SETDA's National Trends Report 2007
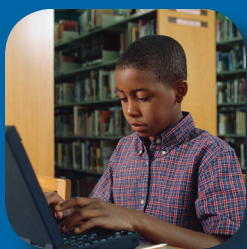
A report from all 50 states and DC regarding
NCLB's Title II, Part D
Enhancing Education Through Technology (EETT) Program

Study conducted by the Metiri Group

SETDA

STATE EDUCATIONAL TECHNOLOGY
DIRECTORS ASSOCIATION

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 uses of technology on closing the achievement gap. While currently most states are implementing Round 5 (FY06) of the funding cycle, this report provides insights into the program implementation for Round 4 (FY05) and documents trend data across Rounds 1, 2, 3, and 4.

> *… the most effective integration of technology into classroom instruction is a result of emerging standards in the content areas combined with the emergence of an electronic portfolio for student assessment. Teachers are now eager to employ technology and they see the value of these new tools in encouraging better student work.*
> *- Rhode Island*

For the last four 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. with insights into the following questions:

1. What administrative approaches are used by states to guide and support LEAs in structuring programs to achieve the NCLB goals?
2. How are grant recipients across the nation structuring programs to meet NCLB II D goals?
3. Is the current implementation of the NCLB II D program advancing the legislative goals and purposes?

In this fourth year of implementation of NCLB II D, a number of NCLB II D Projects are highlighted as excellent examples of how this important federal program has positively impacted teaching, learning, and technology literacy in America's schools. SETDA expresses its sincere appreciation to the state technology directors who completed the survey.

- The Data Collection Committee

Deborah Sutton Missouri	Melinda Maddox, Alabama
**Committee Chair	John Merritt, West Virginia
Bill Romond, Vermont	Cecilia Miller, Alaska
**Committee Vice-Chair	Dan Pullen, North Dakota
Rick Gaisford, Utah	Gary Quiring, California
Kelly Griffin, Texas	Stephen Sanders, Wisconsin
Marlene Johnson, Maryland	Corey Simpson, Idaho
Dennis Kunces, Maine	Brenda Williams, West Virginia
Connie Louie, Massachusetts	

- SETDA Staff Members

Mary Ann Wolf,	Christine Fox, Director of Professional
Executive Director	Development and Research

INTRODUCTION

The No Child Left Behind, Title II Part D Program

The technology component of the No Child Left Behind federal program (NCLB) provides funding for technology to schools across the nation that serve high-need students. The three goals of NCLB II D as stated in Section 2404 of the NLCB Title II Part D law are listed below.

NCLB Title II Part D 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.

The Trends Report

The findings from this report represent survey data on the NCLB II D program for Round 4 (FY05). The survey data were collected from a single respondent – in most cases the state technology director – who represented the state education agency in each of 50 states and the District of Columbia. The number of local education agencies represented by the state survey respondents is 16,073. Within those 50 states and the District of Columbia,14,930 districts were eligible for NCLB II D funds, representing 93% of LEAs.

Collectively, the survey respondents administered $462,201,231 in NCLB II D funding for Round 4, FY05. That sum was the total funding for the 50 states and the District of Columbia. Overall, 1,469 competitive grants and 14,109 formula grants were awarded in the 50 states and the District of Columbia in Round 4 (FY05).

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 emergent results from the program nationally, and the strategies and tactics other states and school districts are using to get such results.

TABLE OF CONTENTS

Methodology

Metiri Group has been commissioned for the past four years to conduct the state-by-state survey and write SETDA's National Trends Report. 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 II 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 4 NCLB 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 have evolved over the four years since its inception. The original set of questions was based on the policy sections of the Common Data Elements (CDE) framework and on NCLB II D requirements. Following several iterations of review and revision by the Data Collection Committee, Metiri Group produced an online version of the survey each of the last four years. 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. The data collection for Round 4 (FY05) was held in the fall of 2006. Between September 16, 2006, and October 31, 2006, 50 SEAs and the District of Columbia completed the survey.

SETDA Framework and Tools

This report provides information on the states' implementation of Round 4 funding (FY05) 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 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

This year, 50 states plus the District of Columbia participated in the fall 2006 SETDA survey. SETDA is providing individual states and the District of Columbia 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 has proven to be a rich source of data to inform a state's progress in meeting NCLB II D goals. Please visit http://states.metiri.com/ to view the state level reports.

EXECUTIVE SUMMARY

Round 4 (FY05) of the NCLB II D Program

The State Educational Technology Directors Association (SETDA) is pleased to release its fourth annual National Trends Report on the use of federal funds to support educational technology. This report documents findings from Round 4 (FY 05) of the No Child Left Behind, Title II Part D, Enhancing Education Through Technology (NCLB II D) program.

The findings in the Round 4 report are based on surveys from 50 states and the District of Columbia, representing 16,073 LEAs and the federal NCLB II D dollars allocated across the United States in FY05. Data from the first three annual National Trends Reports for Rounds 1, 2, and 3 serve as baselines. In Round 4 the respondent states and the District of Columbia awarded 1,469 competitive grants and 14,107 formula grants that together with the 5% of administrative support funds expended at the state level totaled $462,201,231. For the first three years, Congress funded the NCLB II D program at approximately $600 million for the 50 states plus the District of Columbia. That number has been decreased in Round 4 to approximately $462 million.

This year, SETDA's National Trends Report is about results. The states report progress in advancing the three goals of NCLB II D. Their reports provide glimpses into long-term, emergent outcomes related to academic achievement, as well as the purposes and activities identified in the NCLB II D law.

In fact, the NCLB II D program was intended to integrate and consolidate the use of technology into the mainstream of teaching, learning, leading, and administration of U.S. public elementary and secondary schools. Such positioning of technology was a critical public acknowledgement of the importance of technology in reaching the NCLB goals. It also highlighted the importance of building a research basis from which to inform decisions related to educational technology and the absolute necessity for a robust technological infrastructure. Finally, it demonstrated the inherent complexity of transforming schools through technological innovation, and the importance of grounding such transformation in the emergent research from the learning sciences.

One of the clear trends in this year's report is the shift in thinking about what constitutes evidence of results. In many ways, the survey data from the states indicate an emerging sophistication on the part of the states in evaluation and research related to technology. In the first three rounds of NCLB II D, many of the states were assuming that LEA grantees' progress in meeting their goals for Adequate Yearly Progress (AYP) constituted the evaluation of the program. In Round 4, their reliance on that measure had decreased, and they were increasingly requiring that LEA grantees conduct local evaluations that provided descriptive reports on the inputs (strategies and tactics to impact results) as well as outputs (changes in performance measures related to learning and teaching).

The states also seemed to recognize the multi-faceted ways in which the NCLB II D programs related to data driven decision-making. In some cases, the states asked the applicants for evidence of research-based solutions prior to funding such solutions. In other situations, the NCLB II D grant served to support the expansion of the technological infrastructure (i.e., bandwidth, computer base, data warehouse, and online testing) necessary to collect, store, link

and analyze data; and provide access to data sets and findings to educators in ways that inform instructional, curricular, and resource decisions.

States also reported that LEA grantees were involved in formal research studies, indicating that states are seeking new levels of rigor in the analysis and reporting of results. That said many of the states recognize the significant investment required to conduct rigorous studies, the continued value of descriptive evaluative studies that report findings, many of which are correlative, and the importance of understanding the difference between the two in driving policy.

Summary

The fourth year of NCLB II D was characterized by a 28% reduction in funds, more stringent guidelines for competitive grants, and the emergence of evaluative data on a host of programs that states report to be effectively advancing the NCLB II D goals.

NCLB funds in Round 4 were reported to be more focused on evidence-based practices by means of RFP priorities set by the states and more carefully evaluated or researched programs, again through policies and practices set by the states. NCLB brought with it increased accountability and focus.

It is ironic that just as states are beginning to report significant findings from the NCLB II D investment, Congress made substantial reductions in NCLB II D funds for Round 4 (FY05). See table below. Despite the reductions, the findings for Round 4 suggest that, not only are the states implementing the NCLB II D program as prescribed by law, but that such programs, when implemented with fidelity, do advance the NCLB goals.

After Four Years of NCLB II D

The six findings strongly indicate that technology funding from the NCLB II 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 states meet AYP.

The results have been somewhat limited by the reduction in federal funding in Round 4 (FY05) for NCLB II D.

Findings in Round 4 (FY05)

The NCLB II D grants are unique in the history of educational technology in the United States in that they establish the expectation that the use of technology will result in increased academic achievement – as well as advance student's technological literacy. To that end, the federal legislation established a number of goals and purposes, plus recommended activities for LEA programs. Appendix A provides a complete listing of those goals, purposes, and activities as outlined in federal law.

The previous SETDA National Trends Reports for Rounds 1, 2, and 3 have documented various aspects of the implementation of the program nationally, including: the state's alignment to the purposes and activities, the issue of limited impact of the formula grants due to minimal size of the majority of the grants (over 40% under $5,000), and the challenges inherent in evaluating the quality of the LEA grants. The NCLB II D program provides minimal funding at the state level for evaluation and insufficient funds for rigorous research studies on impact. As a result, while most states do have descriptive studies that document the implementation of NCLB II D programs in LEAs, only a few have secured the outside funding necessary to document causal impact. The descriptive evaluations clearly show that LEAs have implemented the type of programs outlined in the NCLB II D legislation. The findings for Round 4 suggest that, not only are the states implementing the NCLB II D program as prescribed by law, but that such programs, when implemented with fidelity, do advance the NCLB goals.

> **Finding 1:** States are increasingly sophisticated in their use of a range of effective professional development models designed to advance the NCLB II D program goals.
>
> **Finding 2**: The type of evidence documenting the impact of NCLB II D programs in advancing the stated goals and purposes varies widely across states. Most states are conducting descriptive evaluations, and despite the lack of NCLB II D funds for this purpose, some states are conducting research studies to document the impact of NCLB II D on student learning.
>
> **Finding 3:** States are setting priorities for the NCLB II D competitive grants that are evidence-based and tightly aligned to the NCLB goals.
>
> **Finding 4:** States report more targeted priorities for competitive programs resulting in substantive NCLB II D programs in the academics, especially in the priority areas of literacy and mathematics. This impact is limited somewhat by federal decreases to funding in FY05.
>
> **Finding 5:** NCLB II D formula grants are used for technology and infrastructure improvements at significantly higher rates than in the NCLB II D competitive grants.
>
> **Finding 6:** While nationally the NCLB II D program continues to be a primary source of dedicated funding for educational technology, states share that responsibility through both dedicated and optional state funding sources for LEA educational technology.

The following pages provide insights into the six key findings from the SETDA Trends Report for Round 4 (FY05) of NCLB II D. The table on the following page lists the NCLB II D allocation to the 50 states and the District of Columbia for the first four years of funding.

Table 1: NCLB II D State Grants

States:	Round 1: FY 2002 Final State Allocations	Round 2: FY 2003 Final State Allocations	Round 3: FY 2004 Final State Allocations	Round 4: FY 2005 Final State Allocations
Alabama	$8,794,248	$9,690,136	$9,868,971	$7,242,783
Alaska	$3,075,155	$3,214,970	$3,304,308	$2,400,020
Arizona	$10,114,346	$9,655,054	$12,202,519	$9,256,875
Arkansas	$5,518,844	$5,465,161	$6,146,287	$4,580,515
California	$85,123,372	$89,959,919	$93,318,376	$65,574,712
Colorado	$5,569,804	$5,489,698	$5,942,011	$4,519,529
Connecticut	$6,158,638	$5,209,647	$5,452,429	$3,820,259
Delaware	$3,075,155	$3,214,970	$3,304,308	$2,400,020
District Of Columbia	$3,075,155	$3,214,970	$3,304,308	$2,400,020
Florida	$28,312,771	$29,241,808	$30,855,668	$22,812,919
Georgia	$18,588,457	$18,645,145	$20,179,473	$15,158,492
Hawaii	$3,075,155	$3,214,970	$3,304,308	$2,400,020
Idaho	$3,075,155	$3,214,970	$3,304,308	$2,400,020
Illinois	$25,456,201	$25,908,318	$27,637,866	$19,883,862
Indiana	$8,959,597	$7,836,888	$8,567,373	$6,381,529
Iowa	$3,535,415	$3,214,988	$3,304,308	$2,400,020
Kansas	$4,295,513	$4,739,996	$4,165,751	$2,890,894
Kentucky	$8,799,115	$8,608,243	$8,907,782	$6,997,426
Louisiana	$11,460,981	$14,168,071	$14,283,472	$10,412,348
Maine	$3,075,155	$3,214,970	$3,304,308	$2,400,020
Maryland	$9,146,822	$8,092,948	$8,771,084	$6,410,750
Massachusetts	$12,793,954	$14,154,554	$11,141,968	$8,277,125
Michigan	$24,296,861	$20,457,029	$20,978,706	$15,902,017
Minnesota	$6,594,336	$6,055,412	$5,017,495	$3,901,408
Mississippi	$6,105,610	$8,315,118	$8,294,144	$6,120,421
Missouri	$9,312,229	$9,557,431	$8,064,903	$7,105,178
Montana	$3,075,155	$3,214,970	$3,304,308	$2,400,020
Nebraska	$3,075,155	$3,214,970	$3,304,308	$2,400,020
Nevada	$3,075,155	$3,214,970	$3,462,269	$2,611,088
New Hampshire	$3,075,155	$3,214,970	$3,304,308	$2,400,020
New Jersey	$14,970,765	$13,972,432	$13,525,534	$9,794,681
New Mexico	$4,856,313	$5,774,873	$6,189,971	$4,029,912
New York	$60,907,113	$64,948,122	$65,722,083	$45,146,951
North Carolina	$12,685,051	$14,721,370	$14,392,700	$10,778,695
North Dakota	$3,075,155	$3,214,970	$3,304,308	$2,400,020
Ohio	$19,229,051	$21,866,049	$21,037,126	$14,159,498
Oklahoma	$7,091,048	$6,646,069	$7,363,973	$5,105,476
Oregon	$5,495,169	$6,253,983	$7,002,352	$4,544,889
Pennsylvania	$22,784,432	$23,425,221	$22,235,814	$17,707,678
Rhode Island	$3,075,155	$3,214,970	$3,304,308	$2,400,020
South Carolina	$8,393,257	$8,651,744	$8,784,800	$6,641,082
South Dakota	$3,075,155	$3,214,970	$3,304,308	$2,400,020
Tennessee	$8,285,988	$10,282,694	$10,665,088	$7,591,908
Texas	$50,721,663	$55,794,699	$59,385,629	$44,009,272
Utah	$3,075,155	$3,214,970	$3,304,308	$2,400,020
Vermont	$3,075,155	$3,214,970	$3,304,308	$2,400,020
Virginia	$10,364,389	$9,917,162	$10,334,465	$8,099,082
Washington	$8,266,254	$8,312,350	$8,951,900	$6,543,660
West Virginia	$4,506,136	$5,106,182	$4,954,589	$3,853,731
Wisconsin	$8,498,770	$7,546,299	$8,353,969	$5,934,266
Wyoming	$3,075,155	$3,214,970	$3,304,308	$2,400,020
Total	**$595,194,993***	**$619,124,333***	**$635,027,468***	**$462,201,231***

*Totals do not include allocations to U.S. Territories.
Source: Allocations from http://www.ed.gov, accessed 11/15/06, updated by state survey reports.

FINDING 1

States are increasingly sophisticated in their use of a range of effective professional development models designed to advance the NCLB II D program goals.

The NCLB II D federal program requires that a minimum of 25% of the formula and competitive grants be allocated to professional development. As a result, the NCLB II D grantees provide a wide range of professional development experiences to PreK-12 educators.

The percentage of states that either required applicants to include professional development approaches aligned to standards for effective professional development or awarded grants based in part on the merit of the professional development plans increased from Round 3 to Round 4. At the same time, states provided slightly less guidance to LEAs related to the professional development plans included in the competitive RFPs.

One of the professional development approaches reported with increased frequency in Round 4 is the use of coaches, mentors, and the development of local experts to provide in-depth, continuous professional development in educational technology for teachers. The LEAs formed professional learning communities, some in face-to-face situations, in others via online interactions, offering teachers, coaches, and mentors the opportunity to exchange ideas, offer suggestions, and share research-based practices. The use of instructional support coaches or mentors is increasingly used with success in the NCLB program. This approach provides teachers with an expert – who is also a teacher – who models lessons, collaborates on lesson plans, assists in identifying research-based practices, and is generally on call when instructional support is needed. In some cases this intensive support is targeted at new teachers in induction programs, in others it is offered school wide or district wide to all teachers and administrators.

Other strategies NCLB II D grantees are using include: establishment of consortia to extend the depth and breadth of offerings; the development and/or offering of online courses, just-in-time training, and videoconferencing; intensive professional development experiences over time that are specifically targeted at cohorts of teachers that are adopting specific classroom models; and the inclusion of technology-based strategies in what were typically non-technology professional development programs (e.g., differentiation of instruction).

In addition, Round 4 survey respondents cited a range of topics through which technology was integrated into professional development, including: data driven decision-making; 21st Century skills; assessment for learning; integration into specific core academic areas; and, technology-specific sessions (e.g., pod casting, blogging, and digital storytelling).

Listed below are some examples of the professional development offered by respondent states and the District of Columbia through the NCLB II D program:

§ ***To Promote Effective Technology Use: Professional Development through Consortia***
  Note: These are examples of the NCLB II D grants awarded to the nation's school districts in Round 4.

State	Examples of NCLB II D Programs *(Professional Development through Consortia)*
HI	The Journey to Excellence project has offered multiple 5-day summer institutes for educators in Hawaii. The program provides performance portfolios for the teachers and is working towards performance portfolios for students as well. There has been a strong focus on developing teacher understanding of the Hawaii Content Standards and designing instruction

State	Examples of NCLB II D Programs *(Professional Development through Consortia)*
	that targets standards and student needs. The approach has effectively helped 2 of their 3 schools meet AYP status.
MN	The ATLAS (Arrowhead Technology Literacy Association of Schools) consortium is a group of schools from northeastern Minnesota that has a tradition of providing quality staff development training academies for teachers in the region. The ATLAS IV Academy will focus on both student and teacher involvement in building information literacy skills using technology tools already in place. ATLAS IV will use small, facilitated working groups and breakout sessions in a three day Academy. Big 6 Skills, Information Power, and ISTE-NETS standards will provide the framework for teachers to create ILPs (Information Literacy Plans) for their students. The ILPs will blend information literacy skills with content curriculum and include information literacy activities, authentic assessments, and a final showcase event to demonstrate lessons learned from the Academy. The ATLAS IV Academy will also provide two opportunities for follow-up support for participants and their students. The ATLAS project is coordinated through Arrowhead Regional Computing Center (ARCC) in Duluth, Minnesota.
NH	The state of New Hampshire used its competitive funds to continue funding its Local Educational Support Center Network (LESCN), which was originally established with Round 1 funds to reach educators in all regions of the state. The primary purpose of these centers is to provide ongoing, high quality professional development in the use of technology to support student achievement. Six centers provided numerous professional development opportunities to multiple districts within their respective regions using face-to-face, online, and videoconference formats. Opportunities are focused on using technology tools and strategies to support curriculum standards, which will, in turn, support school-wide improvement.
TN	Building on the successful endeavor of Technology Literacy Challenge Fund Pilot, Leading All Users to New Challenging Heights 1 and Leading All Users to New Challenging Heights 2, competitive grants were awarded to fund ORBIT Centers (Orchestrate Regional Bases for Integrating Technology). The ORBIT Centers are a collaborative enterprise among five eligible entities within proximity of each other within the boundaries of a specific field service center region. There were a total of nine ORBIT Centers funded in Tennessee: one per each field service center region. Technology literacy is in evidence when students and teachers are using technological tools as part of their everyday learning challenges. ORBIT Centers provided regional access to teachers so that students may benefit from the affordances of technology in education.
VA	The Shenandoah Valley Technology Consortium contracted with the WVPT public television station to sponsor the National Teacher Training Institute in March 2006. The institute provided 180 educators with the vision, strategies, and resources needed to make classroom technology more dynamic. The Shenandoah Valley Technology Consortium continues the training of teachers certified in the National Educational Technology Standards for Teachers. Teachers enrolled in the program must submit a plan that details how technology will be incorporated into their classrooms. Additionally, the Shenandoah Valley Technology Consortium contracts with United Learning (through WVPT) to provide United Streaming services for all schools in the consortium. Recent research indicates the United Streaming application improves the educational performance of students (Boster, Meyer, Roberto, Lindsey, Smith, Strom, & Inge, 2004).

