National Trends:

Enhancing Education Through Technology

No Child Left Behind, Title II D - Year Three in Review

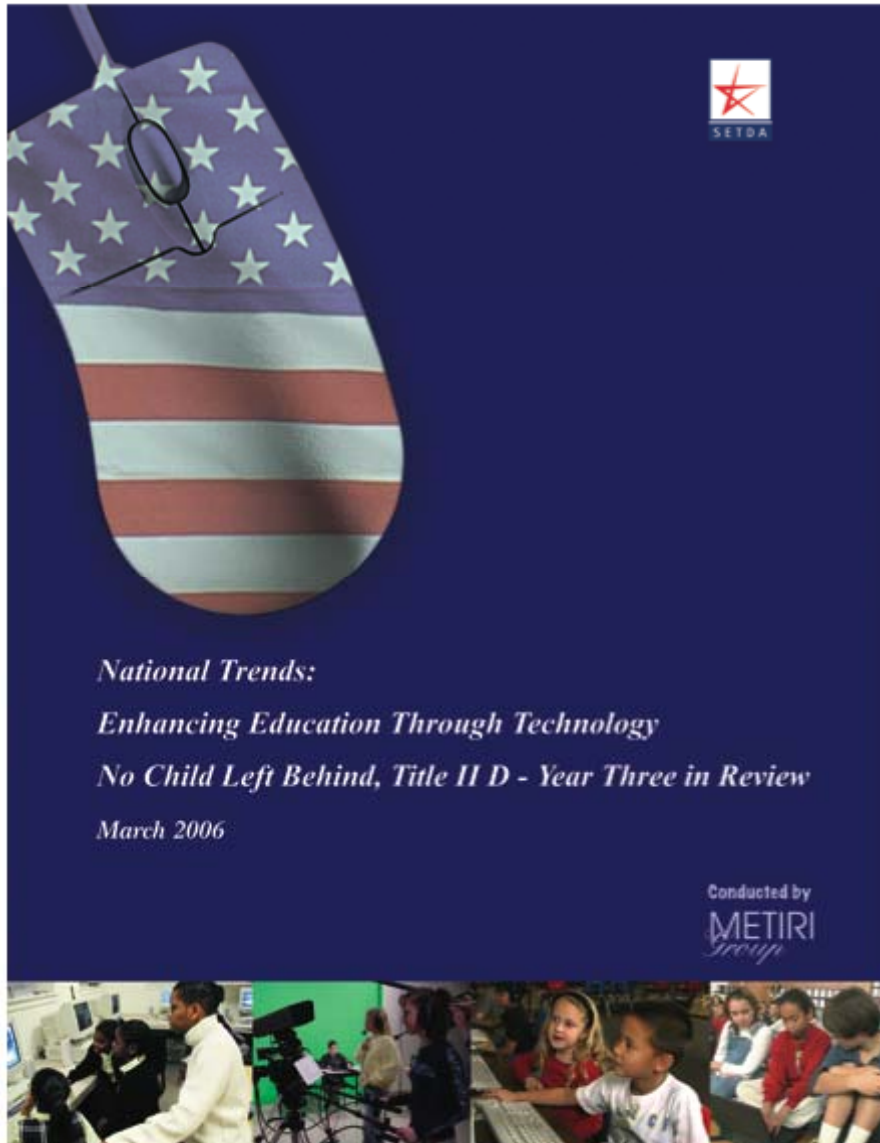*March 2006*

Conducted by

METIRI
Group

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Message to the Reader

The No Child Left Behind, Title II, Part D Enhancing Education Through Technology (NCLB II D) program requires that states and schools focus their use of technology on closing the achievement gap. While most states are currently in Round 4 (2005-2006) funding, this report provides insights into the program implementation for Round 3 and, where possible, documents trend data from Rounds 1, 2, and 3.

For the last three years, SETDA has commissioned the Metiri Group to work with the Data Collection Committee to conduct a national survey to answer questions about the implementation of NCLB II D.

The findings from SETDA's national survey provide states, local school districts, policymakers, and the U.S. Department of Education with insights into the following questions:

1. Is the Title II D program helping to close the achievement gap, leading to the attainment of NCLB II D goals?
2. How are grant recipients across the nation structuring programs to meet NCLB II D goals?
3. What administrative approaches by states are most effective in guiding and supporting local education agencies (LEAs) toward NCLB goals?
4. Are the general trends in technology and learning indicating increased effectiveness in the use of technology for learning, as outlined in NCLB II D?

SETDA expresses its sincere appreciation to the state technology directors who completed the survey.

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Bill Romond, VT	
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Deborah Sutton, MO	
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"Efforts are currently underway to promote the development of broad-scope, "high-impact" projects that include strong research-based interventions and robust evaluation components.

- Florida State Technology Director

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NCLB Title II, Part D funds are focused on increasing literacy and mathematics achievement and closing the achievement gap.

Technology funding from the No Child Left Behind, Title II D program directly supports NCLB goals in three distinct ways:

- *Closing the achievement gap by providing access to software, online resources, and virtual learning aligned to academic standards for instruction and learning*
- *Supporting the development of highly qualified teachers by providing online courses, communities of practice, and virtual communication that ensure flexibility and access*
- *Enhancing data systems to ensure that educators can utilize real-time data to inform sound instructional decisions and ensure that schools meet Adequate Yearly Progress (AYP).*

Introduction to the Study

No Child Left Behind, Title II Part D Program

The technology component of the No Child Left Behind program (NCLB) provides funding for technology to schools across the nation serving high-need students.

The three primary goals of NCLB II D are:

- To improve the achievement of all students through the use of technology in elementary and secondary schools.

- To assist all students in crossing the digital divide by ensuring that they are technologically literate by the completion of eighth grade regardless of their race, ethnicity, gender, family income, geographic location, or disability.

- To encourage the effective integration of technology resources and systems with teacher training and curriculum development to establish research-based instructional methods that can be widely implemented as best practices by state educational agencies and local educational agencies.

NOTE: This publication reports on Round 3 of NCLB II D (FY 04). Because the report is published a year after the completion of Round 3, information is available on subsequent rounds. Originally funded at approximately $700 million in Rounds 1, 2, and 3, NCLB II D funding was reduced by 28% in Round 4 to $496 million. In Round 5, funding was further reduced to $275 million, almost a 45% reduction from the Round 1 annual allocation. Legislative language was amended in FY05 that provides for more flexibility for states in how the EETT funding in Round 5 is dispersed. The appropriations language states "Provided further, that up to 100 percent of the funds available to a State educational agency under part D of Title II of the ESEA may be used for subgrants described in section 2412(a)(2)(B) of such Act." This allows states to use up to 100% of the EETT funds for competitive grants.

The Trends Report

The findings from this report represent survey data on the NCLB II D program for Round 3 (2004-2005). The findings were collected from a single respondent – in most cases the state technology director – in each of the 50 states and the District of Columbia. The number of local education agencies (LEAs) represented by survey respondents is 15,997. Within those 50 states and the District of Columbia, 14,291 districts were eligible for Title II D funds, representing 89.3% of LEAs.

Collectively, the survey respondents administered $635,027,468 in NCLB Title II D funding for Round 3 FY04. That sum was the total funding for the 50 states and the District of Columbia. Overall, 1,630 competitive grants and 13,667 formula grants were awarded in the 50 states and the District of Columbia in Round 3 (2004-2005).

Metiri Group has been commissioned for the past three years to conduct the state-by-state survey and write SETDA's National Trends Report. The report is intended to inform national policymakers on the progress of state education agencies (SEAs) and local education agencies (LEAs) in achieving NCLB II D goals as well as to seed SEAs and LEAs with current information on the strategies and tactics other states and school districts are using to get results.

Methodology

Consistent with other federal programs, it is the responsibility of each state to collect, analyze, and report to the U.S. Department of Education its progress in meeting NCLB, Title II, Part D goals. The state survey is intended to be one of a suite of assessment tools developed to collect data on the implementation of the Round 3, 2004–2005 Title II D program at the state level.

This report is based on an analysis of data collected through a state-level survey of state technology directors. The questions included in the state survey instrument were based on the policy sections of the Common Data Elements (CDE) framework and on Title II D requirements. Following several iterations of review and revision by the Data Collection Committee, Metiri Group produced an online version of the survey. That online survey was subsequently field tested by members of the Data Collection Committee. Once finalized, SETDA requested that the 50 states and the District of Columbia complete the survey. Between September 16, 2005, and November 22, 2005, 50 state departments of education and the District of Columbia completed the survey.

SETDA Framework and Tools

This report provides information on states' implementation of Round 3 funding (2004-2005) in the context of the NCLB II D goals and purposes. The report is also developed using SETDA's framework for the effective use of technology in schools. SETDA commissioned the Metiri Group to work with the SETDA Common Data Elements (CDE) Task Force to develop both the framework and statistically reliable instruments for assessing national, state, and local progress in using technology to advance learning goals. The framework is based on a set of key questions to which indicators and data elements are aligned. A suite of statistically valid protocols and instruments is now available to the states. That suite of tools, correlated with student data, enables states to understand trends in their use of technology to improve learning. The Profiling Educational Technology Integration (PETI) tools can be accessed at http://www.setda-peti.org.

State Reports

SETDA is providing individual states with a comprehensive state profile based on the survey data. That profile, combined with information on state use of the PETI tools SETDA is offering (http://www.setda-peti.org), has proven to be a rich source of data to inform a state's progress in meeting Title II D goals.

This year, 50 states plus the District of Columbia participated in the fall 2005 SETDA survey:

Alabama	Kentucky	North Dakota
Alaska	Louisiana	Ohio
Arizona	Maine	Oklahoma
Arkansas	Maryland	Oregon
California	Massachusetts	Pennsylvania
Colorado	Michigan	Rhode Island
Connecticut	Minnesota	South Carolina
Delaware	Mississippi	South Dakota
District of Columbia	Missouri	Tennessee
Florida	Montana	Texas
Georgia	Nebraska	Utah
Hawaii	Nevada	Vermont
Idaho	New Hampshire	Virginia
Illinois	New Jersey	Washington
Indiana	New Mexico	West Virginia
Iowa	New York	Wisconsin
Kansas	North Carolina	Wyoming

Executive Summary

The State Educational Technology Directors Association is pleased to release its third annual Trends Report on educational technology. In addition to reporting trends on the third round (FY 04) of the No Child Left Behind, Title II, Part D, Enhancing Education Through Technology (EETT) program, the 2006 report also includes general state policy trends in educational technology.

The findings in the 2006 report are based on surveys from 50 states and the District of Columbia, representing 15,997 LEAs and the federal NCLB II D dollars allocated across the United States in 2004-2005. Data from the first two annual National Reports for Rounds 1 and 2 serve as a baseline. Those first two reports represented a similar population (46 states and the District of Columbia for Round 1 and 49 states plus the District of Columbia for Round 2). In Round 3 the respondent states and the District of Columbia awarded 1,630 competitive grants and 13,667 formula grants. Together with the 5% of administrative support funds expended at the state level, the total funding was $635,027,468.

Seven trends were reported across the first three years of the NCLB II D program.

Finding 1: Promising Interim Results at 3-Year Mark Warrant Continued Investment

> States have been targeting NCLB II D funds on the three program goals: increasing student achievement, closing the digital divide, and integrating research-based technology practices into learning.

Finding 2: States Have Set the Bar High for Professional Development

> With the states exceeding the required 25% of NCLB II D funding mandated for professional development, over $159 million was dedicated to building the capacity of teachers to use technology effectively. Many states established criteria for professional development that have been met by LEA grantees.

Finding 3: States Are Leveraging Resources through Collaborations and Partnerships

> The states are leveraging resources across federal, state, local private and public funding to advance NCLB goals.

Finding 4: The Large Volume of Small Formula Grants Diminishes Overall Impact

> As noted in the first and second Trends report, approximately 48% of the formula grants are under $5,000. That means that less than 4% of the funds require almost 50% of the administrative support for formula grants. Grants that small have very little impact on the advancement of the NCLB goals.

Finding 5: States Are Grappling with Evaluation and Impact Research

> With few funds available at the state level for evaluation and research, states are grappling with the challenge of conducting high-quality evaluations of their NCLB programs. Most are requiring that LEA grantees conduct local evaluations and many are building the capacity of LEAs to do so. In addition, nearly 25% of the states are funding or commissioning research studies on the impact of educational technology on learning in schools.

Finding 6: Through Leadership, a Knowledge Base Is Emerging

> State directors are beginning to develop wide-scale efforts to establish a common knowledge base of sound research practices or to conduct research studies that will establish that common knowledge base for technology-enriched programs.

Finding 7: In Many States, NCLB II D is the Only Source of Funding for Technology

The following states report that NCLB II D is the only source of funding in their state for educational technology: Arizona, California, Delaware, Illinois, Louisiana, Maryland, Michigan, Minnesota, Missouri, New Hampshire, Oklahoma, Vermont, Washington, and Wisconsin.

After Three Years of NCLB II D

The seven findings strongly indicate that technology funding from the No Child Left Behind, Title II Part D program directly supports NCLB goals in four distinct ways:

- Closing the achievement gap by providing access to software, online resources, and virtual learning aligned to academic standards for instruction and learning.

- Closing the digital divide by providing increased levels of access and robust connectivity for students in low socioeconomic status (SES) schools.

- Supporting the development of highly qualified teachers by providing online courses, communities of practice, and virtual communication that ensure flexibility and access.

- Enhancing data systems to ensure that educators can utilize real-time data to inform sound instructional decisions and ensure that schools meet AYP.

The findings from SETDA's national survey provide states, local school districts, policymakers, and the U.S. Department of Education with insights into the following questions:

1. Is the Title II D program helping to close the achievement gap, leading to the attainment of NCLB II D goals?

   The primary goal of the Title II D program is to improve student academic achievement through the use of technology in elementary schools and secondary schools. State NCLB II D coordinators report that LEAs are focusing on that goal through both formula and competitive grants. Over 40% of states required LEAs that received NCLB II D competitive grant funds in their states to focus on reading or mathematics. With 61% of states now requiring LEAs that receive competitive grants to "report findings based on improvements as compared to baseline data," it is only a matter of time before states will be able to report statewide summaries of correlational results. In addition, nearly 25% of states report that they have commissioned or funded research studies on the impact of technology on learning. Early indications from local NCLB II D evaluations are rigorous, generally positive, and warrant continued funding to stay the course.

   A secondary NCLB II D goal is to assist every student in crossing the digital divide by ensuring that every student is technologically literate by the time the student finishes the eighth grade regardless of the student's race, ethnicity, gender, family income, geographic location, or disability. Thirty-three states have adopted student technology standards but only seven report that testing is in place to assess those standards. This is, in part, because the progress of the states in achieving eighth-grade technology literacy goals was not included in the NCLB state performance reports. Therefore, many states are concentrating on other priorities.

The third and last goal is to encourage the effective integration of technology resources and systems with teacher training and curriculum development to establish research-based instructional methods that can be widely implemented as best practices by SEAs and LEAs. One of the federal requirements is the dedication of 25% of the NCLB II D funds to professional development. It is apparent from Round 3 survey results that state and the District of Columbia technology directors are using frameworks, standards, and experience to design technology-based learning programs to advance Title II D goals. When asked if the state "identifies what NCLB Title II D technology-related educational interventions appear to be working," 35 states (68.6%) answered in the affirmative. States have encouraged effective integration of technology in schools through a variety of incentives. They are building a knowledge base of technology interventions that work and are disseminating this information to LEAs.

2. How are grant recipients across the nation structuring programs to meet NCLB II D goals?

    The states provide technical assistance and guidance to the LEAs for both competitive and formula NCLB II D grants. Some states are able do so through programmatic guidance within their competitive grant processes. For example, currently 7 states have established specific programmatic guidelines for the competitive grants that are intended to scale a specific model of classroom intervention (e.g., the eMINTS program in Missouri and Utah, the IMPACT program in North Carolina, the No Limits! Program in Washington State), 5 states emphasized laptop programs, 4 required use of specific software or instructional management systems, and 11 states focused applicants on data-driven decision making.

    States are also establishing evaluation requirements and many are building the capacity of their LEAs to conduct high-quality evaluations through training and technical assistance programs.

3. What administrative approaches by states are most effective in guiding and supporting LEAs toward NCLB goals?

    As stated earlier, states' evaluations of NCLB are "in process." A few states report success in collaboratively administering their grants with other federal programs. With over $5.9 million transferred from the Title II A and Title IV A into Title II D and nearly $1.5 million transferred from Title II D into Title V, it is apparent that LEAs are beginning to recognize the value of collaboration between programs to attain the overarching goals for all NCLB programs.

4. Are the general trends in technology and learning indicating increased effectiveness in the use of technology for learning as outlined in NCLB II D?

    Beginning in 2004, the SETDA surveys started collecting data on general policy trends in educational technology. Findings from the 2004 and 2005 surveys indicate the following general trends in educational technology at the state level.

    - Over 88% of states are collecting data annually from either districts, schools, or both. States are increasingly triangulating data sources (e.g., district surveys, school surveys, teacher surveys, student surveys, and site visitations).

    - Only three 21st Century skills out of 14 were identified by a majority of the states as "addressed with high fidelity." Those three skills were: technology literacy, information literacy, and higher-order thinking/sound reasoning. Even fewer numbers of states (5, 7, and 12 respectively) report assessing those skills.

- The percentage of states that report having technology standards varies considerably across constituents: students (65%), Prek-12 teachers (47%), administrators (29%) pre-service teachers (31%), and teacher educators (14%). Less than 16% of states assess attainment of those standards.

- Nearly half (49%) of states indicated that they operate a virtual learning program for secondary students, with 13.7% reporting provision of such programs for elementary students. Fewer still provide policies to guide the use of virtual learning programs for students or maintain approved lists of vendors for such services.

- Over 78% of the states periodically disseminate information on the latest research on technology and learning, and growing numbers are funding (17.6%) or commissioning (25.5%) research studies on the impact of technology on learning.

- Most states are encouraging school districts and schools to integrate technology systematically and 23.5% actually require that technology planning and school improvement be conducted within the same process.

In general, states are increasingly focusing their technology resources on improving academic achievement and technology literacy, increasing professional development for teachers and providing more current technologies and robust access in networked environments for learning. Sustained funding and educational technology program continuation are critical to realizing the potential that technology brings to learning and teaching.

An Overview

NO CHILD LEFT BEHIND TITLE II, PART D
SEC. 2402. PURPOSES AND GOALS

(a) PURPOSES: The purposes of this part are the following:

(1) To provide assistance to States and localities for the implementation and support of a comprehensive system that effectively uses technology in elementary schools and secondary schools to improve student academic achievement.

(2) To encourage the establishment or expansion of initiatives, including initiatives involving public-private partnerships, designed to increase access to technology, particularly in schools served by high-need local educational agencies.

(3) To assist States and localities in the acquisition, development, interconnection, implementation, improvement, and maintenance of an effective educational technology infrastructure in a manner that expands access to technology for students (particularly for disadvantaged students) and teachers.

(4) To promote initiatives that provide school teachers, principals, and administrators with the capacity to integrate technology effectively into curricula and instruction that are aligned with challenging State academic content and student academic achievement standards, through such means as high-quality professional development programs.

(5) To enhance the ongoing professional development of teachers, principals, and administrators by providing constant access to training and updated research in teaching and learning through electronic means.

(6) To support the development and utilization of electronic networks and other innovative methods, such as distance learning, of delivering specialized or rigorous academic courses and curricula for students in areas that would not otherwise have access to such courses and curricula, particularly in geographically isolated regions.

(7) To support the rigorous evaluation of programs funded under this part, particularly regarding the impact of such programs on student academic achievement, and ensure that timely information on the results of such evaluations is widely accessible through electronic means.

(8) To support local efforts using technology to promote parent and family involvement in education and communication among students, parents, teachers, principals, and administrators.

(b) GOALS:

(1) PRIMARY GOAL: The primary goal of this part is to improve student academic achievement through the use of technology in elementary schools and secondary schools.

(2) ADDITIONAL GOALS: The additional goals of this part are the following:

(A) To assist every student in crossing the digital divide by ensuring that every student is technologically literate by the time the student finishes the eighth grade regardless of the student's race, ethnicity, gender, family income, geographic location, or disability.

(B) To encourage the effective integration of technology resources and systems with teacher training and curriculum development to establish research-based instructional methods that can be widely implemented as best practices by State educational agencies and local educational agencies.

NCLB Title II, Part D State Allocations

States:	Table 1: NCLB II D State Grants		
	Round 1: FY 2002 Final State Allocations	Round 2: FY 2003 Final State Allocations	Round 3: FY 2004 Final State Allocations
Alabama	$8,794,248	$9,690,136	$9,868,971
Alaska	$3,075,155	$3,214,970	$3,304,308
Arizona	$10,111,346	$9,655,054	$12,202,519
Arkansas	$5,518,844	$5,465,161	$6,146,287
California	$85,123,372	$89,959,919	$93,318,376
Colorado	$5,569,804	$5,489,698	$5,942,011
Connecticut	$6,158,638	$5,209,647	$5,452,429
Delaware	$3,075,155	$3,214,970	$3,304,308
District Of Columbia	$3,075,155	$3,214,970	$3,304,308
Florida	$28,312,771	$29,241,808	$30,855,668
Georgia	$18,588,457	$18,645,145	$20,179,473
Hawaii	$3,075,155	$3,214,970	$3,304,308
Idaho	$3,075,155	$3,214,970	$3,304,308
Illinois	$25,456,201	$25,908,318	$27,637,866
Indiana	$8,959,597	$7,836,888	$8,567,373
Iowa	$3,535,415	$3,214,988	$3,296,047
Kansas	$4,295,513	$4,739,996	$4,165,751
Kentucky	$8,799,115	$8,608,243	$8,907,782
Louisiana	$11,460,981	$14,168,071	$14,283,472
Maine	$3,075,155	$3,214,970	$3,304,308
Maryland	$9,146,822	$8,092,948	$8,771,084
Massachusetts	$12,793,954	$14,154,554	$11,141,968
Michigan	$24,296,861	$20,457,029	$20,978,706
Minnesota	$6,594,336	$6,055,412	$5,017,495
Mississippi	$6,105,610	$8,315,118	$8,294,144
Missouri	$9,312,229	$9,557,431	$8,064,903
Montana	$3,075,155	$3,214,970	$3,304,308
Nebraska	$3,075,155	$3,214,970	$3,304,308
Nevada	$3,075,155	$3,214,970	$3,462,269
New Hampshire	$3,075,155	$3,214,970	$3,304,308
New Jersey	$14,970,765	$13,972,432	$13,525,534
New Mexico	$4,856,313	$5,774,873	$6,189,971
New York	$60,907,113	$64,948,122	$65,722,083
North Carolina	$12,685,051	$14,721,370	$14,392,700
North Dakota	$3,075,155	$3,214,970	$3,304,308
Ohio	$19,229,051	$21,866,049	$21,037,126
Oklahoma	$7,091,048	$6,646,069	$7,363,973
Oregon	$5,495,169	$6,253,983	$7,002,352
Pennsylvania	$22,784,432	$23,425,221	$22,235,814
Rhode Island	$3,075,155	$3,214,970	$3,304,308
South Carolina	$8,393,257	$8,651,744	$8,784,800
South Dakota	$3,075,155	$3,214,970	$3,304,308
Tennessee	$8,285,988	$10,282,694	$10,665,088
Texas	$50,721,663	$55,794,699	$59,385,629
Utah	$3,075,155	$3,214,970	$3,304,308
Vermont	$3,075,155	$3,214,970	$3,304,308
Virginia	$10,364,389	$9,917,162	$10,334,465
Washington	$8,266,254	$8,312,350	$8,951,900
West Virginia	$4,506,136	$5,106,182	$4,954,589
Wisconsin	$8,498,770	$7,546,299	$8,353,969
Wyoming	$3,075,155	$3,214,970	$3,304,308
Total	**$595,191,993***	**$619,124,333***	**$635,027,468***
*Totals do not include allocations to U.S. Territories.			

State Leadership and Technical Assistance for NCLB Title II D

The state directors are orchestrating effective technology use by LEAs on a number of fronts within and outside of the NCLB II D program. SETDA's framework for effective technology in schools focuses on five key conditions aligned to targeted student learning goals. State directors are establishing policies to guide and support LEA advancement toward these conditions – conditions that will advance higher academic achievement, technology literacy, more effective teaching, 21st Century learning, and increased efficiencies in PreK-12 educational systems.

SETDA's Framework for Effective Technology Use in Schools

Goals for Learners

- Improvement of academic achievement through effective technology use
- Assurance that students acquire 21st Century skills through effective technology use in the context of high standards and high-quality learning
- Engagement of students in learning through effective technology use

Conditions for Effective Technology Use

1. Effective Practice. Is the practice in learning environments characterized by powerful, research-based strategies that effectively use technologies?

2. Educator Proficiency. Are educators proficient in implementing, assessing, and supporting a variety of effective practices for teaching and learning?

3. Robust Access, Anytime, Anywhere. Do students and school staff have robust access to technology - anytime, anywhere - to support effective designs for teaching and learning?

