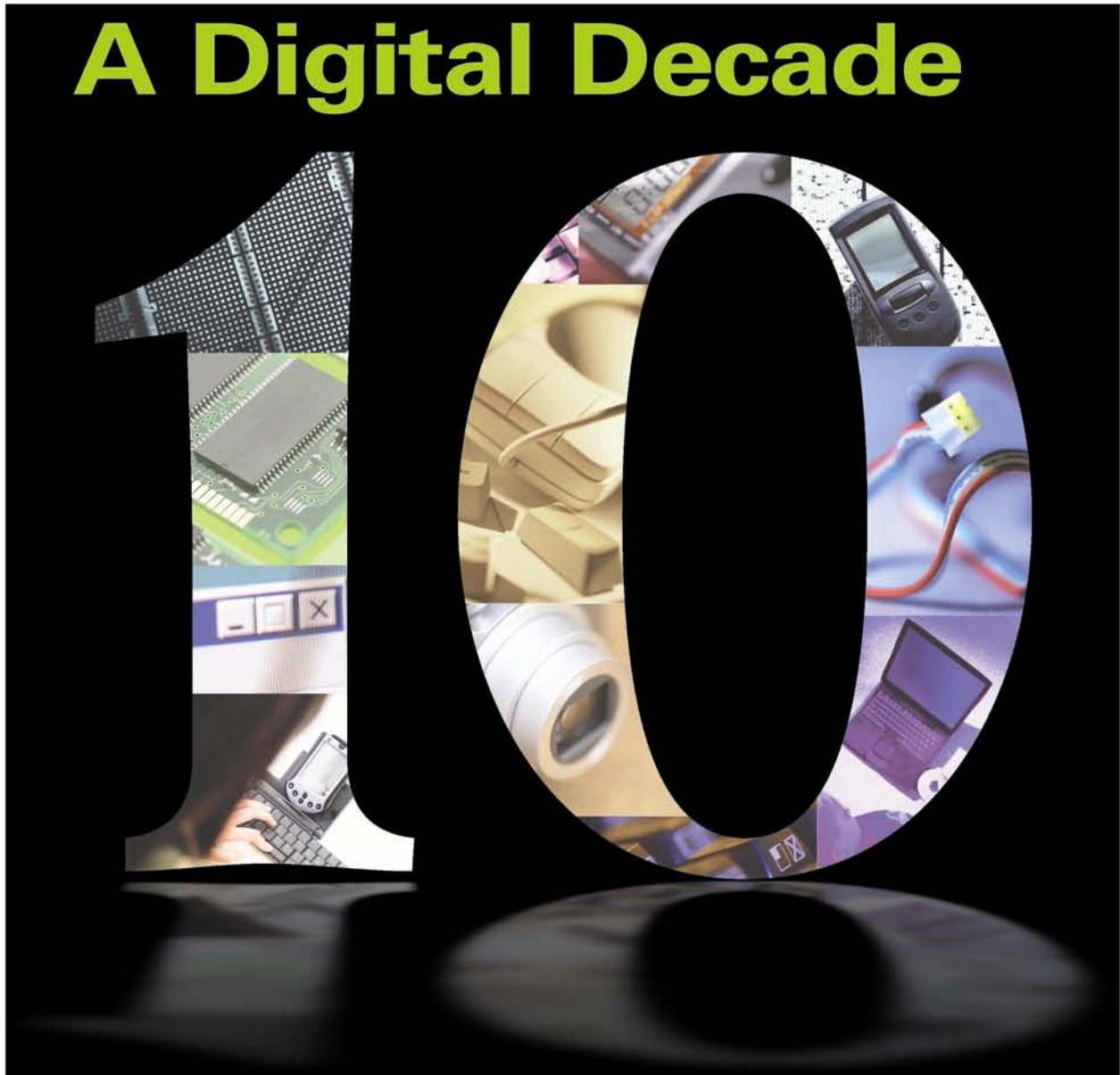# District of Columbia

TECHNOLOGY COUNTS 2007

A Digital Decade

10

A Special State-Focused
Supplement to *Education Week*'s
Technology Counts 2007

EPE RC
RESEARCH CENTER

About This Report

This *State Technology Report* is a supplement to the 10th edition of *Technology Counts,* a joint project of *Education Week* and the Editorial Projects in Education Research Center. As in previous years, the EPE Research Center has surveyed the states to assess the status of K-12 educational technology across the nation. This state report assembles key findings from that survey and other sources in a format that allows readers to examine a particular state's performance on this year's indicators. For most indicators, national results are also provided as a benchmark against which the state can be measured. *Technology Counts 2007,* which explores developments in educational technology over the past decade, tracks data from the 50 states and the District of Columbia in several critical areas of technology policy and practice: access, use, and capacity. The report assigns grades to the states for their performance in those three categories. State grades are not comparable with those in last year's report because of changes in two access indicators and improvements in the scoring for indicators related to teacher and administrator licensure. The full *Technology Counts 2007* report can be accessed online at www.edweek.org/go/tc07.

STATE TECHNOLOGY REPORT CARD 2007

	District of Columbia	How did the average state score?
Access to technology	**C-**	C
Use of technology	**F**	C+
Capacity to use technology	**F**	C
Overall grade	**D**	C+

Grading the States

For *Technology Counts 2007*, the EPE Research Center awarded grades for technology leadership to the 50 states and the District of Columbia. Grading is based on 14 individual indicators spanning three core areas of state policy and practice: access to instructional technology, use of technology, and capacity to effectively use educational technology.

Information on technology use and capacity was obtained from a nation-wide survey of state technology officials conducted by the EPE Research Center. Indicators related to educational technology access were derived from annual school surveys conducted by Market Data Retrieval, a research company that tracks the use of educational technology, and from background questionnaires administered as part of the 2005 National Assessment of Educational Progress.