§   ***To Promote Effective Technology Use: Online Professional Development***
   Note: These are examples of the NCLB II D grants awarded to the nation's school districts in Round 4.

State	Examples of NCLB II D Programs (*Online Professional Development*)
ID	Orofino School District 's "Focus on Phonics and Fluency: Key Components to Reading Proficiency" is a staff development program which focuses on providing online professional development, a district reading coach, and technology tools so reading teachers become proficient in research based techniques for teaching reading and using technology tools to monitor and review student reading achievement and adjust reading instruction. This collaborative approach to reading improvement provides an environment where teachers learn to integrate technology to improve student reading achievement with support from nationally recognized reading experts, reading teachers around the country, and a district reading coach.

State	Examples of NCLB II D Programs (*Online Professional Development*)
	Technology is integrated into reading instruction when electronically generated data is used to plot student progress, plan and execute instructional interventions, and report results. All stakeholders, students, teachers, parents, and community are better served when technology tools are used to improve student reading skills.

§ *To Promote Effective Technology Use: eCoaches/ Mentors for Educational Technology*
   Note: These are examples of the NCLB II D grants awarded to the nation's school districts in Round 4.

State	Examples of NCLB II D Programs (*eCoaches/ Mentors for Educational Technology*)
AK	Master Technology Teacher Leaders. The Anchorage School District in partnership with the Fairbanks North Star Borough School District is creating a staff development model for Technology Integration. They will prepare a critical mass of Technology Teacher Leaders (TTLs) in Alaska's two largest school districts to accelerate learning for their lowest income students, using technology rich resources, higher order thinking skills, and curriculum integration. From this collaboration, a model for the rest of the state will showcase a community of practice in professional development and technology integration. Visit the project website maintained by Anchorage at http://www.asdk12.org/depts/itech/projects/.
AZ	Tucson Unified School District. Through the mentoring of Educational Technology Coaches and Technology Liaisons, students have increased mastery levels in both math and technological literacy. Each 3rd grade teacher at the identified schools had the opportunity to participate in three full days of professional development dedicated to integrating technology into math instruction. Teachers have reported an increase in technology integration. Technology integrated lessons were written, posted, and implemented that aligned with the district pacing calendar in math. Study Island was purchased for all project schools. Presentations have been completed and the project website has provided a model project for TUSD, community, state, and national audiences as measured through 57,000 visitors to the project site this year.
OH	Columbus City - Arlington Park Elementary project will integrate technology into the curriculum to achieve the mission of the district. Arlington Park classrooms currently have an average of 4 computers per classroom, which is insufficient for 367 students participating in the grant project to increase academic achievement. Grant funds will provide additional mobile laptop computers to provide opportunities for learning with technology for the large student population. Group/individual instruction will be provided in mathematics and reading by integrating an online learning tool, a web based curricula, and increasing access to computers/technology. This project will provide professional development to all staff from highly qualified coaches for integration of project related software and hardware. Teachers will develop integration skills with advanced professional development and through the implementation of integrated software programs. All staff will implement the use of the technology twice each week after training is completed to increase student achievement.

§ *To Promote Effective Technology Use: Professional Development Related to Integration*
   Note: These are examples of the NCLB II D grants awarded to the nation's school districts in Round 4.

State	Examples of NCLB II D Programs (*Professional Development Related to Integration*)
CT	Sunset Ridge used the EETT Blue Chip grant to support efforts already under way to increase access to technology and use of multimedia technology. Grant funds were used to purchase a mobile laptop laboratory, 16 laptop computers, wireless networking equipment, a library automation system, memory upgrades for existing computers, and multimedia equipment and supplies, such as digital cameras. Project goals included improvement of teacher and administrator capacity for technology integration, introduction and promotion of concepts and strategies for the integration of technology into the curriculum, and the provision of ongoing support for teachers for implementation of technology integration and various projects with their students.

State	Examples of NCLB II D Programs (*Professional Development Related to Integration*)
LA	Louisiana's SCHOOLTech program is designed to address school-wide improvement efforts through the effective and expanded use of instructional technology. In particular, SCHOOLTech schools develop instructional technology strategies that directly address the needs, goals, indicators, and instructional strategies of the technology plan, as it relates to overall school improvement, to assist teachers to improve teaching practice and to increase student performance. Additionally, SCHOOLTech schools are served by a school-based instructional technology facilitator who designs and models effective technology-based strategies that support and enhance existing curriculum standards. The SCHOOLTech program serves as a catalyst for fundamental change in overall teaching and learning processes while promoting school-based improvement through professional development.
ME	eMINTS Level 2 - This is the second year of training for teachers allowing them to complete the 2 year eMINTS program. Maine runs a large second year program and they have a small group of about 8 working on year one. Funding cuts are limiting the training for teachers.
NH	The NH statewide network of support centers used a portion of their Round 4 competitive dollars to award $5,000 mini-grants to teams from several districts. Each mini-grant was focused on a specific instructional project to be implemented in one or more classrooms within a six-month period. This use of funds has been extremely popular, as it allows teachers with great ideas to implement specific pilot projects that were not able to be funded by local dollars. Teams receive technology training specific to their project needs, with extra assistance in creating digital videos to document characteristics and successes of their project. An end of year celebration event creates a forum for sharing their ideas and results with other teams while also providing an opportunity to raise public awareness about the importance of technology integration among policy makers.

§ ***To Promote Effective Technology Use: Professional Development on Differentiating Instruction***
Note: These are examples of the NCLB II D grants awarded to the nation's school districts in Round 4.

State	Examples of NCLB II D Programs (*Professional Development on Differentiating Instruction*)
OH	The Sandusky City School District - Madison Elementary initiative will impact 205 students, with a special focus on students targeted for after school tutoring. The plan is to use technology to assist in differentiating instruction within a Scientific-Based Research framework. The learning management system chosen for the project makes it possible for teachers to assign lessons, which differentiate instruction. An online learning tool will help to provide intensive intervention. Professional development is the cornerstone of the project. Consultants will provide on-going training and coaching so that teachers are prepared to integrate technology skills into core instruction. The Curriculum Director will work with teachers to update maps to include the assessment and technology pieces. To maximize access to technology, a projector and interactive white board for each class will be purchased. Parents will be invited to attend "Tech Tuesdays" to learn how to view student grades, attendance, read messages and email teachers.

§ ***To Promote Effective Technology Use: Professional Development for Inducting/Retaining Teachers***
Note: These are examples of the NCLB II D grants awarded to the nation's school districts in Round 4.

State	Examples of NCLB II D Programs (*Professional Development for Inducting/Retaining Teachers*)
LA	Louisiana's FIRSTTech program is a Framework for Inducting, Retaining, and Supporting Teachers With and Through Technology. The FIRSTTech program utilizes instructional technology to support new teacher learning, mentoring, and strategies for improving student achievement. The initiative is designed to support the Louisiana FIRST components and new teachers as they go through the state Teacher Assistance and Assessment Program.

§ *To Promote Effective Technology Use: Communities of Learners*
Note: These are examples of the NCLB II D grants awarded to the nation's school districts in Round 4.

State	Examples of NCLB II D Programs (*Community of Learners*)
MD	2nd annual e-Communities Summit: Partnerships established through Educational Technology competitive grant funds studied learning and curriculum management systems, developed online courses for students and teachers, applied this knowledge to several other competitive grant projects and created a dynamic network of e-Communities across the state. As a result, Maryland held its 2nd annual e-Communities Summit to provide educators an opportunity to share ideas and "Promising Practices" about organizing and implementing e-Communities in a K-12 setting. Through e-Communities, educators are able to extend their learning while contributing to the skills and knowledge base of their colleagues.
NC	Professional Development: E.J. Hayes Elementary School in Martin County, NC, offered all its professional development around a R.E.C.I.P.E Club. "Recognizing Everyone Contributes in Providing Educational Successes" (R.E.C.I.P.E.) Club provides grade-level collaborative planning time for teachers to plan lessons and/or units together. Teachers also use this time to participate in technology professional development and learn to use the tools that will be part of their collaborative units. These R.E.C.I.P.E. Club meetings have led to virtual and real-life field trips, digital storytelling, and many other technology-rich, resource-rich project-based units, units that have helped this school that is 64.5% free/reduced lunch meet AYP.

§ *To Increase Professional Development on the Use of Research in Decision-making Related to Resources*
Note: These are examples of the NCLB II D grants awarded to the nation's school districts in Round 4.

State	Examples of NCLB II D Programs (*Professional Development with Research to Inform the Selection of Resources)*
MO	Francis Howell R-III School District. Following the successful implementation of the eMINTS model in two pilot schools, the district established a long-range goal to implement the eMINTS model in all of its 18 schools and two alternative sites. The district guided development of the model by serving first the high needs elementary buildings and the middle schools that receive those students. These high needs buildings meet criteria based on Missouri Assessment Program (MAP) MPI scores in communication arts and mathematics, percentage of students receiving free and reduced lunch, total student population, and special education incidence rate.

Additional funds from building budgets, district programs such as gifted education, parent groups and other grant programs have been combined to implement the program ahead of schedule. The district supports training costs for a certified eMINTS instructional specialist, and provides an extensive leadership team to coordinate implementation and gather district data for evaluation. In this extensive eMINTS project resulting in improved student achievement and higher MAP scores; Francis Howell has captured community attention and support. (Serves 5,200 K-8 students, and 56 Teachers) |

§ *To Increase Professional Development on the Use of Research in Decision-making Related to Instruction*
Note: These are examples of the NCLB II D grants awarded to the nation's school districts in Round 4.

State	Examples of NCLB II D Programs (*Professional Development with Research to Inform Instruction)*
NJ	The Math Achievement To Realize Individual eXcellence (MATRIX) grant program was designed to increase student achievement in mathematics in grades six through eight by providing classroom teachers ongoing professional development and in-class support that focuses on integrating technology into the curriculum and instruction. The professional development models implemented during the grant program included multiple methods for sustained training, followed by in-class support for those teachers involved with this grant program. Although the intense professional development plan targeted the participating

State	Examples of NCLB II D Programs *(Professional Development with Research to Inform Instruction)*
	teachers in grades 6, 7 and 8, all teachers in the school had an opportunity to participate in professional development activities offered through the grant project. The program was designed to have a minimum of two (2) sixth-grade teachers, two (2) seventh-grade teachers, and two (2) eighth-grade teachers learn strategies to infuse technology into the curriculum. Grade seven teachers were a part of the first year of grant activities. During this second year of a three-year grant program, the school district chose either grade six or grade eight teachers to be involved in year two. Grade seven teachers and one other grade level were given intense follow-up and in-class support in year two of the grant program. The participating teachers received support and assistance with implementing a mathematics program that is based on relevant research proving success where students use technology as a tool during their regular instructional time.
WY	A district is using the funds to "support an effective K-12 technology integration project to improve academic success for all students. Teachers gathering data and utilizing the data to drive instruction is the focus of the project." Their plan is "to get the data in the hands of the teachers and utilize that data to individualize instruction and meet the students' needs."

§   ***To Foster Effective Uses of Technology to Support Assessments for Learning***
   Note: These are examples of the NCLB II D grants awarded to the nation's school districts in Round 4.

State	Examples of NCLB II D Programs *(Assessments for Learning)*
HI	The Kalaheo Complex has focused on improving instruction in writing, changing their curriculum and developing writing exemplars and using technology to help with their data analysis. They have offered summer institutes for 48 teachers with another 26 scheduled. They have used their school waiver days for school-wide professional development. As a strategy to sustain the project when the funding ends, they have created Writing Cadres of teachers who are able to coach their colleagues. Twenty-two teachers have attended either the State or National Council of Teachers of English (HCTE, NCTE) conference. The elementary teachers have been trained on consistent scoring of student writing and in the third year of the grant, students will be trained so that they can better assess their own writing.
MA	Boston Public Schools MyBPS Formative Assessment (MFA) Project. The Boston Public Schools MyBPS Formative Assessment (MFA) Project consists of two main components. The first is the development of a system that enables educators to generate student-centered, customized formative assessments. The second is online professional development workshops that foster the way assessment is used in everyday teaching and learning. The MFA Project is designed to enable teachers to create and administer formative assessments customized to their students' learning strengths and weaknesses and then to analyze the data to develop instructional strategies addressing those needs. The project will also increase teacher knowledge of English language arts instructional strategies focusing on higher-level comprehension skills, as well as on reading nonfiction and information texts for 3rd and 4th grade students. Finally, the project will train teachers to continually use assessment data to inform and adapt instruction to address student learning needs. The MFA system will be integrated into the MyBPS MCAS Assessment system, building upon Boston's proven experience with developing assessment systems to enhance teaching and learning.

§   ***To Foster Effective Uses of Technology to Support Data Driven Decision-making***
   Note: These are examples of the NCLB II D grants awarded to the nation's school districts in Round 4.

State	Examples of NCLB II D Programs *(Data Driven Decision-Making)*
AK	Sitka Data Alignment Project. This project will afford the opportunity to bring data driven decision making into reality. The district will use some software that is in place, and upgrade some that is working poorly because it is being run at five individual sites and must be consolidated. The district has chosen to work in its buildings simultaneously so that the data input and use is seamless district-wide. The ultimate goal is to bring information to inform

State	Examples of NCLB II D Programs *(Data Driven Decision-Making)*
	instruction to decision makers' desktops in a timely manner.
MO	The Perryville Elementary School eMINTS program implementation is highly data driven. The Missouri Assessment Program (MAP) student scores and the Missouri School Improvement Program (MSIP) accreditation report for Perryville Elementary indicated low student achievement in communication arts and mathematics. Comprehensive School Improvement Program (CSIP) findings indicated technology had not been integrated into the K-12 instructional program. Teacher data showed a need for an increase in cooperative learning, questioning skills, integrated learning and authentic learning, as well as a need for improved technology skills and professional collaboration. Perryville Elementary is implementing the eMINTS model as a school-wide school improvement initiative. All 784 students, K-4, are actively forming a community where all students are engaged learners who take responsibility for their own and each other's learning. Teachers from intervention services, special service classrooms, and special area classes for these grades are included in the eMINTS implementation to develop an inclusive community of learners. Analysis of Missouri Assessment Program test scores, after one year of implementation, indicates increased percentage rates of students scoring in the top two (of four) levels on the Communication Arts and Mathematics tests. (Grant project serves 784 students, grades K-4, and 62 teachers)

FINDING 2

The type of evidence documenting the impact of NCLB II D programs in advancing the stated goals and purposes varies widely across states. Most states are conducting descriptive evaluations, and despite the lack of NCLB II D funds for this purpose, some states are conducting rigorous research studies on the impact of NCLB II D on student learning.

Beginning in 2002, the NCLB II D program served as a forceful policy lever to intricately connect educational technology to learning, teaching, and leading effectively in schools. Now, four years later, states are reporting definitive progress in advancing the NCLB goals. In some cases the goals were advanced by selecting and implementing evidenced-based technology practices; in other cases, states have dedicated funds – some from outside NCLB II D and some from the administrative funds – to conduct evaluation studies and rigorous research studies to document impact. Listed below are examples of state programs that demonstrate results. In some cases LEAs are using evidence-based practices to guide the design of new programs; in others, they are conducting descriptive evaluation or rigorous research studies in an effort to document the impact of the NCLB II D program.

> *"Ten percent (10%) of each competitive grant school's allotment is awarded to the outside evaluator, North Carolina State University/Friday Institute for Educational Innovation."*
> *-North Carolina*

> *"The Texas Education Agency (TEA) used Title II, Part D monies to fund a wireless learning environment for high-need middle schools through the Technology Immersion Pilot (TIP). A concurrent research project funded by a federal Evaluating State Education Technology Programs grant also under Title II is scientifically evaluating if student achievement improves over time as a result of implementation of technology immersion."*
> *-   Texas*

Listed below are examples of state progress in achieving the NCLB II D Goals:

NCLB Primary Goal 1: The primary goal of this part is to improve student academic achievement through the use of technology in elementary schools and secondary schools.

State	Example(s) of state progress in achieving NCLB Primary Goal 1
AK	The Anchorage School District's Technology Teacher Leader (TTL) project is designed to empower change at the classroom level, and is based on a systemic design approach to be implemented at a district level in alignment with ASD's Six Year Plan. The model has been successfully implemented for four years with the results of both the district and school-based projects currently available for Year 2 (see the project report atwww.asdk12.org/depts/itech/TTL04). The systematic impact of the TTL program on student learning is indisputable as noted in the specific TTL2 school-based project reports. Although each TTL2 school designed an assessment method that complimented the school-based project, four of the TTL2 schools (Fire Lake, Gruening, Kincaid, and Ptarmigan) chose to do an assessment of the TTL2 participant classroom as compared to all of the other classrooms in the school of the same grade level. In 100% of these reports that covered five different

	grade levels, students in the TTL2 participant classroom made significantly more progress than their same grade level peers. Results for one of the TTL school-based projects follows: Students in the Technology Teacher Leader's classroom showed significant improvements in reading, writing, and math academic achievement (27.6, 24.0, and 21.7 respectively) compared to all other 5th grade classrooms at Kincaid Elementary.
CA[1]	Ventura Unified School District, CA. Anacapa Middle School's EETT grant focused on grades 6 – 8 in the areas of Math and Language Arts, primarily focusing on students at the Basic Level or lower on the State Standards Test. Students used the technology in three ways to improve student learning at the school: 1) implementation of a data analysis system to use the state test data to identify the students at Basic Level or lower; 2) Integration of the Accelerated Reader and Accelerated Math software into the curriculum to provide ongoing assessment, and to identify students needing immediate intervention assistance; and 3) Integration of the Successmaker Math and Reading software into the intervention class for the identified students. Resultant data indicates that this program helped the students at Anacapa Middle School make significant growth towards meeting state standards in Mathematics and Language Arts.
ID	Blackfoot School District in Blackfoot, Idaho. The project proposed a systemic, technology infused approach to increasing student achievement in mathematics grades K-12. All teachers were provided with the necessary software and hardware (5 computers per classroom, and lab access) as well as intensive on going training to promote math achievement. The software is coordinated with the curriculum and assesses a student's level, provides support and feedback for the student, and monitors achievement across time. The goal was to increase student math scores in grades 1-12 in participating schools by 5% by the end of the 04-05 school years. A math achievement baseline was established using Spring 2003 Idaho Standards Achievement Test (ISAT) scores. ISAT scores district wide increased by 4.4% with some schools gaining as much as 24.92%.
MO	Missouri earmarks Title II D competitive grant funds for district participation in the eMINTS (enhancing Missouri's Instructional Networked Teaching Strategies) program. An external evaluation of the eMINTS program was completed by the Office of Social and Economic Data Analysis (OSEDA) in April 2005. eMINTS teachers, whose students' scores were analyzed, began the eMINTS professional development program in fall 2002 and completed the program in spring 2004. The cohort consisted of 40 schools selected through a competitive process funded by the Title II D Enhancing Education Through Technology (EETT) grant program. Results of the quantitative analysis show that Title I students benefit from enrollment in eMINTS classrooms, particularly by narrowing the performance gap between Title I and non-Title I students. On the Missouri Assessment Program (MAP) Communication Arts test, Grade 3 Title I students enrolled in eMINTS classrooms scored higher than Title I students enrolled in non-eMINTS classrooms. On the MAP Mathematics test, Grade 4 Title I students enrolled in eMINTS classrooms scored closer to the level of students enrolled in non-eMINTS classrooms. Additional information can be found at http://www.emints.org/evaluation/reports/titleI-emints.pdf
PA	The School District of Philadelphia has leveraged district funds with EETT funds to deploy an Instructional Management System (IMS) that provides educators, administrators, and families with timelier, in-depth data on student achievement, and TerraNova benchmark assessments. Preliminary data that compared matched sets of schools using the IMS with those that deployed it later, indicated that students in the IMS schools scored significantly better in mathematics and language arts.
TX	The Technology for Administrators, Students and Teachers Everyday (TASTE) project created and supported a technology-rich environment that facilitated student achievement and academic excellence. The major emphasis of the TASTE project was to develop a technology rich education environment. The TASTE collaborative had a shared vision of achieving the target tech levels of the Texas STaR Chart which involved regular creation and communication of new technology supported, learner centered projects; vertical alignment of Technology application TEKS; meeting 100% of SBEC proficiencies; ensuring technology integration, and creating communities of inquiry and knowledge by building, anytime, anywhere learning. The vision allowed the collaborative graduates to make informed

---

[1] Example from Round 3

	decisions, develop skills vital to success, foster life-long learning, and become effective citizens in the 21st century.
	§ TAKS results indicate significant increase in student achievement.
	§ The percentage of 6th-8th grade students successfully passing the Reading TAKS increased from 80% to 87%.
	§ The increase in 6th-8th grade Reading TAKS scores emerged as statistically significant.
	§ The percentage of 6th-8th grade students successfully passing the Math TAKS increased from 64% to 76%.
	§ The increase in 6th-8th grade Math TAKS scores emerged as statistically significant.
	§ The percentage of 9th-10th grade students successfully passing the Reading TAKS increased from 72% to 84%.
	§ The increase in 9th-10th grade Reading TAKS scores emerged as statistically significant.
WV	West Virginia schools have used competitive Enhancing Education Through Technology funds to hire school-based Technology Integration Specialists. These specialists collaborate with classroom teachers through mentoring, team-teaching, coaching, and modeling. The Technology Integration Specialist (TIS) Model has been studied by the Research Firm Interactive Inc. with Dr. Dale Mann through a USDE funded Evaluating State Education Technology Programs grant. Preliminary data shows that teachers in the TIS schools are integrating technology into their curriculum more than teachers in the control schools. This three-year study also shows that the TIS program has produced significant gains in student achievement.

