrollment does not have an 'Other' category.
- **Two- and Four-Year College Enrollment, 2005**
  Ed Trust analysis of data from the National Center for Education Statistics, Integrated Postsecondary Education Data System. http://nces.ed.gov/ipeds/
- **Participation and Success in Advanced Placement, 2005**
  The College Board, AP Summary Reports, 2005. http://collegeboard.com/student/testing/ap/exgrd_sum/2005.html
  Note:
  - AP data do not include data for students whose racial/ethnic identification is 'Not Stated' or 'Other.'

Attainment (continued)

Page 7

- **On-Time High School Graduation Rates, 2003**
  Education Week, Diplomas Count: An Essential Guide to Graduation Policy and Rates, June 2006.
  Note:
  - The on-time graduation rates are based on the Cumulative Promotion Index (CPI) method, which estimates the probability that a student in the 9th grade will complete high school on time with a regular diploma. For more information on the CPI calculation, see Diplomas Count.
- **High School Freshmen Enrolling in any U.S. College within 4 Years, 2002**; and
- **1st Year Community College Students Returning their Second Year, 2004**; and
- **Freshmen at 4-Year Colleges Returning their Sophomore Year, 2004**
  National Center for Public Policy and Higher Education, Measuring Up, 2006. http://measuringup.highereducation.org/
  Note:
  - Top states defined as the median value of the five highest-performing states in each indicator.
- **First-Time, Full-Time Freshmen Completing a B.A. within 6 Years, 2005**; and
- **6-Year Graduation Rates at Largest State University, 2005**; and
- **4- and 6-Year College-Graduation Rates Statewide, 2003 and 2005**
  Ed Trust analysis of data from the National Center for Education Statistics, Integrated Postsecondary Education Data System, Graduation Rate Survey. http://nces.ed.gov/ipeds/
  Notes:
  - 6-year percentages represent the proportion of students who enrolled as first-time, full-time bachelor's degree-seeking freshmen in the Fall of 1999 and received a bachelor's degree from the same institution on or before August 31st 2005.
  - 4-year percentages represent the proportion of students who enrolled as first-time, full-time bachelor's degree-seeking freshmen in the Fall of 1999 and received a bachelor's degree from the same institution on or before August 31st 2003.
  - For more information on 4- and 6-year graduation rates at 4-year colleges, including comparisons of graduation rates among similar institutions, see http://www.collegeresults.org.

Opportunity

Page 8

- **Who Teaches Whom?**
  National Center for Education Statistics, 1999-2000 Schools and Staffing Survey. Calculations by Richard Ingersoll, University of Pennsylvania, published in The Education Trust, All Talk No Action: Putting an End to Out-of-Field Teaching, August 2002. http://www.edtrust.org
  Note:
  - Teacher distribution data refers to core academic subjects in grades 7-12.
- **High Level Course Taking, 2004**
  National Center for Public Policy and Higher Education, Measuring Up, 2006. http://measuringup.highereducation.org/
  Note:
  - Top states defined as the median value of the five highest-performing states in each indicator.

Opportunity (continued)

Page 9

- **Special Student Placements, 2002**
  U.S. Department of Education, Office for Civil Rights, 2003 Elementary and Secondary School Survey. http://vistademo.beyond2020.com/ocr2002r/wdsdata.html
  Notes:
  - Public K-12 enrollment percentages reported here are for 2002 as opposed to the 2005 K-12 enrollment data presented elsewhere in this report. This is in order to provide the most consistent comparison with the special student placement percentages, for which 2002 data is the most recent available.
  - Special education percentages are based on the number of students identified as having specific learning disabilities, mental retardation, and serious emotional disturbance.
- **Funding Gaps, 2003**
  Ed Trust analysis of district-level state and local revenue data for the 2002-03 school year collected by the National Center for Education Statistics and the U.S. Census Bureau. Data published in The Education Trust, The Funding Gap 2005: Low-Income and Minority Students Shortchanged by Most States. For a more detailed explanation of the methodology used to calculate state funding gaps, see The Education Trust, The Funding Gap 2005 Technical Appendix. http://www.edtrust.org

Page 10

- **Amount State Provides to Low-Income Students for Every $1 of Federal Pell Grants, 2005**
  Ed Trust calculations based on state need-based aid awards from the National Association of State Student Grant and Aid Programs' 36th Annual Survey Report on State-Sponsored Student Financial Aid for the 2004-2005 Academic Year and total Pell Grant expenditures from the U.S. Department of Education 2004-2005 Federal Pell Grant Program End-of-Year Report.
  Note:
  - Top states defined as the median value of the five highest-performing states in each indicator.
- **Share of Income that Poorest Families Need to Pay for Tuition at Lowest Priced Colleges**
  National Center for Public Policy and Higher Education, Measuring Up, 2006. http://measuringup.highereducation.org/
  Note:
  - Top states defined as the median value of the five highest-performing states in each indicator.