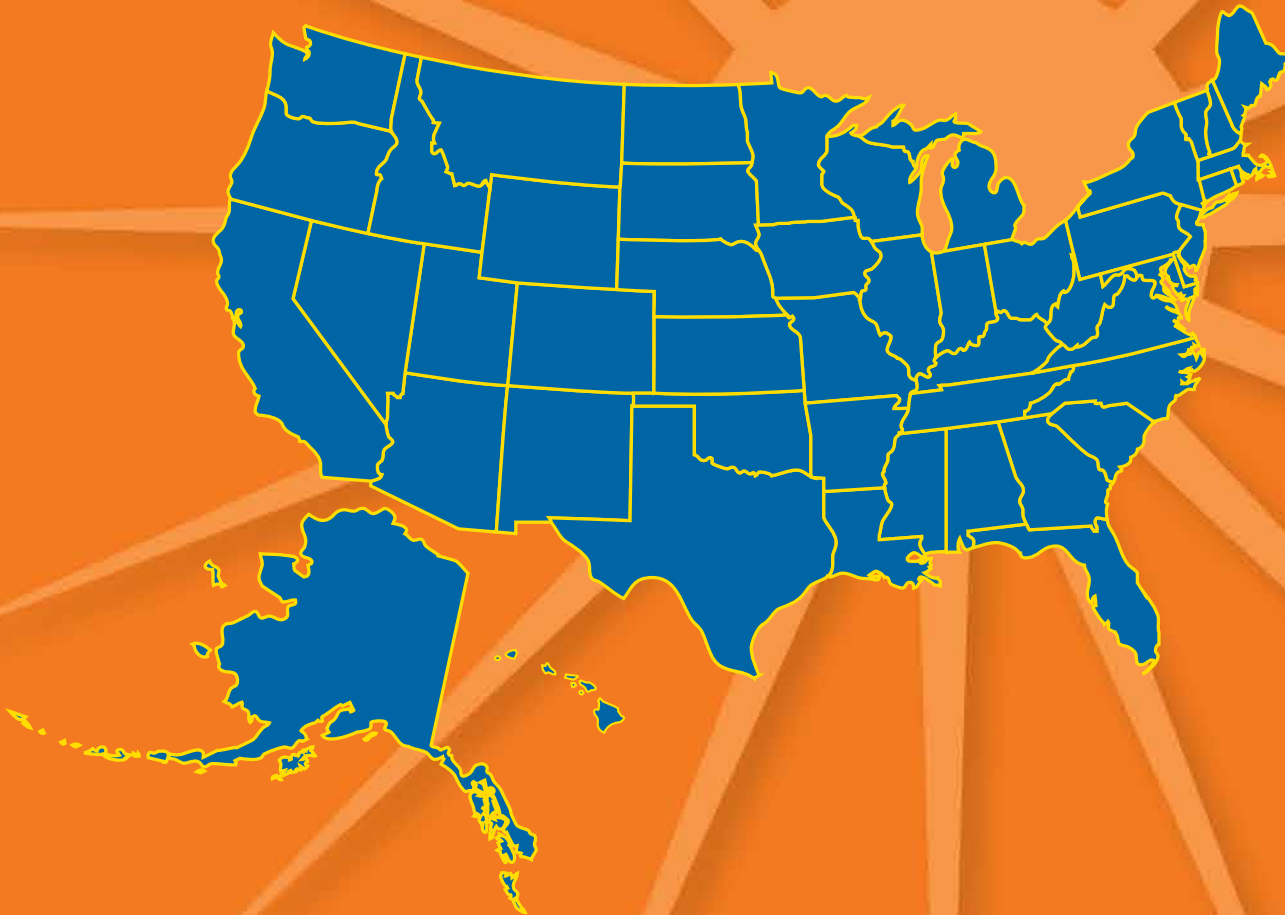




SETDA

National Educational Technology Trends: 2010

Innovation Through State Leadership



*A report from all 50 states regarding Title II,
Part D: Enhancing Education Through Technology
(EETT) Program.*

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For the past seven years, the State Educational Technology Directors Association (SETDA) has conducted annually a national study examining state implementation of the technology sections of the ESEA, Title II, Part D (Enhancing Education Through Technology) Act.

The findings from this report are based on survey responses from knowledgeable individuals in each of the 50 states on the Title II-D program for Round 7 (FY08), as well as on available data from the U.S. Department of Education.

Overall, the data collected for this study indicate a strong Title II-D track record of a state-federal partnership focused on increasing academic achievement, scaling up success, driving innovation and new models, enhancing teacher effectiveness, and using data to inform learning, teaching and leadership. With sustained support for state and local educational technology leadership and capacity, we can be assured of continued innovation and improvement in teaching and learning for all students.