4. Digital Equity. Is the digital divide being addressed through resources and strategies that ensure that all students are engaging in an educational program aligned to the vision?

5. Vision, Systems, and Leadership. Has the education system reengineered itself into a high-performance learning organization aligned to a forward-thinking, shared vision for 21st Century learning?

States are driving effective technology use through a variety of state policies. They have been instrumental in shaping the NCLB II D programs at the local levels. Section 2415 of NCLB Title II D allows 5% of the total state funding allocation for state administration and technical assistance.

Examples of the technical assistance provided to LEAs by the state are included in the table on the next page.

State	NCLB Title II D Technical Assistance by States: Round 3
AZ	Project staff provides continual support and technical assistance to LEAs. Professional development workshops are also provided with the assistance of the Regional Training Centers and the Title II D Coordinator. A technology planning template, sample tech plans, and other resources are provided through the state web site: http://www.ade.az.gov/. For the discretionary competition, workshops were held at key locations statewide on the application and technology plan development process. Twice a year the agency monitored the progress of discretionary projects in advancing goals and objectives.
CA	Approximately $1.5M in EETT state level administrative (technical assistance) funds is allocated directly to the 11 California Technical Assistance Projects (CTAP) housed in county offices of education. The role of CTAP is to provide technical assistance, training, and support to local school districts to integrate technology into teaching and learning. In addition, $408,000 of administrative funds is used for contracted evaluation services. The state staff provides additional ongoing technical assistance and support to districts through an annual evaluation conference, a state web site, district contacts and targeted site visits.
FL	Technical assistance services associated with the EETT program are primarily delivered through a formal project administered by the Florida Center for Instructional Technology (http://fcit.usf.edu/). In addition to that focused project, staff in the FDOE Instructional Technology Office provide ongoing technical guidance and support to Title II D program participants in the following areas: (1) System for Technology Accountability and Rigor [STAR] planning and integration, (2) Inventory of Teacher Technology Skill utilization and planning, (3) application and proposal development, (4) project evaluation and reporting, (5) technology plan development and review, and (6) school improvement plan development and review.
MN	The Department of Education produced the *04-07 Technology Planning Guide*, provides workshops on technology planning, and reviews and approves all LEA technology plans. In addition, it provides technical assistance in the development of grant proposals for the competitive section of Title II D through general workshop sessions and one-to-one assistance with groups to facilitate consortia application for competitive grants. The Department of Education also provides training at school-district workshops regarding the formula section of the program, meets quarterly with school district technology coordinators, provides updates on the Title II program and existing projects, and works closely with the Title I program section to ensure program alignment.
NC	The IMPACT grant provides the necessary personnel and training for teachers to fully implement the IMPACT model, which is grounded in information literacy.
NV	The state supports public-private initiatives for acquiring technology for high-need LEAs and students served by these LEAs, supports professional and curriculum development that includes the integration of advanced technologies, assists grant recipients in providing all students (including students with disabilities and limited English proficiency) and teachers with access to educational technology.
PA	Technical assistance was provided to LEAs through a three-day grant writing workshop, review and discussion of bi-annual reports, and collection and dissemination of survey data to LEAs and teachers to determine professional development needs. A two-day evaluation workshop created a forum for the awardees to expand the repertoire of assessment, evaluation, and accountability tools and processes related to their project. A cohort of districts that have similar goals for assessment and evaluation, tapped into instruments from the state evaluators, provided three different webinars throughout the school year, provided capacity building and technical assistance to about a third of the districts via onsite visits and conducted daylong seminars held in four different locations across the state addressing local evaluation issues for half a day, and research-based practice for the other half.
UT	The state used these funds to contract with the University of Utah to provide an evaluation of Title II D Competitive Grants.
VT	The agency supported literacy and integration of technology through resources related to grade expectations, performance tasks, model performance tasks in content areas, and a grade-by-grade Guide for Instruction. The agency also sponsored two statewide conferences.

FINDING 1: Promising Interim Results at 3-Year Mark Warrant Continued Investment

In the Round 1 and Round 2 Trends Reports, state directors found that the NCLB, Title II, Part D grant program was a positive force in refocusing technology use toward gains in student learning. In those reports, state directors identified three distinct ways in which technology emphasis will lead to quicker and higher attainment of NCLB goals:

- The informed use of digital tools, which, in the hands of highly qualified teachers, are used to broaden and strengthen learning and teaching through authenticity, real-world problem solving, critical thinking, communication, and production;

- The alignment of software, web courses, virtual learning, and other technology-based learning solutions that students use to build basic skills and increase academic achievement;

- The use of real-time data and the informed use of data to drive sound instructional decisions.

Respondents to the Round 3 survey reported interim progress across a variety of fronts. The federal legislation lists eight purposes for the NCLB Title II D legislation. To ensure differentiation, those strategies were expanded into the following eleven topics represented in the following charts. As the below charts indicate, the states selectively addressed some of the 11 in Round 1, and surged forward to collectively address all of the 11 at higher percentages in Rounds 2 and 3.

**Figure 1: Percentage of States Identifying Federal Purposes
as Priorities for EETT Competitive Grants in Their States**
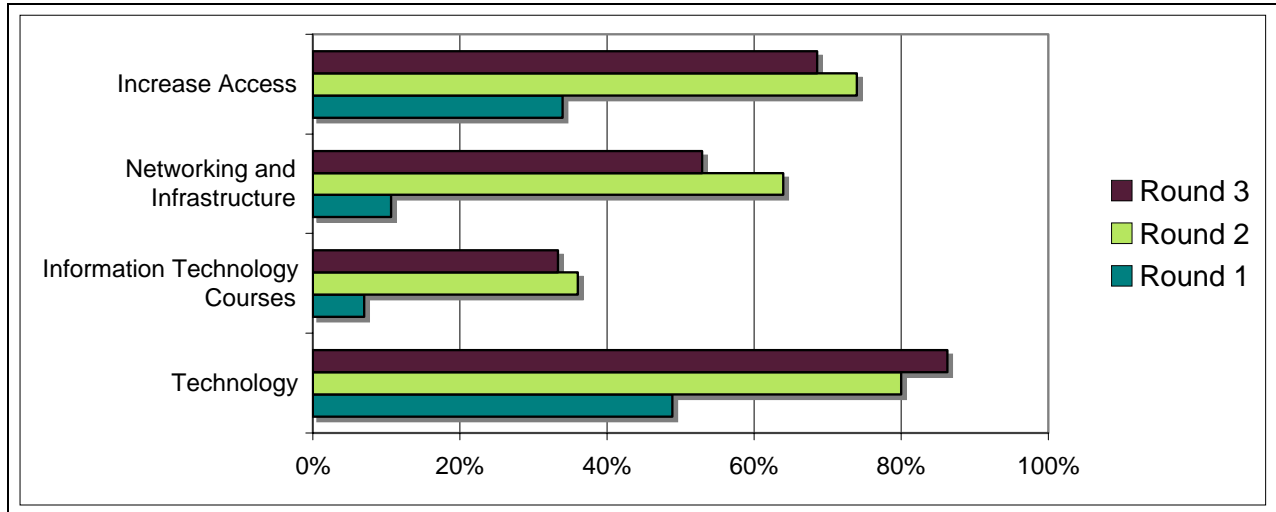
Learning Integration Focus
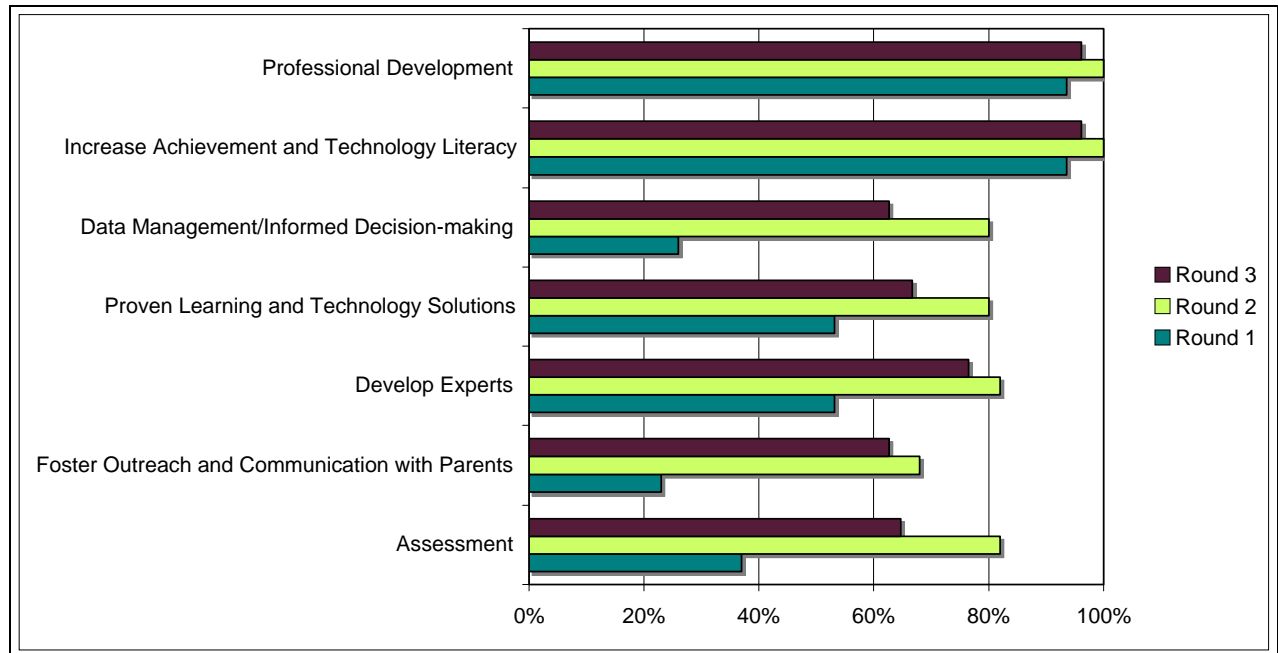
Note: Percentages based on the number of survey respondents (47, 50, and 51 in Rounds 1, 2, and 3 respectively.)

See following page for the technology related priorities.

**Figure 2: Percentage of States Identifying Federal Purposes
as Priorities for EETT Competitive Grants in Their States**

Technology Focus

Note: Percentages based on the number of survey respondents (47, 50, and 51 in Rounds 1, 2, and 3 respectively.)

These findings support the premise of the SETDA Profile of Educational Technology Integration (PETI), which predicts slow-going with technology until a school begins building its "readiness" to use technology expertly and seamlessly with maximum impact. It simply takes time for classroom practices to shift.

Included below are examples from NCLB II D projects across the country, which are on a critical pathway to meeting NCLB goals through effective technology use. These projects warrant continued funding through EETT. They demonstrate that the states and their LEAs are not only building the conditions essential to effective technology use, but they are also beginning to see results as measured in increased student learning.

It should be noted that all of the examples provided by the state technology directors as promising were funded through the competitive grant process.

State	NCLB II D Example of LEA Project
AL *A Virtual Learning Environment for Professional Development*	Two web sites have been developed and maintained as integral parts of the Alabama program. The Online Technology Learning Center (http://www.online.tusc.k12.al.us) was developed to provide a virtual learning environment to promote the use of technology and to offer technology training opportunities for all teachers, administrators, and support personnel in the school system. The Center is online 24 hours per day and can be accessed from anywhere through the Internet. A primary goal of the Online Technology Learning Center is to present convenient online training that will help teachers further develop technology skills that can be used to integrate technology into their teaching.

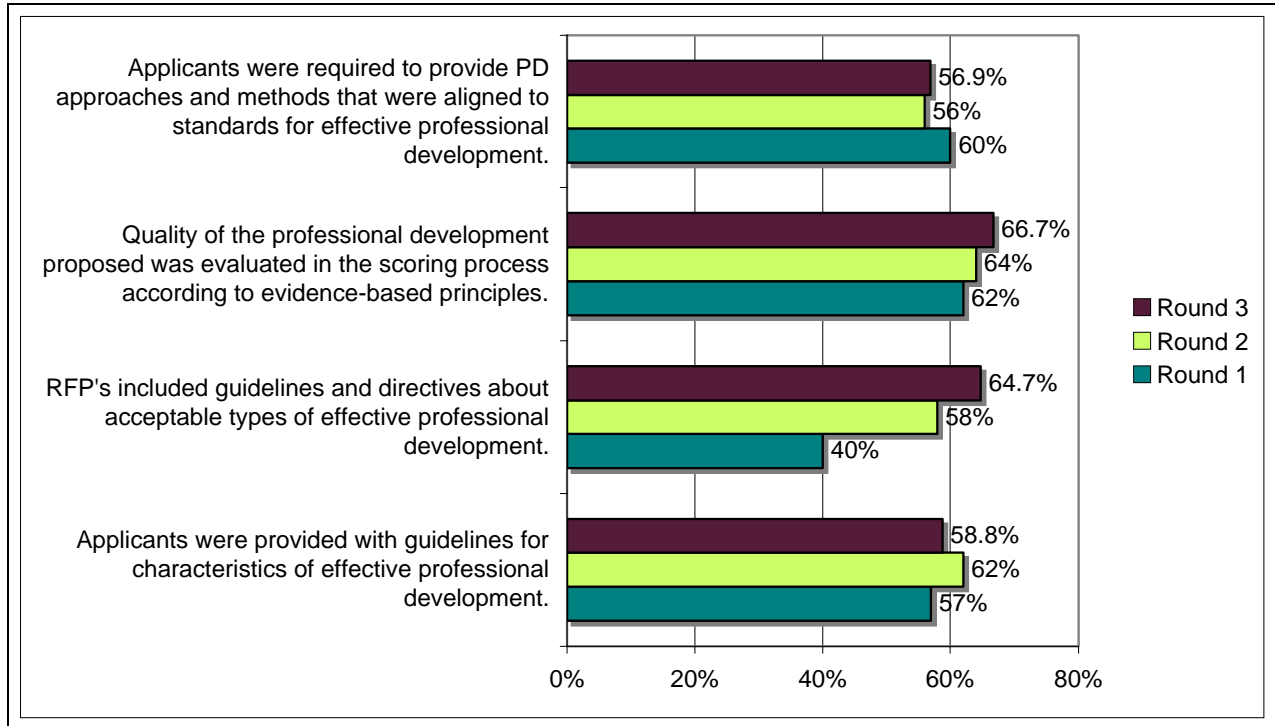| State	NCLB II D Example of LEA Project
AK *Technology as a 21st Century Tool for Writing*	The Fairbanks School District Write On! Project sought to improve the writing ability of elementary students through the use of technology. Two hundred of the lowest performing 3rd- through 6th-grade students in the five lowest performing elementary schools in the district were to use AlphaSmart technology (small laptops) to increase their writing ability. Target schools and students were selected, lesson plans created, and teachers trained through a combination of group workshops, in-classroom model lesson demonstrations, and one-on-one instruction. The Write On! students who used AlphaSmarts posted significantly higher gains in language arts than those who did not use AlphaSmarts. While 5th graders using AlphaSmarts showed more positive results in Writing, 6th graders showed more positive results in Reading.
FL *Ability to measure tech integration*	Key components of Florida's System for Technology Accountability and Rigor are under development through a collaborative initiative involving the Pinellas County School District, district-level instructional technology leaders, university-based research and measurement experts, and the FDOE Instructional Technology Office. One important deliverable for this highly focused effort will be a formal research-based Technology Integration Measurement Matrix. This specialized instrument is expected to facilitate technology integration observation and evaluation within classroom instructional settings. The Matrix will be supported by digitized video clips demonstrating effective and appropriate technology tool utilization and exemplary instructional methods. A similar prior-year effort resulted in the development of a high-quality, performance-based Inventory of Teacher Technology Skills professional development tool designed to help teachers evaluate their proficiency and mastery of certain basic skills. An evaluation tool with skill indicators appropriate for student use is also under development in conjunction with this ongoing project.
KS *Relevant, real-world learning through technology aligned to standards*	Kansas' Technology Rich Classrooms (TRC) is funded through the EETT Competitive Grant funds. The purpose of the TRC program is to provide evidence that technology integrated into a technology-rich learning environment and supported by strong, ongoing professional development can produce positive changes in the classroom environment--specifically academic improvements for students in the areas of reading, math and/or science. The program infuses the classrooms with 21st Century tools, support of a half-time professional developer/coach/mentor/co-teacher, on-going training and content-rich resources, while focusing on creating a student-centered learning environment. The primary goals of the program are to foster a student-centered learning environment through the use of technology and sound instructional strategies, increase content-rich knowledge/understanding through 21st Century teaching tools/technologies, empower teachers to develop content knowledge, instructional best practices, and technology skills needed to sustain a tech-rich environment.
MI *Laptops: 21st Century Learning for 21st Century Students*	Freedom to Learn (FTL) is a statewide initiative aimed at improving student achievement and engagement in Michigan schools. FTL is the catalyst for changing the way students learn and teachers teach. The demands of a 21st Century educational system make this change necessary. FTL empowers teachers to individualize instruction for every child -- truly to leave no child behind. FTL creates an environment where every child can have an Individualized Education Plan (IEP), where learning occurs anytime and anywhere, where students are motivated by their own medium of expression. FTL accomplishes this new educational vision through a one-to-one learning environment, in which every student and teacher has access to his or her own wireless laptop in a wireless environment. Some of the most powerful and positive results have been found in reading and math scores. This year, 7th-grade reading scores jumped from 29 percent to 41 percent and 8th-grade math scores increased from 31 percent to 63 percent.

State	NCLB II D Example of LEA Project
MO *Closing the achievement gap through new designs for teaching and learning using technology.*	The eMINTS (enhancing Missouri's Instructional Networked Teaching Strategies) program transforms classrooms into places for learning where teachers and students use multimedia tools to better understand the world, work together, and achieve at new and higher levels. The goal of the program is to transform how teachers teach and students learn with professional development and support from certified instructional specialists. The eMINTS philosophy is based on transforming teaching using inquiry-based methods and strategies powered by technology. The 2004 analysis of student MAP (Missouri Assessment Program) scores of eMINTS schools shows significant differences by eMINTS enrollment status on the Communication Arts test and smaller, but positive differences on the Mathematics test. Analyses of instructional practices suggest participation in the eMINTS program helps all teachers more effectively support higher levels of student achievement. Finally, analyses of MAP scores for African American students, special-education students, and students receiving Title I services suggest eMINTS enrollment helps reduce the achievement gaps.
OH *Integration in Math and Literacy*	The Ohio Title II D grant involves school districts utilizing grant selected software packages, resulting in a successful professional development mentor model. It has developed cohorts of schools using a prescribed package of software including an instructional management system, software to support literacy and mathematics, and online, virtual learning for students.
SC *The RADICALS*	RADICALS (Raising Academic Demands through Innovative Curriculum, Accessibility, and Learning Styles) is a multi-district, innovative project that builds on the DILLONTEAMS grant provided by the South Carolina Department of Education in 2002. This grant, which focuses on Dillon School District One and Three as well as Marion School District Two, uses technology to increase and enhance the instructional environment for students. Within this project, teachers and staff use high-quality, technology-enriched professional development and modern classroom resources to increase student achievement through enhanced classroom delivery. The RADICALS project also expands the learning of all educational stakeholders by providing for Community Computer Centers, student laptop checkouts, and by offering quality professional development for educators throughout the state via the online classes.

Finding 2: States Have Set the Bar High for Professional Development

The NCLB, Title II, Part D legislation requires that all grantees for formula and competitive grants use a minimum of 25% of their funds for professional development aligned to program goals. Forty-three percent of the states went beyond that target to focus additional resources toward professional development. Thus, over $159 million of grant funds was dedicated to professional development during Round 3 of the NCLB II D program.

State coordinators for Title II D have established criteria and provided technical assistance to ensure high-quality professional development from LEA and partnership awardees, which, in turn, ensures that states and districts are able to have highly qualified teachers. Over 66% of states reported judging the quality of their competitive grant applications against evidence-based principles on professional development. States are increasingly providing guidelines as to the characteristics of high-quality professional development and awarding funds, in part, based on such criteria.

Figure 3: State Methods for Ensuring High-Quality Professional Development in Competitive Grants

	Round 3	Round 2	Round 1
Applicants were required to provide PD approaches and methods that were aligned to standards for effective professional development.	56.9%	56%	60%
Quality of the professional development proposed was evaluated in the scoring process according to evidence-based principles.	66.7%	64%	62%
RFP's included guidelines and directives about acceptable types of effective professional development.	64.7%	58%	40%
Applicants were provided with guidelines for characteristics of effective professional development.	58.8%	62%	57%

Note: Percentages based on the number of survey respondents (47, 50, and 51 in Rounds 1, 2, and 3 respectively.

Examples from promising LEA grant programs identified by states indicate that some grantees are beginning to investigate the use of alternate forms of professional development such as coaching, modeling, and analyzing student work. In addition, grantees are using technology as a vehicle to more accessible professional development. These programs help all states meet NCLB's requirement for highly qualified teachers.

Included below are examples from NCLB II D projects across the country that are making progress in achieving the NCLB goals through effective technology use.

State	NCLB II D Examples in Technology-related Professional Development
AZ	During the 2004-05 school year, an NCLB II D project provided equipment to create seamlessly integrated technology classrooms and two technology integration coaches to support the use of this equipment to the Tuba City Unified School District. It also provided professional development to a wide variety of Flagstaff Unified School District educators as well as increased bandwidth for the district and a choice of MS Office, a SmartBoard, or a computer projector for each of 18 school sites. Seven Community Technology Nights were held in either Tuba City or Flagstaff to provide information and demonstrations to parents on the value of technology in their children's education. Success during the 2004-05 school year was measured by the increase in numbers of teachers with direct access to and training in the use of technology equipment and software to meet academic goals.
DE	This grant involved one of five LEAs that used a technology mini-grant to purchase Palms (PDA). Teachers participated in professional development on how to use the Palms and learned how to understand the data generated from these devices. The Palms are allowing Reading First teachers and coaches to give students the DIBELS test electronically, which increases efficiency and accuracy of student reading data. Teachers can now focus more on instruction rather than taking more time to test students' progress. This also allows for accurate data for individuals and whole groups.

State	NCLB II D Examples in Technology-related Professional Development
FL	Faculty at Hardee Senior High School and Hardee Junior High School collaborate with experts at the USF Florida Center for Instructional Technology (FCIT) in a focused effort to dramatically improve technology use and integration at both rural schools. Ongoing coaching and mentoring by Educational Technology Integrators ensures that training keeps pace with the introduction of new instructional technologies and high-quality digital content. Video-clip development provides a means of documenting exemplary practices. Given the minimal technology use at the two target schools and ongoing student academic challenges, there is good reason to expect significant and measurable professional growth among the faculty as a result of intensive and sustained support.
HI	Mobile Education Partners is a collaboration of efforts stemming from an interest in and need for educational opportunity and reform in the socio-economically depressed rural communities of Hamakua (Big Island). This grant uses technology to engage students in data gathering and the study of science. Through innovative partnerships, high-quality professional development is linked with technology and research-based instructional strategies that will inspire, invigorate, and empower teachers and administrators.
IL	One of the Illinois projects, *Learning with Technology: BLT Style,* was designed to restructure school learning communities; to create new and innovative learning techniques and teaching roles to engage students in their learning; to assist learners of all ages in becoming information critical thinkers, analyzers, selectors, creators of knowledge, effective communicators, technologists, and responsible citizens in a technological age. The project sought to help learners be able to meet the challenges of an ever-changing technological society, while improving student achievement in the core academic areas. By infusing skills via ongoing professional development, these goals were achievable and sustainable. This project infused technology into classrooms and allowed teachers to develop their own IPDP's (Individual Professional Development Plans) that focused on their specific needs and skill levels. This project hit at the heart of technology integration in the classroom and allowed for technology leadership at the administrator level.
SC	Thirty Technology Curriculum Coaches are working in SC schools receiving Enhancing Education Through Technology competitive grants. The SC Department of Education, Office of Technology, provides training in the art of coaching, technology integration, and curriculum-based instruction to these coaches. The Technology Curriculum Coaches use an electronic portfolio system to assess teacher, student and administrator levels of technology proficiency. A customized plan is developed for each teacher, student and administrator indicating what resources are available for progression and improvement. Resources and coursework offered nationally, statewide and locally are mapped to the plans.
TN	The Tennessee grant involves a consortium comprised of an anchor school and four satellites. The anchor school -- a past recipient of II D funds -- serves as a mentor for the satellites providing guidance in professional development and technology integration. This program is promising because of the experienced, dedicated personnel, and excellent program design.
UT	Utilizing a strong research base for improving student achievement, eMINTS-4-Utah is a replication of the national eMINTS program. Generally, students enrolled in Utah eMINTS classrooms outperform their non-eMINTS peers in the same schools. Besides improving student academic performance, eMINTS-4-Utah has a comprehensive plan of intensive professional development and extensive follow-up. In-classroom coaching by eMINTS-trained instructional specialists helps participating teachers transition from the traditional teacher role of classroom expert to the role of student-learning facilitator. Intensive, sustained training ensures changes in instructional practices and increases in student performance on required statewide tests. Teachers report that eMINTS is the best professional development program that they have EVER attended.