The EPE Research Center evaluated each indicator, assigning a certain number of points to each. States received credit for the use and capacity indicators only if they could document that the respective policy or practice was in place. Points were tallied within each of the three technology categories, producing scores on a 100-point scale. To generate an overall score, the Research Center computed the average of the three category scores and then converted that total score to a letter grade.

Technology Counts Grading Breakdown

This table reports the detailed scoring behind the grades for the three major areas of state policy examined in *Technology Counts.*

Access to Technology

	District of Columbia	U.S.
Percent of students with …		
Computer in classroom	**67.5%**	49.5%
Computer in lab/media center	**62.5%**	77.0%
Number of students per …		
Instructional computer	**4.3**	3.8
High-speed Internet-connected computer	**4.2**	3.7

Use of Technology

	Does state have policy?	Number of states with policy
Student standards include technology	**No**	48
State tests students on technology	**No**	4
State has established a virtual school	**No**	23
State offers computer-based assessments	**No**	23

Capacity to Use Technology

	Does state have policy?	Number of states with policy
State includes technology in its …		
Teacher standards	**No**	45
Administrator standards	**No**	36
Initial teacher-license requirements	**No**	19
Initial administrator-license requirements	**No**	9
Teacher-recertification requirements	**No**	9
Administrator-recertification requirements	**No**	5

Overall Technology Score

|	District of Columbia points awarded	Average state points awarded
Access to technology	**72.3**	76.0
Use of technology	**59.0**	78.7
Capacity to use technology	**59.0**	75.5
Total score (average of three categories)	**63.4**	76.7

Grading Curve   A (93-100), A- (90-92), B+ (87-89), B (83-86), B- (80-82), C+ (77-79), C (73-76), C- (70-72), D+ (67-69), D (63-66), D- (60-62), F (0-59)

Technology Access

Note: Indicators of access to technology capture the number of students who share computers used for instructional purposes. Lower values on these measures indicate greater levels of access.

Trends in access

This chart tracks student access to instructional computers over time.