NCLB Goal 2(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.

Examples of state progress in achieving this NCLB II D goal:

State	Example(s) of state progress in achieving NCLB Primary Goal 2(A)
AZ	8th grade Technology Literacy Assessment. Arizona wrote an extensive RFP for an online student technology assessment to be a required assessment for all EETT projects. Learning.com's TechLiteracy Assessment (TLA) was selected and 25,000 5th and 8th grade students were tested. In 2005-2006, EETT projects set aside 2% of their budgets to pay for the tool. In 2006-2007, the EETT projects set aside 2% of their budgets but due to the drastic reduction of EETT funding, Arizona made up the difference between what the LEAs generate and what the actual online assessment costs (www.learning.com/tla). The 2005-2006 school testing event generated baseline data. Twenty-seven percent of 5th graders and 37% of 8th graders met proficiency. During the 2006-2007 school year, TLA will be administered as a pre-test in the fall and then as a post-test in May. Various interventions will be utilized by the local districts and charter schools.
FL	Florida Liberty Learns by Teaching with Technology - Teachers at a rural high school serving a challenging student population are using a variety of technologies to enhance the learning environment and improve student performance. Historically, less than 10% of graduates at this high school continue their education in college. The per capita income for the area is only a little above $15,000 and local tax revenue is especially limited as a large portion of the region is national forest land. EETT grant funding has made it possible for students and teachers in this relatively isolated area to experience learning with technology. Targeted professional development activities such as a Technology Leaders Institute, a Summer Academy of Literacy and Technology, and on-site coaching days encourage teachers and administrators to move forward with efforts to integrate technology into daily instruction. Teacher laptops, a smart board, tablet PCs, projectors, writing slates, and a 30 unit wireless mobile laptop cart are being used to support reading and writing skill development.
	Substantial student performance improvements have been noted in conjunction with this particular initiative. The percentage of 9th grade students testing at FCAT Reading Level 1

	decreased from 25% in 2005 to 15% in 2006. Tenth grade students showed a decrease from 44% at Level 1 in 2005 to 39% in 2006. The percentage of 9th grade students testing at Level 3 or above increased from 46% in 2005 to 62% in 2006. Tenth grade students also improved, increasing from 24% testing at FCAT Level 3 or above in 2005 to 35% in 2006.
HI	Hawaii has instituted General Learner Outcomes (GLOs) as overall goals for all students by the time they graduate. The EETT Competitive grants have included a focus on GLOs together with academic content and technology skills. Each grant has established benchmarks and assessments to document student growth towards the GLOs. Teachers in the EETT grants reported a significant gain in student critical thinking and problem solving skills as a result of the grant activities. Prior to the grant, two-thirds of the teachers (66%) reported that their students rarely or never evidenced critical thinking or problem solving skills. As a result of the grant, 90% of the teachers reported their students usually or consistently evidenced the skills to demonstrate progress on this state GLO.
WI	Integrating State Standards, Achievement, and Curriculum (ISSAC). Seven south-central Wisconsin rural school districts including the Wisconsin School for the Deaf formed a school improvement consortium in 2003 with the purpose of improving professional practices and increasing student achievement in reading, writing, and math through the integration of educational technology in the classroom. In 2005-2006 the ISSAC Consortium implemented a well-planned, ongoing systemic EETT professional development program that linked the schools' standards based reading and math curriculum to best practices in implementing instructional technology into classroom practice. Through a series of five professional learning experiences, EETT Project leaders provided both face-to-face and online professional learning where teachers developed high quality instructional units that incorporated student use of technologies, creative thinking, and higher order problem solving. Professional networking and collaboration across the regional consortium fostered high educator engagement and high level learning activities for all students. Student Technology Literacy Results: A total of 276 students in grades 6-8 completed the Learning Point Associates Tech Point assessment in the fall of 2005 and the spring of 2006. Results show that the students in all participating schools realized an increase in the percentage of students performing at the proficient and advanced levels with two schools showing greatest gains: Albany, 12% proficient pre and 46% proficient post and Clinton, 39% proficient pre and 57% post. More information is located at http://www.ecsdnet.org/page.php?pid=155.

NCLB Goal 2(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.

State	Example(s) of state progress in achieving NCLB Primary Goal 2(B)
DC	Elementary Educator Technology Training Initiative: District of Columbia Public Schools. This initiative focuses on training elementary school teachers (K-6) in how to effectively integrate technology into their instructional practice. Using technology-based curriculum aligned resources; teachers participate in focused professional development activities that model an array of educational integration and support strategies. As teachers complete each tier of training, the level of technology integration skill increases. At the conclusion of the training series, participating teachers have the foundation level skills in place, and the confidence and familiarity with the various tools and strategies now available to them in their classrooms, both as desktop computer resources, as well as an array of approved on-line resources.
LA	Louisiana's SCHOOLTech program is designed to address school-wide improvement efforts through the effective and expanded use of instructional technology. In particular, SCHOOLTech schools develop instructional technology strategies that directly address the needs, goals, indicators, and instructional strategies of the technology plan, as it relates to overall school improvement, to assist teachers to improve teaching practice and to increase student performance. Additionally, SCHOOLTech schools are served by a school-based instructional technology facilitator who designs and models effective technology-based strategies that support and enhance existing curriculum standards. The SCHOOLTech

	program serves as a catalyst for fundamental change in overall teaching and learning processes while promoting school-based improvement through professional development.
ME	The Gorham School Department received a Title II D grant of $5,008. This medium size rural district used its Title II D funds for staff development. Four activities were conducted in preparation for projects that will either measure or help improve the achievement of students through the use of technology. Two of the initiatives deal with student assessment and using technology to enter, store and complete an analysis of results. The other two projects are training for the use of the software SpringBoard and READ 180. To successfully implement these projects, the district understands that it must first have its teachers trained and be successful in running the software. Pilot work went on last school year; the base line data was collected. From this basis, it can be determined as to how successful the projects will be in increasing student achievement. Without Title II D funding, the teacher training for these promising initiatives could not take place.
VA	It is well documented (e.g., Linda Darling-Hammond) that teacher quality is the most important factor in student learning; consequently, Virginia has used EETT funds to provide high-quality professional development for teachers. Eight regional consortia offer training in the integration of technology into curricula and instruction. A recent meta evaluation commissioned by the state suggests more than 3,500 teachers have participated in training opportunities.

FINDING 3

States are setting priorities for the NCLB II D competitive grants that are evidence-based and tightly aligned to the NCLB goals.

As states learn more about what works, they provide more guidance (and are more directive) in how schools use competitive grants as evidenced by the creative redesigns and new priorities in RFPs for upcoming Round 5.

> *"The eMath competitive grant provides a very prescriptive use of technology to teach math in grades 3-5. We are in the 3rd year of a 4-year grant. Taken together with the CRCT findings, preliminary evidence suggests that eMath may have a positive student learning impact on Georgia's new mathematics standards."*
> *-Georgia*

> *"Ed Tech schools submit large-scale objective assessment data three times per year. Their outside evaluators work with them to examine the performance of targeted sub-groups while increasing the academic achievement of all students. There are 34 ongoing projects that address different content areas, student populations and teacher capacity issues. The results are varied. Projects that do not increase student academic achievement are not continued."*
> *-Indiana*

Round 4 respondents reported increased numbers of states that focused competitive grants specifically on core content areas (i.e., 39% of states included writing as a priority, 45% included reading, 45% included mathematics, and 28% included science). In addition, Round 4 competitive grants were more targeted to specific approaches including (i.e., 28% of states focused on specific classroom models, 14% focused on specific software for learning, 18% focused on instructional management systems, 41% focused on data driven decision-making, 20% focused on laptop programs, and 52% focused NCLB II D funds on professional development beyond the 25% required by law).

State	Example(s) of priorities in the NCLB competitive grant program
MI	Michigan's One to One Initiative, Freedom to Learn (FTL), is a statewide initiative aimed at improving student achievement and engagement in Michigan schools. FTL creates 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. Our research and evaluation has shown: § Of 4,200 FTL students surveyed, 86% say they do better on their schoolwork in the one to one environment. § Of the 4,200 FTL students surveyed, 81% said their experience with one to one learning has enhanced their abilities with technology and chances for post high school opportunities. § In the Eastern Upper Peninsula Intermediate School District (EUPISD), among all FTL middle schools, student made progress in math and science. In science, MEAP achievement: from 68% proficient in 2002-03 to 80% in 2003–04. In math, MEAP achievement: from 57% in 2002-03 to 67% in 2003-04. EUPISD began FTL in 2002–03. § At Bendle Middle School (Burton, MI) 7th grade MEAP reading proficiency increased (29% in 2003-04 to 41% in 2004-05), and scores in 8th grade MEAP math proficiency increased from 31% in 2003-04 to 63% in 2004–05. § In Bear Lake Schools, 5th graders in 2002 went from 33.3% proficient in MEAP writing to 76% in 2004 as 7th graders.

FINDING 4

States are reporting more targeted priorities for competitive programs, resulting in substantive NCLB II D programs in the academics, especially in priority areas of literacy and mathematics. This impact is limited somewhat by federal decreases to funding for NCLB IID in FY05.

The NCLB II D federal law cites eight purposes that the program is intended to serve. This section includes a host of examples in states across the nation where the LEA grants for NCLB II D are effectively advancing academic achievement. Many states reported that such gains were mitigated in 2005 by the significant reduction (28%) in federal funding for NCLB II D. The comments of two of those states are included below. The represent concerns by the majority of states in their capacity to continue to achieve and sustain such impact through NCLB II D given the reduction in funding.

> *"Minimal progress [has been achieved] in light of the decreased funding. While any funding for technology and training is valued, the small and shrinking amounts reduce the possibility of accomplishing the goals in the district's technology plan."*
> *- California*

> *"The perception among our districts is that the federal commitment to maintain support for educational technology is being questioned, and that the current demands for AYP have begun to compete with and diminish support for 21st Century skills. Although we as a state do our best to counter this perception, current funding cuts speak louder than words."*
> *- New Mexico*

Listed below are examples of state programs that address these purposes.

The 8 Purposes of NCLB II D

Purpose 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***.

§ **Programs that Improve Academic Achievement in Reading**

State	Examples of NCLB II D Programs *(Reading, Writing, and Language Arts)*
CA[2]	Upland Unified School District. The targeted student reports from MyAccess! have shown student improvement in writing. The average holistic baseline score for seventh grade in October 2005 was 2.54. In December 2005, the average holistic score increased to 3.02. In eighth grade the average holistic baseline score in October 2005, was 2.67. In December 2005, the average holistic score increased to 3.24. According to targeted teachers' grade reports, students' grades and work samples in writing have improved.

---

[2] Example from Round 3

State	Examples of NCLB II D Programs *(Reading, Writing, and Language Arts)*
ID	Pocatello School District - Fast ForWord to Reading The Fast ForWord to Reading project will be implemented at three elementary schools in the Pocatello/Chubbuck School District #25. The Fast ForWord computer-based software will target students who are below proficient in reading at Jefferson, Lewis & Clark, and Wilcox Elementary schools. These schools serve 1,800 students from low socio-economic and high mobility populations. The project will improve student academic achievement and increase the number of students proficient in reading as measured by the Idaho Standard Achievement Test and the Idaho Reading Indicator. Teachers and principals will receive high-quality, sustained professional development in the utilization of Fast ForWord software.
IN	As a Year 4 project, Ed Tech in the North White School Corporation is continuing to make a profound impact on teaching and learning for all students and teachers in the district. ISTEP+ scores in the Middle School have increased from 56.9% of students passing to 65% passing while the student population has become more diverse. The project has focused on: § Improved Language Arts skills for middle school students through innovative teaching strategies; § A structured format for implementing process writing for all students; § Continued enrichment of programming and relationships with the diverse ESL population in the district. North White School Corporation Ed Tech project is a data-driven, scientifically based research application of best practices for all teachers and students through district-level initiatives of the Staff Development Team.
NE	*Tales of the West Digital Storytelling* projects will provide a technology environment in which students create their own digital stories using video, writing, digital photography, graphics, music and sound to express their interpretations and share factual information about concepts relevant to existing curriculum.
OR	EETT funding in North Clackamas School District helped to close the achievement gap in Title I schools. On-Demand, classroom access to technology tools, instructional support on "in classroom" support resulted in increased student achievement in reading and mathematics. North Clackamas School District partnered with Reynolds School District were student achievement gains indicated that the achievement gap with Title I students had closed and the gap for ELL and special education students was significantly decreased.

§ **Improving Academic Achievement in Mathematics and/or Science**
Note: These are examples of the NCLB II D grants awarded to the nation's school districts in Round 4.

State	Examples of NCLB II D Programs *(Mathematics and/or Science)*
IA	AEA 9 Mathematics Project with Integrated Technology (2006-2009) goals are to improve the mathematics problem-solving and reasoning skills and technological literacy of all middle and high school students; and, to improve the quality of mathematics instruction and the technological capacities of all middle and high school mathematics teachers in AEA 9 through the implementation of Cognitive Tutor Algebra I and Geometry. The E2T2 Project Action Plan has two objectives: Objective 1: By May 2009, all grade 7-12 mathematics teachers in AEA 9 school districts will deliver mathematics instruction using scientifically research-based mathematics curricula and instructional strategies and will use technology in the classroom to improve student achievement in mathematics. Objective 2: Middle and high school students enrolled in the E2T2 technology-supported curricula will improve their performance on mathematics assessments of problem solving and reasoning by 25% when compared to control groups by May 2009.
NY	Title II D funds for Region 8 (Consortium of School Districts 13, 14, 15 and 16) EETT project supported programs that advanced student's academic performance in Math, Science and English. The program: § Provided schools with technology based literacy programs, equipment and staff development that enabled teachers to provide direct assistance for low performing/at risk students to improve their literacy skills and their confidence in handling grade level math and science content.

State	Examples of NCLB II D Programs *(Mathematics and/or Science)*
	§ Expanded the use of streaming video, distance learning, and video conferencing to bring the world directly into the classroom. § Provided opportunities for students to make global connections. § Provided handheld devices (Axims) that increased student motivation and brought relevancy to the classrooms. § Provided laptops for writing and research. Examination of student work indicates that students are using technology in written, auditory, and visual expression, and to demonstrate their accomplishments in problem solving and decision-making. Teachers report significant increase of uninterrupted instructional time indicating students are on task and engaged. Schools in the program report increases in Math and ELA scores.

§ **Developing Technology Literacy Skills in Students**
   Note: These are examples of the NCLB II D grants awarded to the nation's school districts in Round 4.

State	Examples of NCLB II D Programs *(Technology Literacy)*
AK	Juneau Geo Treks Project. The focus of the Geo Treks Project is the integration of technology into the curriculum and daily instruction of middle school classrooms in the Juneau School District. Classroom projects that incorporate Global Information System (GIS) and Global Positioning System (GPS) technologies will be developed to meet standards in geography, history, science, math, language arts, and technology. Through best practices in staff development, teachers will gain the competencies necessary to sustain this project for future cohorts of students.
MD	The Maryland Student Technology Literacy Consortium is a continuing partnership focused on ensuring that all students are technologically literate by the end of eighth grade, a requirement of No Child Left Behind. The consortium has developed a definition of and standards for student technology literacy in clear and measurable terms, a plan for teaching technology literacy skills, and a process for assessing student technology use and literacy. The consortium is seeking key stakeholders' input, including business, higher education, and associations. The draft standards have gone through a national expert review process and are currently undergoing revision based on that review. Professional development modules have been created to assist teachers in understanding the standards and integrating them effectively into instruction.
NY	In NYC Region 4 of New York City, the NCLB II D funds are supporting grade level inquiry projects in over a thousand public and nonpublic school classrooms. Such project-based learning improves student achievement and promotes the acquisition of twenty-first century skills. These projects have been designed to scaffold critical thinking and problem solving strategies, nonfiction literacy, information literacy, and technology skills, use of global communication and collaboration tools, ability to work on a team, and the development of a global work ethic. The latest data from these classrooms confirms that these students have not only improved their math, literacy, science, and social studies test scores, but have become more self-directed and engaged learners, with improved attendance, especially at the high school level. Another significant impact of this implementation is the change in teacher practice. Region 4 has leveraged the imperative to integrate technology into the teaching learning process to introduce teachers to the use of inquiry to promote collaboration and deepen understanding.
SC	Jasper County South Carolina, a very high need school district, received a three year competitive grant designed to hire technology coaches. The coaches were assigned a minimum of 12 teachers with the intent of raising their technology proficiency level as measured through a portfolio assessment system. This grant also included a process to assess the technology proficiency of the students taught by the teachers assigned to the technology coaches. Over the three-year period, all the teachers were assessed and assigned an advancement of at least one proficiency level in their technology proficiency. This project was used to collect student technology proficiency data to be used later to measure their achievement in technology standards.

Purpose 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.

§ *Increase Access through Partnerships*
    Note: These are examples of the NCLB II D grants awarded to the nation's school districts in Round 4.

State	Examples of NCLB II D Programs *(Increasing Access through Partnerships)*
AZ	The Pinal County Interactive Television Consortium, an affiliation of ten school districts and one community college, provides and supports videoconferencing in central and southeastern Arizona through classroom content, professional development, videoconference room construction, and high-speed connectivity. Some of the outcomes were 122 teachers participated in six hours of professional development (technical and pedagogical) with extended coaching and mentoring by fifteen teacher coaches. A videoconference handbook was completed. Sixty-seven lesson plans were developed and evaluated. One hundred and fifty videoconferences were conducted. A model math tutor professional development program was created along with training materials. Twelve teachers participated in 28 hours of PD training via ITV to improve student's math proficiency. Math tutored students improved their overall math test scores by 11%. All ITV equipment has been installed and is working at all sites. Ninety-five parent demonstrations were conducted. Approximately 29,000 newsletters were sent to parents. Seven newspaper articles were published about the project.
FL	PREPARE: EETT Leveraging Laptops Project. Project PREPARE provides school administrators, teachers, students, and parents the technological tools (student laptops and PALM handheld devices) and training necessary to transform the learning environment at school and at home to enhance student achievement, cross the digital divide, and truly do new things in new ways. The project engages students in project-based learning to facilitate Hurricane Preparedness, advancing students readiness to enter adulthood with the 21st Century Skills necessary to be productive citizens. Participating elementary, middle, and high school students will utilize project technology across the curriculum to work collaboratively to provide pertinent emergency preparedness information to local, state, and national Emergency Operations Centers. The information provided will be used by emergency services personnel in planning future hurricane preparedness and recovery efforts. Additionally, data collected and publicized via the PREPARE project will assist community members in determining their current level of preparedness and the necessary steps to becoming adequately prepared for disaster.
VA	The Central Virginia Technology Consortium provides multilevel summer workshops that train teachers to understand information literacy and use technology integration tools, such as Inspiration, video-editing software, curriculum-based software, and United Streaming. Additionally, the Central Virginia Technology Consortium has created a cohort of Tech Mentors at the middle school level. Tech Mentors attend graduate-level courses in technology leadership to assist teachers and instructional technology resource teachers in member school divisions. School administrators have been trained to evaluate teachers on technology integration. The consortium also developed a rubric for evaluating technology integration. To support this work, the Central Virginia Technology Consortium taps into the technological expertise of local universities and public television stations to develop resources for summer workshops.

§ *Increase Access through Establishment of Initiatives*
    Note: These are examples of the NCLB II D grants awarded to the nation's school districts in Round 4.