Finding 3: Leveraging through Collaborations and Partnerships

The federal government's consolidated approach to NCLB education funding encourages the leveraging of resources through collaboration and partnership. This often works to education's advantage in opening up lines of communication that can result in a shared commitment to common goals. As the link between education and economic viability in today's knowledge-based economy become clear to decision makers, such collaborations and partnerships are increasingly viewed as mutually beneficial. However, such collaborations and partnerships require time for respective staffs to learn about, discuss, and jointly plan programs.

Local Partnerships

Collaborations were evident at the LEA level with states reporting that nearly one-third of their competitive grants involved a partnership with other LEAs and/or outside entities such as universities, private companies, or non-profits.

Federal Fund Transfers between Programs

LEAs are increasingly opting to use the flexibility of the federal guidelines to transfer funds in and out of the NCLB II D program. In the first year of the program (2002-2003), transfers across federal programs resulted in a net gain of $2,323,302 to Title II D. In Round 2, the transfer of formula grant funds resulted in a small net loss of $8,831. In Round 3, there was a net gain to the NCLB II D programs of $3,286,898. The tables in the Section on Formula Grants provide detailed charts on which programs were impacted by these transfers in and out of Title II D.

Figures 4 and 5: Amount of funds transferred into and out of NCLB II D in Round 3
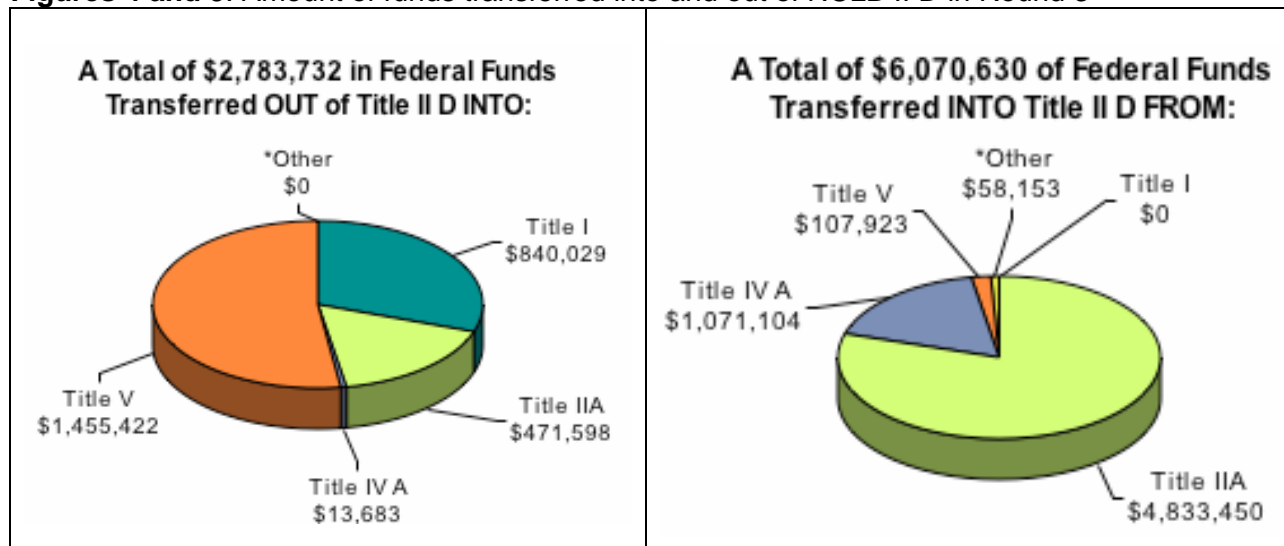
The transfers OUT of NCLB Title II D programs totaled $2,783,732, with the largest sum transferred into Title V programs (Promoting Informed Choice and Innovative Programs.) The transfers INTO the Title IID programs totaled $6,070,630, with most of those funds transferred from Title II A (Teacher and Principal Training and Recruiting Fund/Improving Teacher Quality).

In Years 1 and 2 of NCLB II D, the federal focus on academic achievement, as measured by each state's AYP, has established a common and unifying goal at the state and local levels, resulting in consolidated applications; application requirements for leveraging funding across programs; the

building of consortia that work together through competitive grant awards; and the consolidation of administration and technical support for federal programs.

Collaboration with Other State and Federal Programs

State technology directors have established strong NCLB II D programs to ensure that grantees use the funds to advance toward AYP benchmarks and beyond. With the common goals of NCLB established for so many federal and state programs, collaborations seem advisable.

The annual survey asked the state directors to indicate their level of coordination and collaboration with other federal and state programs. During Rounds 1, 2, and 3, collaborations and partnerships provided opportunities for cost-sharing in the development of assessments, lowered telecommunications costs, facilitated joint ventures in 21st Century learning of interest to both businesses and schools, and generally provided services not otherwise available. However, in Round 3 the state technology directors reported a decided decrease in such collaborations and partnerships with other federal and state programs. This shift could be due to a natural tendency to attempt joint work early in the life of a program and then realize that the goals, target populations, and/or nature of the programs are not sufficiently similar to warrant the investment of time. A second reason could be the reduction in the level of federal funding for NCLB II D, which resulted in some reductions in staffing at the state, leaving less time for such efforts.

The state technology directors reported the highest levels of collaboration and coordination with standards-based reform programs, comprehensive school reform programs, and IDEA (Individuals with Disabilities Education Act).

Figure 6: Percentage of State Technology Directors Indicating

Formal Participation between Their State NCLB Title II D and Other Programs
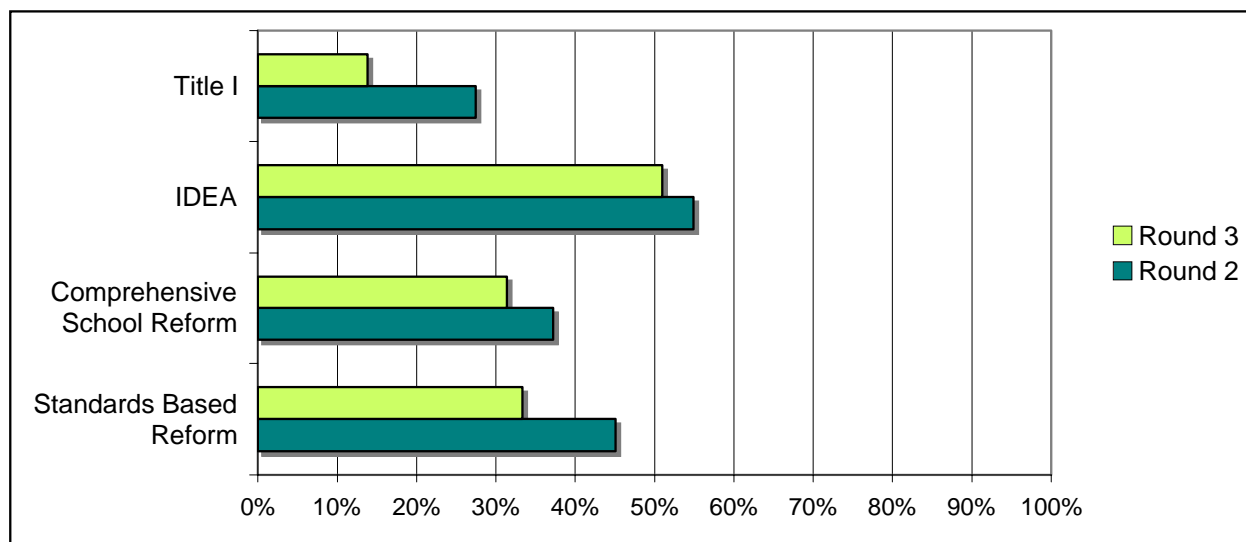
Note1: Round 1 asked for data in a less quantifiable manner therefore is not included in this figure.
Note2: Percentages based on the number of survey respondents (50 in Round 1 and 51 in Round 2)

The examples on the following pages provide a closer look at the type of partnerships and collaborations made possible through NCLB Title II D.

State	NCLB II D LEA Examples of Partnerships and Collaborations
MD *Technology Literacy by the 8th grade*	The Maryland Student Technology Literacy Consortium is a partnership of school districts focused on ensuring that all students are technologically literate by the end of eighth grade. The consortium will recommend a definition of technology literacy, a plan for teaching technology literacy skills, and a process for assessing student technology use and literacy. A major outcome of this project is to create clear and measurable standards that define technology literacy for elementary- and middle-school students. Activities involve gaining the support of stakeholders at the state and district levels, including business, higher education, and associations and seeking key stakeholders' input on what a technologically literate student ought to know and be able to do. Through the Technology Literacy by 8th Grade (TL8) Consortium, student technology standards that are closely aligned with Maryland's Voluntary State Curriculum (VSC) will be available statewide.
SD *Medicine has "teaching hospitals," education has "teaching schools"*	The Black Hills Teacher Learning Center (TLC) at Spearfish West Elementary was developed through a partnership between the Department of Education, Spearfish School District, Black Hills State University, and Black Hills Special Services Cooperative. The Teacher Learning Center is housed at West Elementary in Spearfish within a three-classroom suite. An observation area, complete with one-way mirrors and video and audio capabilities, is situated between two demonstration classrooms. Three goals were articulated for the development of the TLC: 1) to provide professional development to elementary teachers; 2) to provide a learning environment for pre-service elementary candidates; and 3) to provide elementary teachers with research-based curriculum and teaching methods. Based on the results of the first year of the TLC and assessed benefits for current resident teachers and teacher candidates, TLC partners and other stakeholders have begun to realize the potential of the TLC model to respond to the needs of educators and students throughout the Black Hills Area. This is a promising project for many reasons: it provides a cohort of support for novice teachers; it utilizes the coaching model; it will provide examples of best practices; and it utilizes existing distance technology to deliver the project, thus making it viable for replication.

Finding 4: Large Volume of Small Formula Grants Diminishes Impact

The number and focus of the competitive and formula grants differ considerably. With comparable amounts annually in each category, 13,667 grants were awarded in Round 3 through formula funds compared to only 1,630 in competitive grants. That translates into much larger, more substantive grants through the competitive awards.

For those districts with substantive awards, the formula grants are an effective means of closing the achievement gap by targeting LEAs with high percentages of high-need, at-risk students. Districts that received sizeable formula awards as opposed to those smaller awards have more options in using the funds to continue or develop existing initiatives. However, with over 48% of such grants at less than $5,000, most state technology directors say that while these funds are critical, the administrative effort on the part of districts and states required to manage such grants is high. Survey respondents report that the high numbers of grant recipients are further stretching states' administrative and technical assistance budgets.

Figure 7: Round 3 NCLB II D Formula Awards to Eligible LEAs
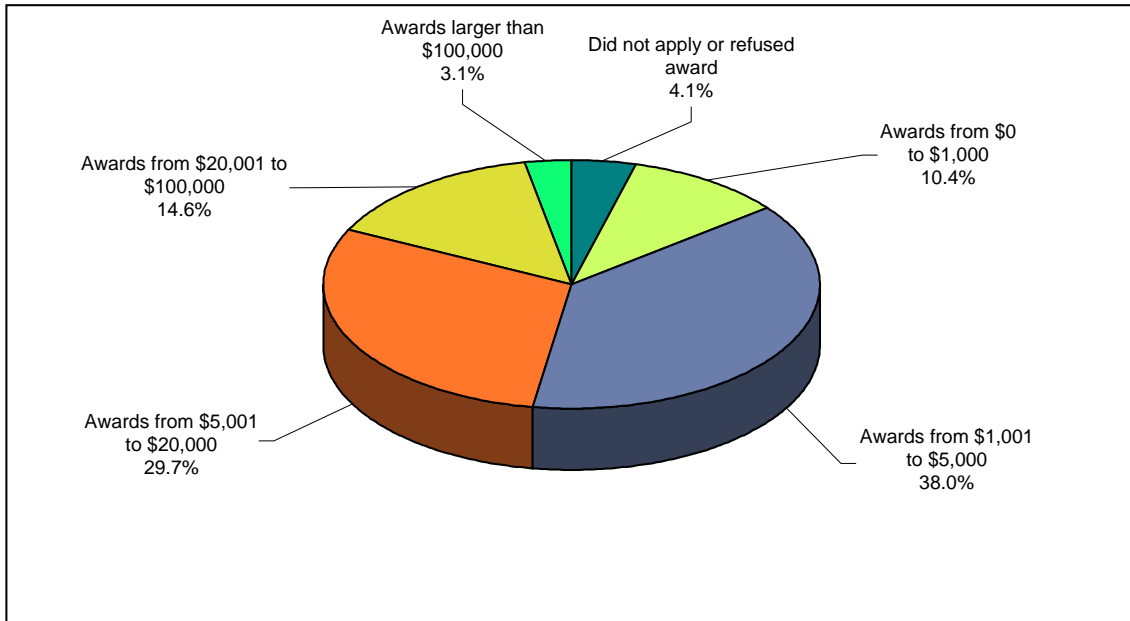
Formula Grant Allocations to LEAs: Round 3

	LEAs not eligible	LEAs eligible but refused or did not apply	LEAs with awards between:				LEAs receiving $100,001 or more
			$0 and $1,000	$1,001 and $5,000	$5,001 and $20,000	$20,001 and $100,000	
Number of LEAs (n=15,134)	1572	555	1415	5160	4029	1977	426
Percent of eligible LEAs (n=13,562)		4.1%	10.4%	38.0%	29.7%	14.6%	3.1%

Note: Data on Illinois not included on chart, data not available.

The Round 3 survey polled the state technology directors about the dual funding structure. While the majority of respondents indicate that the dual structure does help allocate funds to high-need populations, nearly 50% of respondents indicate that the structure hinders their state agencies from assessing impact and from efficiently administering the program.

Figure 8: Percentage of State Technology Directors Responding as to the Impact of Dual Funding Structure (Competitive and Formula) Affects Results
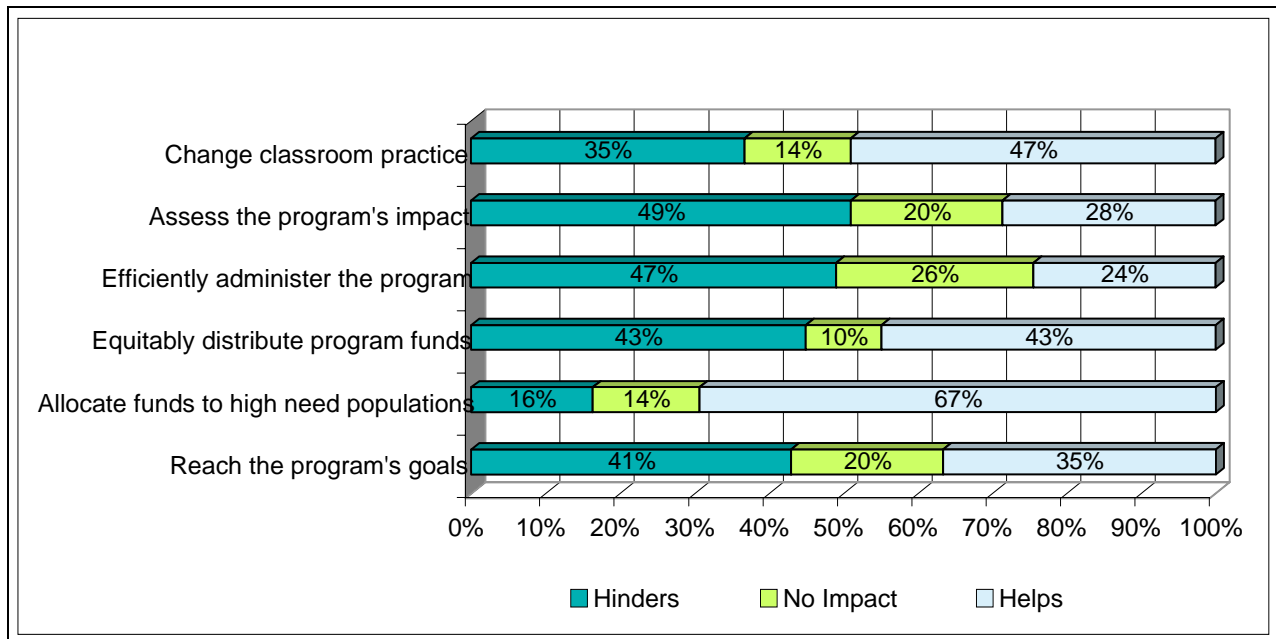
Many states raised the issue of the challenge of administering the formula grants with the large volume of small grants. "Due to the small amount of formula funds available, the funds are spread so thin they have a negative impact on the program," Arkansas reported. The following comment by Colorado was representative of how many states reported the impact of the dual-funding structure: "The dual-funding structure in some situations provides very little funding to allow districts to measure the impact of the use of technology and also raises the level of administrative support necessary to make the program successful."

A few states praised the dual-funding structure. California fell into this category: "The combination of formula and competitive funds reaches a broader constituency than either would alone. While the formula funds target the broad range of districts so more participate, the competitive funds bolster a smaller number of districts to provide in-depth assistance in a particular area."

Many states also reported that the amount that they are allocated by the formula grants was too small to make a difference. For example, Indiana reported, "For more than 90% of Indiana's LEAs, the formula funds allocated is less than $5 per student." In these cases, states reported that competitive grants would be more beneficial than the formula grants.

The size of the awards ranged from $9.00 to $20,980,099, with 52.6% of those eligible for such awards either receiving less than $5,000 or declining the award because the size did not warrant the effort. States reported that the amount of funds refused or not applied for was $2,453,150 in Round 2 (FY04). Twenty-five states said that those declining the award cited "insufficient award to warrant effort," while nine states said LEAs declined because they did not accept NCLB funding.

"Due to the reduction of funding, some of the formula awards become so small that the dollars cannot support effective change or the cost of participation far exceeds the award dollars."

-Pennsylvania Department of Education

Figure 9: LEA Formula Grants - Rounds 1, 2, and 3
Percent of Grantees Eligible for EETT Funding Receiving Various Size Formula Awards
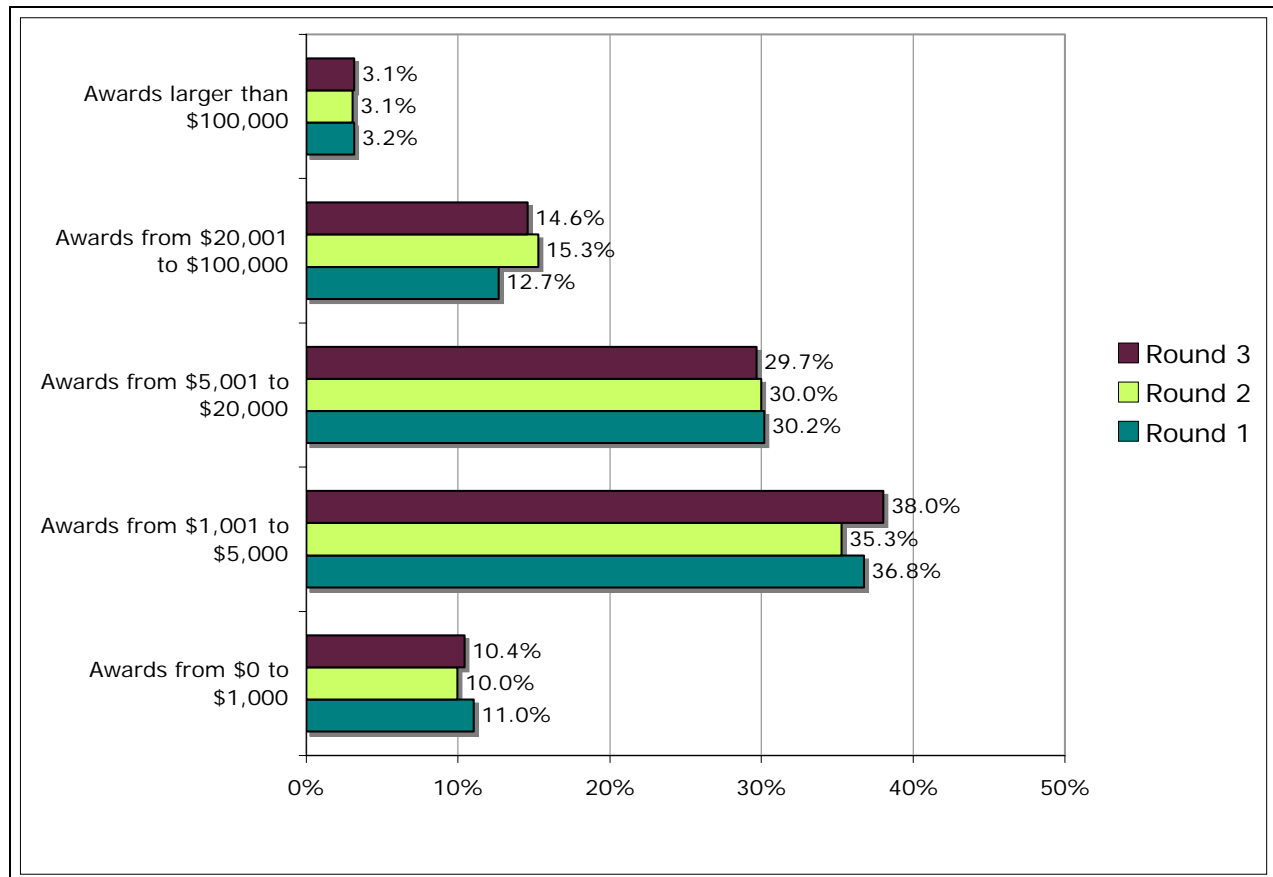
Note: Percentages based on the number of survey respondents (47, 50, and 51 in Rounds 1, 2, and 3 respectively.)

The overwhelming majority, 62% of the respondent states, said that many of the formula grants were just too small to make a difference. Alaska reported, "Many of our LEAs receive less than $5,000. [They] feel that this is insufficient funding to have an effective Title II, Part D program."

"The formula grant program is effective in addressing equity issues in larger districts; but modest allocations to small districts restrict what can be accomplished in many rural areas of the State. Annual formula allocations have fostered ongoing commitment to the EETT program and have helped districts sustain efforts to achieve primary goals of the Title II D program; but administering an entitlement program component in addition to conducting formal proposal competitions is very challenging."

Florida Technology Director

Many of the states do not believe that the current formula grant program always reaches the neediest districts and schools. Iowa reported, "The major problem has been the equal distribution of funds under the formula component. Equality does not mean equal. Federal funds need to focus on those most in need of help."

Some state directors are reducing the administrative burden on schools with smaller awards by allowing them to carry over their funds for one year until the award is of sufficient size to warrant implementation. This approach has reduced the number of eligible districts in Round 3 that refused their grants or did not apply (i.e., 6.4% and 4.1% in Rounds 2 and 3 respectively).

Many of the respondent states called for more flexibility in the EETT program allowing states to set a lower threshold for formula funding OR enabling states to distribute all their EETT funding through more targeted, competitive grants that would have a greater impact than the small formula grants. This concern has been raised consistently over the last three years of this survey.

NOTE: Legislative language was amended in FY05 that provides for more flexibility for states in how the EETT funding in Round 6 is dispersed. The appropriations language states "Provided further, that up to 100 % of the funds available to a State educational agency under part D of title II of the ESEA may be used for subgrants described in section 2412(a)(2)(B) of such Act." This allows states to use up to 100% of the EETT funds for competitive grants.
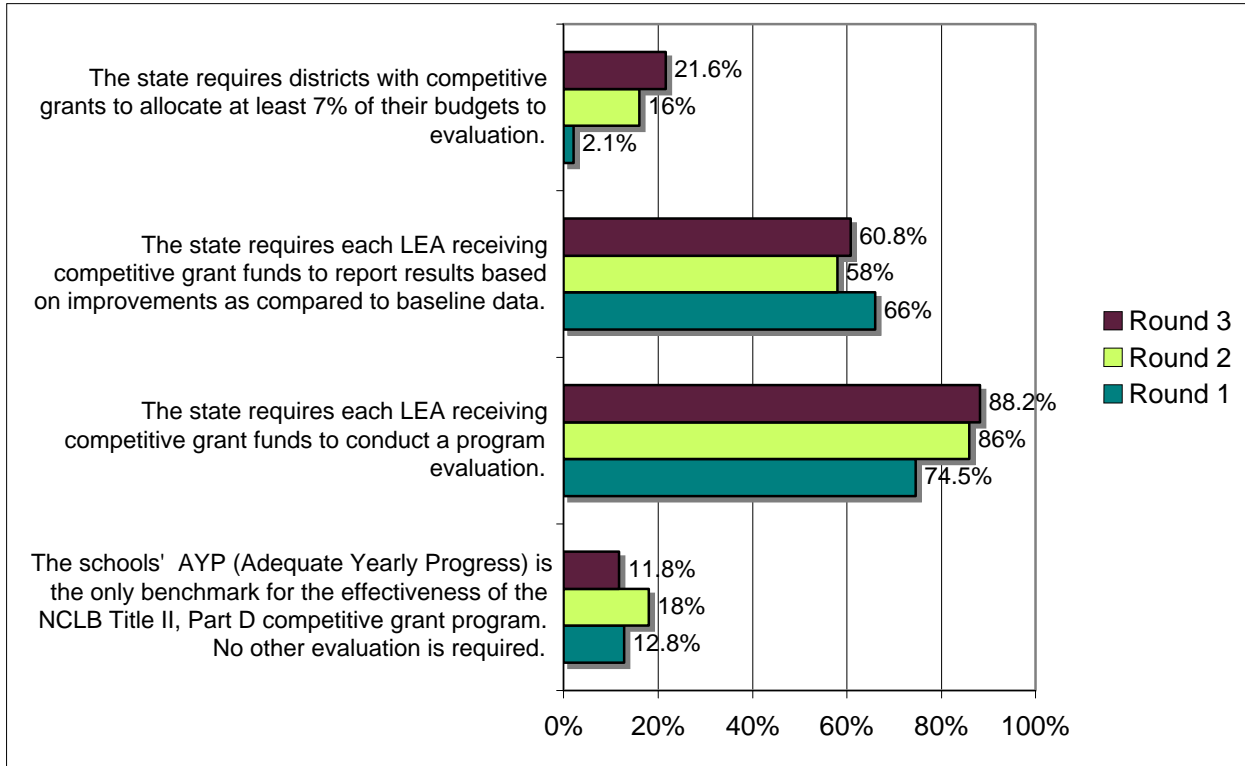

Finding 5: Grappling with Evaluation and Impact Research

In this era of high-stakes accountability, nearly all program administrators are exhibiting an intense interest in assessing the effectiveness of the NCLB program, as evidenced by trends in their approaches to the program's evaluation.