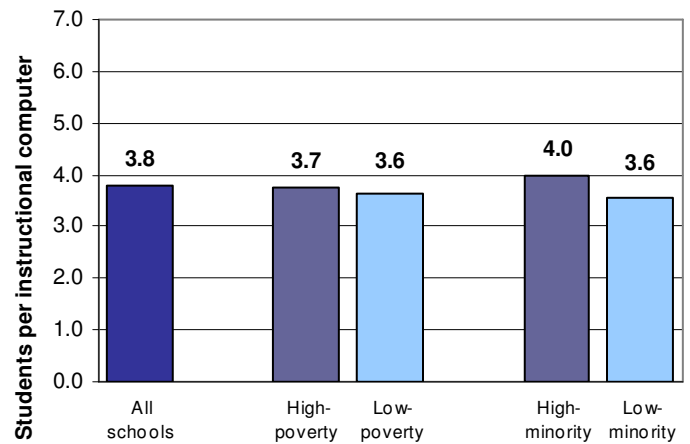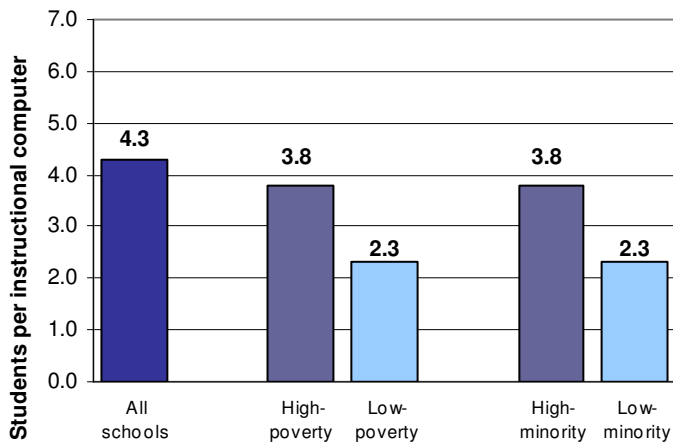- District of Columbia
- National average
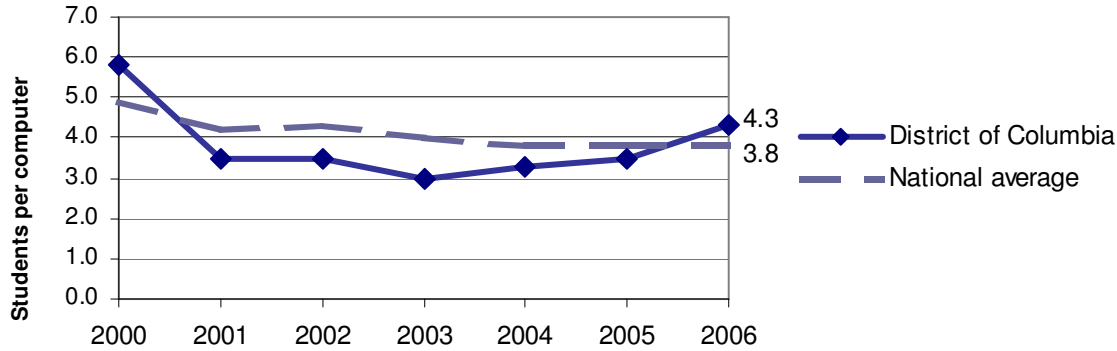
Students per instructional computer

These charts show the average number of students sharing access to each computer available for instructional purposes for public schools in this state and the nation as a whole during the 2005-06 school year.

District of Columbia

	All schools	High-poverty	Low-poverty	High-minority	Low-minority
Students per instructional computer	4.3	3.8	2.3	3.8	2.3

U.S. Average

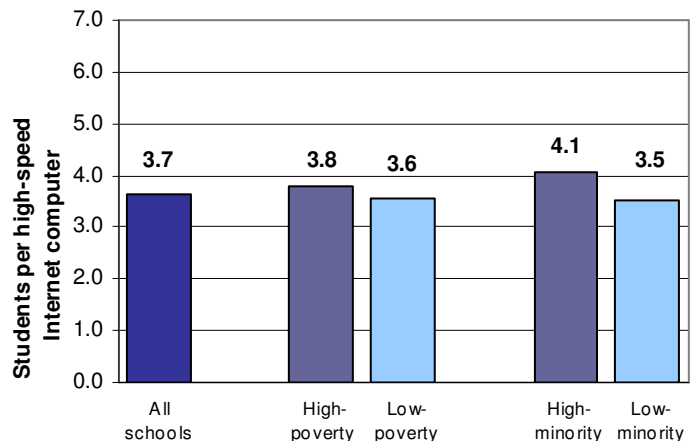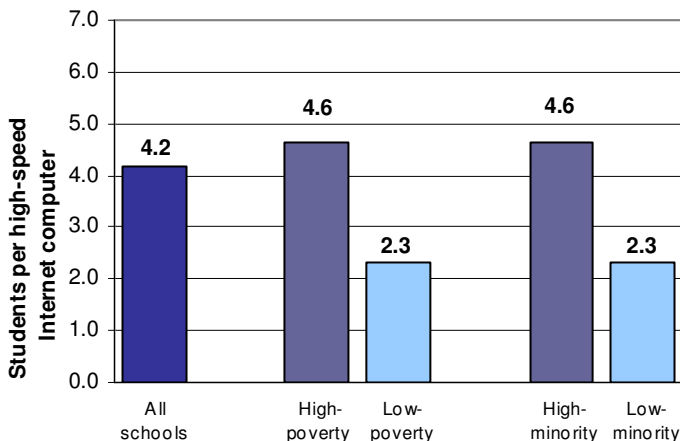|	All schools	High-poverty	Low-poverty	High-minority	Low-minority
Students per instructional computer	3.8	3.7	3.6	4.0	3.6