State	Examples of NCLB II D Programs *(Increasing Access through New Initiatives)*

AL	The Alabama Learning Exchange (ALEX) is a free, state-supported educational Web portal designed to provide the best, high quality resources and one-stop shopping for Alabama's teachers, principals, and students. Over 2000 panel-reviewed lesson plans linked to Alabama's most recent Courses of Study are available for all teachers to download today and use in their classrooms immediately. This nationally recognized web portal contains a wealth of additional resources to enhance learning in every content area - all digital, all online, all completely Alabama's. ALEX website: http://www.alex.state.al.us.
DE	An Information Power Portal competitive grant was used to increase access for instructional technology to students and staff to increase home-school interactions. This was done through a web-based portal, which houses instructional units and services for students, teachers and parents. Staff participated in high quality professional development to create those units which would be housed on the districts website. The entire school community has been trained how to access and utilize the site, depending on the audience (parents, students and teachers). Teachers are also able to use this site to deliver electronic syllabi, which they connect to for all class instruction.
OK	The district and project goals are to purchase needed technology and train all district administrators, teachers, and the librarian in technology uses to support and improve teachers; to develop strategies that integrate technologies to maximize learning; and to improve student's academic performance. The district used Enhancing Education Through Technology Funds to purchase a mobile cart with 24 wireless notebooks, 20 computers for the new elementary lab, 4 LCD projectors, and 2 electronic whiteboards.

§   *Increase Access through Expansion of Initiatives*
 Note: These are examples of the NCLB II D grants awarded to the nation's school districts in Round 4.

State	Examples of NCLB II D Programs *(Increasing Access through Expansion of Initiatives)*
CT	Killingly Intermediate school used the EETT funding in conjunction with other funding sources to enhance and enrich the district's on-going development of the Assessment Driven Instruction curriculum, on-going staff technology training, and the district's technology plan, including substantial investment in technology infrastructure. The school acquired two mobile laptop laboratories, a stationary computer lab, and high-speed switches to facilitate school-wide implementation of technology integration across the curriculum.
SD	As a major part of its school improvement activities, Mitchell Middle School (MMS) (in Level1 or SI) has begun a 1:1 laptop initiative in the 2005-06 school year with its seventh graders utilizing Title II part D funding. Within 1-2 years, all MMS students will have laptops. The research on laptop initiatives demonstrates that such programs improve student achievement in reading and math (two areas MMS has focused on for improvement under NCLB) and also in science, writing, and technology skills. Improvements have been noted in other NCLB areas: graduation rates and attendance. But what several studies note, especially Henrico, is the necessity for excellent staff training in order to make the 1:1 initiative an educational success. Training must occur in the areas of technology integration and skills (something the district is accomplishing through the tailoring of the training to needs identified by local and provider surveys). The training is utilizing all the facets Joyce and Showers, have identified as necessary for effective educational professional development: Theory, Demonstration, Practice, Feedback and Coaching. These facets are guaranteed through a long-term professional development program, which builds technology integration together as a staff: a ten-day camp (summer 2005), three non-consecutive training days (2005-06 SY), a second camp (Summer 06), and another three day training (2006-2007 SY). The professional development has been instructed through a mix of providers and district instructors. The program is being evaluated, both formatively and summatively, by external and internal evaluators, with primary focus on MMS's success on all NCLB criteria.

Purpose 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.

§ ***Acquisition, Development, or Interconnection of Effective Technology Infrastructure***
Note: These are examples of the NCLB II D grants awarded to the nation's school districts in Round 4.

State	Examples of NCLB II D Programs *(Access: Technology Infrastructure)*
GA	A Title II, Part D Competitive Grant process in the spring of 2006 awarded fifty middle and high schools in Georgia the opportunity to implement a wireless classroom environment. Each grant of $75,000 is designed to help each recipient deploy a wireless network for the instructional areas in one Title I middle school or high school, and to establish a wireless 1:1 computing environment in at least one classroom in that same school. The Georgia Department of Education believes that powerful technology integration strategies cannot emerge without hands-on, real-world learning opportunities for students and teachers. Technology is a powerful tool, but it is only a tool. Effective teaching practices must first be in place before technology can be utilized to its fullest potential. Through the power of technology, learning can happen anytime and anywhere. Educators need to provide realistic and meaningful learning opportunities both in and outside the classroom. As part of the grant application, the schools identified a leadership team comprised of the 1:1 teacher(s), the building-level administrator, and the technology coordinator. This dedicated group of educators is working together to successfully develop and implement their project plan for the year. Designated funds are included in the grant for professional development, as well as eighty hours of direct instructional and technical support provided by each school's regional Educational Technology Training Center (ETTC.) Together with the support of their ETTC and the members of their leadership teams, these 1:1 teachers are giving their students real-world opportunities to shape their own future. These students in turn are helping Georgia reach its goal of leading the nation in improving student achievement.
OK	The district is committed to the infusion and integration of technology into all classrooms, in all curricular areas, in order to provide the most meaningful and comprehensive education for all students so that the goal of increased student achievement is met. To this end, the district created wireless classrooms by integrating 26 wireless notebooks and 2 electronic response systems, along with mobile carts for easy access and usage. Continuous and ongoing professional development helped ensure success of the project.

Purpose 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.

§ ***Promote Effective Technology Use: Professional Development through Consortia***
Note: These are examples of the NCLB II D grants awarded to the nation's school districts in Round 4.

State	Examples of NCLB II D Programs *(Professional Development through Consortia)*
MT	Montana currently has six competitive grants operating. All of the grants are placing a heavy focus upon professional development to build teacher technology and integration skills with the intended outcome of impacting student achievement. Further, they are focusing upon creating consortium of rural school districts separated by great distances, through the utilization of partnerships with teacher education departments at the various campuses of the university system along with specialized mentors selected to meet the needs of the individual grants. All grants are showing promise in creating consortiums for the effective and efficient delivery of professional development, the use of outside mentors, and building working relationships with teacher education programs.
NM	Melrose Partnership grant. This award focused on technology support and professional

State	Examples of NCLB II D Programs *(Professional Development through Consortia)*
	development for several rural districts in the eastern portion of NM. The grant provided a technology coordinator for 8 schools and provided extensive professional development, which focused on student improvement.

§   *Promote Effective Technology Use: Online Professional Development*
   Note: These are examples of the NCLB II D grants awarded to the nation's school districts in Round 4.

State	Examples of NCLB II D Programs **(Online Professional Development)**
MA	Worcester Public School's Partnership for Technology Professional Development. Through a partnership with three of the top professional providers in the state: The Center for Applied Special Technology (CAST), the Massachusetts Elementary School Principals Association (MESPA), and Virtual High School (VHS), Worcester Public School District is working with the Massachusetts Department of Education to use the state's learning system, MassONE to provide quality online professional development to teachers and administrators across the Commonwealth. MassONE is the state's set of web-based tools for communication, collaboration, and curriculum planning, which are designed to support PreK-12 standards-based teaching and learning. These courses are offered at no cost to teachers and administrators across the Commonwealth. The Department will award professional development points for the courses, and academic credits are available through partnership with higher education institutions. Registration will be accepted on a first-come, first-served basis with preference given to high need districts that are enrolling teams, followed by those offering stipends to teachers using the NCLB II D Entitlement funds. Six courses are being offered in the first year. Most of the instruction will be asynchronous, which means that participants access a course, participate in discussion, and complete the coursework at times most convenient for them. The courses are offered in three periods during the year. It is expected that approximately 500 educators will participate in these courses during the year. For information and updates on this program: http://www.doe.mass.edu/edtech/teacher/ptpd.html.
WA	The NO LIMIT! Network Learning Community Project includes working with teams of teachers in grades 5-9 to improve teaching practices in mathematics using online tools such as My eCoach, the Internet, and research-based methodologies. Much of the instruction and professional development is delivered online after the initial face-to-face meetings. In the NLC, 3-5 teachers in a school building actively collaborate to solve math literacy problems. Learning together as they develop solutions in common, NLC participants take on the role of learners as well as teachers in such an environment. There is a dynamic exchange of knowledge between all participants (including from children to adults, and from adults to children); thus setting a foundation for construction of new knowledge.

§   *Promote Effective Technology Use: eCoaches/ Mentors for Educational Technology*
   Note: These are examples of the NCLB II D grants awarded to the nation's school districts in Round 4.

State	Examples of NCLB II D Programs *(eCoaches/ Mentors for Educational Technology)*
ME	eMINTS - In Maine, eMINTS is being funded by Title II D and has 9 trainer/mentors statewide, roughly based in Superintendent's regions. Each mentor receives training through MLTI (One-one Computers initiative) and eMINTS and then in turn works with eMINTS teacher-leaders in their region in providing intense (200+ hours) training in teaching methods that optimize the utilization of technology. While the mentors' focus is on working with their eMINTS teachers and consortium schools, they are also available as resources to others in the State as well.
MS	Embracing Technology, Enhancing Teaching (ET2) proposes a systematic change in the teaching and learning process in the Philadelphia Public School District (MS) through seamless integration of educational technology. The principal goal of ET2 is to improve student academic performance through onsite technology professional development and increased access to quality technology resources. With the assistance of a school technology facilitator, teachers and students will have the support needed to integrate technology into daily instructional activities. Elementary teachers for grades 4-6 will be provided a full-time

State	Examples of NCLB II D Programs (*eCoaches/ Mentors for Educational Technology*)
	onsite technology facilitator. One-on-one mentoring and coaching as well as small group trainings will be provided for teachers is reading, language, and math. One lead teacher from each school site will attend all training sessions and work closely with the technology facilitator. Additional training sessions and technology resources will be provided for the teachers and students in grades 4-8 for increasing teacher proficiency in using technology in their daily instruction. These acquired skills will help teachers to integrate technology into the curriculum for improving student achievement through student assessment, remediation and instructional activities.
WV	Lewis County Schools' competitive grant is promising because the Technology Integration Specialist (TIS) that will be working in the targeted school has been a previous TIS. In addition, the school district has been very supportive of the TIS model at all levels and has funded several TISs in the county through other funding sources.

§ *Promote Effective Technology Use: Professional Development Related to Integration*
  Note: These are examples of the NCLB II D grants awarded to the nation's school districts in Round 4.

State	Examples of NCLB II D Programs (*Professional Development Related to Integration*)
MN	A project coordinated by the Minnesota River Valley Education District (MNRVED), is designed to steer teachers, administrators and board members through barriers that are preventing them from fully integrating technology into their classroom. This will be accomplished by using a series of unique online and onsite professional development opportunities. Teachers will assess their technology integration knowledge and skills as they relate to the ISTE/NETS standards and be directed to online sites for independent study. Online learning communities will be formed with teachers who will integrate technology into lessons/units and administrators and school boards who will examine data, resulting in a systemic approach to support technology integration. The project will use assessment tools developed by TrueNorthLogic to assess their level of technology knowledge, skills and integration as they Align with ISTE/NETS.
NJ	The Students Using Technology To Achieve Reading - Writing (STAR-W) grant program was designed for students to achieve the Core Curriculum Content Standards in language arts literacy in grades three through five by providing classroom teachers ongoing professional development and in-class support that focuses on integrating technology into the curriculum and instruction. The program had a minimum requirement for two (2) third-grade teachers, two (2) fourth-grade teachers, and two (2) fifth-grade teachers participating in the same school who learned strategies to infuse technology into the curriculum. In year one of the grant program, only the third and fourth grade teachers were given intense follow-up and in-class support. In year two and again in year three of the grant program, the third, fourth, and fifth grade teachers were given intense follow-up and in-class support. The outcome for the third year continuation grant is for all three grade levels to develop the capacity of the teachers to replicate the successful components of the program to other classrooms, schools or school districts. All participating teachers continued to be supported and assisted with the development of language arts literacy programs where students use technology as a tool during their regular instructional time.
RI	Funds were provided for partial support of computers in the classrooms of participants in the RI Professional Development Institute with the intention of creating a 4:1 ratio of students to computers in each classroom. Additional equipment included printers, presentation devices, digital video, scanners, handheld devices or additional wiring for these classrooms.

Comment [CF1]: This had some weird formatting issues where the last line was always in the middle so I had to reformat.

§ *Promote Effective Technology Use: Professional Development on Differentiating Instruction*
  Note: These are examples of the NCLB II D grants awarded to the nation's school districts in Round 4.

State	Examples of NCLB II D Programs (*Professional Development on Differentiating Instruction*)
TX	This TARGET grant was written in response to needs of teachers. The ESC 20 staff

State	Examples of NCLB II D Programs (*Professional Development on Differentiating Instruction*)
	participated in professional development to develop new skills in virtual labs and online simulations, videography, video production and editing, and handhelds in all content areas. Those impacted include approximately 6,700 students and over 300 teachers and administrators. The STaR Chart showed favorable results.

§ *Promote Effective Technology Use: Assessing and Advancing Teacher Proficiency*
   Note: These are examples of the NCLB II D grants awarded to the nation's school districts in Round 4.

State	Examples of NCLB II D Programs (*Assessing and Advancing Teacher Proficiency*)
DE	Districts are involved with using the EETT competitive funding to further their teachers' expertise with using technology to increase student academic achievement. This is accomplished through professional development in LoTi (Levels of Technology Implementation). Teachers participate in a state funded survey to find out their level of technology professional development. Teachers raise their level of technology implementation though intense LoTi training. Teachers connect level thinking activities with seamless technology, thus raising their levels of technology use. Students become more involved in standards based activities using technology.

§ *Promote Effective Technology Use: Professional Development for Inducting/Retaining Teachers*
   Note: These are examples of the NCLB II D grants awarded to the nation's school districts in Round 4.

State	Examples of NCLB II D Programs (*Professional Development for Inducting/Retaining Teachers*)
NC	Teacher Retention: In Ashe County, NC, Westwood Elementary's collaborative process is based on entire grade level teams working with the technology facilitator and school library media coordinator to develop units of instruction. This authentic, project-based approach allows each teacher within the team to concentrate on his or her areas of expertise and interest and gives students an opportunity to experience a variety of teaching styles, technology tools, and content. As one second year teacher stated: "I'm not even sure I'd still be teaching if it hadn't been for the IMPACT model. The collaboration, along with the media and technology, made my early teaching career so much better. I could concentrate on developing a lesson really well because I knew that others were developing other lessons for my students. I am such a much better teacher than I would have been by myself!"

§ *Promote Effective Technology Use: Communities of Learners*
   Note: These are examples of the NCLB II D grants awarded to the nation's school districts in Round 4.

State	Examples of NCLB II D Programs (*Community of Learners*)
WA	The overarching goal of the NO LIMIT! Project is to develop classroom models where students in grades 5-9 are engaged in activities that lead to a deeper understanding of mathematical concepts and improvement in mathematics achievement. This is accomplished through the development of professional learning communities at the building level that focus on effective mathematics instruction and integration of appropriate technology. Participating school districts are expected to support the development and operation of a professional learning community with the expectation that it remains in place beyond the duration of the project. Evaluation has noted gains in student motivation and engagement, and changes in instructional practice. Some participants have seen significant improvement in student mathematics achievement, but not all.

§ *Promote Effective Technology Use: Develop Experts*
  Note: These are examples of the NCLB II D grants awarded to the nation's school districts in Round 4.

State	Examples of NCLB II D Programs (*Professional Development: Develop Experts*)
AL	In Elmore County, a cadre of school-based teaching and learning school technology coordinators is being formed. The goal of this project is to have the technology coordinators act as technology mentors to teachers and administrators at their schools in order to integrate technology into teaching and learning to improve student achievement. School Coordinators participate in professional development, develop and implement lesson plans for meeting the Technology Course of Study content standards, and mentor teachers in their schools on technology integration. Teachers will participate in courses emphasizing the integration of technology into core curricula in order to facilitate the implementation of proven and effective curricula that include integrated technology and are designed to help students reach challenging academic standards. As an end result, teachers will then be able to design effective projects to support student learning. Student test scores on classroom tests and norm-referenced tests will be used to track improvement in student achievement.

Purpose 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.

§ *Increase Professional Development for Administrators*
  Note: These are examples of the NCLB II D grants awarded to the nation's school districts in Round 4.

State	Examples of NCLB II D Programs *(Professional Development for Administrators)*
UT	Administrators Working with Educational Data – AWED. Effective school leadership requires facility with data. Seven rural districts in Utah are participating in a two year professional development for school leaders where they are learning to use technology tools to mine their school data and classroom observation data.

Developing a learning community for leaders where they look at their school and district data, discuss strategies for helping teachers help students, and investigate research on effective classrooms, is having a positive impact in their schools. The first year of data shows positive trends on student achievement on state end-of-level tests. |

§ *Increase Professional Development on the Use of Research in Decision-making Related to Resources*
  Note: These are examples of the NCLB II D grants awarded to the nation's school districts in Round 4.

State	Examples of NCLB II D Programs *(Professional Development with Research to Inform the Selection of Resources)*
KY	The Kenton County project goal is to employ a powerful research-based assessment tool that will provide immediate feedback on student progress and proof of achievement so teachers and administrators can monitor and adjust teaching strategies on an ongoing basis to meet student specific needs. Their first objective is to purchase the software, hardware, support and training that will allow them to implement this research-based program. Their second objective is to support the implementation through administrative progress reviews. Their final objective is to move 66% of the schools currently at the Progressing-level to the Meeting-Goal level based on the 2005-2006 CATS Combined Index.

§ *Increase Professional Development on the Use of Research in Decision-making Related to Instruction*
  Note: These are examples of the NCLB II D grants awarded to the nation's school districts in Round 4.

State	Examples of NCLB II D Programs *(Professional Development with Research to Inform Instruction)*
IA	The goal of AEA 8 is to provide exemplary, sustained professional development and continuous support for middle level staff and buildings through the learning and application of scientific, research-based reading strategies with supportive appropriate technologies that result in the development of an improved curriculum in multiple content areas and continuous improvement in the proficiency level of middle level 5th - 8th grade students in reading.
ND	West Fargo Public School District has been struggling to make AYP in the subcategories of special Education and LEP. Through this grant, they are focusing on training in the use of technology for the teaching staff members who work with these two populations. They have also hired a data analyst who will assist in the collection of data in the district and help to find areas of weakness in the instruction provided to these students.

§ *Foster Effective Uses of Technology to Support Assessments for Learning*
   Note: These are examples of the NCLB II D grants awarded to the nation's school districts in Round 4.

State	Examples of NCLB II D Programs *(Assessments for Learning)*
MD	An Algebra Data/Analysis Collaborative partnership was established in Round 4 to support the attainment of skills and knowledge in Algebra/Data Analysis through the use of e-Learning. The Collaborative will: (1) enhance the online resources for Algebra/Data Analysis in support of the Core Learning Goals and High School Assessment; (2) develop, pilot, and provide online professional development using a consistent protocol based upon the Maryland Teacher Professional Development Standards and focused on providing high quality professional development for teachers of Algebra/Data Analysis; (3) select and use a learning object repository in order to make the digital content from the online student course and professional development course accessible to Algebra/Data Analysis teachers; and (4) develop, pilot, and provide a process for online course design, development, implementation, and evaluation.
ND	Madison Elementary School in Fargo is focusing on its LEP and Special Education populations with the funds that they were awarded. They will be using handheld devices in assessment for immediate data input and working with the data that they collect to make adjustments and improvements in the delivery of curriculum. There will be extensive professional development and a part-time staff person who will analyze the data and assist in helping teaching staff in making appropriate adjustments to the curriculum delivery for the targeted students.

§ *Foster Effective Uses of Technology to Support Data Driven Decision-making*
   Note: These are examples of the NCLB II D grants awarded to the nation's school districts in Round 4.