Increasing Academic Achievement

Title II-D investments continue to focus on technology-enhanced teaching and learning innovations that demonstrate positive gains in the core academic areas.

The combination of affordable, interactive technologies, Web 2.0, globalization, and human ingenuity has radically transformed the world in which today's students live, learn, and work. States are using educational technologies to increase academic performances and build 21st Century skills through the differentiation, personalization, and real-world applications for learning.

Utah - Intech Partnership

The Intech partnership (Carbon School District, Utah - Grades 7-9) project was designed to integrate technology into math education, preparing students to compete mathematically in a technology-based global economy. This program helped to ensure mathematics teachers' success by providing on-going and diverse training opportunities focused on the technology component. The Intech grant focused on helping math teachers effectively use technology tools and resources in math instruction. Seventh grade math scores in the district have increased 9 points since 2006. Mont Harmon increased 13% points in that same time period. The geometry scores at Mont Harmon increased from 54% proficient in 2006 to 80% proficient in 2009. Helper Junior High's math scores increased from 73% proficient in 2006 to 92% proficient in 2009.

Ohio - Closing the Digital Divide

With EETT funds, Roselawn Condon School (RCS) purchased interactive software and equipment, along with technology integration professional development. The project goals were: provide standards based learning; raise staff/student technology skills to 21st century level; improve achievement in literacy & math by integrating instructional strategies aligned to state standards; and assure instructional strategies are delivered by highly qualified teachers. Quarterly benchmark assessments increased from fall 2008 to spring 2009: Fifth grade increased 13% in language arts. Sixth grade increased from 17% to 65% in language arts and math scores increased from 45% to 73%.



Scaling Up Success

States continued to provide educational technology leadership by focusing Title II-D investments on student-centric, research-based, technology-rich learning environments that advance state and federal goals

State educational technology directors, in partnership with school district leaders, have advanced the technological systems that support new models of learning, teaching, and leadership. The building blocks sustaining these new models include technological infrastructure and support systems; uniform access to digital tools and resources; and the technological expertise of educators who together are driving innovations at scale within and across the states.

Alabama - Scaling Up the NC IMPACT model

The Boaz City Middle School Project is based on the systemic reform model outlined by the North Carolina IMPACT program. The vision of this project was to implement a library media and technology program focused on student achievement and involving staff collaboratively in planning instructional programs that were authentic, engaging, enriched by high quality resources, current technologies and effective technology integration ensuring ALL students are technologically literate by the end of 8th grade. Project objectives aligned with school-improvement goals, student needs, and teachers' professional development requirements. Technology resources and tools were used throughout the professional development process.

Texas – TIP

Based on the successful Texas Immersion Pilot (TIP) program, Atlanta Independent School District (AISD) located in rural Northeast Texas, provided all 8th and 9th grade students with laptops. This 1:1 learning environment immersed 8th and 9th grade students in all core subject areas with emphasis in math and science with the intent to engage students in learning and improve TAKS (Texas Essential and Skills scores). AISD's staff received professional development in a three-phase program to assure mastery and integration of skills. AISD provided numerous online instructional resources and online formative assessment tools. To close the gap for students without Internet access, AISD provided evening access in school libraries. Teachers reported that students were more engaged in learning, asked more questions, and spent more time exploring concepts.

States Combine Knowledge, Expertise and Buying Power

By combining knowledge, expertise, and buying power, states have been able to provide greater opportunities and resources for learning and teaching. For example, by forming a purchasing consortium, Maryland counties saved nearly a million dollars by pooling their resources to afford access to digital databases through the MDK12 Digital Library. Montana created a regional consortium to help rural and isolated districts eliminate duplication of efforts to provide high-quality professional development programs, share expenses and resources, and create a network of teacher/mentor collaboration. New Mexico developed a statewide eLearning system (IDEAL) that includes educational resources for digital content, instructional support, and professional development opportunities. IDEAL promotes the sharing of resources and reduces the cost of technology access and professional development costs, while increasing technology skills.

**SETDA also provides individual state profile reports at
<http://www.setda.org/web/guest/statemembers>**



Driving Innovation and New Education Models

Educators are taking advantage of Title II-D investments in Web 2.0, interactive technologies, and broadband, by embracing technology-enhanced learning strategies that include online learning, use of digital content, and web-based professional communities of practice.

States are making strategic investments in expanding access to digital and open content, virtual learning for students, authentic learning projects that connect to real-world experts to classrooms, and online professional development for teachers. Increasingly, states are developing and deploying comprehensive new models of teaching and learning to effectively address the longstanding goals we share for public education but have been historically challenged to meet in traditional ways.