Students per high-speed Internet computer

These charts show the average number of students sharing access to each instructional computer with high-speed Internet access for public schools in your state and the nation as a whole during the 2005-06 school year.

District of Columbia

	All schools	High-poverty	Low-poverty	High-minority	Low-minority
Students per high-speed Internet computer	4.2	4.6	2.3	4.6	2.3

U.S. Average

|	All schools	High-poverty	Low-poverty	High-minority	Low-minority
Students per high-speed Internet computer	3.7	3.8	3.6	4.1	3.5

Technology Use and Capacity Policies

National Perspective

This map shows the number of technology use and capacity policies in place for the 2006-07 school year for each state and the District of Columbia.

The EPE Research Center has examined state technology use and capacity policies. Ten key policies, listed on the first page of this state report, are summarized in this map.

The states with the strongest use and capacity policies are Georgia (10 policies) and Kentucky (8 policies). At the other end of the spectrum, Montana and Nevada each have one policy, while the District of Columbia has adopted none of the policies.

DC = 0 policies

Number of Policies
- 7 to 10 policies (6)
- 4 to 6 policies (29)
- 0 to 3 policies (16)
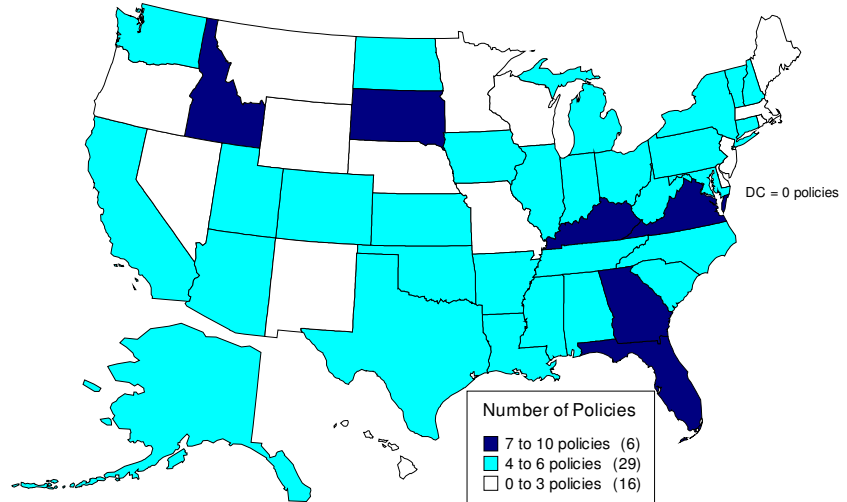
Technology Standards

Past & Present

This chart tracks the number of states that have technology standards for students, teachers, and administrators.
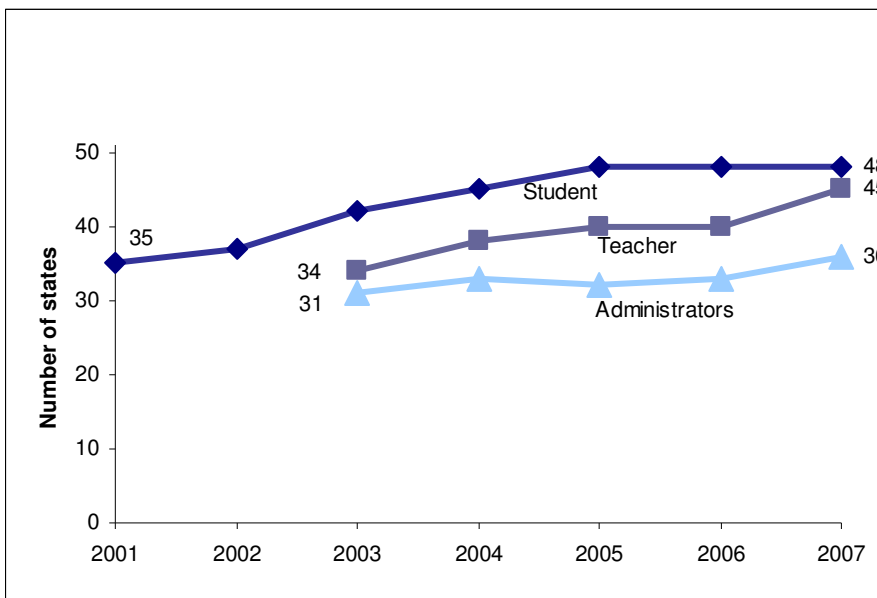
The EPE Research Center has been tracking technology standards for students since 2001 and technology standards for teachers and administrators since 2003.