State	Examples of NCLB II D Programs *(Data Driven Decision-Making)*
AR	The state of Arkansas has concentrated NCLB II D funds (and state supplemental funds) on the EAST Initiative, a scientifically validated program that has been proven to improve skills for the 21st century, the Arkansas Learning Management System (ALMS), and distance learning resources, instruction, and professional development. Sixteen of the competitive grant recipients have been involved in a three-year experimental design research project of the EAST Initiative. Eight of the schools were selected as control schools, and eight were chosen to implement EAST. The eight control schools moved into the implementation phase during the 2006-2007 school year. Results will be available following the implementation phase.
MA	Greenfield Public Schools, CRISTAL LITE (Leaders Integrating Technology in Education). Greenfield Public Schools is joining the regional data warehouse project funded in the 2004 NCLB II D Competitive Grant Program: the Cooperative Regional Information Storage for Teaching and Learning (CRISTAL). The goal of this project is to bring participating school districts up to speed in completing the data inventory process in their districts while simultaneously engaging in an intensive series of

State	Examples of NCLB II D Programs *(Data Driven Decision-Making)*
	professional development activities. The professional development activities are designed to create data leaders and to build a climate for the effective data use in the districts, positioning them to implement the warehouse solution selected by Massachusetts. Activities will involve key stakeholders: teachers, administrators, and district's data-keepers in facilitated discussions or inquiry groups focused on data-driven decision-making. These activities will complement, augment, and ultimately prepare the staff and systems for full, meaningful participation in the state's Data Warehouse Project.
MI	The "School and Classroom Formative and Summative Assessment Enhanced Through the Use of Technology" grant program offered opportunities for school districts to: § Provide professional learning to school and district teams that will define and implement methodologies that will enable teachers to increase their knowledge and use of student assessment facilitated by technology. § Provide teachers the expertise to use classroom and school assessments to teach to the correct level of difficulty and appropriately pace instruction. § Provide the opportunity for teachers to acquire technology devices/software that will facilitate student assessment in order to provide timely feedback and re-teaching opportunities. § Demonstrate how technology enhanced student assessment will advance teaching and learning and enhance academic achievement for children. Nine grants were awarded in amounts up to $300,000. Consortia formed between Intermediate School Districts (ISDs) and districts within that ISD area that contain one or more schools that have been identified for improvement or corrective action because they have not made Adequate Yearly Progress (AYP) for one or more years and that fit within the earlier stated guidelines on family income below the poverty line were eligible. In addition, other school districts within the eligible ISD were permitted to participate. Evaluations on these grants are not due until June 30, 2007.
MN	The project, Data Driven Success, is the proposal of a consortium representing approximately 22 percent of the state's K-12 population. Sagebrush Corporation, the distributor of Sagebrush Analytics, a data-driven decision-making/data-warehousing tool, is the corporate partner. This project will: • Train middle school and high school math and English teachers and administrators in analyzing data, identifying patterns from the data, and developing and implementing strategies and goals for improvement of student achievement. • Assist districts in developing and implementing data-driven instructional strategies through facilitated discussions and opportunities to share best practices. • Support teachers and administrators as they work together in professional learning communities to develop the skills to use data as an effective tool to drive instruction and improve student achievement. A website will then be created which will include: best practices, training materials, other data-driven decision-making and data driven instruction documents, links to related information, on-line training, and facilitated threaded discussions. This project is being coordinated by the Central Minnesota Education Regional Development Council (cmERDC).

Purpose 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.

§ ***Provision of Web-based/Online Resources to Advance Effective Technology Use***
   Note: These are examples of the NCLB II D grants awarded to the nation's school districts in Round 4.

State	Examples of NCLB II D Programs (Access: Online Resources)
NE	Every Teacher Web page project is coordinated by the regional service units to help train teachers to use web pages to communicate with students, patrons and other educators. The project encourages a degree of uniformity in style and types of information contained in web pages.
OH	The Cleveland City School District - Charles Dickens Elementary project Community and Teachers, Students and Parents includes all members of the school. Parents and the community will have access to educational opportunities in technology integration. The student population that scored below proficient on the statewide Ohio Achievement Test will be targeted. An online learning tool will give teachers the opportunity to specify instruction based on a student's needs, so that all teachers can modify lessons and target student's individual learning. This comprehensive program will afford each student the opportunity to acquire the technology skills necessary to thrive in a high tech society and ensure that each student is technology literate by the end of the 8th grade. An after-school program and weekend program with the Mt. Pleasant Community Center has been incorporated to continue the project's goals.
VT	Vermont initiated a competitive EETT program targeting "technology integration" by pulling together 30 prominent integrators from around the state. The teachers and administrators involved in the program created a portal for technology integration resources, and plan to expand their work next year.

§   *Provision of Virtual Spaces for Online Communication*
   Note: These are examples of the NCLB II D grants awarded to the nation's school districts in Round 4.

State	Examples of NCLB II D Programs *(Access: Online Resources)*
OR	Reynolds School District in Troutdale, Oregon focused their EETT competitive grant on English-language arts in Title I schools. As a component of their grant, Reynolds developed a Forum for Elementary School Literature (http://www.reynolds.k12.or.us/~lenotto/litforum/categories.php). This site provides a protected forum for students to discuss homework questions, the latest book they are reading, recommendations on books, and current events. It also houses Ed Tech lesson plans for teachers interested in using the Forum for instruction. At the end of the grant, Reynolds reported that Title I students were achieving at the same levels as their peers.
NJ	New Jersey's goal for the Kids Officially OnLine (KOOL) grant program is for students in grades six through twelve to achieve the Core Curriculum Content Standards through online learning. The two-year, limited competitive grant program was to improve academic achievement through the use of technology in schools and to integrate technology with teacher training and curriculum development to establish successful research-based instructional models. LEAs adopted an existing and successful virtual course, offered the course, evaluated the results of the course, and expanded the course delivery to additional students within or outside the current school district. Year two focused on evaluation of the implemented course and expansion of the course to additional students. In year one of the KOOL grant program, the lead agent acquired and implemented an online course in an area of need as recognized by the partners (the lead LEA and another LEA - one of which is a high-need school district). The partners identified one or more grade levels from six through twelve, which the online course addressed. Students in the targeted grade level(s) throughout the state were offered the opportunity to participate in the course. In the second year of the grant program, LEAs continued to offer the same online course or under extenuating circumstances offer a different online course, evaluate the entire implementation process, modify the implementation based on the lessons learned in year one, and offer the course to more students than in year one. The students were from within the current school district and/or enrolled in an LEA where a newly established partnership was formed.

State	Examples of NCLB II D Programs *(Increase Authenticity or "Real World" Connections)*
KY	McCracken County Public Schools joined with the local Chamber of Commerce to implement a business and education collaboration. The business and education collaborative model bridges the gap by providing educators the strategies to integrate emerging technologies and real-world technology systems into classroom instruction, and to recognize the influences of technology on the career choices of students. The vision of the district's initiative to "Enhance Education through Technology" is to enhance educational opportunities through a focus on the integration of technology with "real world" applications. The district aspires to high goals and provides assistance to the schools with the greatest needs. It is obvious that the integration of technology continues to play a huge role in meeting their goals and the enhancement of the education and business model is essential for continued success.

Purpose 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.

§ *Support the Evaluation of Programs for Impact*
Note: These are examples of the NCLB II D grants awarded to the nation's school districts in Round 4.

State	Examples of NCLB II D Programs *(Support Evaluation of Programs for Impact)*
GA	eMath is a four-year Ed Tech Competitive Grant for 3rd - 5th grades designed to increase student achievement in mathematics, improve classroom access to modern learning technologies, and enhance educators' understanding of scientifically-based research and evaluation encouraged by NCLB. Independent evaluation is an important component of this grant. The Learning and Performance Support Laboratory (LPSL) at the University of Georgia is conducting rigorous evaluation of the grant implementation and success. Student performance measurement tools include the Balanced Assessment in Mathematics (BAMs), and Georgia's large-scale Criterion-Referenced Competency Test (CRCT). Preliminary findings from the LPSL evaluation and research for the first year of implementation and assessment of the eMath Grant (2005-06) taken directly from the report are: * Uniform CRCT improvements found for all students. Changes between 2nd and 3rd grade CRCT math test scores were analyzed, and overall comparable improvement was seen in both the eMath experimental and control treatment groups. * Significant BAM scores increased for eMath students. Pre- to post-assessment scores for all students improved as expected, but eMath students scored 3% higher than non-eMath students from pre- to post-assessment. * Taken together with the CRCT findings, preliminary evidence suggests that eMath may have a significant impact on student mastery of the Georgia Performance Standards in mathematics.
WY	A partnership between two districts and the University of Wyoming plan to extend and expand the pilot uses of tablet and projector technologies focused squarely on improving instruction for at-risk students and gauge the potential success of using relatively new technologies for classroom applications. The focus of this project is to acquire equipment, access internet-based resources, and implement professional development to increase student achievement.

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

§   ***Promote Parent and Family Involvement***
   *Note: These are examples of the NCLB II D grants awarded to the nation's school districts in Round 4.*

State	Examples of NCLB II D Programs *(Parent and Family Involvement)*
NC	Community Involvement: Williford Elementary in Rocky Mount, NC, is an inner city school with a mission to lift the entire community through its children by using such invention strategies as having students create iPod End of Course test reviews and a biographical/interview whole-school unit, Heroes and Sheroes . Their community learning center is part of the school, and the IMPACT grant enabled them to buy a laptop cart that is used for online GED courses, Office Tools training and other job skills, and parenting training for the parents and the surrounding adult community. Since the IMPACT model implementation, Williford, a school with 33% of its students considered by the US ED as homeless, has become a school of choice and is the model for the rest of the school system as they move all schools to the IMPACT model.
WY	One partnership plans to continue to support and train parents to use WedGate and PowerSchool as a virtual means to connect parents to their educational community and improve their child's academic performance; to provide training to staff and tools for the classroom to implement instructional strategies where technologies are used to improve academic achievement; and, to provide time and support for rigorous academic course work to be developed for students.

FINDING 5

NCLB ll D formula grants are used for technology and infrastructure improvements at significantly higher rates than in the NCLB ll D competitive grants.

The competitive and formula grant programs have similar emphases, but the formula grants, in part, due to the large number of small grant awards, are more often used to update infrastructure and technology inventories. (See Figure 1.)

Figure 1: **Comparison of the Number of States Reporting Technology and Infrastructure Emphases for Competitive versus Formula Grants in Round 4 (FY05)**
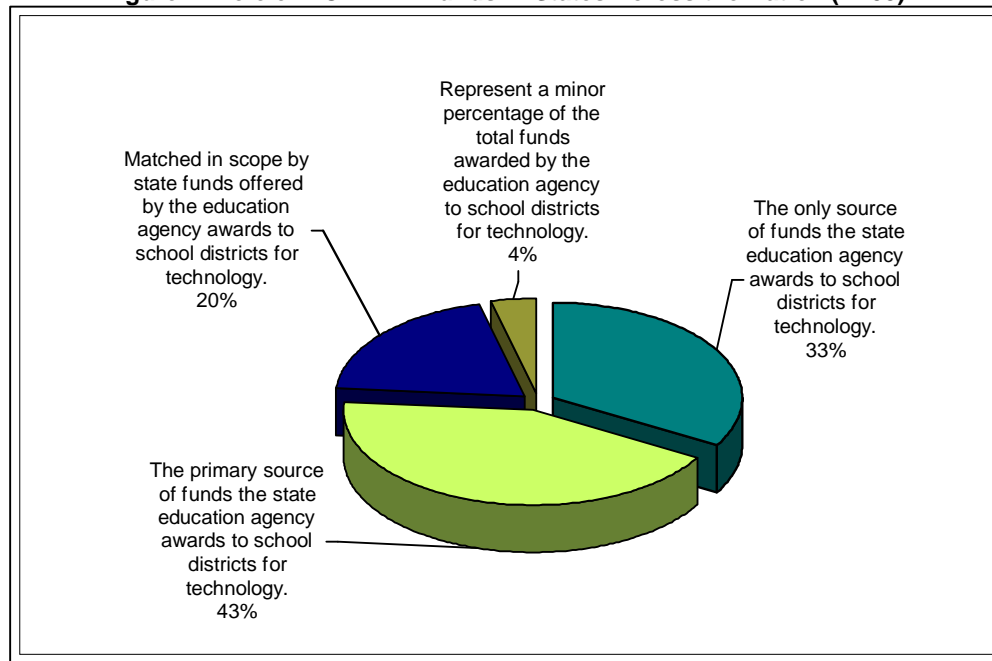

Note: Data based on 51 respondents.
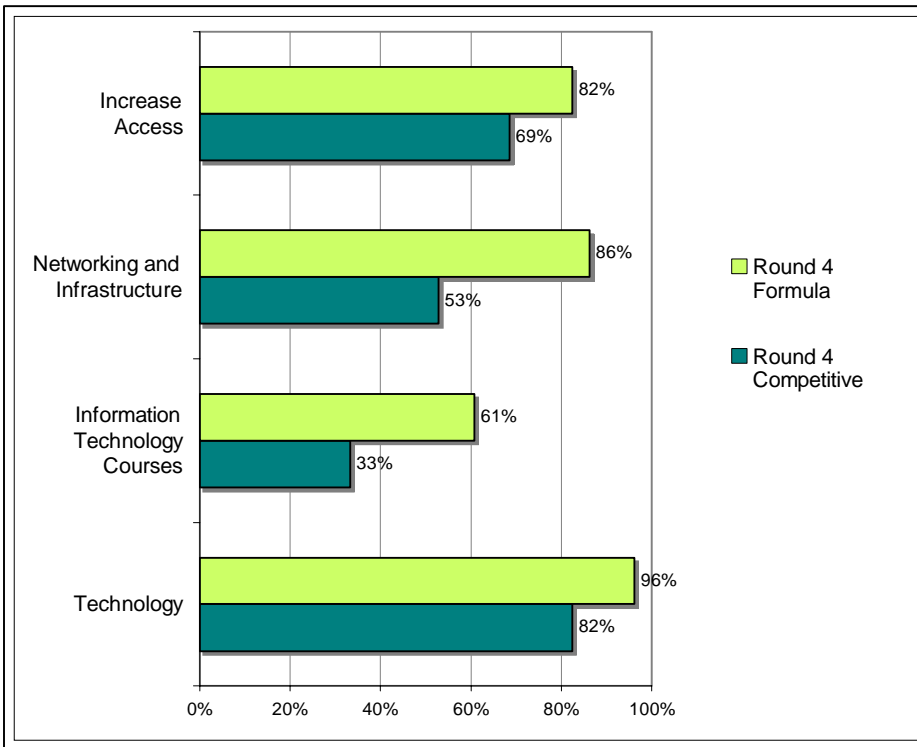
Whereas the competitive grants are focused on programmatic solutions, the survey results concluded that formula grants are used significantly more for the purpose of increasing the frequency and quality of K-12 access to technology. As noted in the chart above, 82% of states reported the use of formula grants for networking and infrastructure in comparison to 69% of states reporting such use in the competitive grants. Patterns were similar for all technology and infrastructure investments and in courses related to technology.

FINDING 6

While nationally the NCLB II D program continues to be a primary source of dedicated funding for educational technology, states are sharing that responsibility through both dedicated and optional funding sources for LEA educational technology.

The role of NCLB II D funding varies across states, although NCLB II D provides a significant percentage of educational technology funding in almost all states. In Round 4, the percentage of states reporting that NCLB II D funding was "the only source of funds" or "the primary source of funds" the state education agency awarded to school districts for technology was 76% (39 states), up slightly from 70% in Round 3.

Figure 2: Role of NCLB II D Funds in States Across the Nation (FY05)

Note: Data based on 51 survey respondents

The federal NCLB program allows LEAs some flexibility in transferring funds across Title programs. Respondents indicated that LEAs in their states used the flexibility afforded them on a limited basis. Overall, $9.7 million was transferred out of Title II D programs into other Title programs, and $8.7 million was transferred from other Title programs into Title II D programs. In addition, six (6) states reported that the net effect of REAP-flex was a substantial increase in the use of federal program funds for the purposes of NCLB II D. Overall the net effect for NCLB II D was reportedly positive.

States also noted an emerging trend for state education programs that "allow" rather than "mandate" the use of state dollars for educational technology. For example, in California, a Discretionary Block grant for $500 million allows for a menu of expenditures, including education technology; and a block grant for $100 million was earmarked for library materials, curriculum materials and/or education technology. Similarly, in Maryland's Bridge to Excellence Program, the state has a non-categorical adequacy-based funding approach where school systems decide how they will use all sources of funding to implement the goals and objectives of their Master Plans – thus educational technology is a cross-programmatic theme. A third example is in Utah where the state provides a "Student-Success" block grant within which funds can be used for purchasing technology.

The survey data finds that thirty-one (31) states included state funding for technology as a line item in their state's FY05 budget. For example: Connecticut reported that $500,000 in budget funds were allocated in 2005 for pilot projects in seven high schools to use online writing assessment tools. That included funding for online writing tool licenses for their students and wireless mobile labs. In the southwest, the New Mexico Laptop Learning Initiative allocation offered $2,000,000 in state funds for laptops in schools. In Minnesota the Microsoft Cy Pres Program (legal settlement) distributed $55.2 million in January 2006 to all Minnesota schools for technology investments.

The states that reported the NCLB Title II D funds to be the only source of funding the SEA awarded to school districts in FY05 that was specifically mandated for technology were: California, Delaware, Illinois, Kansas, Maryland, Minnesota, Mississippi, Missouri, New Hampshire, New Jersey, North Dakota, Oklahoma, Oregon, Utah, Vermont, Washington, and Wisconsin.

The percentage of states reporting that the NCLB funds were "matched in scope by state funds," in Round 4 (20%) was slightly down from the Round 3 (22%), while the percentage reporting that those funds "represented a minor percentage of the total funds awarded by the state education agency to school districts for technology" remained constant at 4%. Overall, the data suggest a decline in the number of states providing dedicated funding for technology to school districts. However, 61% of the states indicate that "state funds are available for the purchase of end user technology." In addition, as noted above, some state programs provide options for school districts to invest program funds in educational technology should school leaders consider it a priority and essential to the purposes of such programs.

After Four Years of NCLB II D

The six findings strongly indicate that technology funding from the NCLB II 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 states meet AYP.

Overall, NCLB funds in Round 4 were reported to be more focused on evidence-based practices by means of RFP priorities set by the states, and more carefully evaluated or researched, again through policies and practices set by the states.

The next two sections provide specific data on the NCLB competitive and formula grant programs.

DUAL PROGRAMS: COMPETITIVE AND FORMULA

COMPETITIVE GRANTS: FACTS AND FIGURES

Each year of the NCLB II D program, states can conduct a competitive grant process through which 47.5% of the funds allocated for that year, and any carryover funds from previous years, can be awarded to eligible LEAs. Only high need LEAs, or partnerships that include a high need LEA can apply. The NCLB II D law requires that states allocate EETT funds as follows: at least 47.5% for Competitive Grants, at least 47.5% for Formula Grants, and up to 5% for Administrative costs.

In Round 4 of the NCLB II D competitive grant program (FY05), states awarded 1,469 competitive grants, totaling approximately $240,797,454, a substantial reduction from the $318,941,206 awarded in Round 3 (FY04).

Of the competitive grants funded in Round 4, 795 (34%) were continuation grants, with 399 (27%) listed as partnership grants, and 1067 identified as LEA-only grants (64%). Approximately 69% of the competitive grants involved rural schools, with 38% involving urban schools. Survey respondents reported that 12% of the competitive grants involved an institution of higher education, 10% involved a private sector partner, and 15% involved a non-profit partner. (See Figure 3.)

Figure 3: Type of Participation Reported in Competitive Grants
Rounds 3 and 4
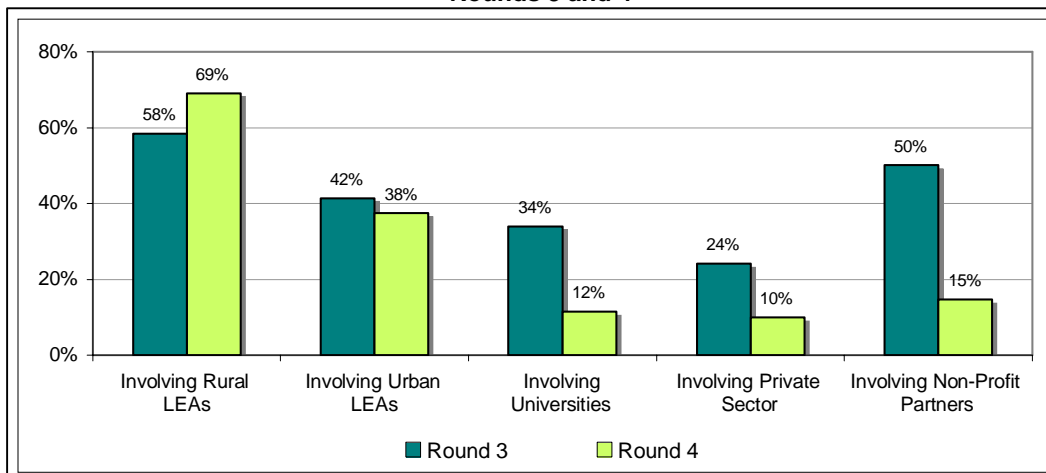
Note: Percentages based on the 51 survey respondents in Rounds 3 & 4

Overall, the decrease in federal funding in FY05 for NCLB II D correlated with a decrease in the number of competitive grants that involved partnerships.

FOCUS OF COMPETITIVE GRANTS

The rollout of the NCLB II D competitive grant program varied considerably across states. Many of the states guided their LEAs' use of competitive grant funds by establishing programmatic priorities in the competitive process.

More than 73% of states established priorities in their competitive grant processes to guide LEAs toward increased achievement of NCLB II D goals. (See Figure 4.) In alignment with the NCLB II D goals, states focused their competitive Requests for Proposal (RFPs) on the academic areas of reading (45%), writing (39%), mathematics (45%), and/or science (28%). While 33% of the states established priorities for early elementary grades, 49% did so for intermediate grades, 53% for middle schools, and 45% for high schools.