All states are required to conduct statewide program evaluations for both formula and competitive grant programs (e.g., reports that document administrative processes, detail grantees implementation processes, and summarize evaluative reports provided by the grantees). But states are approaching the evaluation of formula and competitive grants somewhat differently. Because over 48% of the formula grants are less than $5,000, 32% of the states are tracking the impact of NCLB funds on the formula side by tracking schools' progress in meeting AYP (Adequate Yearly Progress). That number drops to 12.8% for competitive grants since 86% of the states are requiring each competitive grant awardee to conduct a program evaluation.

Sixty-one percent (61%) of states now require LEAs receiving competitive grants to "report findings based on improvements as compared to baseline data." An increasing number of states (21.6%) are requiring that LEA grantees dedicate at least 7% of their funds to evaluation. That increase coupled with the fact that 45.1% of the states are providing training on program evaluation, and 43.1% of the states are providing guidance for EETT local evaluations should result in increasingly higher quality evaluations from grantees. Higher quality evaluations should provide formative data that grantees can use to continuously improve their programs over time.

Figure 10: Trends in Evaluation Approach – NCLB II D Competitive Grants

The state requires districts with competitive grants to allocate at least 7% of their budgets to evaluation.
- Round 3: 21.6%
- Round 2: 16%
- Round 1: 2.1%

The state requires each LEA receiving competitive grant funds to report results based on improvements as compared to baseline data.
- Round 3: 60.8%
- Round 2: 58%
- Round 1: 66%

The state requires each LEA receiving competitive grant funds to conduct a program evaluation.
- Round 3: 88.2%
- Round 2: 86%
- Round 1: 74.5%

The schools' AYP (Adequate Yearly Progress) is the only benchmark for the effectiveness of the NCLB Title II, Part D competitive grant program. No other evaluation is required.
- Round 3: 11.8%
- Round 2: 18%
- Round 1: 12.8%

Note: Percentages based on the number of survey respondents (47, 50, and 51 in Rounds 1, 2, and 3 respectively).

Since this degree of accountability is relatively new and federal evaluation requirements for NCLB II D have not yet been released, many states are struggling to find solid ground. What evaluation requirements should they make of LEAs? How do they build the capacity of local LEAs to conduct rigorous evaluations given limited funds? How will they conduct studies that enable them to correlate technology interventions with student learning outcomes? According to survey respondents, the lack of funds for evaluation at the state level makes it difficult to provide the leadership, guidance, and electronic data collection systems necessary to evaluate the effectiveness of both the formula and competitive grants.

That said, trends from this report suggest that technology directors are ready to take another step forward in accountability and toward research studies that would provide more rigorous data on the impact of the NCLB II D program on student learning, the digital divide, and teacher proficiency and practice. Only then will they be able to report with confidence their progress toward meeting NCLB goals. Over a quarter (27.5%) of the respondents indicated that they were asking recipients of NCLB II D competitive grants to conduct experimental or quasi-experimental impact studies to determine the impact of NCLB II D programs.

While twelve states commented, three states reported explicitly that they were conducting experimental or quasi-experimental impact studies. Florida reported, "Implementation of the 2005 competitive proposal selection process is expected to result in funding a number of rigorous experimental or quasi-experimental impact studies." Some states responded that they do not have a formal evaluation process. Other states work with local evaluators. Ohio reported this

type of arrangement: "The state-level evaluator is charged with review of local evaluation reports and thus provides feedback on research design, implementation, and results/findings."

State	Description of experimental or quasi-experimental evaluation efforts
CA	An evaluation conference for competitive grantees and their evaluators is held annually to enable uniformity in data collection for required benchmarks and performance indicators. A statewide EETT evaluation report is compiled to demonstrate effectiveness of the district level two-year grants.
IN	Each site has an outside evaluator and collects large-scale objective assessment data at a minimum of three times per year. This student data includes the instrument used, the types of scores it collects, low score, high score, mean, median and mode, what this data represents, and where they will proceed. The information for the teacher portion includes the assessment title, the data points collected (grouping under main headings is fine), what this data represents, and where they will proceed with professional development.
MI	The Freedom to Learn Program conducted, via a Request for Proposal process, the selection and engagement of an outside service provider for conducting the FTL program-level evaluation. The first year's program evaluation was conducted by Michigan State University. The current program evaluation is being conducted by the University of Memphis Center for Research and Educational Policy (CREP). The preliminary evaluation results for the first year of the program was provided to the Freedom to Learn Program's Executive Committee members, including representation from the Governor's Office, Michigan Department of Education, Michigan Department of Management and Budget, Michigan Department of Information and Technology, and Michigan Virtual University for review and release authorization prior to finalization and public release. The final report for the first year of the program was made available from the FTL Web site in both an Executive Summary and full-report. The same pre-review and finalization process will be followed for the current year and subsequent years of the program evaluation. The current review and release will be conducted by representatives from the Michigan Department of Education and Ferris State University, the joint program administrators for FTL. Iterative program evaluation results will be published, as reviewed and released, on the FTL Web site at www.ftlwireless.org.
MO	Grantees participate in eMINTS research that is supported with state and local grant funds. Research includes, among other activities, comparison analyses of performance on state Missouri Assessment Program (MAP) tests. MAP performance of students in classes taught by eMINTS-trained teachers is compared with performance of students in the same buildings and grade levels but taught by teachers who have not participated in the eMINTS program (serving as matched pairs).
WV	The state is conducting a quasi-experimental evaluation of LEAs with certain grade configurations involved in the competitive grant program. Local evaluators are responsible for evaluators of individual EETT grant programs.

In addition, several respondents mentioned the large-scale research on educational technology programs funded through the U.S. Department of Education that is currently underway in their states.

Note: In October, 2003, the U.S. Department of Education awarded $15 million in evaluation grants to conduct scientifically-based evaluations of how technology impacts student achievement in elementary and secondary education. The SETDA TAPP program was designed to support federal Evaluating State Educational Technology Programs (ESETP) grantees by providing networking and collaboration tools for the grantees as well as disseminating interim information, success stories, and progress reports to the broader education community regarding best practices in the area of scientifically based research. SETDA has developed a website (www.setdatapp.org) to help in the dissemination efforts and will also provide a Handbook at the end of the grant period outlining the TAPP projects.

State directors provided the following comments when asked how their state will measure the impact of its competitive grant program in achieving the NCLB II D goal of closing the achievement gap and the digital divide. Over 60% of the states responded that they were conducting an evaluation of NCLB II D. Eighteen states responded that they used Title II D funds to conduct evaluations of competitive grants at the state level.

State	Reports as to how states will measure impact
CA	Districts are analyzing the impact as part of their semi and annual reporting to the California Department of Education. Results will be summarized by the CTAP regional level to determine overall grant impact.
DE	DE has hired Research for Better Schools to evaluate competitive sites (except mini-grant sites) all three years of the grant. The evaluator works collaboratively with the schools that received competitive grants to best implement and meet the needs of the grant evaluation process.
KY	Kentucky outsourced evaluation services to a university. The university gets its input from electronic reports submitted by districts.
MO	Districts provide the program evaluator with access to various student data, including state achievement test results. The evaluator interviews and collects survey data from teachers and their administrators and conducts classroom observation visits.
ND	EduTech used the North Dakota Guide for Effective Use of Technology (NDGEUT) for the first two rounds. http://www.edutech.nodak.edu/supserv/services/school_assessment.htm. EduTech has collected baseline data using SETDA PETI in Round 3.
PA	The Pennsylvania state evaluator (Metiri Group) provided evaluation webinars throughout the school year, conducted onsite visits to a third of the awarded districts, and held half-day seminars in the four corners of the state addressing local evaluation.
TX	Year 4 is the second year that a portion of Texas' competitive grants are being evaluated through a federal ESETP grant.

In addition, states are building the capacity of LEA grantees to conduct local evaluations. The following table provides examples from across the country of NCLB programs that advance program goals through evaluation related to educational technology.

State	NCLB II D examples of state level evaluation
IN	At the state level, Indiana works with the LEAs to build the LEA capacity to work better with outside evaluators. The state provides resources and technical assistance so that LEA can ask the right questions and better leverage the evaluator to assist in furthering project goals.
KS	Kansas has a strong working relationship with its external evaluation team. They assist local grant evaluators by providing assistance for developing their local evaluation. Data is summarized and returned to district grant teams and published on the project web site.
RI	The training and grant awards represented a renewed emphasis on a wide variety of student performance measures, which is all tied to state standards. Performance-based assessment has been introduced to RI schools through the electronic portfolio. The professional development activities created an environment of improved teaching strategies and effective uses of technology, especially with portfolios.
TX	Texas has held face-to-face meetings with all grantees and their evaluators. Additional communication and collaboration will continue throughout the year through email, site visits, and phone conversations.

Finding 6: Through Leadership, a Knowledge Base Is Emerging

Most NCLB, Title II, Part D state coordinators viewed the competitive grant process as an opportunity to advance Title II D learning goals through substantive, innovative approaches to technology-enriched learning. It is apparent from Round 3 survey results that state and the District of Columbia technology directors are using frameworks, standards, and experience to design technology-based learning programs to advance Title II D goals. More than two-thirds of survey respondents use existing sources such as the Regional Technology Education Centers (68.6% of respondents), the ISTE Caret site (78.4% of respondents), the What Works Clearinghouse (58.8%), and the Regional Educational Labs (64% of respondents) to inform decision making related to technology and learning, but few go directly to source journals (13.7% of respondents). This is indicative of busy professionals who need the information analyzed and indexed by reliable sources.

State directors are beginning to develop wide-scale efforts to establish a common knowledge base of sound research practices or to conduct research studies that will establish that common knowledge base for technology-enriched programs. When asked if the state "identifies what NCLB Title II D technology-related educational interventions appear to be working," 35 states (68.6%) answered in the affirmative, up from 52% in Round 2. Those states went on to describe the ways in which they identify what is working as outlined below.

States' Identification of What Works

The state directors are beginning to compile information on what EETT interventions appear to be working. Over two-thirds of the survey respondents have identified what's working and are disseminating the results to educators statewide. States are highlighting best practices through a variety of processes. In some states, an outside consultant evaluates the effectiveness of EETT programs and compiles information for dissemination by the department. Others convene educators and showcase promising practices, while others facilitate interactive sharing sessions among EETT grantees. In some states, the department of education staff conducted site visitations to EETT grantees compiling program information for subsequent dissemination. Others require that each EETT grantee hire an evaluator to assess impact and submit reports on summative findings.

An example of the latter is the state of Indiana where each EETT program is required to submit large-scale student and teacher data in November, April, and June of each year. Projects are expected to demonstrate student achievement gains with intervention populations. The expectation is that projects will be scaled vertically or horizontally. All project teams must present at regional, state and/or national conferences, and each LEA must provide electronic dissemination (web site) of results with supporting templates, lessons, professional development strategies and documents to allow other LEAs to replicate the project. In addition, each LEA must serve as an outreach site for other LEAs to visit (virtually or face-to-face) and support replication of the project, serving as a mentor (both virtually or face-to-face) for other LEAs to begin replication of the project.

Some states relied on conferences to present best practices while others used professional development and the publication of reports. Virginia reported, "Best practices are shared at the educational leadership conference." Wyoming reported, "Best practices will be identified by reviewing mid-term and final program evaluations." Pennsylvania used case studies to find best practices: "Case studies were developed to further explore EETT findings and/or key issues related to educational technology, specifically… the implementation of the competitive grant

program…[how] the implementation and use of educational technology in elementary and secondary schools that received a competitive grant are effecting teaching and learning."

The two most common forms of dissemination reported by states were in conferences or other meetings and by the Web or through email. Eighteen states reported sharing their findings at meetings, workshops, and trainings. Maine in particular seemed to focus on using gatherings to disseminate results, citing "conferences, state trainings, ATM sessions, regional trainer/mentor meetings in districts" as the main venues. Seventeen states used the Internet and web sites to disseminate findings. Michigan uses a variety of online methods to disseminate findings: "The… main communications conduit is via its Web site.   In addition to the Web site, an electronic newsletter is sent out on a monthly, or as-needed, basis to all FTL [Freedom to Learn} participating schools. Special notices, best practices, new research, professional development events, and FTL-specific school news and events are posted on the FTL Web site. A Technology Forum is facilitated on a monthly basis. Meeting notes and action items are posted on the FTL Web site." Seven states also send out hard copies of findings to key personnel, Connecticut reported, "Hard copies of the findings are sent to all district superintendents and executive directors or regional service centers."

State	Identification Process	Dissemination Process
CO	Identification of what works is part of the evaluation process for each grant project. This information is collected by the state for each project.	Findings are disseminated by grant awardees through various methods. Additionally, findings are analyzed on a state level and disseminated through various departments, units, organizations, and LEAs via online resources, publications, and trainings.
CT	An outside evaluator assesses program effectiveness on all EETT competitive projects.	Hard copies of the findings are sent to all district superintendents and executive directors or regional service centers. An executive summary along with the complete report are available online.
FL	Project recipients are asked to prepare final evaluation reports, which document indicators of project success. For a majority of the initiatives that have been funded, interventions have tended to be project-specific. Many interventions include multiple components such as reading coaches, technology integration mentoring, new equipment and software acquisition, or lesson-plan development.	Project abstracts are under development and will be posted on the Educational Technology Clearinghouse (http://etc.usf.edu/index.html) for access by interested district and school personnel. Project evaluation reports will also be provided upon request.
MD	Interventions are identified and evaluated through required 6-month progress reports and project evaluations; ongoing collaboration between MSDE and the LEAs, including partnership meetings across LEAs; and online course offerings.	Findings are shared at periodic Ed Tech Leaders meetings; LEA grantee presentations at statewide conferences and meetings; presentations to local Assistant Superintendents of Instruction; brochures; web sites; press releases.

State	Identification Process	Dissemination Process
MI	The Freedom to Learn (FTL) program operates under a structured program management methodology that provides for the systematic gathering and dissemination of best practices and lessons learned. In addition, the Freedom to Learn Demonstration Site Coordinators (12 key FTL program sites representing over 80% of FTL participating districts) meet on a monthly basis for program updates and collaboration on program initiatives. A Demonstration Site Support Services model has been set-up so that the twelve key FTL program sites have responsibility to provide support services (coaching, mentoring, technology assistance) to their assigned school districts across the program. A Lead Teacher program has been set up within each participating school building to provide training and intervention at the local level for FTL teachers in the classroom.	The Freedom to Learn program is a main communications conduit. Its web site is www.ftlwireless.org. In addition to the web site, an electronic newsletter is sent out on a monthly or as-needed basis to all FTL participating schools. Special Notices, Best Practices, new research, professional development events, and FTL-specific school news and events are posted on the FTL Web site. A Technology Forum (via conference call) is facilitated on a monthly basis with each school's technology team to discuss technology-related issues. Hewlett Packard and the FTL Management Team facilitate this. Meeting notes and action items are posted on the FTL Web site.
MO	The eMINTS National Center contracts program evaluation and research, using this information and assistance of outside experts, to identify strengths and weaknesses and update or revise the program accordingly. The two-year, eMINTS professional development program for teachers is aligned with the National Educational Standards for Teachers, receiving ISTE's seal of alignment in 2005.	Evaluation reports, research findings, web-based resources, and a limited subset of the professional development modules are posted on the eMINTS web site. The program has been featured in journals, magazines, state and national conferences, and State Board meetings. The Department helps disseminate program information via the Web, newsletters, conferences, and other professional development events.
NM	New Mexico is correlating student performance data with Educational Plan for Student Success (EPSS) plans.	Public Education Department staff members are assigned as District Coordinators in providing technical assistance for EPSS plans and the crosswalk between these plans and Ed Tech plans is provided to each EPSS coordinator.
PA	Case studies were developed to further explore EETT findings and/or key issues related to educational technology, specifically. Evaluate the implementation of the competitive grant program. Determine how the implementation and use of educational technology in elementary and secondary schools that received a competitive grant are affecting teaching and learning. Determine if the models utilized by schools/districts for their competitive grant program can be and should be used as models in other schools to facilitate student learning.	The link to the web site will be provided via email to all grantees. Provide a webinar to explain how to manipulate the web site to view the different elements of the case studies.

State	Identification Process	Dissemination Process
TX	The Technology Applications Teacher Network provides a wealth of resources and best practices that are contributed by teachers and districts across the state. At the annual Texas technology conference, an entire day is focused on the Technology Applications Best Practices Event where teachers provide strategies in meeting the goals of Title II, Part D and the Texas Technology Applications Essential Knowledge and Skills.	Information is shared through a number of listservs and posted on the Texas Education Agency (TEA) Technology Applications web site, the Technology Applications Teacher network, and the Education Service Center web sites. In addition, these practices are shared through the statewide videoconferencing network in meetings and through professional development.
WI	Wisconsin is part of the Evaluating States Educational Technology Programs grant project. The findings of this research will help determine the success of funded projects. Wisconsin also uses enGauge with all districts funded through the competitive grants.	Findings are disseminated through the SEA web site and at statewide conferences and meetings. The research findings will also be disseminated by SETDA.
WV	This process is currently in place through a USDE-funded, 3-year evaluation study on Title II D in West Virginia. Preliminary results are very promising, showing positive data for the WV implementation.	The findings will be disseminated to LEAs through SETDA, email, and other dissemination mechanisms commonly used in the state.

A knowledge base is emerging from the innovative projects funded through the NCLB II D competitive grants. The following table includes examples from across the country of NCLB II D local grant programs.

| State/Focus	NCLB II D Examples of Emergent Knowledge Base
AZ *Increased Academic Achievement in Mathematics through Technology*	AchieveIT, Achievement Improved Through Technology, is an intervention program focusing on third-grade students who are falling far below or approaching the standards in math. This project integrates math and technology to improve student achievement. All third-grade students who are not meeting the standards in math at 51 Tucson schools will take part in a focused intervention two times per week based on the district pacing calendar. The third-grade teachers, instructional coach, and principals at each school will receive three days of professional development designed to improve student achievement in math through technology integration. The AchieveIT project has proven successful over the past two years. Over 700 students have participated in the focused intervention. During the 2003-2004 school year, students participating in the program improved their scores on the third-grade AIMS test as compared with the second-grade district standards-based criterion referenced test that they had taken the previous year.
CA *High Need, High Tech, Increased Achievement*	Bakersfield City Elementary, an inner-city district with high poverty, was part of the Round 2 (FY 2003-04) funding cycle for the EETT-C grant. This comprehensive program focused on the academic areas of mathematics and science for students in grade 7 at Emerson Middle and incorporated five different goals. These goals included creating and improving technology resources to support the instructional program, expanding connectivity, increasing the effective utilization of emerging technologies, improving technology proficiency skills for administrators, teachers, students and parents, and expanding community partnerships that promote student achievement.

State/Focus	NCLB II D Examples of Emergent Knowledge Base
ID *Using Technology to Increase Reading Proficiency*	Idaho's Read Out Loud is a research-based project that improves students' reading proficiency, while providing teachers with enhanced opportunities to integrate technology into their reading and language arts curriculums. The project utilizes paired reading, echo reading, choral reading, and reading with talking books as well as interactive reading/language arts CDs and web sites as avenues to provide support for less fluent readers, while enhancing proficient readers' skills. By increasing students' proficiency in reading, proficiency is affected in all other curricular areas.
MA *Technology to the Aid of Struggling Readers (Grade 3)*	Boston Public Schools was funded for two years to use Lexia software to address the needs of their struggling readers in K-3 grade levels. Twenty-six teachers in nineteen schools within the Boston Public Schools piloted Lexia with good results. In each year, fifty teams of two teachers from the same schools received Lexia software and attended six training sessions (totaling 15 hours). Participating teachers earned 15 PDPs/1 in-service credit and received an additional computer for their classroom.
MD *Online Virtual Learning for Students and Teachers is Making a Difference*	The Maryland Students Online Consortium (MSOC) reviews, offers, evaluates, modifies, and recommends online courses for the Maryland Virtual Learning Opportunities Program (MVLOP). Implementation of the project goals and objectives fall into two major activities: 1.) supporting the work of the consortium itself as members meet to share their experiences as they implement online programs and support of local activities, including the provision of student courses and 2.) the creation of a professional development plan and implementation of online learning for students. This project is important because strong strategic planning is taking place dealing with policy and student support issues. Standards are being developed for courses and for teachers' teaching courses. Maryland is gaining an understanding of course management and learning management systems.
ME/MO *Leveraging Successful High School Technology Programs in ME and MO*	This initiative is a collaboration of the Maine Learning Technology Initiative and Missouri's eMINTS professional development technology integration training program. This collaborative project combines two of the nation's most successful technology integration programs. MLTI's one-to-one initiative is one of the most far-reaching efforts to provide equity for all students – presently all 7th- and 8th-grade students in Maine. The initiative is now being extended into high schools. eMINTS professional development allows teachers and faculty members to realize the power of technology to transform education. Student achievement and engagement in learning have been demonstrated to increase dramatically in classroom environments supported by eMINTS professional development and mentoring programs.
NH *Seeding Integration of Technology in Schools Documenting Results!*	In New Hampshire, one of six regional support centers funded through the competitive grants conducted its own competitive mini-grant process. At this center, three grants of $3,000 each were awarded to teams for technology integration projects. Teams participated in tech integration training and final projects with students were presented at the end of the year in various forums. These presentations had to include a video clip that demonstrated that they met the integration criteria. These mini-grants put more tech tools and training into the hands of teachers who were motivated to participate. The end product was impressive to all observers and all six centers have adopted the model this year.

State/Focus	NCLB II D Examples of Emergent Knowledge Base
VA *Accountability for Educators:* *Putting Business Models into Practice*	The Shenandoah Valley Technology Consortium (SVTC) implements a program of Technology Performance Certification (TPC) designed to enable SVTC educators to employ technology effectively to enhance their teaching for 20 school divisions, 8,000 teachers, and 83,000 students. The program combines industry-inspired practices for performance certification with proven professional development practices, leading-edge technology, and extensive use of direct-to-educator incentives to create a dynamic and innovative approach to meeting the demands of teaching and learning in the 21st Century. The unique project design provides full support for technology-inexperienced educators while, at the same time, challenging even the most technically advanced educators to excel in the classroom. The services provide the focal point for educational excellence in and around the Shenandoah Valley for the project duration and years beyond. Strategies Involved include Professional Development Proven Learning and Technology Solutions
WI *Building 21st Century Information Literacy Skills*	The Project Big6 consortium and CESA 5 will collaborate to provide a comprehensive professional development program to Increase student achievement in inquiry skills across all curricular areas; provide opportunities for teachers to develop and implement technology-rich, project-based activities; expand teacher understanding of assistive technologies; provide opportunities for teachers to develop professional development plans and portfolios; and enhance adult literacy and student learning through expanded parental involvement activities. The project is building capacity within districts to go beyond the funding influence.

Finding 7: In Many States, NCLB II D is the Only Targeted Funding for Technology

Federal funds have played a significant role in the research, development, and scaling up of educational technology in states across the country. The level of significance is striking, with 70% of states reporting that NCLB II D funds are either the only source or the primary source of funds an LEA awards to schools for technology. In 14 states (27.4% of respondents), their school districts had no other funding earmarked specifically for technology in schools. Those states include Arizona, California, Delaware, Illinois, Louisiana, Maryland, Michigan, Minnesota, Missouri, New Hampshire, Oklahoma, Vermont, Washington, and Wisconsin.