California - Online Assessment, Lessons and Assessments Complement Classroom Instruction

Stanislaus Union Elementary, located in an agricultural area in the Central Valley of California implemented technology integrated writing programs, online grade books, online assessments and student email services. All classrooms were equipped with multimedia presentation carts for daily teacher and student use and all students have email accounts and digital lockers to communicate and collaborate with their teachers and peers. Results include an increase in teacher general computer skills. Teacher use of technology to support student learning rose from 7% to 64%. Baseline 7th grade student writing scores rose from 21% proficient/advanced in 2007 to 62% in 2009; and the 7th grade ELA benchmark scores rose from 9% proficient/advanced, to 52% proficient/advanced in the same period.

Hawaii - Digital Connection program

The Digital Connection program at the Noelani and Pauoa Elementary Schools employed research-based online math and writing tools that provided targeted practice and continuous feedback to students and teachers. Teachers were provided extensive professional development in 21st Century learning and the use of new technology tools as well as integration of technology into the curriculum. Wireless laptops increased student access, allowing use of the math and writing programs on a daily basis. Teachers developed web pages to foster school-home communication, as well as to support student learning through activities, resources and learning trips. In one semester student writing as measured by the online assessments increased from 36% to 41% proficient at Noelani and from 5% to 16% proficient at Pauoa. One-semester gains on the math online assessments were 24% at Noelani and 20% at Pauoa.

New Hampshire - Digital Portfolios and Social Networking

Six school districts formed the Moodle Mahara Consortium in New Hampshire to support an open source student digital portfolio solution with a free online course management system. The drag-and-drop environment and social networking underpinnings allowed 8th grade classrooms within all six school districts to build portfolios. Reporting tools helped teachers and administrators evaluate progress. Teachers received common training on the use of the software and how to help their students create portfolios. Student engagement was high and many students requested access from home. Students in grades 4-9 were able to access their portfolios through a number of core content classes, and teachers began building online course environments for their classrooms.



Enhancing Teacher Effectiveness

For the seventh year in a row, states reported offering a wide range of professional development, positioned as a key leverage point for extracting a learning return on their Title II-D technology investments.

Research underscores the importance of supporting teacher effectiveness: one recent review of studies on professional development found that teachers impacted by substantive professional development (on average, 49 hours) can improve their students' academic achievement scores by 21 percentile points. In FY08, more than 8 in 10 states reported that professional development was the major emphasis in their Title II-D competitive grants, underscoring the fact that professional development is considered a key leverage point for extracting a learning return on their educational technology investments. In fact, the majority of states awarded their Title II-D grants based – at least in part – on the quality of school district professional development plans.

Arizona - Northern Arizona Technology Integration Coaching (NATICC)

The Northern Arizona Technology Integration Coaching (NATICC) in Flagstaff United District provided technology to partner LEAs, creating 30 technology-enhanced model classrooms (TEMC). The primary goal of the program was to utilize sustainable models of professional development, such as peer coaching, to develop increased capacity at local school sites. Two project facilitators supported all grant project activities including, but not limited to, providing training for technology coaches, data collection and analysis, modeling of effective technology integration strategies, budget and purchasing oversight, and just in time assistance. In classrooms impacted by the grant, students showed an 11% increase in math scores, while reading scores showed an increase of 3%.

New York - Technology-Based Education Strategies Training Project

The Technology-Based Education Strategies Training project, Niagara Fall City School District, New York, provided professional development in the use of interactive whiteboards, tablet PCs and podcasting. These initiatives were in alignment with each district's strategic plan grounded in and modeled on extensive research into effective professional development practices. Results include — Dunkirk: 22% increase in Middle School ELA tests scores; N Tonawanda: 22% increase in Middle school ELA test scores; 21% increase in Middle school Math test scores. Niagara: 21% increase in Middle School ELA test scores; 7% increase in Middle School Math test scores