Figure 4: Content Areas Emphasized in Competitive Grant RFPs – Rounds 3 and 4
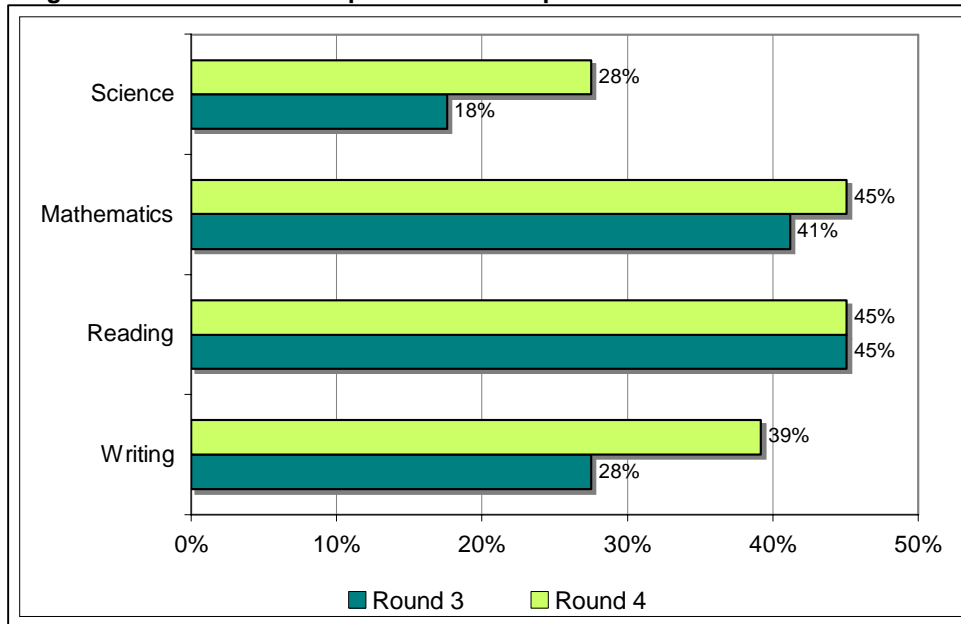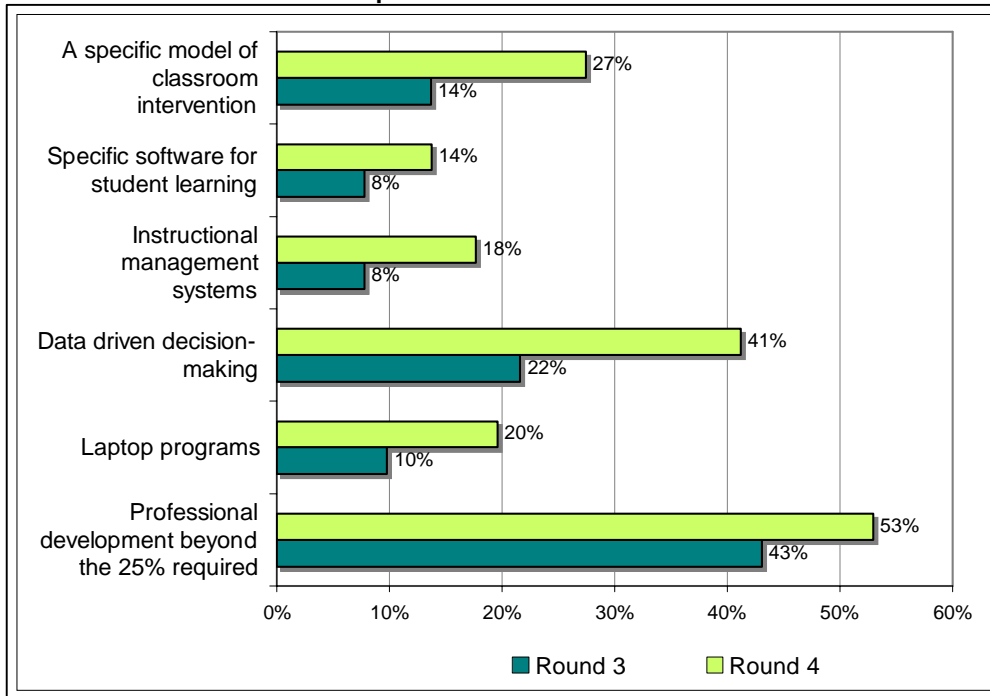

Note: Percentages based on the 51 survey respondents in Rounds 3 & 4

Other emphases in states' competitive processes included: professional development beyond the 25% required (27 states), laptop programs (10 states), data driven decision making (21 states), instructional management systems (9 states), specific software for learning (7 states), and a specific model of classroom instruction only (14 states). These numbers increased significantly in all categories from the previous year. (See Figure 5.) In this era of high-stakes accountability, the U.S. is requiring that federal education dollars be used to support evidence-based investments (e.g., Reading First and other Title program requirements).

As research on educational technology is emerging and dollars are scarcer, states are focusing the limited funds on areas of highest need or programs that have a high probability of getting

results. The continued investment by the U.S. in the What Works Clearinghouse is an indicator that such requirements will continue.

Figure 5: Percentage of States with Specific Priorities for the Competitive Grant RFPs in Rounds 3 and 4

	Round 3	Round 4
A specific model of classroom intervention	14%	27%
Specific software for student learning	8%	14%
Instructional management systems	8%	18%
Data driven decision-making	22%	41%
Laptop programs	10%	20%
Professional development beyond the 25% required	43%	53%

Note: Percentages based on the 51 survey respondents in Rounds 3 & 4

Since the NCLB II D program was launched in 2002, the number of states that evaluate the quality of the professional development plan in an LEA's application has incrementally increased. Yet, the number of states that provided guidelines and/or directives and formally assessed applications for the quality of professional development decreased from Round 3 to Round 4 substantially. (See Figure 6.)
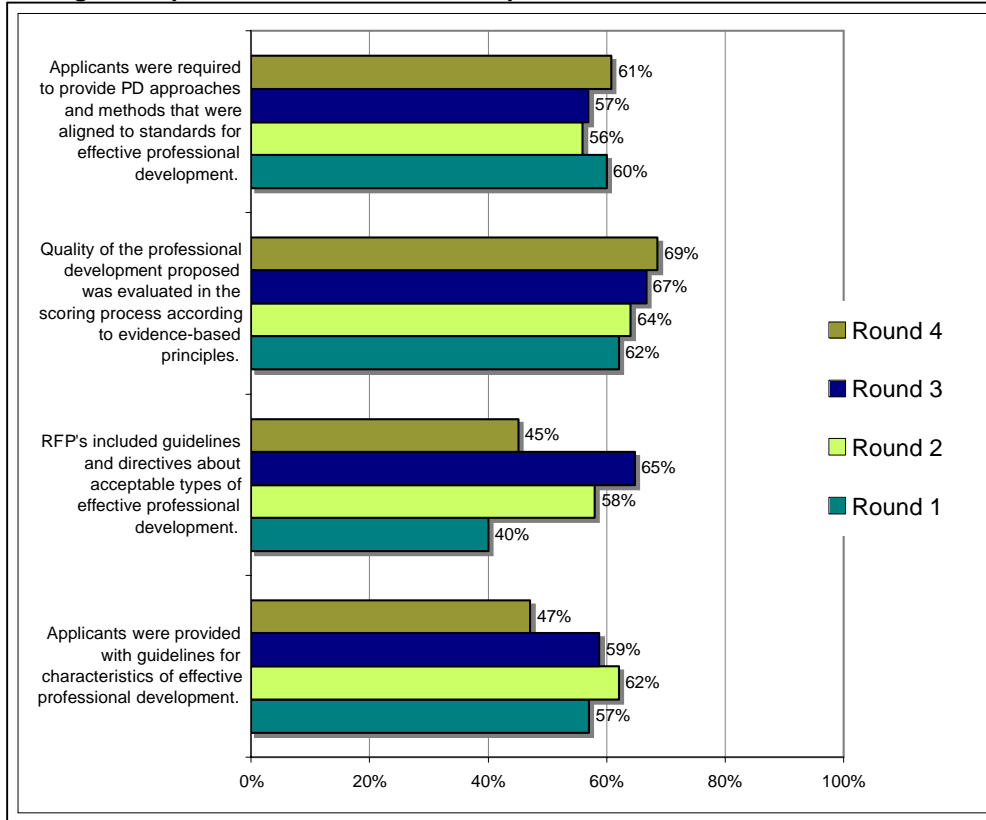
Figure 6:Specific Priorities for the Competitive Grant RFPs in Rounds 3 and 4

Note: Percentages based on the number of survey respondents (47, 50, 51, and 51 in Rounds 1, 2, 3 & 4 respectively)

RESEARCH

The main sources the states report using to provide a knowledge/research base to guide the use of NCLB II D competitive grants are the International Society for Technology in Education, and the national network of Regional Educational Laboratories.

The states reported increased emphasis in Round 4 (FY05) in research related to the competitive grants. As Figure 7 below indicates, the number of states that are encouraging or requiring that LEAs participate in or conduct research related to their NCLB II D projects has increased significantly from the previous rounds.

While in Round 4, only 18% of the states required competitive grantees to conduct research as a component of their EETT competitive grants, 33% encouraged such work and 20% percent required grantees to participate in research protocols established by the states.

One-third (33%) of the states indicated "recipients of competitive funds used funds to conduct experimental or quasi-experimental research." Most states report that, while some large scale

comparison studies are being conducted (e.g., eMINTS in Missouri, TECH-IL in Illinois, and the EAST initiative in Arkansas), most such studies are at the initiative of grantees and their local evaluators.

**Figure 7: State Requirements for LEAs Receiving
Competitive Grants in Rounds 3 and 4**
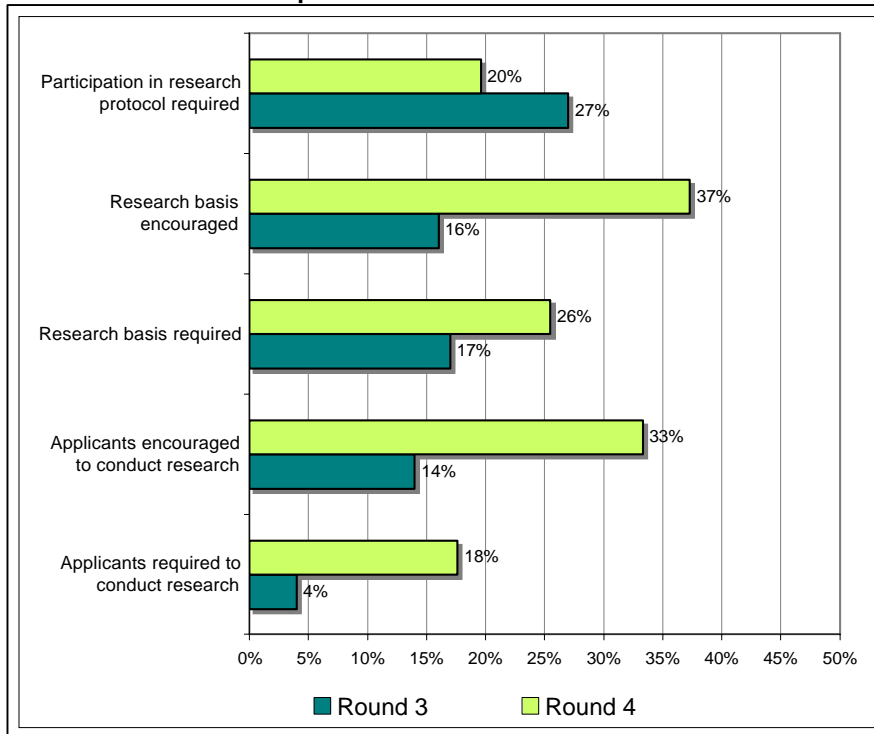
Note: Percentages based on the 51 survey respondents in Rounds 3 & 4.

EVALUATION

Nearly two-thirds (67%) of the states report they conduct an evaluation of the NCLB II D program at the state level. Most states fund this state evaluation through the 5% State Administration Funds or dedication of grantees funds to this purpose, with a few using state funds.

Throughout the four years of NCLB II D programs, states have increasingly stressed the importance of sound evaluation by local grantees. Over 25% of states now require that grantees dedicate at least 7% of their funds to evaluation. Over 80% now require that grantees conduct evaluations and over 60% require that evaluation results be reported in comparison to baseline data.

A majority (80%) of states require that their competitive NCLB II D grant recipients conduct a program evaluation. The number of states relying solely on AYP as a benchmark for the impact

of competitive grants has declined from a high of 18% in Round 2 to a low of 8% in Round 4. Meanwhile, the number of states that requires districts to allocate at least 7% of their competitive award to evaluation has steadily risen from 2% in Round 1 to 26% in Round 4.

Figure 8: State Requirements of LEAs for Evaluation of Competitive Grant RFPs in Rounds 1, 2, 3 & 4.
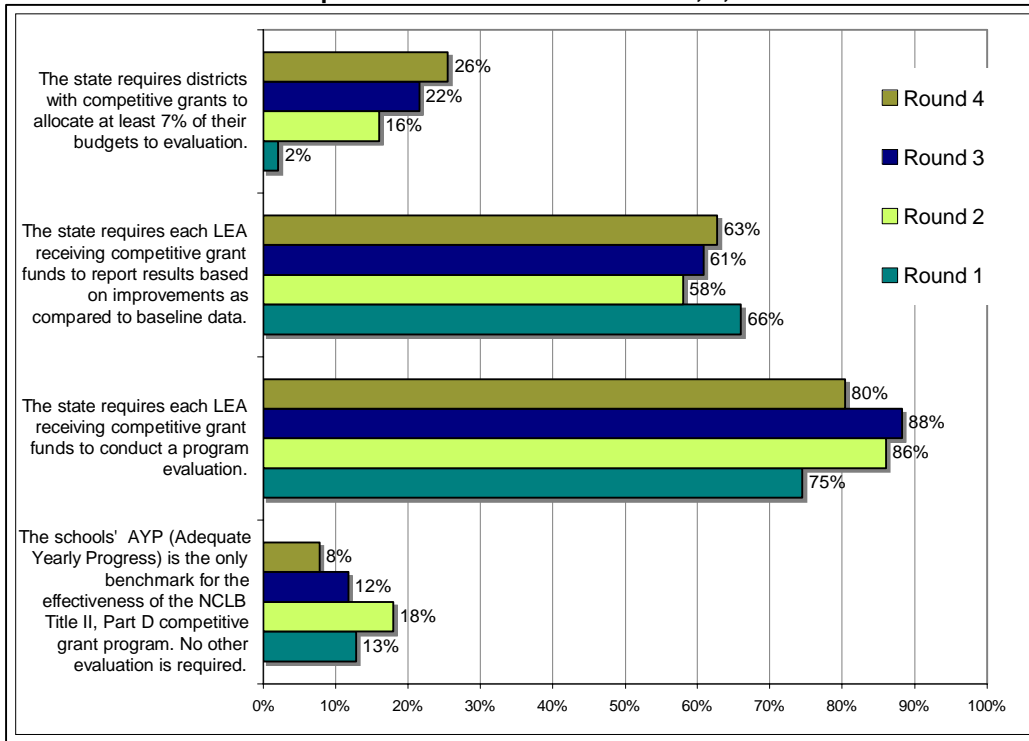
Note: Percentages based on the number of survey respondents (47, 50, 51, and 51 in Rounds 1, 2, 3 & 4 respectively).

In addition, NCLB II D funds are used by LEAs to advance high-quality assessment.

Formula and competitive funds have been responsible for helping insure that every teacher becomes technology proficient in South Carolina. A state contract has been granted to eSchoolware to set in place a statewide system to portfolio assess the technology proficiency of 25,000 teachers in 2006-07. This role out will affect one half of the state's teachers the first year and will continue in subsequent years until all teachers have been assessed. The assessment is required by state law under Provisio 1.28.

- South Carolina

PRIORITIES

The federal legislation (Section 2416) lists 11 activities for LEA use of NCLB II D funds (See Appendix A). The trend lines for the competitive priorities reported by states have remained constant for the last three years. The *technology* priority dropped slightly from 86% to 82%, while the *increase access*, the *networking and infrastructure, and the Information Technology Course* priorities held steady at 69%, 53%, and 33% respectively. The following charts report the percentage of states that are allocating NCLB II D resources to these priorities. The 11 activities are reported in two charts, Figure 9 reports the activities related to access, and Figure 10 reports the activities more closely related to teaching and learning.

Figure 9: Percentage of LEA Activities Funded by Competitive Grants in Rounds 1-4 on Topics Related to Access
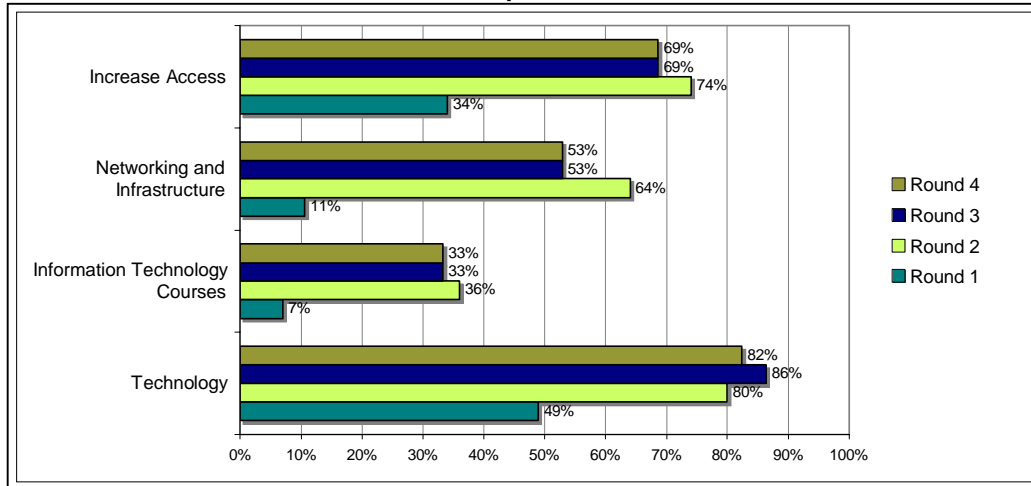
Note: Percentages based on the number of survey respondents (47, 50, 51, and 51 in Rounds 1, 2, 3 & 4 respectively).

The top priorities related to technology integration for the competitive grants in Round 4 shifted slightly for most categories. Consistent across all four rounds of funding, the top two categories related to technology integration in competitive grants are professional development and increase achievement and technology literacy. While those categories exceeded 90%, most of the others hovered in the 60% to 70% range. The three categories that reported increases from Round 3 to Round 4 were proven learning and technology solutions, develop experts, and assessment.

**Figure 10: LEA Activities Funded by Competitive Grants in Rounds 1-4
On Topics Related to Learning**

Professional Development: Round 4 96%, Round 3 96%, Round 2 100%, Round 1 94%

Increase Achievement and Technology Literacy: Round 4 92%, Round 3 96%, Round 2 100%, Round 1 94%

Data Management/Informed Decision-making: Round 4 63%, Round 3 63%, Round 2 80%, Round 1 26%

Proven Learning and Technology Solutions: Round 4 75%, Round 3 67%, Round 2 80%, Round 1 53%

Develop Experts: Round 4 82%, Round 3 77%, Round 2 82%, Round 1 53%

Foster Outreach and Communication with Parents: Round 4 57%, Round 3 63%, Round 2 68%, Round 1 23%
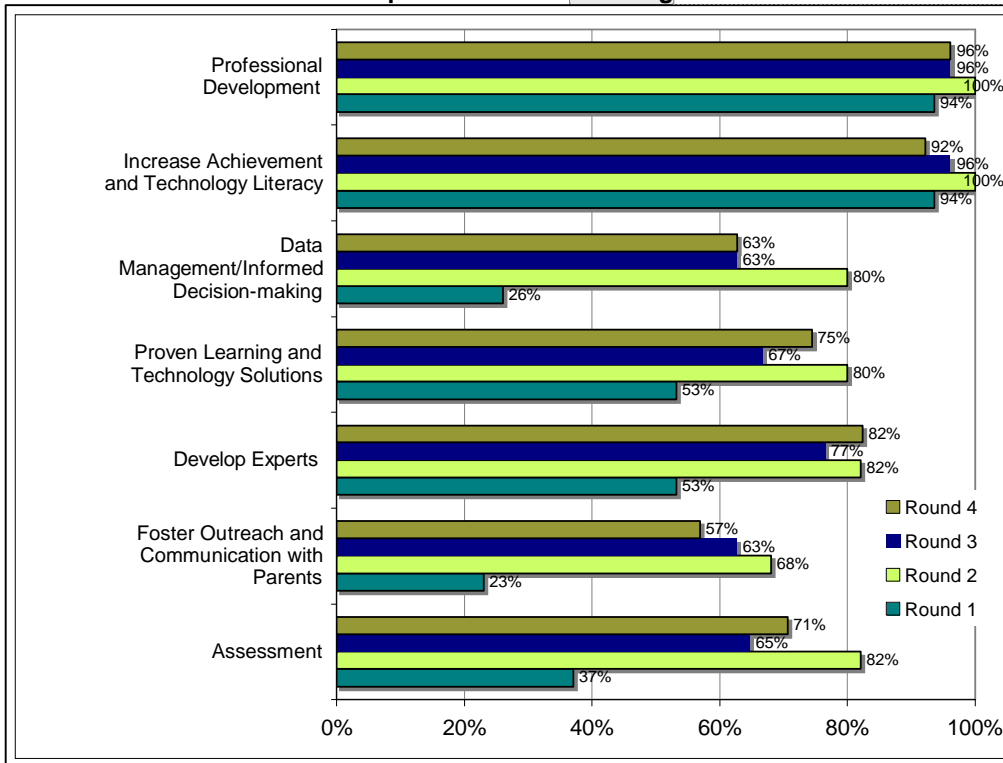
Assessment: Round 4 71%, Round 3 65%, Round 2 82%, Round 1 37%

Note: Percentages based on the number of survey respondents (47, 50, 51, and 51 in Rounds 1, 2, 3 & 4 respectively).