Figure 11: The Percentage of Respondents Indicating the Role NCLB II D Plays in the Overall Funding of Educational Technology in Their State/District of Columbia:
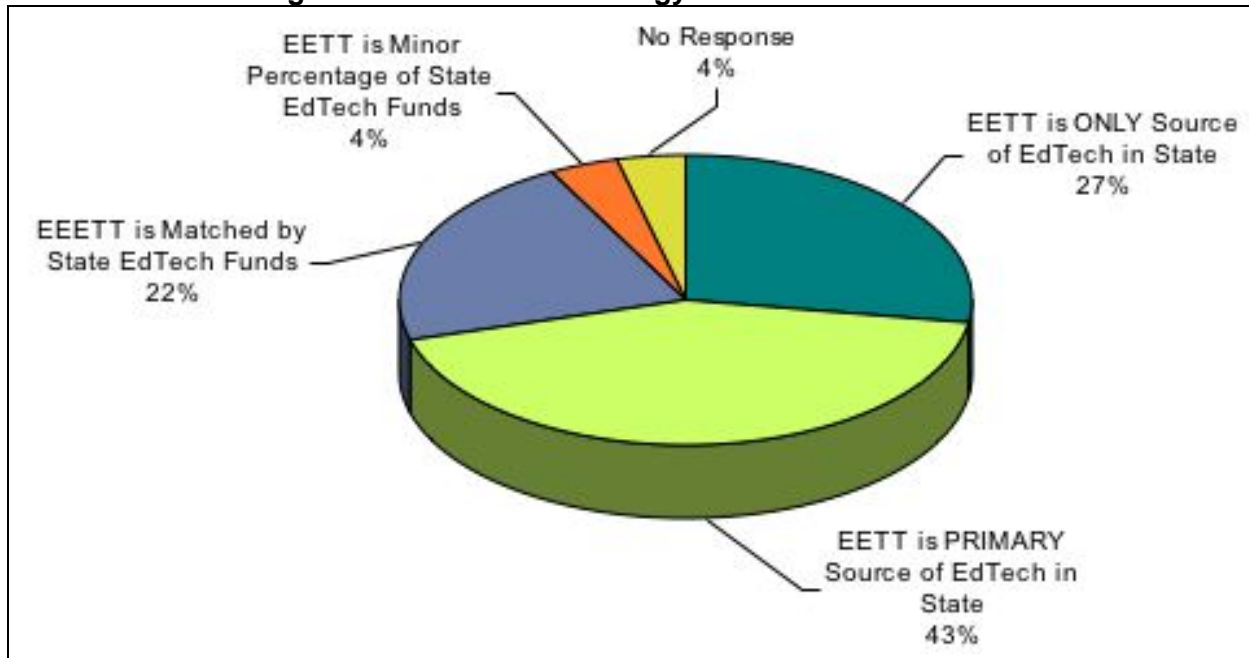
Twenty-eight state technology directors commented on the value they place on the NCLB II D program. Nearly 25% of respondent states reiterated the critical importance of EETT funding as the only or primary source of funding for their states. The respondent from Arizona commented, "EETT funding is the only source of funds specifically allocated for technology for districts and charter schools in the state." In other states, such as Montana, EETT provides the only consistent educational technology funding, but there are other sources that supplement the EETT funding less consistently.

About half of the states said that they receive some level of state education technology funding. The ways in which the state supports education technology in each site differs greatly. In Alabama, the state allocates $181 per teacher for technology funds. In Maine, state funds have gone to supporting one-to-one computer initiatives. In addition, Maine's new school funding formula includes targeted funds to support Instructional Technology programs. In this new funding formula, the state has dedicated $85 per student in grades K-8 and $258 per student in grades 9-12. In Utah, the state legislature "appropriated $5 million to support the development of technology infrastructure to deliver the core assessments online." These funds will also benefit the use of educational technology in schools and classrooms.

In other states, general funds are available from which use for education technologies is allowed and encouraged; however, it is not mandatory.

State	State Commentary on Funding Sources for Educational Technology
DC	These resources continue to be used as a primary funding source for school-system technology initiatives. Due to the ever-increasing number of charter school (LEA) programs under the SEA /District of Columbia Public Schools, these resources have had to stretch to cover over 50 LEA programs this past year.

State	State Commentary on Funding Sources for Educational Technology
KY	NCLB technology funds represent approximately 10% of the funds used by KY schools, district offices, and the KY Department of Education to purchase and provide technology tools and services for students and teachers. Competitive funds made a major impact in pursuit of professional development for teaching staff.
MD	Maryland's funding strategy is a non-categorical, adequacy-based approach. Maryland has received a substantial increase in state education funding for local school systems over the past two years under the State's Bridge to Excellence Program ($178 million additional in FY04; $330 million increase in FY05; $394 additional proposed for FY06). As part of their accountability, school systems must report to the State, through a Master Plan and yearly Master Plan Updates process, how they are spending all sources of funding. Educational technology is a cross-programmatic theme in Bridge to Excellence that school systems must address in their Master Plan Updates.
MN	In FY04, Title II D was the only funding available to school districts for technology integration. The only other funding used for this purpose was the federal E-rate telecommunications discount program. Title II D is also the only funding available to provide staff support to school districts at the state level in the area of education technology.
MT	The Title II, Part D program provides the only statewide, ongoing, consistent funding for educational technology. Montana provides funding to school districts from a fund that generates revenue from trees harvested from state held trust land. When the fund has generated sufficient revenue, the funds are distributed to the states 446 LEAs.
NJ	The NJ DOE does not award any targeted funding for technology to schools. Title II D is the only ongoing targeted source of educational technology funding for New Jersey schools. Some funding for technology in new school construction is available through the New Jersey Schools Construction Corporation, which is funded by state bonds, but these dollars are only for initial equipment purchases and will cease when the state bond fund is depleted, currently estimated to occur in 2006 unless more bonding is authorized by the Legislature.
NM	$6 million in federal funding is matched by $11 million in State funds ($5 million State EdTech Fund, $4 million Laptop Learning Initiative and $2 million Computerized Learning System funding).
NY	Besides NCLB/Title II D funds from the federal government, New York State (NYS) has a state-funded Learning Technology Grant Program. In comparison to the Title II D funds for education technology ($65 million for 2004-05), NYS Learning Technology is significantly smaller with an annual appropriation of $3.3 million.
UT	The Utah Legislature appropriated $5 million to support the development of technology infrastructure to deliver core assessments online. These funds will also benefit the use of educational technology in schools and classrooms.
WV	The correct answer is none of the above for West Virginia. There are other educational technology initiatives funded at the state level, but the use of Title II D funds is different. The technology integration specialists' model is primarily funded only through Title II D.

Competitive Grants: Facts and Figures

"The II D competitive grant program is vital to the continued success of technology enhanced initiatives in Colorado. Without this program, progress would not be made. The Title II D competitive grant program allows states to tailor programs based on local needs and concerns."

> *- Colorado State Technology Director*

"The formula component spreads the funds too thin to be effective. Therefore, the LEAs have a tendency to revert back to laboratory-based programs versus integrating technology into the classroom because of the emphasis for the programs to be 'research-based'. More research-based evidence is available for vendor-provided laboratory programs."

> *- Arkansas State Technology Director*

During Round 3 of the NCLB Title II D competitive grant program, states awarded 1,630 competitive grants, totaling approximately $318,941,206. Of those, 649 were continuation grants, 496 were partnership grants, and the remaining were LEA-only grants. Approximately 48% of the LEA grants involved rural schools, with 37% involving urban schools.

**Figure 12: Percentage of States Reporting
Participation in Competitive Partnership Grants – Round 3**
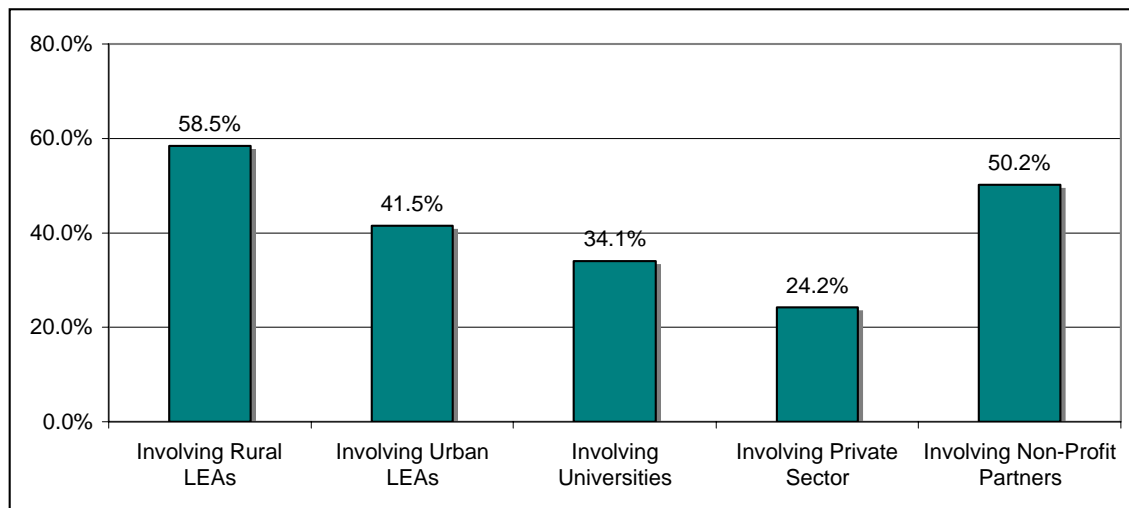
The rollout of the Title II D competitive grant program varies considerably across states.

More than 84% of states established priorities in their competitive grant processes to guide LEAs toward achievement of NCLB II D goals. In alignment with the NCLB II D priorities, states did focus their competitive Requests for Proposal (RFPs) on reading (45.1%), writing (27.5%), mathematics (41.2%), and/or science (17.6%). While some states continued to focus their competitive grants on specific grade levels, it was emphasized less this round.

Many of the states guided their LEAs' use of competitive grant funds by establishing programmatic priorities in the competitive process. While professional development was a top

priority, states also guided their grantees toward data-driven decision making, specific learning interventions and software, and laptop programs.

Research, on the other hand, is a topic that few states have yet to integrate into their competitive grant RFPs. Approximately a third of the states did either require or encourage their applicants for the EETT competitive grants to ground their work in research. And while only 7.8% of the states required competitive grantees to conduct research as a component of their EETT competitive grants, 27.5% encouraged such work and 27% percent required grantees to participate in research protocols established by the states.

**Figure 13: Percentage of States Emphasizing Content Areas
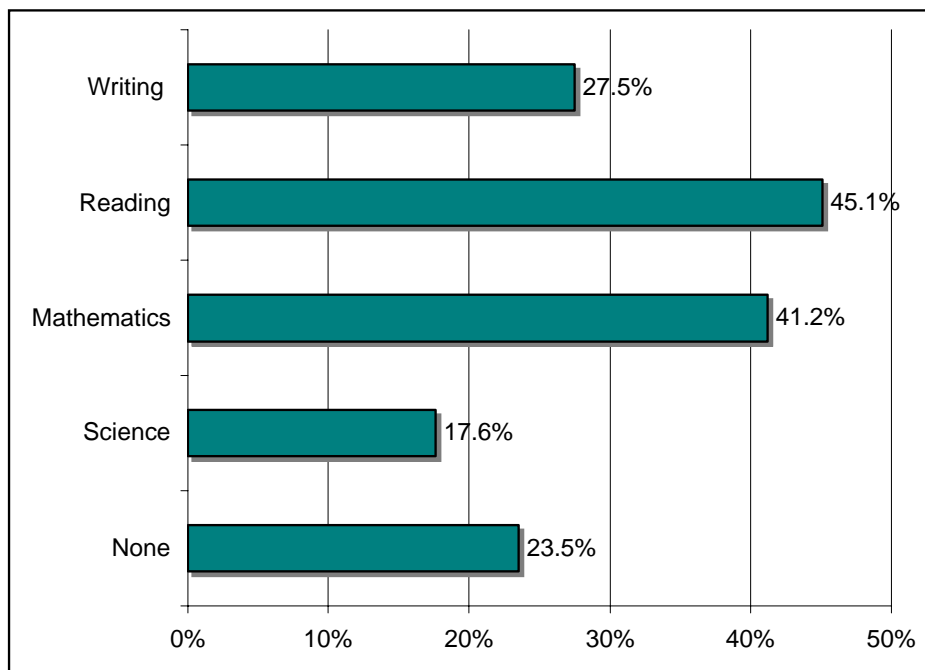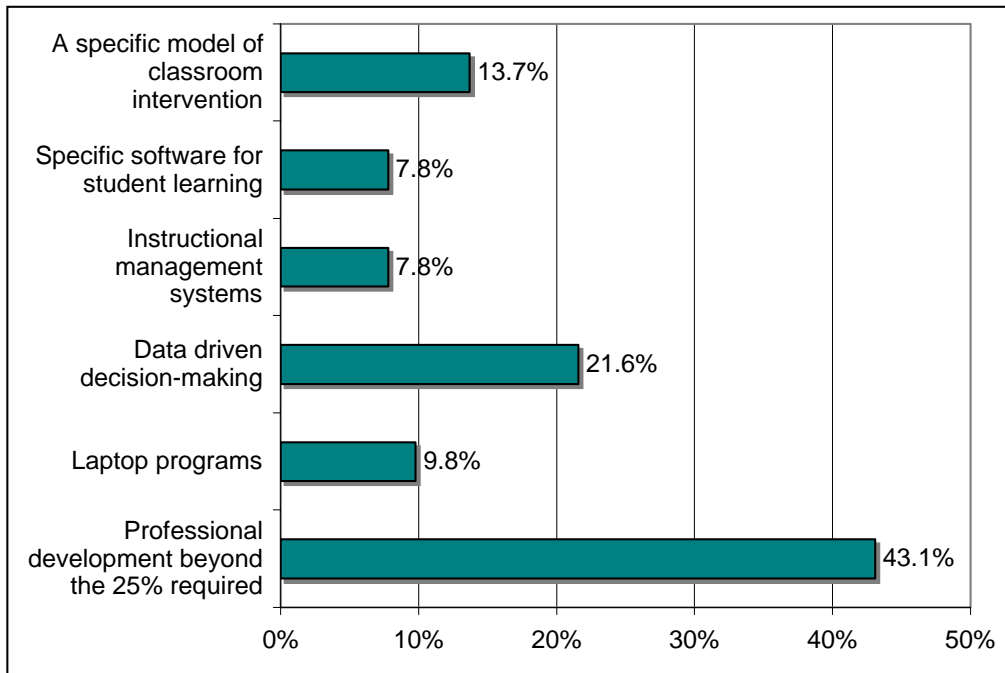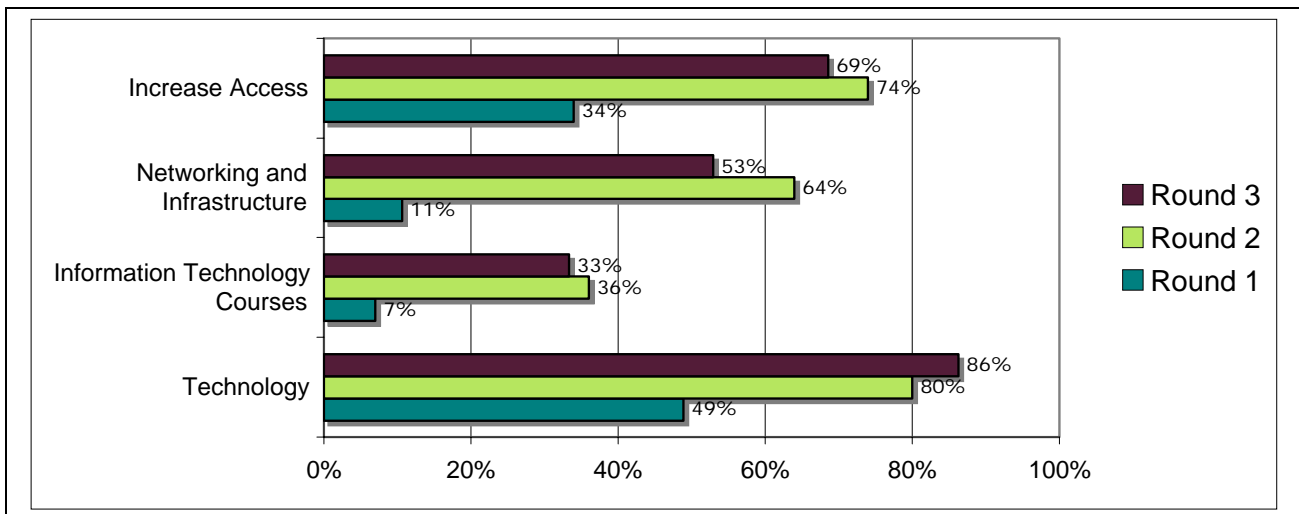in Round 3 Competitive Grant RFPs**

**Figure 14: Percentage of States Emphasizing Specific Programs
in Round 3 Competitive Grant RFPs**

Priorities

The federal NCLB Title II D law lists 11 strategies for achieving the EETT goals. Round 3 priorities are very similar to Round 2. While professional development and increasing academic achievement and technology literacy have been the top two priorities in all three rounds, the states continue to pay attention to acquiring technology, increasing access, and developing experts. (Note: Charts repeated for emphasis. See also Figures 1 and 2.)

**Figure 15: Percentage of States Identifying
Technology Priorities for NCLB II D Competitive Grants - Rounds 1, 2 & 3**

Note: Percentages based on the number of survey respondents (47, 50, and 51 in Rounds 1, 2, and 3 respectively).

**Figure 16: Percentage of States Identifying
Technology Integration Priorities for NCLB II D Competitive Grants
Rounds 1, 2 & 3**
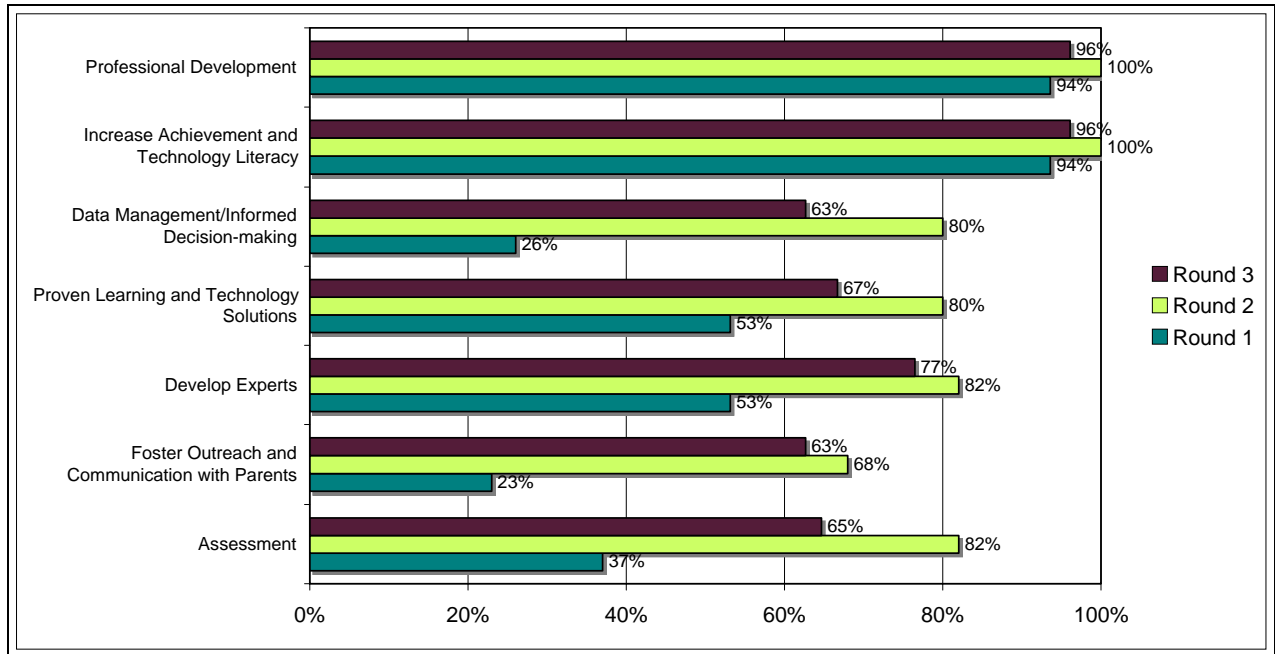
Note: Percentages based on the number of survey respondents (47, 50, and 51 in Rounds 1, 2, and 3 respectively).

The real story is in the fewer number of states that listed all of the priorities. In most cases, the percentage of states that listed each priority decreased from Round 2 to Round 3. This may be attributed to the decreased funding in EETT, causing the states to focus on fewer areas.

Title II D funds were clearly being used to support overall NCLB education goals, including helping schools and districts to train and retain highly qualified teachers, closing the achievement gap, and using data to inform student instruction and increase student achievement.

The purposes for which competitive grants were used in Round 3 were (in priority order):

o   Professional Development: Professional development that provides school teachers, principals, and administrators with the capacity to integrate technology effectively into curricula and instruction aligned with challenging State academic content and student academic achievement standards through such means as high-quality professional development programs.

o   Increase Achievement and Technology Literacy: Adapt or expand existing and new applications of technology to enable teachers to increase student academic achievement, including technology literacy.

o   Technology: Acquire, adapt, expand, implement, repair, and maintain existing and new applications of technology to support the school reform effort and to improve student academic achievement, including technology literacy.

- o Develop Experts: Prepare one or more teachers in elementary and secondary schools as technology leaders with the means to serve as experts and train other teachers in the effective use of technology, providing bonus payments to these teachers.

- o Increase Access: Establish or expand initiatives, including initiatives involving public-private partnerships designed to increase access to technology, particularly in schools served by high-need local educational agencies.

- o Proven Learning and Technology Solutions: Acquire proven and effective courses and curricula that include integrated technology and are designed to help students meet challenging state academic content and student academic achievement standards.

- o Assessment: Implement performance measurement systems to determine the effectiveness of education technology programs funded under this subpart, particularly to determine the extent to which activities funded under this subpart are effective in integrating technology into curricula and instruction, increasing the ability of teachers to teach and enabling students to meet challenging state academic content and student academic achievement standards.

- o Foster Knowledge with Parents: Utilize technology to develop or expand efforts to connect schools and teachers with parents and students to promote meaningful parental involvement; to foster increased communication about curricula, assignments, and assessments between students, parents, and teachers; and to assist parents in understanding the technology being applied in their child's education so that they are able to reinforce at home the instruction their child receives at school.

- o Data Management/Informed Decision Making: Use technology to collect, manage, and analyze data to inform and enhance teaching and school improvement efforts.

- o Networking and Infrastructure: Acquire connectivity linkages, resources, and services (including hardware, software, and other electronically delivered learning materials) for use by teachers, students, academic counselors, and school library media personnel in the classroom, in academic and college counseling centers, or in school library media centers in order to improve student academic achievement.

- o Information Technology Courses: Develop, enhance, or implement information technology courses.

-Source of definitions: NCLB Title II D legislation

The top sources used by respondents for research and practices related to technology are the ISTE CARET site, Regional Technology Education Consortia, followed by the Regional Education Centers and the What Works Clearinghouse.

The following section represents the many EETT programs from across the nation, which have been launched through NCLB II D funds. Each is aligned to a specific goal or strategy in the Federal No Child Left Behind, Title II Part D law.

Competitive Grant Alignment to NCLB Purposes

Section 2402 of the NCLB Title II, Part D legislation clearly outlined 8 purposes in the legislation. Listed below are descriptions of competitive grant awards that represent clusters of awards addressing those purposes. This alignment is a result of states' competitive grant processes.

Competitive Awards Targeting Specific Purposes in NCLB II D

Purposes of NCLB, Title II D	State	Representative Competitive Awards
1) To provide assistance to States and localities for the implementation and support of a comprehensive system that effectively uses technology in elementary schools and secondary schools to improve student academic achievement.	UT	This model challenges very low-income and minimal mastery students through participation in integrated technology programs, nature programs, and practical experiences that increase reading, writing, mathematical, and science skills during the summer. Teachers attend training to learn technological and research-based methods that impact learning. A follow - up is conducted by having the teacher apply what they have learned in a setting where children are present during the summer school program. This grant is promising because student academic attitude and literacy aptitude are both impacted positively.
	IA	Iowa's program focuses on middle school mathematics and reading, closing the achievement gap, providing support to teachers for the fidelity of implementation of teaching strategies in mathematics and reading, and the creation of professional learning communities.
2) To encourage the establishment or expansion of initiatives, including initiatives involving public-private partnerships, designed to increase access to technology, particularly in schools served by high-need local educational agencies.	AZ	Originally, Graham County Education Consortium members were unable to obtain Internet access because they needed telecommunication services that did not exist in their individual communities. As a result, the member schools formed a consortium and built their own wide-area, wireless, and fiber-optic network. Their WAN now connects the Graham County School Superintendent's office, 18 schools in Southeastern Arizona, one library, and the University of Arizona's Agricultural Experiment Station to each other and to the Internet. Arizona has been successful in obtaining grant funding to provide a private fiber optic and wireless WAN that connects all entities together to share resources. Classrooms were set up with equipment to help students in these schools to attend classes at college campuses without leaving their school campus. In 2004 there were 6 remote classrooms.