The vast majority of states (48) have embraced technology standards for students for the past few years. Almost as many states (45) now have such standards for teachers, while fewer states (36) have them for administrators. Overall, 2007 shows an increase in states endorsing teacher and administrator standards in technology.

District of Columbia Technology Standards	2001/ 2003	2007
Students	No	No
Teachers	Yes	No
Administrators	No	No

Extra Credit—Integrating Technology

| Supporting Educators	District of Columbia	Nation
State facilitates access to online academic content and/or instructional software (CD or Web-based) through …		
Group-purchasing program *Digital content available at lower prices because of state negotiations*	No	17 states
Collection of online resources from different academic areas *Digital content to supplement learning that can be accessed through a state Web site or portal*	No	26 states
Subscription services *Electronic resources, such as e-journals, online indexes, and full-text databases, available through a commercial provider*	No	29 states
State offers teachers online opportunities …		
Professional development online, such as courses or virtual training *May include technology-related professional development or professional development in other areas*	No	39 states
State offers professional or financial incentives to use technology for …		
Teachers	No	17 states
Administrators	No	13 states
Number of policies:	0	---

Educator Technology-Integration Policies

A National Perspective

This map shows the number of educator technology-integration policies (listed above) for each state.

Integration of digital resources in schools is not regular and comprehensive, according to anecdotal reports and research. For that reason, state policies to help educators—such as offering access to digital content, online professional development, and incentives—can help maximize the potential of educational technology.

Just two states (Kentucky and West Virginia) have all six technology-integration policies discussed above. Nearly half of states have two or fewer policies.

DC = 0 policies

Number of Policies
- 5 to 6 policies (9)
- 3 to 4 policies (18)
- 0 to 2 policies (24)
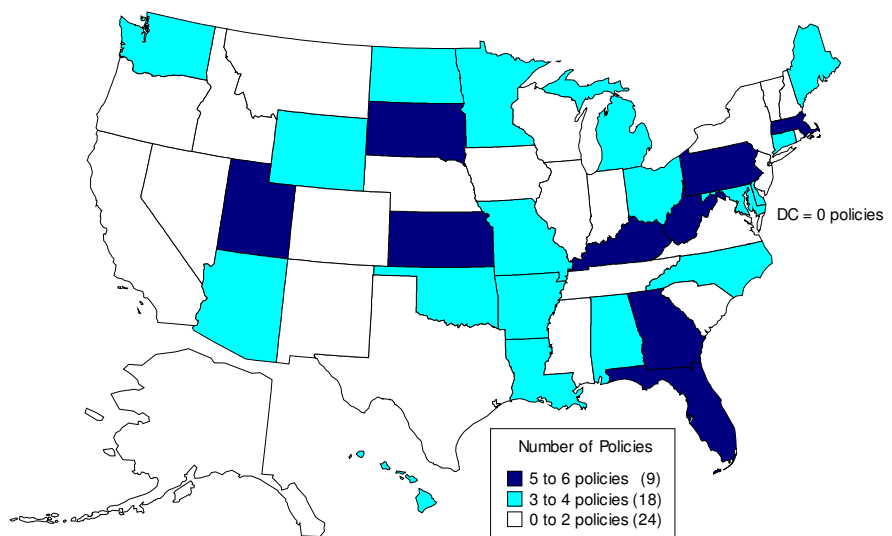
Sources and Notes

State Technology Indicators

Most of the state policy indicators reported in *Technology Counts* are obtained through an original policy survey conducted annually by the Editorial Projects in Education Research Center. The Research Center sent surveys to the chief state technology officers in all 50 states and to the superintendent of the District of Columbia public schools. Respondents provided information on policy indicators related to educational technology, and competencies of students and educators. Every state response was carefully verified using additional evidence provided by the state, such as documentation describing a state statute or administrative rule.