NCLB 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.

When asked to rank their top priorities, state directors consistently identified professional development, increase academic achievement and technology literacy, and increase access as their top priorities.

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 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 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 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 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 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 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 II D legislation

ADVANCEMENT OF NCLB II D GOALS THROUGH COMPETITIVE GRANT FUNDS

Throughout the four years to date that the U.S. has funded the NCLB II D program, the states have been focused on achieving three major goals, as stated in the federal law. Listed below are commentaries by the state technology directors when asked about their state's progress in reaching each of the NLCB II D goals through the competitive grants in Rounds 1-4.

Goal 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.

> *"The number of schools meeting all 41 Adequate Yearly Progress (AYP) indicators in 2004-2005 was 340 (out of 601 for 57%) while the number of schools who missed at least one AYP indicator was 261 (out of 601 for 43%). In the 2005-2006 school year, the number of schools that met all of the AYP indicators was 409 (out of 620 for 66%). While the number of schools who did not make at least one AYP indicator was 211 (out of 620 for 34%)."*
> *-Idaho*

> *"The purpose of the Technology Rich Classroom 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 that result in improved student learning in the areas of reading, math and science. In addition, it is intended to assist schools with student and teacher empowerment to infuse technology into an engaging and active environment that enables the learner to become a technologist, problem solver, researcher and communicator. The project is specifically looking to improve student academic achievement through the use of technology in grades 3-6. This is being measured through local evaluators and will be reported in winter 06 by participating LEAs."*
> *-Kansas*

> *"Student Academic Achievement: An external evaluation is showing that, over the three years of the grant, IMPACT Model School students out-performed comparison school students on both Reading and Math End of Grade tests for 3rd, 5th, and 8th grades. Two new EETT competitive grants are being implemented based on the lessons-learned from the first IMPACT Model Schools grants. Currently, an advocacy movement is building to fund this model across NC with state money."*
>
> *-North Carolina*

> *"The two NCLB Title II D goals that we have addressed through scientifically based research relate to technology integration into the curriculum and improved student academic achievement. The research data proves that both of these goals have been reached as a direct result of the Title II D competitive grants."*
> *-West Virginia*

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

Goal 2A) 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.

> *"Arizona wanted to take advantage of the window of opportunity provided for educational technology in NCLB by assessing 5th and 8th grade technology literacy. Districts around the state encouraged the Arizona Department of Education to take the lead in this area. In addition, AZ did not have data to show the effectiveness of EETT funding for the first 3 funding years. For the 2005-2006 funding cycle, AZ strengthened its evaluation process for all EETT funding. A requirement was included in the 2005-2006 EETT RFP to set aside 2% of all discretionary funding and 2% of those who received $30,000 or more in formula funding with the intent to secure an online technology literacy assessment for 5th and 8th graders. As a result, Arizona tested nearly 25,000 5th and 8th grade students in spring of 2006. In addition, teachers were assessed through a partnership with ASSET (Arizona School Services Through Educational Technology). A percentage of teachers involved in EETT projects (discretionary and formula) were required to take the 360° Technology Assessment which is aligned to the NETS-Teachers. More than 2500 teachers took the Diagnostics, Knowledge and Environment Scan portions of the 360° Technology Assessment."*
> *-Arizona*

> *"We have asked all districts to report their progress toward reaching the 8th grade technology literacy goal of NCLB. When they report for school year 06/07 we will have a better understanding of their progress."*
> *-Michigan*

Goal 2B) 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.

> *"We have met or exceeded two of our NCLB II D program goals; (1) the percentage of qualified teachers who use technology for instruction; and (2) teachers participating in professional development on education technology will increase their use of technology as a tool to support student academic achievement. California uses the EdTechProfile for it's data collection, which is aligned to the adopted technology standards for a California Teaching Credential established by the California Commission on Teacher Credentialing. Teachers demonstrate knowledge and competency in the use and delivery of comprehensive computer-based technology to facilitate the teaching and learning process. This information is validated through a random sample while doing site visits for EETT grantees."*
> *-California*

> *"Through the competitive funding provided by NCLB II D, the DC SEA has been able to develop proof of concept models in the use of advanced and developing educational technology tools. These include video conferencing resources to support senior high*

school instruction. Additional milestones include the development of an on-line adaptive testing protocol in selected elementary schools."
    -Washington DC

"NCLB competitive dollars are basically used in the following categories in this state (a) to integrate technology into curriculum and instruction, (b) to improve teacher skills for using technology, and (c) to meet the state standards for teacher and administrator use of technology in the classroom. Kentucky has adopted challenging academic standards, through the Program of Studies for Technology and the Kentucky Core Content for Assessment 4.1. Using NCLB competitive funds in conjunction with state offers of assistance and local funds, districts have offered ongoing and sustained professional development programs to help teachers, principals, and other administrators, and librarians become proficient in effective uses of the technologies. The ultimate impact of the combination of these efforts should be improved student achievement on Kentucky state academic tests."
    -Kentucky

"We are training more and more teachers in inquiry based instruction and problem solving with technology as a tool to instruction. To encourage the effective integration of technology resources and systems with professional development and curriculum development to promote research-based instructional methods that can be widely replicated, many school systems are preparing one or more teachers in schools as technology leaders. While these leaders are called by many titles (Technology Resource Teachers, Ecoaches, etc.) they are responsible for assisting teachers in integrating technology into their classroom practice and providing them with professional development."
    -Maryland

"Mississippi has adopted the Intel Teach to the Future as a state initiative to enhance ongoing professional development for teachers, principals, and administrators. The Intel Teach to the Future Program provides administrators and teachers with the skills to integrate computer technology effectively into the existing curriculum by using productivity software, using free online tools to support higher-order thinking skills, and exploring and prioritizing leadership behaviors that help integrate technology into teaching and learning. These leaders developed an action plan to further advance technology integration in their school districts."
    -Mississippi

"NM has been successful in encouraging 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."
    -New Mexico

"The Commonwealth of Virginia has made progress in improving the instructional practices of teachers, which, research has shown, positively affects student academic achievement. These improvements are due largely to the Virginia's competitive grant program, through which 3,500 teachers have been trained in technology integration. The competitive grant recipients have established partnerships with all major colleges and universities in Virginia, eight technology firms, and several public television stations.

These partnerships have involved more than 80 percent of Virginia's teachers and nearly 75 percent of the students."
- Virginia

DISSEMINATION OF RESULTS

Nearly two-thirds (65%) of states report that they are identifying that technology-related educational interventions appear to be working. Those states described a range of identification processes. While a few states depend on the selection of conference sessions (2 states) or face-to-face exchanges (3 states), others are beginning to bring a systematic rigor to the identification of what works, through analysis of progress updates (7 states) or research findings (3 states).

The dissemination methods also vary widely, from exchanges and presentations at conferences; to reports, newsletters, and presentations by professional organizations, to postings on websites.

REDESIGN OF THE COMPETITIVE PROCESS

Over half (57%) of the states reported they had redesigned their competitive grant process for Round 5. The changes noted for the upcoming cycle included increased focus on: specific academic areas (16%), professional development (26%), scientifically based research (16%), system changes (24%), and school improvement (31%). While some states are continuing grant cycles that extend through Round 5, others noted the need for adjustments and refocus due to the decreased levels of funding.

Table 2: Summary Table for Competitive Grants – Round 4

State	Release Date (Round 4)	Total Competitive Grants	Total Awards Round 4: Competitive	*Partnership Grants	LEA Only Grants	Number Involving Rural LEAs
Alabama	12/01/05	63	$4,602,815	1	61	42
Alaska	12/08/05	6	$1,173,438	1	6	4
Arizona	7/1/05	24	$4,362,289	9	21	14
Arkansas	8/1/06	22	$2,276,490	12	10	20
California	02/01/06	47	$26,190,336	31	16	
Colorado	07/01/2005	16	$2,146,776	1	14	3
Connecticut	08/15/05	47	$2,589,903	6	43	
Delaware	06/30/05	27	$1,569,546	3	24	
District of Colombia	12/30/06		$0	Not Applicable	Not Applicable	Not Applicable
Florida	05/02/06	11	$10,836,137	0	11	4
Georgia	04/15/05	95	$7,200,284			72
Hawaii	5/13/05	12	$1,027,506		10	10
Idaho	01/18/06	17	$1,140,009	0	17	12
Illinois	11/01/05	30	$6,985,073	1	29	17
Indiana	05/15/2005	34	$3,031,226	10	24	13
Iowa	11/01/06	12	$1,140,010	9	3	358
Kansas	05/01/2006	20	$1,400,000	9	11	12
Kentucky	5/19/06	55	$3,323,777	0	55	
Louisiana	8/23/05	32	$4,945,866	22	10	22
Maine	7/1/06	9	$1,140,010	0	9	8
Maryland	07/01/05	13	$3,045,107	4	9	4
Massachusetts	9/1/05	39	$3,570,919	37	3	13
Michigan	03/13/06	74	$5,053,458	9	62	16
Minnesota	1/15/06	12	$3,159,706	12	0	9
Mississippi	5/1/06	17	$2,907,199	6	11	16
Missouri	07/01/05	54	$3,845,142	0	54	31
Montana	7/01/06	6	$1,140,010	6	0	6
Nebraska	08/11/2005	19	$1,140,011	11	8	15
Nevada	9/21/05	6	$1,055,922	2	5	3
New Hampshire	04/10/06	6	$1,120,567	6	0	4
New Jersey	7/1/05	54	$6,583,377	49	5	5
New Mexico	8/15/05	27	$4,039,494	7	20	11
New York	7/1/05	45	$50,330,032	6	39	4
North Carolina	04/18/05	11	$550,000	11	0	9
North Dakota	12/01/2005	12	$989,894	0	12	6
Ohio	7/6/05	75	$6,582,955	0	75	7
Oklahoma	12/00/05	30	$2,303,846	0	30	27
Oregon	6/9/05	15	$3,053	13	2	4
Pennsylvania	7/1/05	69	$10,562,011	0	69	46
Rhode Island	08/01/2005	14	$940,000	1	13	
South Carolina	01/01/07	12	$1,700,000	6	6	12
South Dakota	7/1/05	10	$1,540,473	4	6	5
Tennessee	07/01/05	45	$4,527,000			37
Texas	07/01/05	60	$22,004,636	46	14	11
Utah	07/01/05	4	$1,562,150	4	0	4
Vermont	07/01/05	35	$1,140,000	10	25	29
Virginia	03/01/06	8	$3,847,064	8	0	3
Washington	07/01/05	76	$2,993,800	1	76	56
West Virginia	8/30/05	12	$1,830,522	0	12	9
Wisconsin	07/01/05	17	$3,031,000	17	0	16
Wyoming	9/1/05	13	$625,741	8	5	13
Subtotals		**1469**	**$240,806,579**	**399**	**935**	**1015**

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.

FORMULA GRANTS: FACTS AND FIGURES

The NCLB II D federal grant program for Round 4 (FY05) required that 47.5% of the total state award be allocated to school districts based on the formulas for the state's other Title programs. (Please note EETT funds are divided into 47.5% Competitive Grants, 47.5% Formula Grants and 5% Administrative costs.)

While most states (45) reported a release date for Round 4 formula grants to be in 2005, six states released those funds in 2006. In Round 4 of NCLB funding, state directors reported awarding 14,241 formula grants to eligible Local Education Agencies (LEAs).

AWARD SIZE

In Round 4 (FY05), states awarded nearly $220 million nationally in formula grants to 14,109 eligible school districts – 88% of the total number of LEAs in the U.S. (16,073) and 95% of the number of LEAs eligible to receive funds (14,908). The amount awarded to school districts ranged from a $1.00 award in a western state to a $14.7 million award to an urban LEA on the eastern seaboard. Nineteen states reported awards under $100, with 2,606 awards of under $1000, across 40 states. At the other end of the spectrum, a total of 309 grants of over $1 million were awarded to school districts across eleven states. Nationally, 59% of the formula grants or 8,093 awards were under $5,000.

Figure 11: Round 4 (FY05) NCLB II D Formula Grant Awards by Size
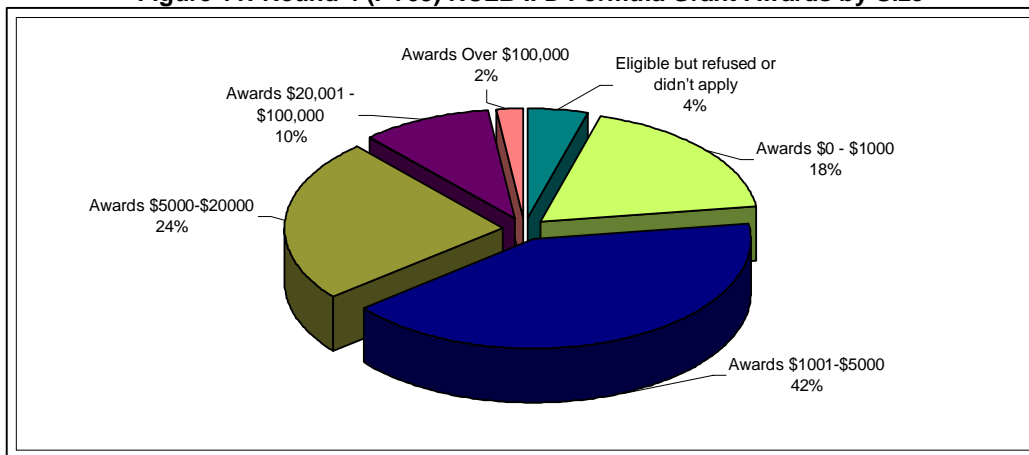
*Source: Fall 2006 SETDA Survey of State Technology Directors (n = 51).*

Table 3: Round 4 (FY05) NCLB II D Formula Grant Awards by Size

	Not Eligible	Eligible: Refused or didn't apply	Awards: $0 - $1000	Awards: $1001- $5,000	Awards: $5,001- $20,000	Awards: $20,001 - $100,000	Awards over $100,000
Number of LEAs	1143	797	2,606	6,165	3,581	1,448	309
Percentage of eligible LEAs	N/A	5.3%	17.5%	41.4%	24.0%	9.7%	2.1%

Percentages are calculated on the number of LEAs eligible for funding. N=14,906, representing 50 states and the District of Columbia.
Note: While 14,930 awards were reported as totals by states (see table page 53), only 14,906 were represented in the subcategories)

A look across the four rounds finds that the percentage of smaller grants under $5,000 awarded to LEAs has increased. As the figure below shows, the percentage of grants under $1,000 increased by 10% from Round 3 to Round 4, and those under $5,000 increased in the same period from 48% to 59%.

Figure 12: Trends Over Time in Size of the Formula Grant Awards
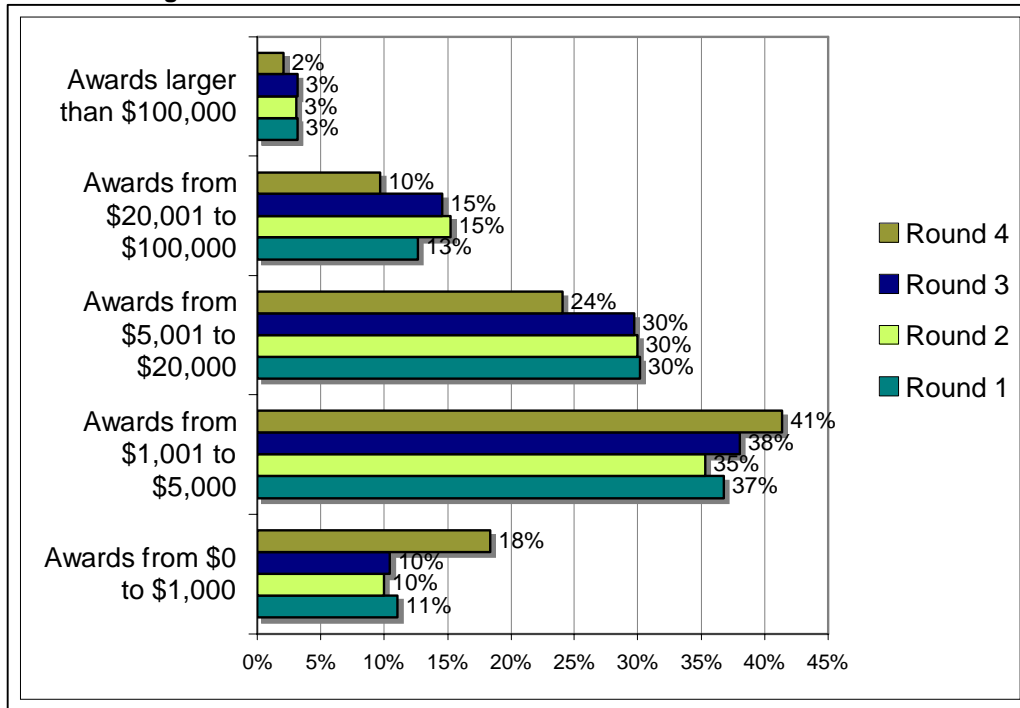
Note: Percentages based on the number of survey respondents (47, 50, 51, and 51 in Rounds 1, 2, 3 and 4 respectively).

The number of awards under $1,000 increased from 48% in Round 3 to 59% in Round 4. The significant increase in smaller grants in Round 4 may be a result of the decreasing federal allocation for NCLB II D.

TRANSFERS

Thirty states reported that their LEAs' use of NCLB II D funds required transfers to ($8,724,420) or from ($9,663,246) their formula grant programs, resulting in a net loss of $938,826 to the NCLB II D program for Round 4. Over the four rounds to date, there has been a net gain to NCLB II D of $44,662,544.

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
Round 4	$8,724,420	$9,663,246	-$938,826

Title Program Fund Transfer – Round 4 (FY05)

	Title I	Title IIA	Title IV A	Title V	*Other	Totals
Funds transferred OUT of Title II D into:	$695,471	$5,707,019	$102,341	$3,138,131	$20,284	$9,663,246
Funds transferred INTO Title II D From:	$0	$5,514,873	$587,058	$79,269	$2,543,220	$8,724,420
Net Gain/Loss for Title II D	**-$695,471**	**-$192,147**	**$484,717**	**-$3,058,861**	**$2,522,936**	**-$938,826**

From Title VI, or Title programs not specified. 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 increase for their program through REAP-Flex, with 0% reporting a substantial decrease, 41% reporting little effect, and 50% reporting a small increase or decrease.