Purposes of NCLB, Title II D	State	Representative Competitive Awards
3) To assist states and localities in the acquisition, development, interconnection, implementation, improvement, and maintenance of an effective educational technology infrastructure in a manner that expands access to technology for students (particularly for disadvantaged students) and teachers.	VA	The Blue Ridge East Technology Consortium is comprised of 21 Virginia school divisions. There are 272 individual schools in the consortium with 10,896 teachers and 125,407 students. The goal is for all 21 participating school divisions to have the ability to use video conferencing with H.323 connectivity and access to online staff development tools. The project consortium will function as an Educational Enterprise Community capable of working together to identify needs and to design and create prototypes and solutions that address those needs. This community consists of the entire group of school districts, partners, service providers, and institutions of higher education who will work to meet the project's goals and objectives, and, ultimately, to collaboratively redefine education through the integration of technology. Within this community, administrators, teachers, and students will be able to collaborate easily and effectively across geographical boundaries, removing traditional barriers to innovation. Within this overall community, a Regional School Service Cooperative includes partners such as Blue-Ridge Public Television, the Southwest Virginia Education and Training Network (SVETN), Virginia Tech, and Radford University. The Cooperative promotes the use of technology-enhanced learning opportunities and provides ongoing professional development experiences. These providers assist the community in ensuring equitable access to training, resources, and support services.
4) To promote initiatives that provide school teachers, principals, and administrators with the capacity to integrate technology effectively into curricula and instruction that are aligned with challenging State academic content and student academic achievement standards, through such means as high-quality professional development programs.	WV	Wood County Schools in West Virginia is implementing the Technology Model Schools project. This project focuses on technology integration specialists assisting teachers with effective strategies for integrating technology into the curriculum in order to increase student academic achievement. All LEAs are implementing the same project. The Wood County project is more promising because this is the third year of the implementation and they have the same technology integration specialists involved thereby increasing their expertise over time.
	NJ	The *Students Using Technology To Achieve Reading Writing* (STAR-W) three-year grant program is designed to increase student achievement in language arts literacy in grades 3 through 5. It provides classroom teachers ongoing professional development and in-class support that focuses on integrating technology into the curriculum and instruction. At least 6 teachers of grades 3-5 learn strategies to infuse technology into the curriculum and are supported and assisted with developing language arts literacy programs where students use technology as a tool during their regular instructional time. Overall, 10 schools showed a significant 10% or more gain on the NJASK4 (state standardized test) between 2003 and 2004 and 5 schools showed at least a 5% gain, which is also significant. For example, Pemberton Township School District: 37% increase; (Lawnside School District: 32.1% increase, and Winslow Township Schools: 23.2% increase.)

Purposes of NCLB, Title II D	State	Representative Competitive Awards
5) To enhance the ongoing professional development of teachers, principals, and administrators by providing constant access to training and updated research in teaching and learning through electronic means.	**AK**	This project will improve the literacy and math proficiency of students in seven school-improvement sites. Kuspuk School District (KSD) implemented the following six actions: use research-based methods and materials to provide high-quality technology and technology integration training to staff; provide sustained support through the Project Coordinator and School Technology Leaders; use a cost-effective approach to provide schools with interactive video equipment, connectivity, and training; increase technology-based curricula for reading, writing, and math for selected students; provide parents with access to quality coursework and train them on computer skills; expand the tailor-made database for student progress on Kuspuk standards and train teachers to use it effectively.
6) To support the development and utilization of electronic networks and other innovative methods (such as distance learning) of delivering specialized or rigorous academic courses and curricula for students in areas that would not otherwise have access to such courses and curricula, particularly in geographically isolated regions.	**CO**	Colorado Online Learning (COL) is a multi-year project, receiving $2.7 million in EETT funding over the last four years. COL provides affordable, high-quality, standards-based supplemental online coursework for Colorado schools and students needing credit retrieval, advanced courses, curriculum enhancement and/or to resolve scheduling conflicts. During the 2004-05 school year, COL also began providing online professional development for teachers. Over 50 percent of Colorado's 178 school districts have students participating in COL courses. Over two-thirds of COL students reside in districts categorized as rural Colorado districts. COL provides courses for students in grades 4-12. All courses have been developed by Colorado teachers and are aligned to Colorado content standards and offers courses in COL. Courses are delivered 100 percent online, but also utilize numerous techniques to offer student/instructor interaction, and are heavily facilitated throughout the semester by certified and licensed teachers. COL provides supplemental online courses to students, and works through districts and individual schools to cooperatively plan to provide access to the online courses for students. Students generally complete coursework at their local school but can access course content anytime, anywhere through the online delivery.
	LA	The Algebra I Online project, a part of the Louisiana Virtual School (LVS), is a Louisiana Department of Education initiative that provides Louisiana students with a certified and qualified Algebra I instructor and high quality Algebra I curriculum through a year-long, web-based course. The project targets rural and urban districts having schools with one or more sections of Algebra I being taught by an uncertified mathematics teacher. The project also engages the uncertified classroom teacher in professional development opportunities designed to assist with the facilitation of the in-class experience and to build capacity for strong mathematics instruction. Nearly 98% of grade 8 students in the online Algebra course scored Basic or above on Louisiana's high stakes, LEAP 21 test, with 42.5% scoring Mastery or above; online grade 9 students had a higher mean score on the IOWA mathematics exam than the control students; 84.1% of students enrolled in the Algebra I project successfully completed the course, up from 61% the previous year.

Purposes of NCLB, Title II D	State	Representative Competitive Awards
7) To support the rigorous evaluation of programs funded under this part, particularly regarding the impact of such programs on student academic achievement and ensure that timely information on the results of such evaluations is widely accessible through electronic means.	TX	Bryan Independent School District ensures students increase achievement by providing every middle school student with a wireless mobile computing device, software, and other online resources. The program is designed to facilitate the creation of a technology immersed campus that uses technology to provide meaningful and personalized student learning. This grant is promising because it provides the ability to effectively integrate technology resources and systems into teacher training. In addition to the integration, teachers began to report reduced discipline referrals and absenteeism from students who received laptops. NOTE: In Texas 22 school districts have been awarded EETT funds for wireless 1-to-1 computing. In a middle school, a controlled research study is currently underway through other federal funds to analyze the impact of 1-to-1 computing in comparison to control schools.
8) To support local efforts using technology to promote parent and family involvement in education and communication among students, parents, teachers, principals, and administrators.	IN	"Beyond the Textbook" is a 4th- and 5th-grade mathematics program in five elementary and two non-public schools. iCATS (Integration Curriculum and Technology Specialists) facilitate interventions that encouraged teachers to use a hands-on approach to improving math scores in the 4th and 5th grades. In addition to improving the technology integration skills of the teachers, the program is designed to increase communication throughout the local community through student-created productions aired on local public television.
	CT	The goal of Hall Memorial's initiative was improved student learning and increased technology and information literacy among students in all grades. The goal was achieved through increased teacher technology competency, increased technology integration, and increased student and teacher access to emerging new technology. Grant funds were used to purchase a variety of technology, including a mobile laptop laboratory, SMART Boards, projectors, and laptops for faculty. The entire community has been behind the effort to turn the school into a technology showcase for students, staff, and the community at large. Many hours were spent by community members along with school personnel in a combined effort to act on the initiatives of the district's technology

Challenges

While most states report good progress in advancing the NCLB Title II D goals through the EETT competitive grant process, they are inhibited by three major factors all of which stem back to the lack of certainty in a sustained funding stream for EETT:

- The short duration of the projects does not allow the grantee to implement fully and evaluate the impact prior to the end of the grant period.

- The insufficient staffing for NCLB II D at the state level to build the capacity of and support all grantees.

- The lack of sustainability of the programs given the reduction in funding that is occurring in educational technology at the state and federal levels.

Alaska reported, "Due to the decrease and uncertainty of continued Title II D funding, it was not possible to extend the length of the grant period beyond two years. It is difficult to measure the

impact of technology on student achievement for grants of this short duration." Program funding and continuity was also a concern for Connecticut: "The area of greatest concern is the lack of assurance of program continuance. There is grave concern statewide that II D will be reduced even further than it is currently." Michigan also reported a lack of funding in order to make an impact stating, "There is a lack of funding on both the federal and state level to provide a significant impact on the total state population. The entire competitive funding for the first three years will impact less than 20,000 of the state's 1.6 million K-12 students."

Also impacted by the deep cuts in EETT is the issue of inadequate staffing to support EETT. Many states cited an inadequate number of staff at the state level to administer programs, including the facilitation of partnership grants. Insufficient funds and staff to provide appropriate, ongoing project evaluations and to conduct an in-depth overall program evaluation are also of concern to many states.

Summary Table for Competitive Grants – Round 3

State	Release Date (Round 3)	Total Competitive Grants	*Partnership Grants	LEA Only Grants	Leverage with Other Funds
Alabama	10/1/04	64	18	46	No
Alaska	7/1/04	6	2	4	No
Arizona	7/1/04	43	10	33	Yes
Arkansas	No Data	0	No Data	No Data	Yes
California	4/6/05	29	26	3	No
Colorado	7/1/04	30	3	27	Yes
Connecticut	8/1/03	36	5	31	No
Delaware	7/1/04	27	0	27	No
District of Colombia	4/1/05	8	0	8	No
Florida	3/19/05	51	2	49	Yes
Georgia	3/15/05	95	10	85	No
Hawaii	7/1/04	16	12	4	Yes
Idaho	1/16/05	24	No Data	No Data	Yes
Illinois	7/1/04	52	11	41	No
Indiana	7/1/05	22	0	22	Yes
Iowa	7/1/05	12	9	3	Yes
Kansas	5/1/05	30	13	17	Yes
Kentucky	7/1/03	22	0	22	Yes
Louisiana	10/22/04	44	10	34	Yes
Maine	7/1/05	9	8	1	Yes
Maryland	7/1/04	18	9	9	No
Massachusetts	9/1/04	86	61	25	Yes
Michigan	7/4/04	55	4	51	Yes
Minnesota	5/12/05	12	12	0	Yes
Mississippi	4/30/05	19	7	12	Yes
Missouri	7/1/04	76	0	76	Yes
Montana	7/1/05	6	6	0	No
Nebraska	1/7/05	28	20	8	Yes
Nevada	7/28/04	8	6	2	Yes
New Hampshire	5/6/05	6	6	0	Yes
New Jersey	7/1/04	79	79	0	Yes
New Mexico	8/1/04	38	19	19	Yes
New York	5/1/04	46	42	4	Yes
North Carolina	4/1/05	15	4	11	No
North Dakota	10/4/04	19	3	19	No
Ohio	7/1/05	95	0	95	No
Oklahoma	12/19/04	39	0	39	Yes
Oregon	No Data	15	11	4	Yes
Pennsylvania	7/1/04	69	69	69	No
Rhode Island	12/1/04	16	2	15	No
South Carolina	9/22/04	10	6	4	Yes
South Dakota	5/1/05	12	5	7	No
Tennessee	7/1/05	45	No Data	No Data	No
Texas	7/1/05	65	30	37	Yes
Utah	7/1/05	4	4	0	Yes
Vermont	2/10/05	40	1	39	No
Virginia	3/1/05	8	8	0	No
Washington	7/1/04	48	0	48	Yes
West Virginia	9/1/04	17	0	17	Yes
Wisconsin	7/1/04	18	17	1	No
Wyoming	10/1/05	15	6	9	Yes

*Partnership grants include grants awarded to high-need LEAs who applied in partnership with entities such as other LEAs, institutions of higher education, nonprofit organizations, or private sector businesses.

NOTE: Forty-two of the 51 respondent states (82%) reported that they encouraged partnership grants. They did so by limiting awards to partnerships only (8 states: 15.7%); awarding extra points to partnerships in the scoring process (18 states: 35.3%); disseminating information to potential members of partnerships prior to submission date (20 states: 39.2%); facilitating informational meetings to which potential partnership members were invited prior to submission date (24 states: 47.1%); or linking potential partners through referrals or introductions prior to submission date (14 states: 27.5%).

Figure 18: LEA Formula Grants - Round 3
Percentage of 51 Respondents Reporting Methods for Encouraging
Partnership Applications in Competitive Grant Process
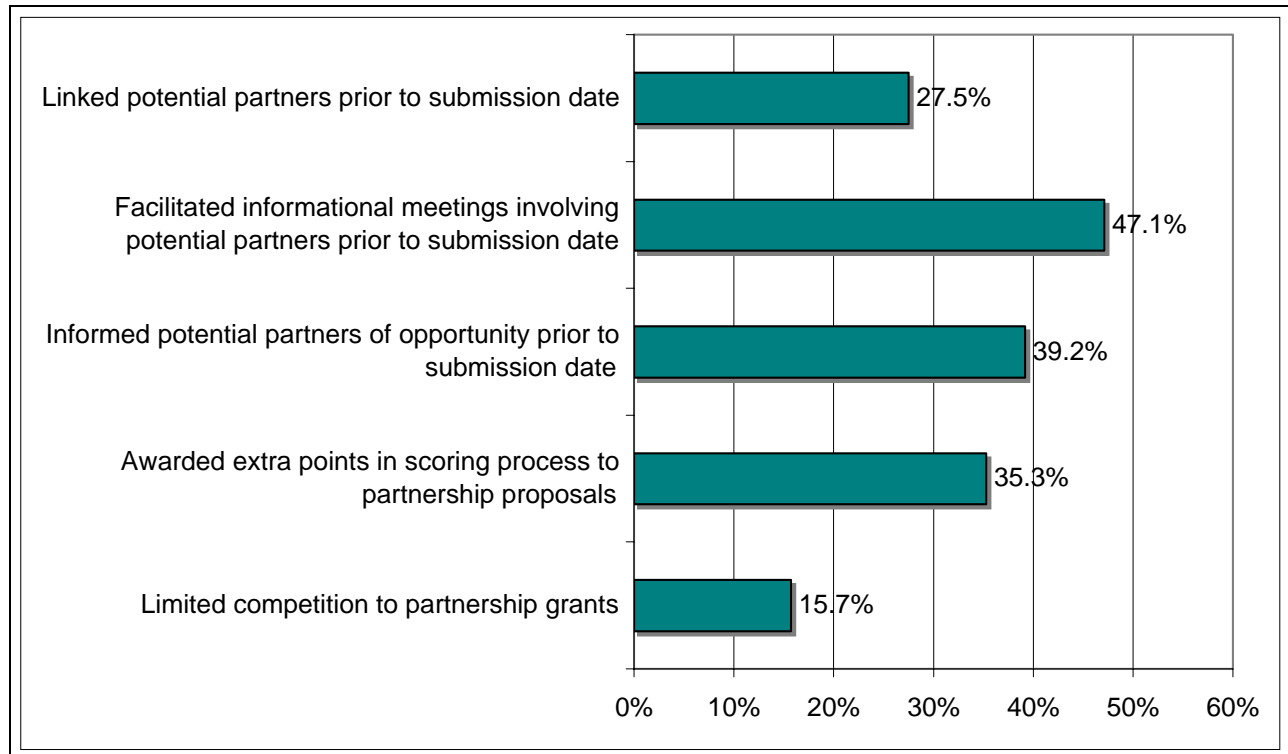
Note: Percentages based on the number of survey respondents (47, 50, and 51 in Rounds 1, 2, and 3 respectively).

Formula Grants: Facts and Figures

In the third grant year of NCLB, state directors reported awarding 13,667 formula grants to eligible LEAs (85.4% of the total number of LEAs represented by the 51 respondents and 95.6% of the LEAs eligible in those 50 states and Washington DC).

SIZE OF AWARD

The size of the awards ranged from $9.00 to $20,980,099, with 52.6% of those eligible for such awards either receiving less than $5,000.00 or declining the award because the size did not warrant the effort. States reported that the amount of funds refused or not applied for was $2,453,150 in Round 2 (FY04). Twenty-five states said that those declining the award cited "insufficient award to warrant effort." Nine states said LEAs declined because they did not accept NCLB funding.

Figure 18: LEA Formula Grants - Rounds 1, 2, and 3. Percent of Grantees Eligible for EETT Funding Receiving Various Size Formula Awards
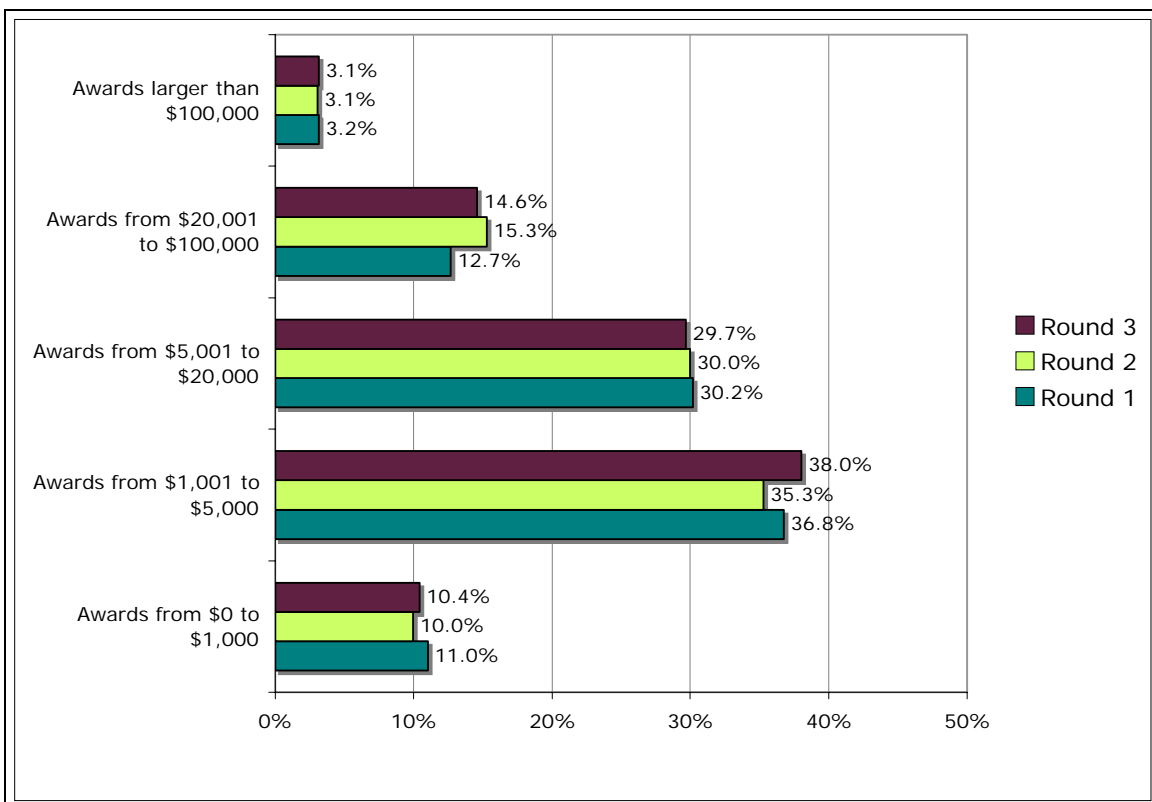
Note: Percentages based on the number of survey respondents (47, 50, and 51 in Rounds 1, 2, and 3 respectively).

The overwhelming majority, 62% of the respondent states, said that many of the formula grants were just too small to make a difference. Many of the respondent states called for more flexibility in the EETT program allowing states to set a lower threshold for formula funding OR enabling states to distribute all their EETT funding through more targeted, competitive grants that would have a greater impact than the small formula grants. This concern has been raised consistently over the last three years of this survey.

"The majority of LEAs receive relatively small amounts of formula funds. The funds are insignificant and do not positively impact the program. Only 26 of 264 school districts receive $20,000 or more in formula funds."

Arkansas Technology Director

"Only 14 of the 208 LEAs in the state receive $20,000 or more in formula funds. Those 14 LEAs are able to pay the salary (or a partial salary) of one or more staff members that assist in technology initiatives or training within the district with their formula grants. The others are only able to purchase some software upgrades or a few computers with the small amounts of funding that they receive."

North Dakota Technology Director

Many of the states do not believe that the current formula grant program always reaches the neediest districts and schools. Iowa reported, "The major problem has been the equal distribution of funds under the formula component. Equality does not mean equal. Federal funds need to focus on those most in need of help."

Survey respondents reported various strategies for dealing with the small amounts allocated to many LEAs. One of the most effective strategies was to allow LEAs to carry over the funding until the amount was sufficient in scope to advance one or more of the program goals.
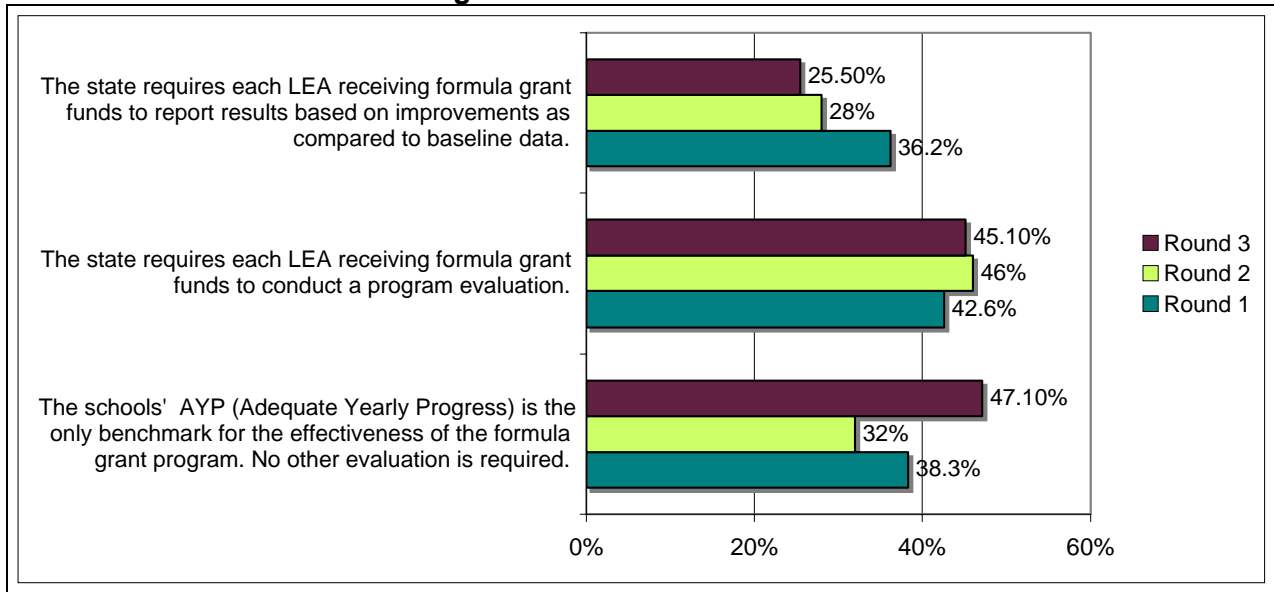
This approach has reduced the number of eligible districts in Round 3 that refused their grants or did not apply (i.e., 6.4% and 4.1% in Rounds 2 and 3 respectively). The major reason cited by these districts, according to state directors, is that "the amount of funding was insufficient to warrant the effort."

EVALUATION

Six of the states were concerned that the distribution of EETT funds on a formula basis made it difficult to conduct succinct evaluations of impact. Missouri reported, "It is difficult to isolate and evaluate the program's impact. Districts use formula funds for a variety of purposes, often pooling technology-related activities and funds with other activities and funds."

In fact, the states seem to be losing ground in the direct evaluation of formula funds. They are increasingly using AYP as the only indicator of impact versus requiring separate program evaluations to track impact.