Using Data to Inform Learning, Teaching, and Leadership

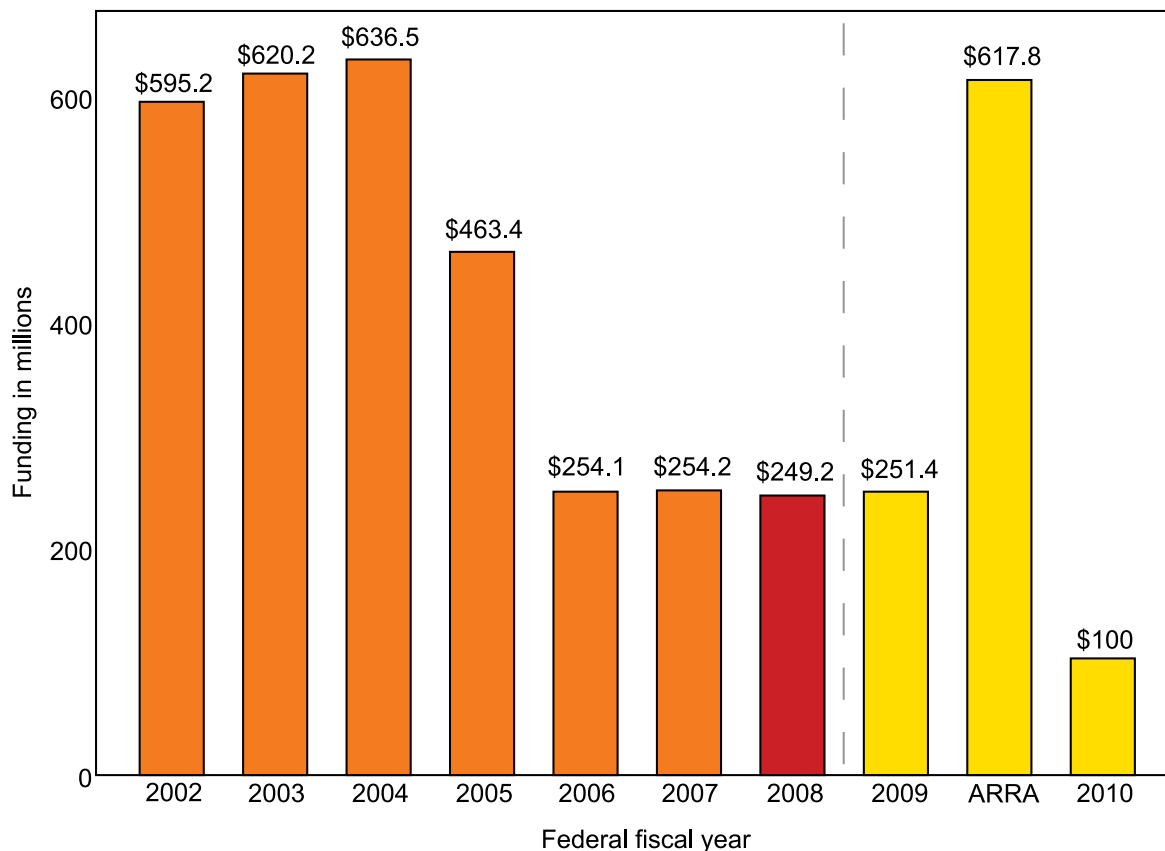
Title II-D investments are increasing the capacity of educators to access, analyze, and use data effectively to inform learning, teaching, and leadership.

In FY08, several states reported that Title II-D funds supported both formative and summative uses of data in the classroom. In some cases, the grants were used to build the capacity of teachers to access and use data to inform instruction, in others the grants enabled teachers and students to use data to track changes in student achievement over time.

Georgia - The Teachers, Teamwork, & Technology

Calhoun City Schools were awarded one of 80 statewide, The Teachers, Teamwork, & Technology grants, which provided opportunities to increase student achievement through the use of interactive technology tools including interactive boards, student response systems, and MP3 players. Through formative assessments, teachers assessed their teaching strategies and student achievement before and after the use of the technology. Standardized math test scores increased from 78% in 2008 to 84% in 2009. The teachers reported that the use of interactive tools allowed more time for teachers to teach than in the previous year.

Federal Title II-D Allocations to States (in millions) by Year



Source: U.S. Department of Education, *Fiscal Year 2001-2009 State Tables*. Retrieved March 23, 2010, from <http://www.ed.gov/about/overview/budget/statetables/index.html>: *American Recover and Reinvestment Act State Allocations*, updated February 19, 2009, www.ed.gov/about/overview/budget/statetables/recovery.html.

Note: FY02-FY09 totals include District of Columbia, but do not include data from outlying areas or national activities funds reserved by ED. ARRA total only reflects distributions to SEAs. FY10 total includes District of Columbia and data from outlying areas and national activities funds reserved by ED. All figures are in current dollars, not adjusted for inflation.

Unique Role of the Enhancing Education Through Technology (EETT) Program

Title II-D is the only federal education program that supports meaningful uses of educational technology in classrooms and schools nationwide. It serves as a complement to investments through other federal and state programs – including the E-Rate, Title I, and IDEA – and sets the national expectation that every student be technologically literate by the end of the eighth grade.

Every state distributes program funds to the highest need schools through a mixture of competitive and formula grants to school districts. In addition, the 2010 SETDA National Educational Technology Trends Report reveals that the EETT program:

- Disproportionately supports technology integration and use at the middle and high school levels, in contrast to the Title I program which historically has focused investments at the elementary school level;
- Offers states and school districts the flexibility to invest in innovations that meet local needs, as evidenced by the net increase of transfers of federal dollars into EETT from other eligible federal program (particularly from the Improving Teacher Quality State Grants Program, Title II, Part A); and,
- Focuses on high-quality implementation and sustainability by supporting a large proportion of multi-year competitive grants to individual school districts and to consortia of school districts

Additional data and state examples can be found in the full report at: <http://setda.org/web/guest/nationaltrendsreport>.