Figure 13: Net Effect of REAP-FLEX on Use of Formula Funds in Rural Schools
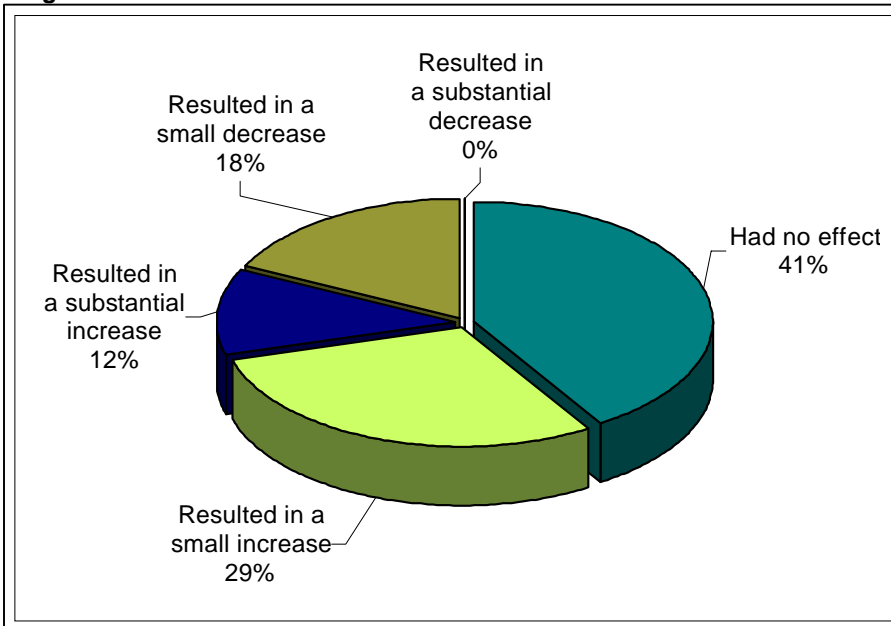
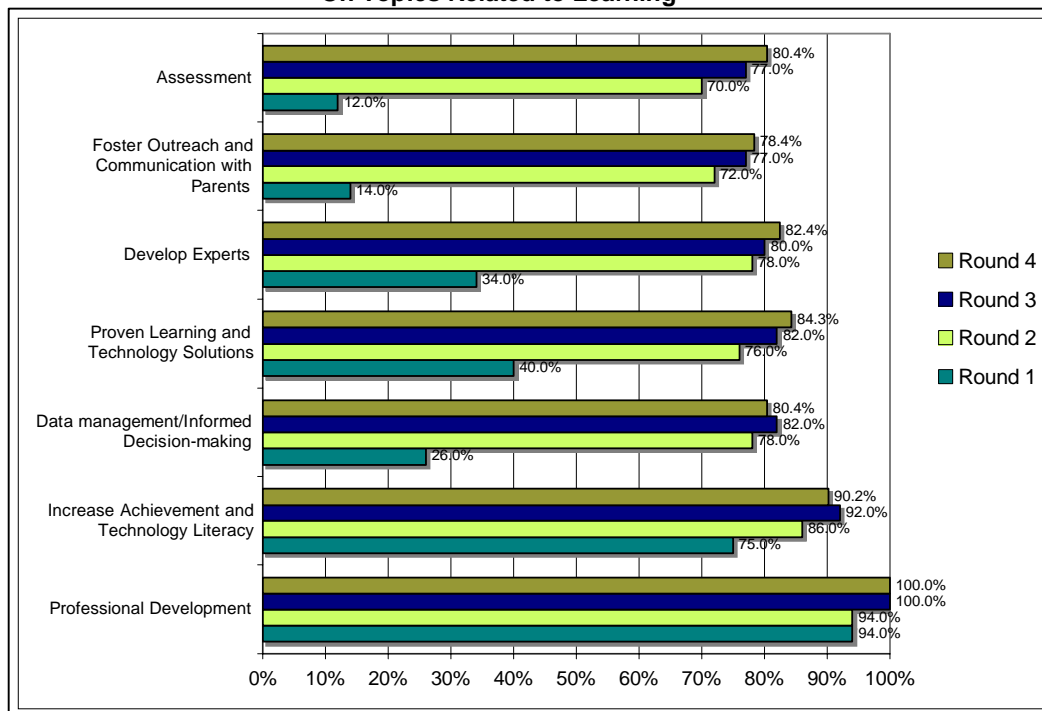Note: Percentages based on the 51 survey respondents.

NOTE: "REAP-Flex" is the term that the U.S. 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.

FUNDED ACTIVITIES

The federal legislation (Section 2416) lists 11 activities for local education agency use of NCLB II D funds (See Appendix A). The first year of the EETT program, the state technology directors indicated a strong emphasis in four of the activities for formula grants: professional development, increasing academic achievement, technology literacy, and technology. The second year the states' program emphases were broadened to include all 11 activities. The third and fourth years indicated a continued emphasis on the full range of activities.

The survey results suggest that the EETT programs have strong emphases on ten of the eleven federal activities recommended for LEA grants. The exception is Information Technology Courses, which has the least emphasis of any of the activities. The following charts report the percentage of states that are allocating NCLB II D resources to these priorities. The 11 activities are reported in two charts, Figure 14 reports the activities more closely related to teaching and learning, and Figure 15 reports the activities related to access.

**Figure 14: LEA Activities Funded by Formula Grants in Rounds 1-4
On Topics Related to Learning**

Assessment
- Round 4: 80.4%
- Round 3: 77.0%
- Round 2: 70.0%
- Round 1: 12.0%

Foster Outreach and Communication with Parents
- Round 4: 78.4%
- Round 3: 77.0%
- Round 2: 72.0%
- Round 1: 14.0%

Develop Experts
- Round 4: 82.4%
- Round 3: 80.0%
- Round 2: 78.0%
- Round 1: 34.0%

Proven Learning and Technology Solutions
- Round 4: 84.3%
- Round 3: 82.0%
- Round 2: 76.0%
- Round 1: 40.0%

Data management/Informed Decision-making
- Round 4: 80.4%
- Round 3: 82.0%
- Round 2: 78.0%
- Round 1: 26.0%

Increase Achievement and Technology Literacy
- Round 4: 90.2%
- Round 3: 92.0%
- Round 2: 86.0%
- Round 1: 75.0%

Professional Development
- Round 4: 100.0%
- Round 3: 100.0%
- Round 2: 94.0%
- Round 1: 94.0%

Note: Percentages based on the number of survey respondents (47, 50, 51, and 51 in Rounds 1, 2, 3 and 4 respectively).

**Figure 15: LEA Activities Funded by Formula Grants in Rounds 1-4
on Topics Related to Access**
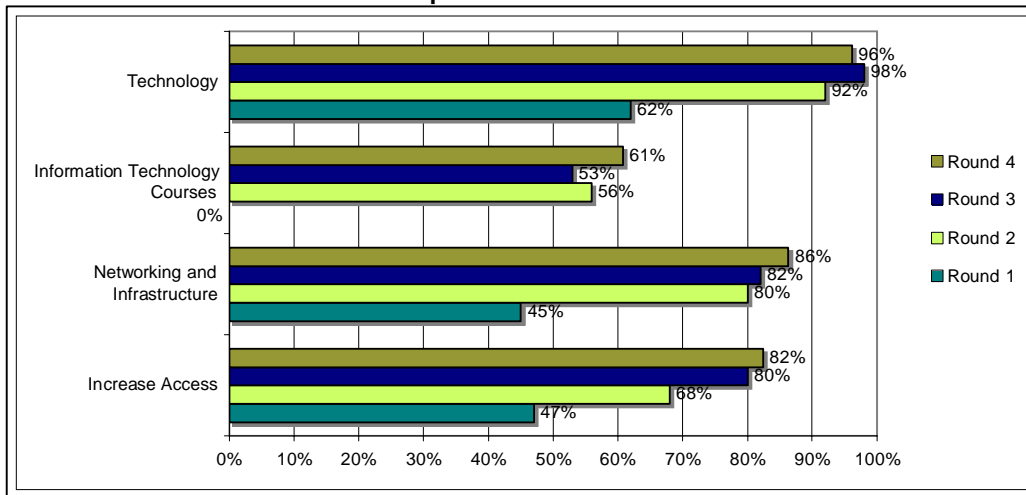
Note: Percentages based on the number of survey respondents (47, 50, 51, and 51 in Rounds 1, 2, 3 and 4 respectively).

The activities (as outlined in NCLB II D Section 2416) used by LEAs in implementation of the formula grants in Round 4 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 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 Proven Learning and Technology Solutions: Acquire proven and effective courses and curricula that include integrated technology and are designed to help students meet challenging Sate academic content and student academic achievement standards.

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

- 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.

- Source of definitions: NCLB ll D legislation

EVALUATION OF FORMULA GRANTS

Figure 16 provides trend data on the states' evaluation requirements of NCLB recipients since the program's inception.

Over 50% of the states require evaluations from NCLB II D recipients, while 47% percent continue to use adequate yearly progress (AYP) attainment as the only measure of the effectiveness of the program. That is not surprising given the large number of awards that are under $5,000 (i.e., 59% of the total number of formula grants).

Figure 16: State Approach to Evaluation of Formula Grants
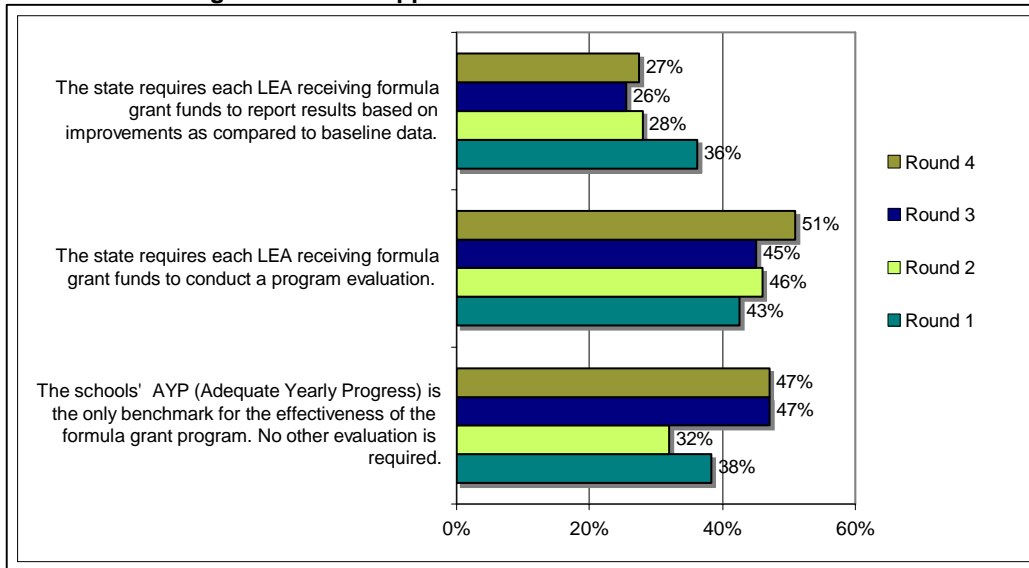
Note: Percentages based on the number of survey respondents (47, 50, 51, and 51 in Rounds 1, 2, 3 and 4 respectively).

ADVANCEMENT OF NCLB II D GOALS THROUGH FORMULA FUNDS

Ultimately, the intent of such activities as those listed above is to reach the three goals established by NCLB II D. Listed below are commentaries by the state technology directors when asked about their state's progress in reaching each of the NLCB II D goals through the formula grants in Rounds 1-4.

Goal 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.

> *"Districts continue to report improved technology integration efforts, as measured by the Missouri Census of Technology. In 2006 the typical (median) district has technology embedded in its local core curriculum, 81 percent of its educators possessing*

intermediate or higher technology skills; and 90 percent of 8th-grade students determined as being technologically literate."
        - Missouri

"Oregon districts, especially those who received competitive grants along with formula funding, report increased student achievement, increased capacity of teachers to integrate technology into instruction and increased access to technology for students. This is more evident in districts that receive formula funding greater than $25,000."
        - Oregon

"The districts have addressed all of the goals of the program. Many have combined their funds with competitive funds, which have been proven to increase student achievement and technology integration. Student technology literacy is being addressed through multiple sources and the WVDE is pursuing avenues to measure this progress."
        - West Virginia

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

Goal 2A) 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.

"Arizona wanted to take advantage of the window of opportunity provided for educational technology in NCLB by assessing 5th and 8th grade technology literacy. Arizona Districts encouraged the Arizona Department of Education to take the lead in this area. In an effort to strengthen its evaluation process for all EETT funding, a requirement was included in the 2005-2006 EETT RFP to set aside 2% of all discretionary funding and of those who received $30,000 or more in formula funding with the intent to secure an online technology literacy assessment for 5th and 8th graders. As a result, Arizona tested nearly 25,000 5th and 8th grade students in spring of 2006."
        - Arizona

"Maine has over 93% of 8th graders technologically literate of those districts that evaluate for literacy."
        - Maine

"Vermont has probably made better progress in achieving technology literacy by students than any of the other NCLB goals. The existence of Technology Grade Expectations (skill expectations for students) and Performance assessment tasks have given teachers something concrete to grasp."
        - Vermont

Goal 2B) 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.

"During the last four years, approximately $3,000,000 of EETT funds has been spent on technology professional development. Every teacher and administrator in the state has received between one and three days of technology professional development. Over 90 per cent of the teachers are considered highly qualified by the US definition. A statewide program (www.portical.org) has been initiated specifically for school administrators. It is designed to facilitate technology support and networking."
- Arkansas

"Through numerous outreach efforts at the state, regional and local levels, schools have used their formula II D funds to encourage the effective integration of technology with teacher training and curriculum development to establish successful research-based instructional methods."
- Indiana

"To encourage the effective integration of technology resources and systems with professional development and curriculum development to promote research-based instructional methods that can be widely replicated, many school systems are preparing one or more teachers in schools as technology leaders. While these leaders are referred to by many titles (Technology Resource Teachers, Ecoaches, etc.) they are responsible for assisting teachers in integrating technology into their classroom practice and providing them with professional development."
- Maryland

"The Commonwealth of Virginia has made significant progress in changing and improving the instructional practices of teachers and the computer literacy of students. The EETT formula grant program has increased the number of instructional personnel integrating technology into instruction and raised awareness among school administrators regarding the value technology adds to the instructional process. The Virginia General Assembly was encouraged by successful EETT-funded professional development strategies and passed legislation to fund, in part, instructional technology resource teacher positions in all school divisions at a rate of one position per 1,000 students. The Commonwealth of Virginia has commissioned a study that will examine the relationship between the instructional technology resource teacher program and levels of technology practiced in schools, impact of the instructional technology resource teacher program on classrooms and teachers, and impact of the instructional technology resource teacher program on students."
- Virginia

Several states commented on the challenges posed by the program. Their comments are summarized by the following quote from Pennsylvania:

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

SUMMARY

Survey respondents report that, while many of the formula grants to LEAs in Round 4 are under $5,000, those dollars have been used in conjunction with existing educational technology programs, or in combination with competitive NCLB awards to advance the NCLB II D goals. The formula funds have been used by LEAs to support a variety of activities, with the most frequently reported activities including: professional development for effective use in teaching and learning; the adoption or expansion of technology solutions to increase academic achievement and technology literacy; and initiatives to increase access to technology. Survey respondents also noted that, due to a decrease in the level of funding over the past four years, the number of small grants under $5,000 has steadily increased, reducing the impact of the program.

The following table provides a list of the number of formula grants awarded in each state and the percentage of eligible LEAs served (95% of eligible districts were awarded grants).

Table 4: Formula Grants for Round 4 (FY05)

State	Number of LEAs (FY05)	Number of LEAs Eligible for Title II D	Percent of LEAs Eligible for Title II D	Number of Formula Grants Awarded in Round 4
Alabama	132	131	99.2%	129
Alaska	54	52	96.3%	46
Arizona	612	440	71.9%	283
Arkansas	255	255	100.0%	255
California	1,439	1,240	86.2%	1,006
Colorado	174	174	100.0%	168
Connecticut	185	157	84.9%	157
Delaware	30	29	96.7%	30
District Of Columbia	51	49	96.1%	49
Florida	74	72	97.3%	69
Georgia	184	182	98.9%	182
Hawaii	1	1	100.0%	8
Idaho	123	121	98.4%	121
Illinois	873	797	91.3%	666
Indiana	316	306	96.8%	299
Iowa	365	365	100.0%	366
Kansas	300	299	99.7%	300
Kentucky	176	175	99.4%	175
Louisiana	78	78	100.0%	78
Maine	230	212	92.2%	212
Maryland	24	24	100.0%	24
Massachusetts	387	385	99.5%	323
Michigan	842	753	89.4%	720
Minnesota	520	422	81.2%	425
Mississippi	156	152	97.4%	152
Missouri	524	520	99.2%	510
Montana	437	341	78.0%	341
Nebraska	467	467	100.0%	459
Nevada	17	17	100.0%	13
New Hampshire	163	146	89.6%	122
New Jersey	666	628	94.3%	626
New Mexico	89	89	100.0%	89
New York	789	733	92.9%	679
North Carolina	215	176	81.9%	130
North Dakota	199	181	91.0%	181
Ohio	785	785	100.0%	785
Oklahoma	540	540	100.0%	540
Oregon	197	180	91.4%	181
Pennsylvania	625	616	98.6%	607
Rhode Island	47	43	91.5%	43
South Carolina	85	44	51.8%	38
South Dakota	168	166	98.8%	165
Tennessee	136	136	100.0%	135
Texas	1,229	1,196	97.3%	1,194
Utah	67	67	100.0%	54
Vermont	60	55	91.7%	55
Virginia	132	132	100.0%	132
Washington	296	285	96.3%	284
West Virginia	55	55	100.0%	55
Wisconsin	456	413	90.6%	398
Wyoming	48	48	100.0%	48
Total	**16,073**	**14,930**	**92.9%**	**14,107**

Due to the decrease in NCLB II D funding and the small grant awards the majority of eligible districts receive under formula funds, the federal government has enacted law to allow states flexibility. Beginning in Round 5 (FY06) states will be required to continue the competitive grant program at minimum at the current percentage of NCLB II D funds (50% of the total). However, states will have the flexibility to shift all formula funds into the competitive grant programs.

APPENDICES

Appendix A: NCLB II D Purposes and Goals

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.

Appendix B: NCLB II D Local Activities

<div>

NO CHILD LEFT BEHIND TITLE II PART D
SEC. 2416. LOCAL ACTIVITIES

(a) PROFESSIONAL DEVELOPMENT–

(1) IN GENERAL– A recipient of funds made available under section 2412(a)(2) shall use not less than 25 percent of such funds to provide ongoing, sustained, and intensive, high-quality professional development. The recipient shall provide professional development in the integration of advanced technologies, including emerging technologies, into curricula and instruction and in using those technologies to create new learning environments, such as professional development in the use of technology—

(A) to access data and resources to develop curricula and instructional materials;

(B) to enable teachers—

(i) to use the Internet and other technology to communicate with parents, other teachers, principals, and administrators; and

(ii) to retrieve Internet-based learning resources; and

(C) to lead to improvements in classroom instruction in the core academic subjects, that effectively prepare students to meet challenging State academic content standards, including increasing student technology literacy, and student academic achievement standards.

(2) WAIVERS- Paragraph (1) shall not apply to a recipient of funds made available under section 2412(a)(2) that demonstrates, to the satisfaction of the State educational agency involved, that the recipient already provides ongoing, sustained, and intensive, high-quality professional development that is based on a review of relevant research, to all teachers in core academic subjects in the integration of advanced technologies, including emerging technologies, into curricula and instruction.

(b) OTHER ACTIVITIES- In addition to the activities described in subsection (a), a recipient of funds made available by a State educational agency under section 2412(a)(2) shall use such funds to carry out other activities consistent with this subpart, which may include the following:

(1) Establishing or expanding initiatives, particularly initiatives involving public-private partnerships, designed to increase access to technology for students and teachers, with special emphasis on the access of high-need schools to technology.

(2) Adapting or expanding existing and new applications of technology to enable teachers to increase student academic achievement, including technology literacy—

(A) through the use of teaching practices that are based on a review of relevant research and are designed to prepare students to meet challenging State academic content and student academic achievement standards; and

(B) by the development and utilization of innovative distance learning strategies to deliver specialized or rigorous academic courses and curricula to areas that would not otherwise have access to such courses and curricula.

(3) Acquiring 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.

(4) Utilizing 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 to understand the technology being applied in their child's education, so that parents are able to reinforce at home the instruction their child receives at school.

</div>

(5) Preparing one or more teachers in elementary schools and secondary schools as technology leaders who are provided with the means to serve as experts and train other teachers in the effective use of technology, and providing bonus payments to the technology leaders.

(6) Acquiring, adapting, expanding, implementing, repairing, and maintaining existing and new applications of technology, to support the school reform effort and to improve student academic achievement, including technology literacy.

(7) Acquiring connectivity linkages, resources, and services (including the acquisition of hardware and 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.

(8) Using technology to collect, manage, and analyze data to inform and enhance teaching and school improvement efforts.

(9) Implementing performance measurement systems to determine the effectiveness of education technology programs funded under this subpart, particularly in determining 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.

(10) Developing, enhancing, or implementing information technology courses.