**Figure 19: State Requirements and Guidance
for Program Evaluation - Formula Grants**

The state requires each LEA receiving formula grant funds to report results based on improvements as compared to baseline data.
- Round 3: 25.50%
- Round 2: 28%
- Round 1: 36.2%

The state requires each LEA receiving formula grant funds to conduct a program evaluation.
- Round 3: 45.10%
- Round 2: 46%
- Round 1: 42.6%

The schools' AYP (Adequate Yearly Progress) is the only benchmark for the effectiveness of the formula grant program. No other evaluation is required.
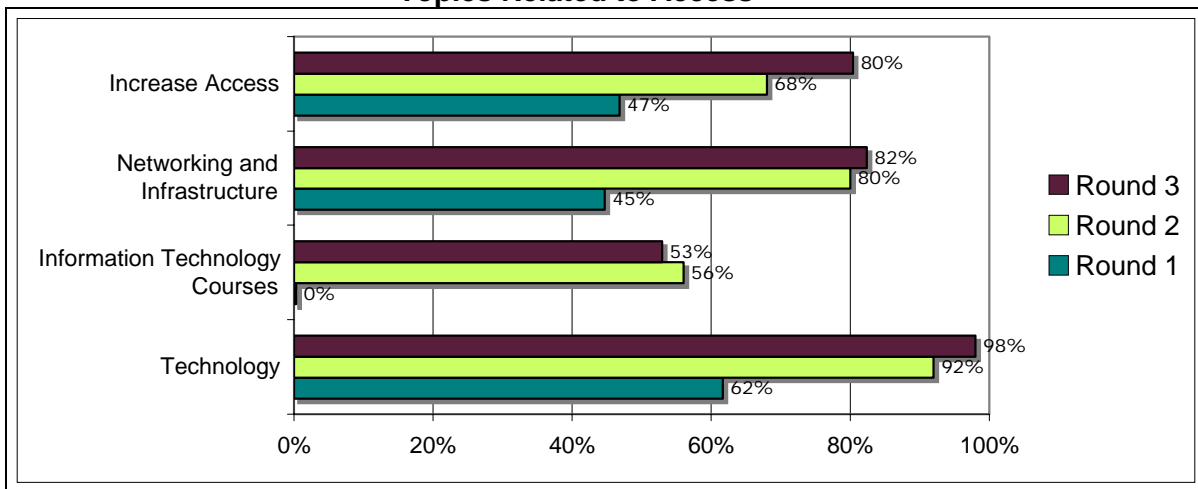- Round 3: 47.10%
- Round 2: 32%
- Round 1: 38.3%

Note: Percentages based on the number of survey respondents (47, 50, and 51 in Rounds 1, 2, and 3 respectively).
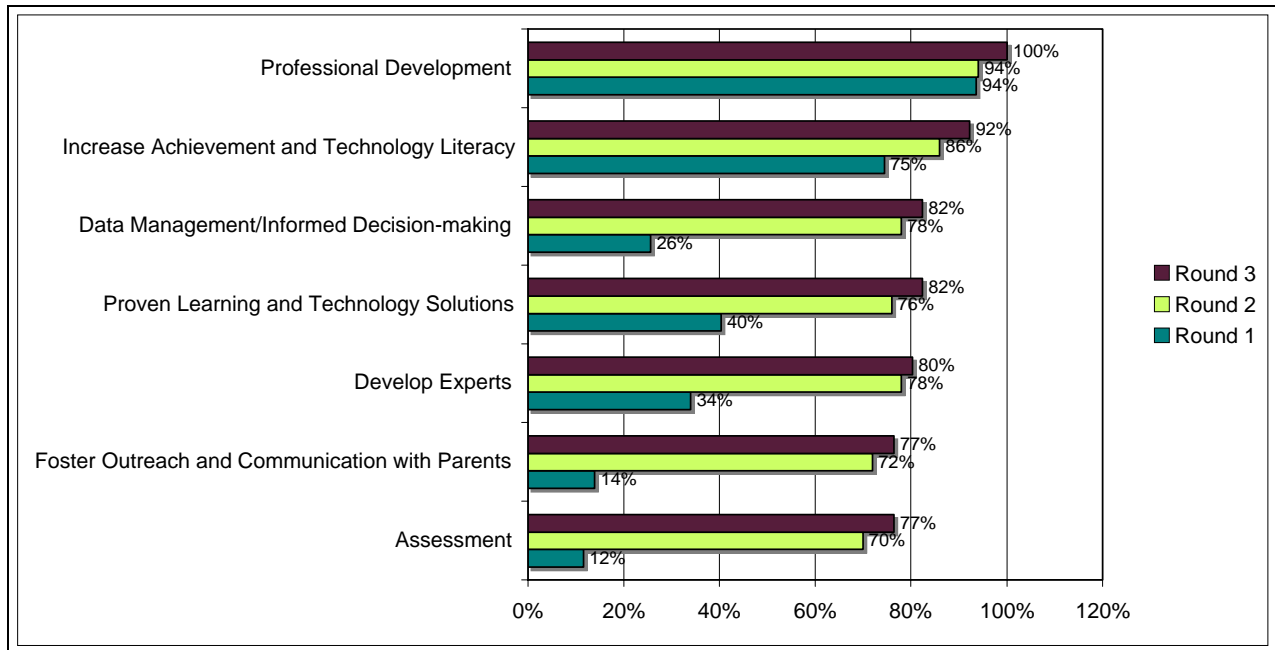
PRIORITIES

The federal legislation lists 11 strategies for advancing effective use of technology. The first year of the EETT program the state technology directors indicated a strong emphasis in four of those areas: professional development, increasing academic achievement, technology literacy, and technology. The second year the state's program emphases were broadened to include all 11 strategies. The third year indicates a continued emphasis on the full range of strategies (see charts below). The only area in which state directors reported significant increases in emphasis is in the area of "increasing access." This could be due in part to the new one-to-one computing initiatives. The survey suggests that over 80% of the states EETT programs are addressing ten of the eleven federal strategies. The exception is "information technology courses," which is addressed, but in only 53% of the states.

**Figure 20: LEA Priorities for Formula Grants – Rounds 1, 2 and 3
Topics Related to Access**

Increase Access
- Round 3: 80%
- Round 2: 68%
- Round 1: 47%

Networking and Infrastructure
- Round 3: 82%
- Round 2: 80%
- Round 1: 45%

Information Technology Courses
- Round 3: 53%
- Round 2: 56%
- Round 1: 0%

Technology
- Round 3: 98%
- Round 2: 92%
- Round 1: 62%

Note: Percentages based on the number of survey respondents (47, 50, and 51 in Rounds 1, 2, and 3 respectively).

**Figure 21: LEA Priorities for Formula Grants – Rounds 1, 2 and 3
Topics Related to Classroom Integration**

Note: Percentages based on the number of survey respondents (47, 50, and 51 in Rounds 1, 2, and 3 respectively).

When asked to identify the top five LEA priorities for their use of NCLB II D formula funds in Round 3, state directors indicated similar priorities to those identified last year. As before there were two clear priorities: professional development and technology.

The purposes used by LEAs in implementation of the formula grants in Round 3 follow in priority order.

- o Professional Development: Professional development that provides school teachers, principals, and administrators with the capacity to integrate technology effectively into curricula and instruction aligned with challenging state academic content and student academic achievement standards, through such means as high-quality professional development programs.

- o Technology: Acquire, adapt, expand, implement, repair, and maintain existing and new applications of technology to support the school reform effort and to improve student academic achievement, including technology literacy.

- o Increase Achievement and Technology Literacy: Adapt or expand existing and new applications of technology to enable teachers to increase student academic achievement, including technology literacy.

- o Increase Access: Establish or expand initiatives, including initiatives involving public-private partnerships, designed to increase access to technology, particularly in schools served by high-need local educational agencies.

- o Develop Experts: Prepare one or more teachers in elementary and secondary schools as technology leaders with the means to serve as experts and train other teachers in the effective use of technology, providing bonus payments to these teachers.

- o Networking and Infrastructure: Acquire connectivity linkages, resources, and services (including hardware, software, and other electronically delivered learning materials) for use by teachers, students, academic counselors, and school library media personnel in the classroom, in academic and college counseling centers, or in school library media centers in order to improve student academic achievement.

- o Proven Learning and Technology Solutions: Acquire proven and effective courses and curricula that include integrated technology and are designed to help students meet challenging state academic content and student academic achievement standards.

- o Data Management/Informed Decision making: Use technology to collect, manage, and analyze data to inform and enhance teaching and school improvement efforts.

- o Foster Knowledge with Parents: Utilize technology to develop or expand efforts to connect schools and teachers with parents and students to promote meaningful parental involvement; to foster increased communication about curricula, assignments, and assessments between students, parents, and teachers; and to assist parents in understanding the technology being applied in their child's education, so that they are able to reinforce at home the instruction their child receives at school.

- o Assessment: Implement performance measurement systems to determine the effectiveness of education technology programs funded under this subpart, particularly to determine the extent to which activities funded under this subpart are effective in integrating technology into curricula and instruction, increasing the ability of teachers to teach and enabling students to meet challenging state academic content and student academic achievement standards.

- o Information Technology Courses: Develop, enhance, or implement information technology courses.

TRANSFERS

Twenty-nine states reported that their LEAs' use of NCLB II D funds required transfers to or from their formula grant programs, resulting in a net gain of $3,286,898 to the NCLB II D program as compared to the net gain of $2,323,303 in Round 1 and the net loss of $8,831.

Overall Fund Transfer

	Dollars Transferred In	Dollars Transferred Out	Net Gain/Loss From Transfers:
Round 1	$4,257,733	$1,934,431	$2,323,303
Round 2	$3,087,476	$3,096,308	- $8,831
Round 3	$6,070,630	$2,783,732	$3,286,898

Title Program Fund Transfer – Round 3

	Title I	Title IIA	Title IV A	Title V	*Other	Totals
Funds transferred OUT of Title II D into:	$840,029	$474,598	$13,683	$1,455,422		$2,783,732
Funds transferred INTO Title II D From:		$4,833,450	$1,071,104	$107,923	58,153	$6,070,630
Net Gain/Loss for Title II D	**($840,029)**	**$4,358,852**	**$1,057,421**	**($1,347,499)**	**$58,153**	**$3,286,898**

From Title VI, or Title programs not specified.

Note: REAP-Flex funds also impact Title II D funds, but are not included here since they do not constitute a transfer, but rather can be reallocated within existing programs.

Definitions:

Title I Programs: Improving the Academic Achievement of the Disadvantaged. The purpose of this title is to ensure that all children have a fair, equal, and significant opportunity to obtain a high-quality education and reach, at a minimum, proficiency on challenging state academic achievement standards and state academic assessments. Funds cannot be transferred out of Title I.

Title II, Part A: Teacher and Principal Training and Recruiting Fund (Improving Teacher Quality). The purpose of Title II A is to increase student academic achievement through strategies such as improving teacher and principal quality and increasing the number of highly qualified teachers in the classroom and highly qualified principals and assistant principals in schools, as well as "to hold local educational agencies and schools accountable for improvements in student academic achievement."

Title IV, Part A: 21st Century Schools - Safe and Drug-Free Schools and Communities. The purpose of this part is to support programs that prevent violence in and around schools; that prevent the illegal use of alcohol, tobacco, and drugs; that involve parents and communities; and that are coordinated with related Federal, State, school, and community efforts and resources to foster a safe and drug-free learning environment that supports student academic achievement.

Title V: Promoting Informed Parental Choice and Innovative Programs. The purpose of this part is to improve the quality of education for all students through the support of local education reform efforts that are consistent with and support statewide education reform efforts; to implement promising reforms and school improvement based on scientifically based research; to provide a continuing source of innovation and educational improvement; and to develop and implement programs to improve school, student, and teacher performance.

Respondents were also asked about the impact of the Rural Education Achievement Program use of alternative funds authority (REAP-Flex) on their Title II D funds. While this does not involve a transfer, 12% of state directors reported a substantial impact on their program (e.g., 2% substantial decrease, 10% substantial increase) through REAP-Flex.

NOTE: REAP-Flex" is the term that the U.S. Department of Education has given to the "alternative uses of funds" authority under the Small, Rural School Achievement program. This authority provides flexibility to eligible, rural LEAs to support local activities under an array of federal programs in order to assist them in addressing local academic needs more effectively. REAP-Flex does not involve a transfer of funds from one program to another. Rather, REAP-Flex gives an LEA broader authority in spending "applicable funding" for alternative uses under selected federal programs.

**Figure 22: Net Effect of REAP-FLEX on Use of Formula Funds in Rural Schools
Round 3**
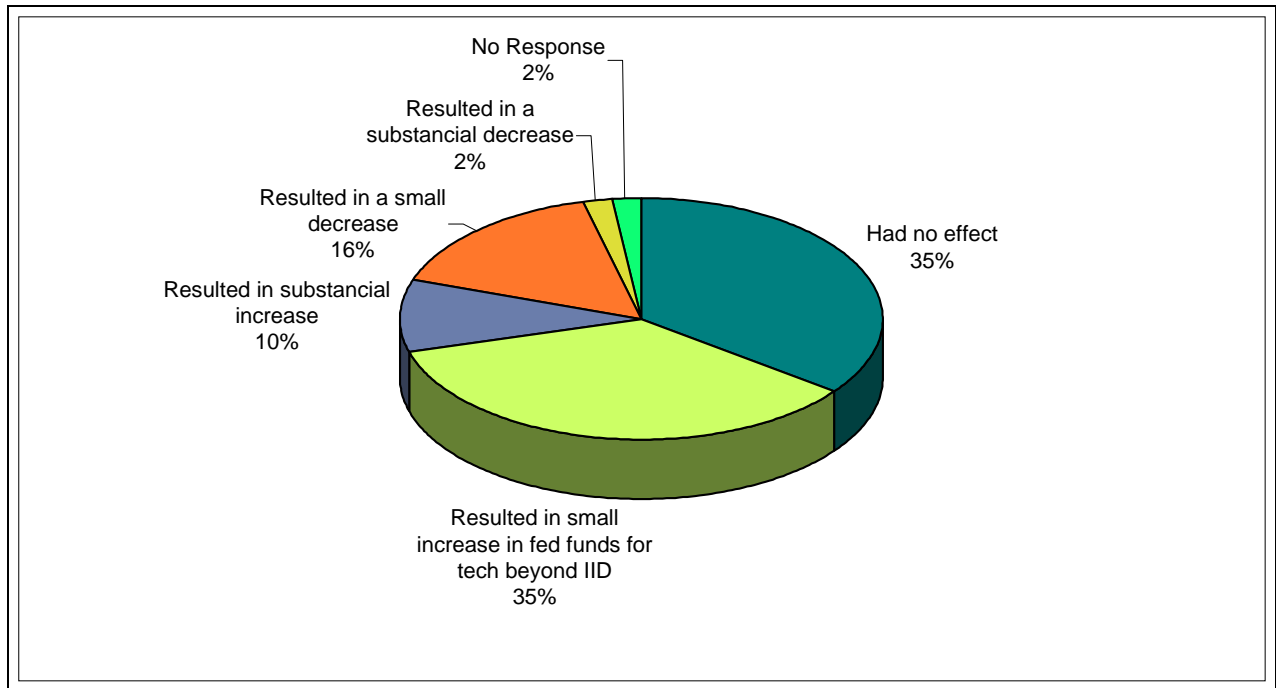
SUMMARY

The challenge of efficiently administering the large number of formula grants was identified in survey responses from all three rounds. State directors commented that while the structure of the formula grants does ensure sustainability and equitable distribution of funds, in some cases the size of the grant is so small as to make administration overly burdensome and the measurement of impact challenging.

The bottom line for survey respondents is that formula grants are an expeditious method for allocating technology funds to high-need schools, provided the grants are of a sufficient size and the evaluation associated with these funds is focused on fidelity of implementation – not ferreting out the impact of the technology versus other aspects of the overall school improvement effort.

Formula Grants – Round 3

State	Number of LEAs (FY04)	Number of LEAs Eligible for Title II D	Percent of LEAs Eligible for Title II D	Number of Formula Grants Awarded in Round 3
Alabama	129	128	99.2%	128
Alaska	54	53	98.1%	52
Arizona	638	423	66.3%	348
Arkansas	257	256	99.6%	256
California	1,367	1103	80.7%	906
Colorado	178	178	100.0%	172
Connecticut	183	155	84.7%	146
Delaware	33	30	90.9%	30
District of Colombia	42	41	97.6%	41
Florida	74	72	97.3%	69
Georgia	184	182	98.9%	182
Hawaii	1	1	100.0%	6
Idaho	116	116	100.0%	116
Illinois	894	749	83.8%	749
Indiana	308	296	96.1%	291
Iowa	367	366	99.7%	366
Kansas	301	300	99.7%	300
Kentucky	176	175	99.4%	175
Louisiana	78	78	100.0%	71
Maine	231	209	90.5%	209
Maryland	24	24	100.0%	24
Massachusetts	387	385	99.5%	353
Michigan	842	733	87.1%	710
Minnesota	520	404	77.7%	375
Mississippi	152	152	100.0%	131
Missouri	524	517	98.7%	515
Montana	446	344	76.9%	343
Nebraska	492	305	62.0%	303
Nevada	17	17	100.0%	17
New Hampshire	162	139	85.8%	111
New Jersey	671	492	73.3%	487
New Mexico	89	89	100.0%	89
New York	763	746	97.8%	635
North Carolina	215	179	83.3%	132
North Dakota	208	188	90.4%	190
Ohio	720	720	100.0%	720
Oklahoma	540	540	100.0%	500
Oregon	198	182	91.9%	182
Pennsylvania	664	567	85.4%	587
Rhode Island	47	42	89.4%	42
South Carolina	85	85	100.0%	85
South Dakota	168	166	98.8%	165
Tennessee	136	109	80.1%	134
Texas	1,229	1,215	98.9%	1,196
Utah	58	58	100.0%	45
Vermont	60	57	95.0%	57
Virginia	132	132	100.0%	131
Washington	296	290	98.0%	290
West Virginia	55	55	100.0%	55
Wisconsin	438	400	91.3%	400
Wyoming	48	48	100.0%	48
Totals or Averages	15,997	14,291	89.3%	13,667

*Data Source: SETDA Surveys Round 3

Appendix

### State Educational Technology Policy Trends

This appendix on state policy trends is included here to provide a context within which the NCLB II D program is implemented. State education agencies have provided policy leadership for LEAs in educational technology consistently over the last several decades. While the type and nature of educational technology policies do vary from state to state, most states have adopted standards for students, teachers, and administrators, state assessment of technology-related standards, and state funding contingent upon LEA compliance with established requirements. States report that ISTE National Educational Technology Standards for Students, Teachers, and Administrators guide their policy decisions, with individual state standards, the enGauge Essential Conditions, and 21st Century skills a distant second, followed by the CEO Forum StarChart and 21st Century Learning, and the Milken Seven Dimensions.

[The reader should note that this section is not intended to be comprehensive, but rather to complement the data SETDA collects periodically through other channels. See www.setda.org.]

State Data Collection on Technology Use

More than three quarters of the state technology directors reported in Round 2 (88% or 44 states) and Round 3 (78% or 39 states) that they require school districts and/or schools to complete annual surveys on technology use.

Figure 23. Percentage of States Collecting Data Annually from Districts or Schools on Their Uses of Technology (2005 SETDA Survey)
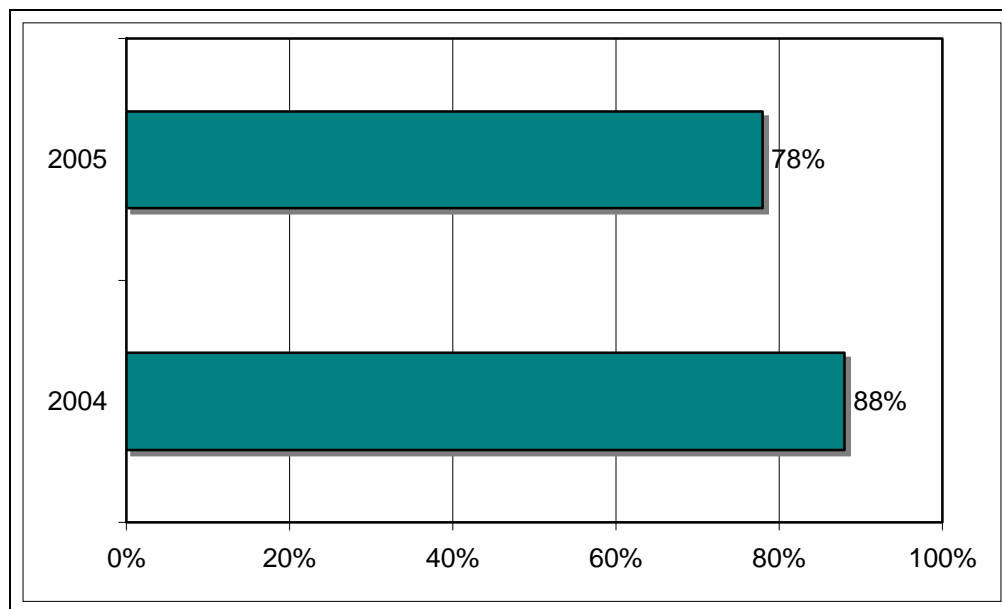

The data collection type, frequency of and time of year for data collection and whether or not it was mandatory were so similar in the 2004 and 2005 surveys for district and school surveys that only 2005 data are reported here. In 2005, 63% of the states reported collecting data through district surveys and 57% reported using school surveys. Of those states that reported collecting

data through district surveys, approximately 50% collected such data in the spring while 19% reported using fall data collection and 31% reported collecting the data sporadically. Similar numbers were reported for school surveys (e.g., 45% in the spring, 21% in the fall, and 34% sporadically). The majority of states using these methods of data collection mandated LEA participation, i.e., 70% of those using district surveys and 64% of those using school surveys.

Although the percentage of states reporting the use of district and school surveys to collect data on educational technology decreased from 2004 to 2005, the percentage of states reporting the use of teacher surveys, student surveys, and site visitations for data collection in educational technology increased.

Figure 24. Percentage of States Collecting Data on Uses of Technology Using Teacher Surveys, Student Surveys, or Site Visitations As Reported in 2004 and 2005
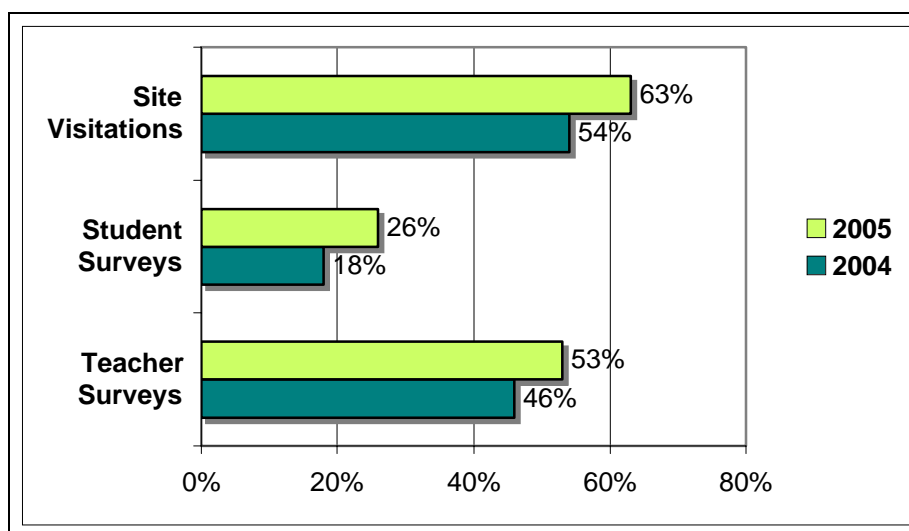
Source: 2005 SETDA survey of 51 state and Washington DC technology directors.

In the case of all three of these data collection processes, fewer states mandated participation, i.e., 41%, 36%, and 55%, respectively of those reporting teacher surveys, student surveys, and site visitations. While the states used a census approach to collecting data through district and school surveys, they used a more focused approach with specific targets with teacher surveys, student surveys, and site visitations, i.e., targeted approach was used by 56%, 75%, and 53%, respectively of those reporting teacher surveys, student surveys, and site visitations. In addition such data collections were done sporadically, i.e., sporadic collection reported by 54%, 73%, and 80%, respectively of those reporting use of teacher surveys, student surveys, and site visitations. Site visitations and teachers surveys were mandated by 55% and 41% respectively of states reporting such uses. Only 36% of the states that reported using student surveys mandated participation.

In summary, there appears to be an increasing trend on the part of the states to get more fine-grained, targeted information on the use of educational technology in schools by getting closer to the source. Increasingly schools are using student surveys, teacher surveys, and site visitations to complement district and school surveys.

The Milken Family Foundation conducted a similar survey in 1999. The total number of states reporting the use of district and/or school surveys to collect data on educational technology has remained relatively constant from 1997-1998 (Milken Study) to 2004-2005 (SETDA study).

Student Standards

There was little variation in the percentage of states in Rounds 2 and 3 reporting reliance on state versus local control. Year 2004 survey respondents reported the State:Local ratio to be 3:1 and Year 2005 respondents reported a ratio of approximately 2:1.

Those respondents indicating reliance on state standards were then asked to respond to questions on the extent to which their state addressed 21st Century skills. States were queried on a full range of 21st Century skills in four categories identified through enGauge by NCREL/Metiri: Basic Literacies, Inventive Thinking, Effective Communication, and High Productivity.