For some indicators on access to technology, the EPE Research Center obtained information from Market Data Retrieval, or MDR, a research organization in Shelton, Conn., that tracks trends in educational technology, and from the National Assessment of Educational Progress, conducted by the National Center for Education Statistics.

Grading the States

For *Technology Counts 2007*, the EPE Research Center graded state leadership in the areas of technology access, use, and capacity, based on data compiled for 14 individual indicators of state policy and practice. Each indicator was evaluated and assigned a certain number of points, with some indicators receiving greater weight than others. States were not awarded credit for an indicator unless they were able to document that the respective policy was in place.

The Research Center tallied points within each of the three policy categories on a 100-point scale. These three subscores were averaged to produce an overall technology score, which was then converted to a letter grade. A detailed explanation of the grading methodology can be found in the full edition of *Technology Counts 2007*.

Technology Access

Students per instructional computer: Market Data Retrieval, "2005-06 Public School Technology Survey" and unpublished tabulations from MDR's Public School Technology Surveys (2000-2005).

Students per high-speed Internet-connected computer: Ibid.

For the purposes of this report, high-poverty schools are those in which more than half of students are eligible for the federal free or reduced-price lunch program. High-minority schools are those in which more than half the students belong to minority racial or ethnic groups.

Percent of students with computer in classroom: National Assessment of Educational Progress, National Center for Education Statistics, U.S. Department of Education, 2005. This figure represents the percent of public school students in grades 4 and 8 whose math teachers reported that at least one computer was available to students in their classrooms. Figures for grades 4 and 8 were averaged.

Percent of students with computer in lab/media center: Ibid. This figure represents the percent of public school students in grades 4 and 8 whose math teachers reported that at least one computer was available to students in a lab or media center. Figures for grades 4 and 8 were averaged.

Technology Use & Capacity

Editorial Projects in Education Research Center annual state technology survey, 2007. Survey respondents were asked about state policies that promote technology use and capacity. States received credit for an indicator only when they provided clear evidence that the respective policy or practice was currently in place.

Extra Credit

Editorial Projects in Education Research Center annual state technology survey, 2007. Survey respondents were asked about state policies that help teachers gain access to digital academic resources, and provide educators with incentives to use technology, as well as online professional-development opportunities. States received credit for an indicator only when they provided clear evidence that the respective policy or practice was currently in place.

About Editorial Projects in Education

Editorial Projects in Education (EPE) is a nonprofit, tax-exempt organization based in Bethesda, Md. Our primary mission is to help raise the level of awareness and understanding among professionals and the public of important issues in American education. We cover local, state, national, and international news and issues from preschool through the 12th grade. Editorial Projects in Education Inc. publishes *Education Week*, America's newspaper of record for precollegiate education, *Teacher Magazine*, edweek.org, and the Agent K-12 employment resource. We also produce periodic special reports on issues ranging from technology to textbooks, as well as books of special interest to educators.

The **EPE Research Center** conducts annual policy surveys, collects data, and performs analyses that appear in the *Quality Counts, Technology Counts*, and *Diplomas Count* annual reports. The center also produces independent research reports and contributes original data and analysis to special coverage in *Education Week, Teacher Magazine*, and edweek.org.

Technology Counts 2007: A Digital Decade

➤ *Technology Counts 2007* – This year's full report examines the past 10 years of educational technology. *Technology Counts* grades the states in three critical areas of technology leadership: providing access to technology, use of technology, and capacity to use technology effectively.

➤ *State Technology Reports* – Individualized reports featuring state-specific findings from the 2007 *Technology Counts* report are available for all 50 states and the District of Columbia.

➤ *Education Counts* – This online database contains hundreds of state-level indicators on K-12 education collected over the past decade for *Education Week's* annual *Technology Counts*, *Diplomas Count*, and *Quality Counts* reports. Use the Custom Table Builder feature to create graphs, tables, or maps for specific indicators.

Technology Counts 2007 is available online at www.edweek.org/go/tc07