Figure 25. Basic Literacies.
Percentage of States That Reported Reliance on State Standards Reporting a High Degree*
Regarding their State's Status in Addressing Specific 21st Century Skills
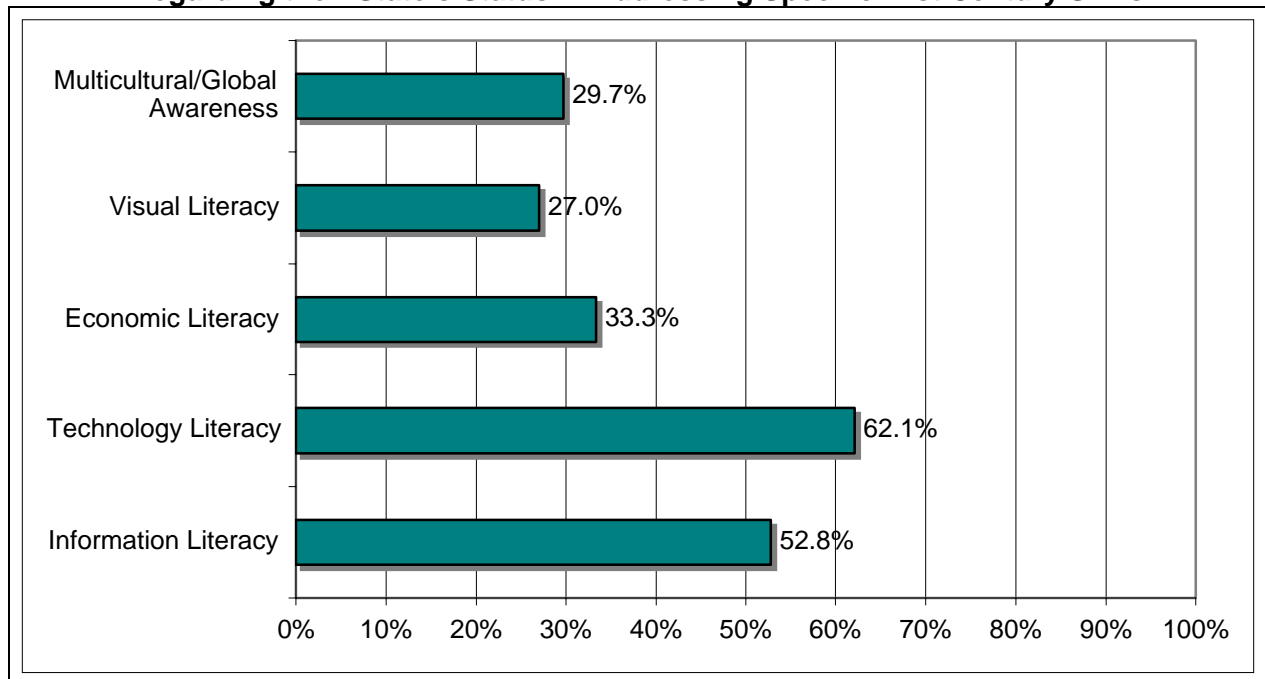
*High degree is a 4 or 5 on a scale of 0-5 (0= Not Addressed to 5 = Fully Addressed).
 Source: 2005 SETDA survey of 51 state and Washington DC technology directors.

Figure 26. Inventive Thinking.
**Percentage of States That Reported Reliance on State Standards Reporting *A High
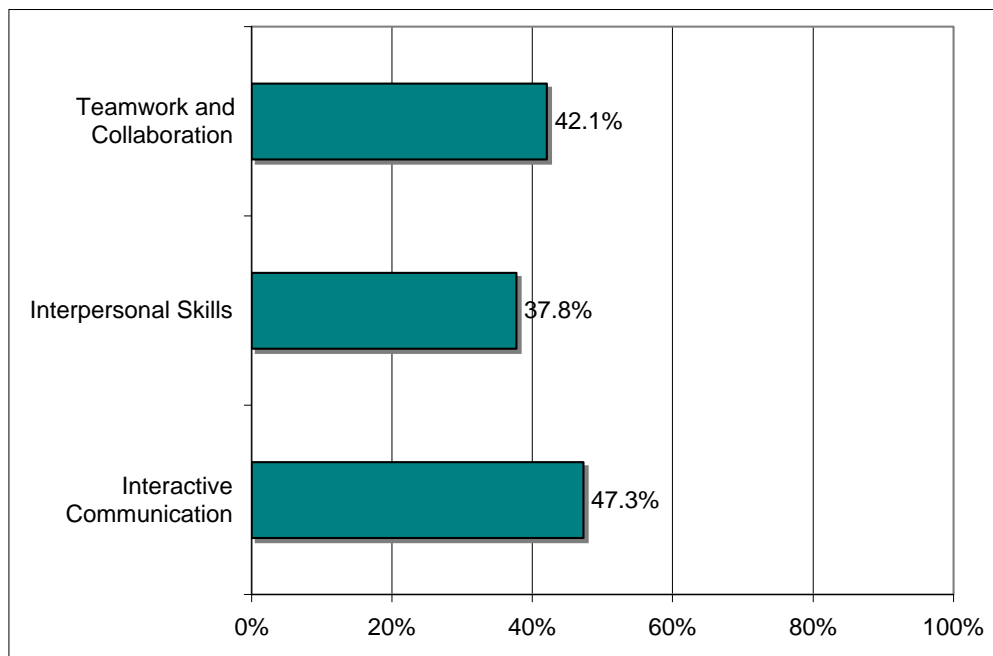Degree Regarding their State's Status in Addressing Specific 21st Century Skills**
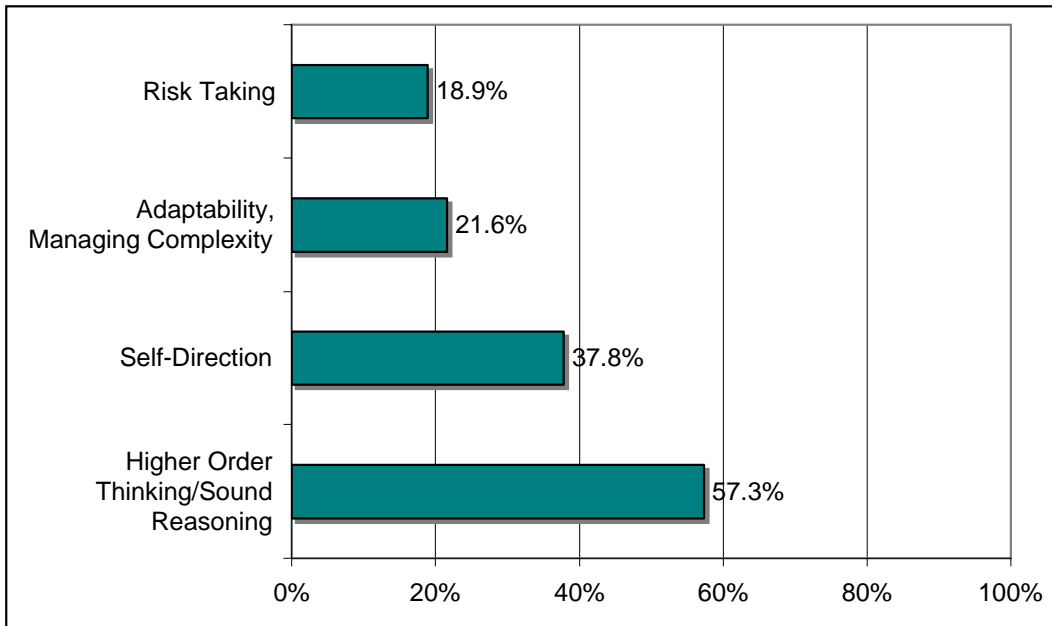
*High degree is a 4 or 5 on a scale of 0 = Not Addressed to 5 = Fully Addressed.
Source: 2005 SETDA survey of 51 state and Washington DC technology directors.

Figure 27. Effective Communication.
Percentage of States That Reported Reliance on State Standards Reporting a High Degree*
Regarding their State's Status in Addressing Specific 21st Century Skills

*High degree is a 4 or 5 on a scale of 0 = Not Addressed to 5 = Fully Addressed.
Source: 2005 SETDA survey of 51 state and Washington DC technology directors.

Figure 28. High Productivity.
Percentage of States That Reported Reliance on State Standards Reporting a High Degree*
Regarding their State's Status in Addressing Specific 21st Century Skills

*High degree is a 4 or 5 on a scale of 0 = Not Addressed to 5 = Fully Addressed.
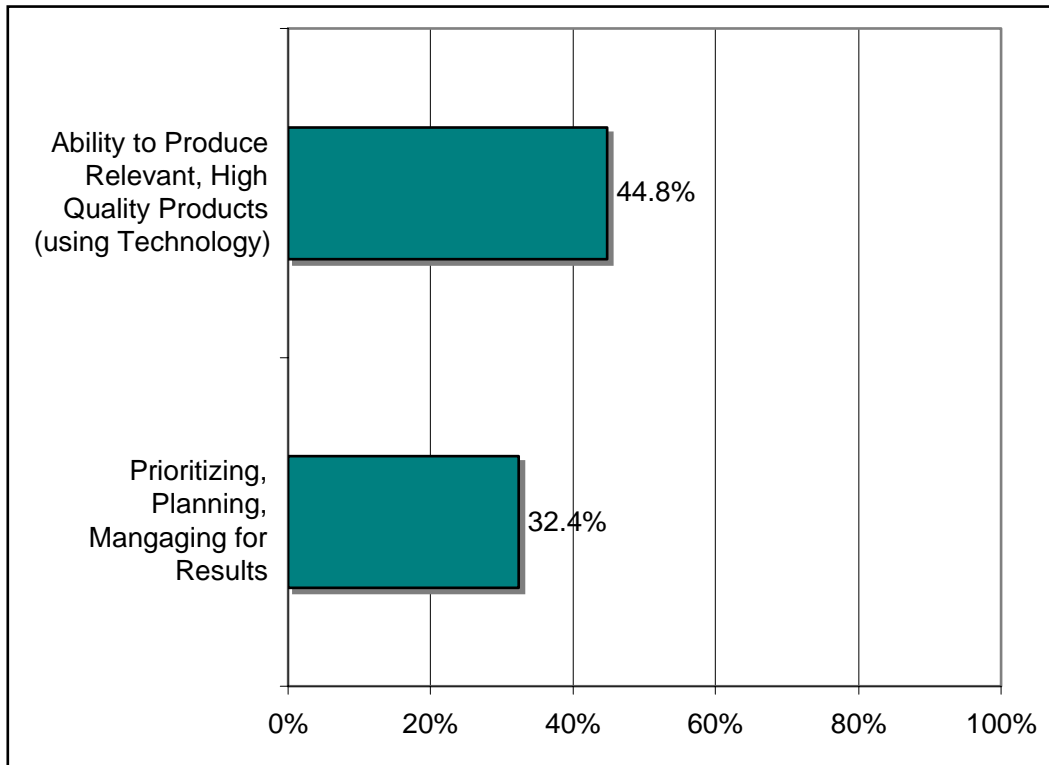Source: 2005 SETDA survey of 51 state and Washington DC technology directors.

Those states indicating a high degree of fidelity in addressing a specific 21st Century skill were then asked to indicate whether or not their state assessed the skill. The table below provides a table indicating the number of states (out of the 35 that indicated a reliance on state standards) that reported high fidelity in addressing the skill and the number that reports their state is assessing the skill.

Table: 21st Century Skills

Digital Literacies	Number of States Indicating High Level of Fidelity in Addressing Skill	Number of States Assessing Skill
Information Literacy	26	7
Technology Literacy	27	5
Economic Literacy	18	8
Visual Literacy	16	8
Multicultural/Global Awareness	18	9

Inventive Thinking	Number of States Indicating High Level of Fidelity in Addressing Skill	Number of States Assessing Skill
Higher-Order Thinking/Sound Reasoning	28	12
Self-Direction	21	7
Adaptability, Managing Complexity	16	6
Risk Taking	12	3

Effective Communications	Number of States Indicating High Level of Fidelity in Addressing Skill	Number of States Assessing Skill
Interactive Communication	22	8
Interpersonal Skills	18	6
Teamwork and Collaboration	24	6

High Productivity	Number of States Indicating High Level of Fidelity in Addressing Skill	Number of States Assessing Skill
Prioritizing, Planning, Managing for Results	17	7
Ability to Produce Relevant, High Quality Products (using Technology)	22	8

States reliant on state standards are reporting low fidelity in addressing most 21st Century skills. The exceptions are Technology Literacy, Information Literacy, Higher-Order Thinking/Sound Reasoning, Interactive Communication, and to a slightly less degree, Teamwork and Collaboration and Ability to Use High Quality Products Using Technology.

Policy Trends with Technology Standards

States vary considerably in the establishment and assessment of technology standards for students, teachers, and administrators. While the most prevalent standards for educational technology reported by states is for students (65% of respondents), only 15.7% reported having assessments for those standards in place.

Number of States Reporting Status on Educational Technology Standards.

	Do not know/No response	State standards are not in place	Such standards are currently under consideration	State standards are in place, but not yet assessed	State standards are in place and assessed
Students	6	7	5	25	8
PreK-12 Teachers	6	16	5	17	7
Pre-Service Teachers	9	20	6	8	8
PreK-12 Administrators	6	20	10	9	6
Teacher Educators	15	22	7	6	1

The Milken Family Foundation's policy study in 1999 indicated that 36 states had student standards for technology in place. In the five years hence, that number has decreased to 33 states. While the majority of states have established technology standards for PreK-12 students, few are assessing those standards systematically across the states.

The numbers of states reporting standards in place for teachers, administrators, pre-service teachers, and teacher educators remain relatively low with fewer still reporting assessments in place.

Virtual Learning Policies

Nearly half (49%) of respondent states indicated that they now operate a program that provides virtual learning directly to secondary students. A much smaller percentage of states (13.7%) reported operating such a program for elementary students. In addition, many states indicated

that they provide policies on the quality, quantity, and recommendations for engaging students in virtual learning.

Figure 30: Percentage of State Respondents Indicating Specific State Policies on Educational Technology Are in Place.
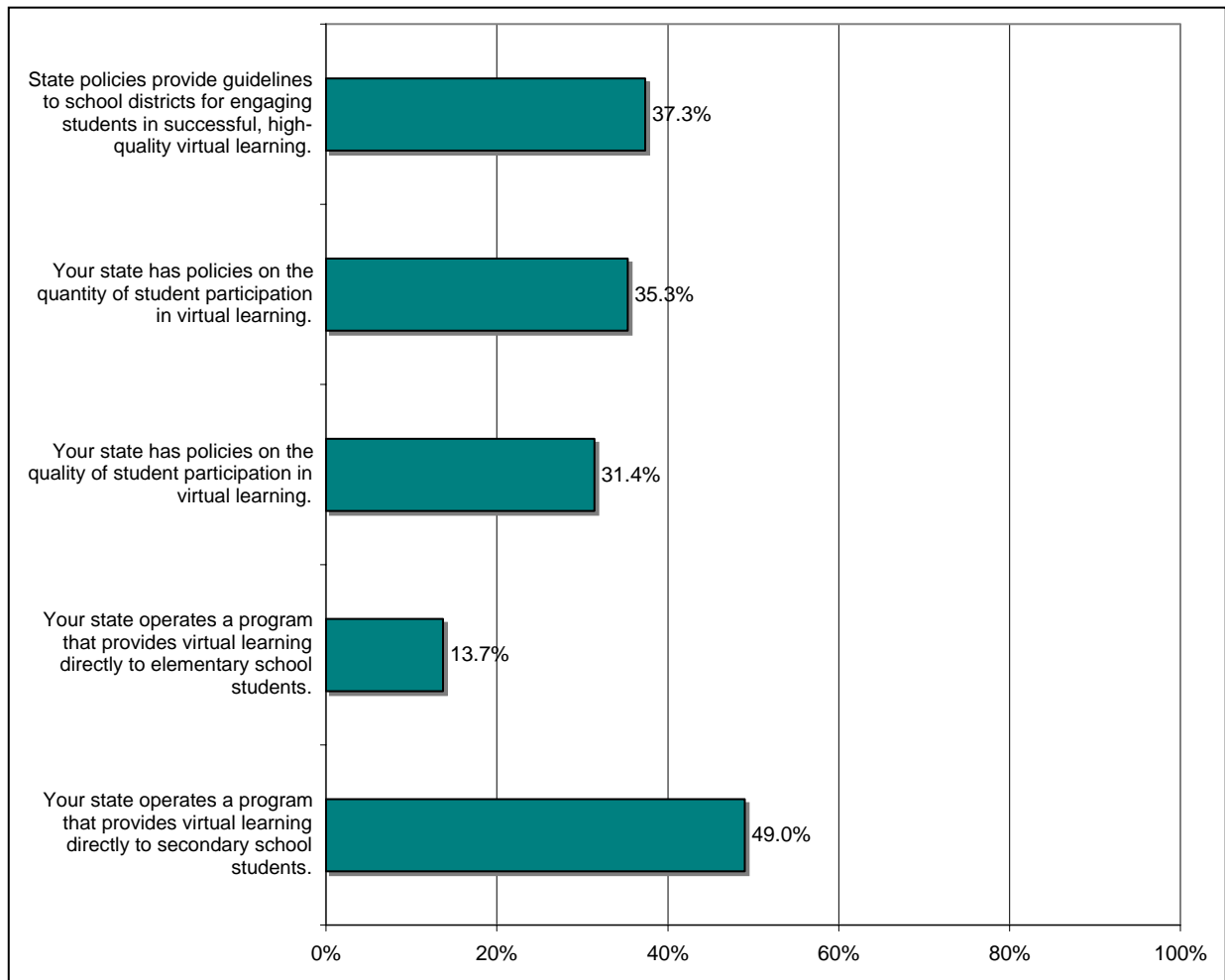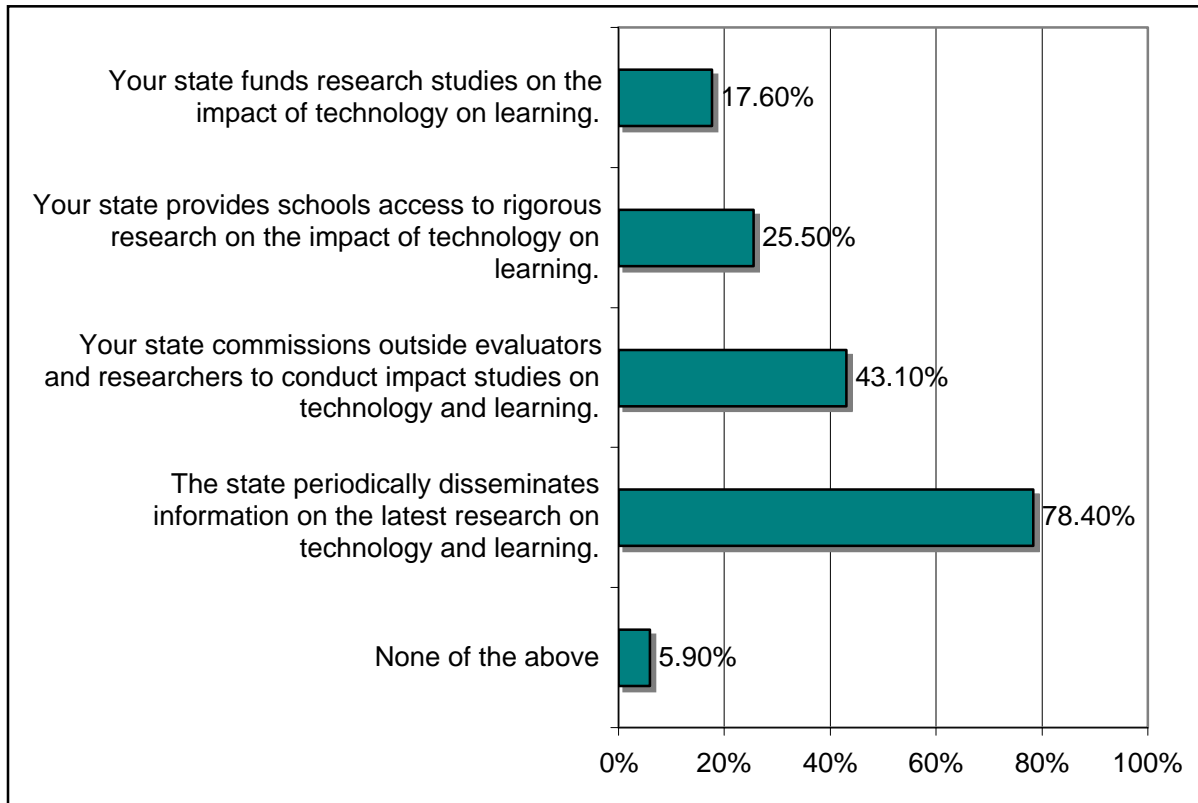

Source: 2005 SETDA survey of 51 state and District of Columbia technology directors.

A small percentage of states are including virtual learning services (9.8%) and/or technology-based resources (17.6%) on approved lists of resources for students in schools designated as high-need. Small percentages of the states maintain approved vendor lists for virtual learning for students (13.7%) or educators (5.9%).

Incentives to LEAs for Implementing Policy

State directors were asked to indicate the ways in which their state provided incentives to schools to rigorously document the impact of technology in learning. Hands down, the most oft repeated incentive was the dissemination of information on the latest research on technology and learning.

Figure 31. Percentage of States Reporting Specific Policy Incentives (see below) Are Used in Their State.
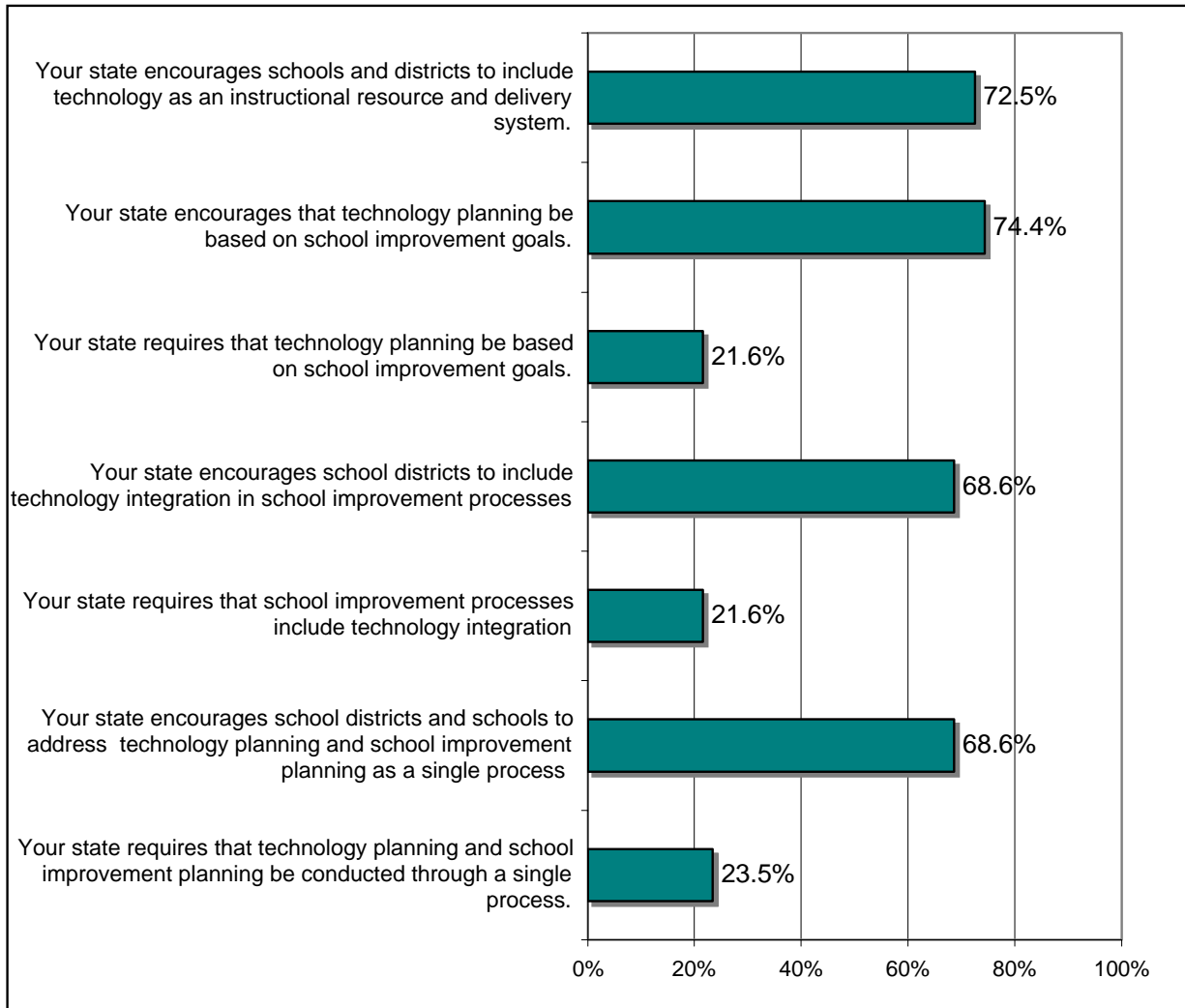

Source: 2005 SETDA survey of 51 state and Washington DC technology directors.

Policies Instituted to Advance Systemic Integration of Technology in LEAs

States are increasingly recognizing the importance of mainstreaming technology – infusing and integrating technology into the core functions of the school. No surprise, the top strategy is guidance and encouragement to LEAs in linking their technology uses and investments to school improvement. It is important to note that some states (25%) are going a step further in mandating that technology planning be grounded in school improvement and/or that the school improvement plan include technology integration.

Figure 32. The Percentage of States Indicating that Their State Has Taken Steps to Systemically Integrate Technology in Specified Manner.

Your state encourages schools and districts to include technology as an instructional resource and delivery system.	72.5%
Your state encourages that technology planning be based on school improvement goals.	74.4%
Your state requires that technology planning be based on school improvement goals.	21.6%
Your state encourages school districts to include technology integration in school improvement processes	68.6%
Your state requires that school improvement processes include technology integration	21.6%
Your state encourages school districts and schools to address technology planning and school improvement planning as a single process	68.6%
Your state requires that technology planning and school improvement planning be conducted through a single process.	23.5%

Source: 2005 SETDA survey of 51 state and District of Columbia technology directors.