2009

National Trends Report

Focus on Technology Integration in America's Schools

Professional Learning Opportunities for Teachers

Alaska — The Technology Teacher Leaders (TTL) Program

The TTL program provides a supported community of K-12 teachers who become leaders in the area of technology integration and who leverage their skills, knowledge, and understanding to help schools improve student learning. In the 2007-08 TTL project year, several schools used document cameras and increased access to computers to improve reading and writing skills. At Romig Middle School, 88% of the students in the TTL participant classrooms increased at least one reading level, with 52% of those students increasing two or more reading levels. http://www.asdk12.org/depts/itech/TTL04/

Massachusetts — The Partnership for Online Professional Development (POPD)

POPD is a pilot program for Brockton, Cambridge, Community Day, Easthampton, New Bedford, Northampton, Springfield, and Winchendon Schools in Massachusetts. The program is designed to improve teaching practices, promote student learning, and provide capacity-building solutions with Massachusetts's teacher portal, MassONE, and other innovative practices. The districts work with curriculum specialists and online learning experts, in cooperation with the Department of Education, to develop and teach online professional development courses. The evaluation report indicates that teachers have gained substantial content knowledge after the professional development. http://www.doe.mass.edu/edtech/grants/fy08/POPDReport.pdf

> *Sustained professional development has encouraged the effective integration of technology to facilitate student achievement and technology literacy across the state.*
>
> —State Technology Director, South Carolina

Washington — Enhanced Peer Coaching Program

Central to the two-year Enhanced Peer Coaching Program is the systematic integration of technology into classrooms as teachers train to become technology integration coaches for other teachers in their schools. As coaches, these teachers help their peers identify ways that technology can strengthen classroom curriculum and enhance their students' academic achievement. Data from Year 1 indicates that coaches and the teachers they coached have a better understanding of how to integrate technology into the core curriculum and to increase student engagement. Additionally, stakeholders felt that the improved student engagement has led to increased comprehension of the core content and increased technology skills for students.
http://www.k12.wa.us/EdTech/peercoaching.aspx

Wisconsin — Digital Tools Integration

Nine districts collaborated to provide a comprehensive professional development program to increase student academic achievement in Wisconsin's Standards for Information & Technology Literacy skills. These districts provided opportunities for teachers to develop, implement, and assess technology-rich learning activities. Student achievement increased with respect to student use/mastery of: interactive white boards, podcasting, blogs, wikis, digital video and handheld computers.
http://web.cesa5.k12.wi.us/departments/it_digitaltools.cfm

NCLB IID funding (in millions) for educational technology state grants: Rounds 3-6

State	Round 3 FY 04	Round 4 FY 05	Round 5 FY 06	Round 6 FY 07	State	Round 3 FY 04	Round 4 FY 05	Round 5 FY 06	Round 6 FY 07
Alabama	$9.9	$7.3	$4.1	$3.9	Montana	$3.3	$2.4	$1.3	$1.3
Alaska	3.3	2.4	1.3	1.3	Nebraska	3.3	2.4	1.3	1.3
Arizona	12.2	9.3	5.3	5.3	Nevada	3.5	2.6	1.6	1.6
Arkansas	6.1	4.6	2.5	2.4	New Hampshire	3.3	2.4	1.3	1.3
California	93.3	65.7	35	32.8	New Jersey	13.5	9.8	5.3	5.0
Colorado	5.9	4.5	2.6	2.5	New Mexico	6.2	4.0	2.3	2.0
Connecticut	5.5	3.8	1.9	2.2	New York	65.7	45.3	24.6	24.6
Delaware	3.3	2.4	1.3	1.3	North Carolina	14.4	10.8	6.0	6.1
District of Columbia	3.3	2.4	1.3	1.3	North Dakota	3.3	2.4	1.3	1.3
Florida	30.9	22.9	13.4	11.7	Ohio	21.0	14.2	8.4	9.1
Georgia	20.2	15.2	8.4	8.3	Oklahoma	7.4	5.1	2.8	2.5
Hawaii	3.3	2.4	1.3	1.3	Oregon	7.0	4.6	2.7	2.4
Idaho	3.3	2.4	1.3	1.3	Pennsylvania	22.2	17.7	9.9	10.5
Illinois	27.6	19.9	11	12	Rhode Island	3.3	2.4	1.3	1.3
Indiana	8.6	6.4	3.8	4.7	South Carolina	8.8	6.7	3.7	3.8
Iowa	3.3	2.4	1.3	1.4	South Dakota	3.3	2.4	1.3	1.3
Kansas	4.2	2.9	1.6	1.8	Tennessee	10.7	7.6	4.2	4.2
Kentucky	8.9	7	3.7	3.7	Texas	59.4	44.1	24.1	23.4
Louisiana	14.3	10.4	5.7	5.6	Utah	3.3	2.4	1.3	1.3
Maine	3.3	2.4	1.3	1.3	Vermont	3.3	2.4	1.3	1.3
Maryland	8.8	6.4	3.5	3.8	Virginia	10.3	8.1	4.2	4.1
Massachusetts	11.1	8.3	3.9	4.2	Washington	9.0	6.6	3.6	3.7
Michigan	21	15.9	8.6	9.3	West Virginia	5.0	3.9	2.0	1.7
Minnesota	5	3.9	2.2	2.3	Wisconsin	8.4	5.9	3.1	4.1
Mississippi	8.3	6.1	3.4	3.5	Wyoming	3.3	2.4	1.3	1.3
Missouri	9.5	7.3	3.8	4.1	**National total**	**$636.5**	**$463.4**	**$254.1**	**$254.2**

NCLB IID Funding: FY 02-07 (Dollar amounts in millions)

Round 1 FY 02	Round 2 FY 03	Round 3 FY 04	Round 4 FY 05	Round 5 FY 06	Round 6 FY 07	Change, Round 3 to Round 4	Change, Round 4 to Round 5	Change, Round 5 to Round 6
In millions percent change								
$595.2	$620.2	$636.5	$463.4	$254.1	$254.2	-27%	-45%	0.04%

NOTE: Detail may not sum to totals because of rounding. National totals are limited to the 50 states and the District of Columbia. They do not include data from outlying areas.
SOURCE: U.S. Department of Education. *Fiscal Year 2001-2009 State Tables for the U.S. Department of Education.* Retrieved November 1, 2008 from
http://www.ed.gov/about/overview/budget/statetables/index.html.

SETDA

STATE EDUCATIONAL TECHNOLOGY DIRECTORS ASSOCIATION

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

America's students have the potential to compete successfully in the global economy if our educational system is modernized to respond to the vast and varied learning needs of America's future innovators. Research shows that well-executed technology rich classroom environments increase student achievement and engagement, boost teacher retention rates, and reduce discipline referrals. Through the Enhancing Education Through Technology (EETT) grant program, in Title IID of the No Child Left Behind Act, the U.S. Department of Education provides educational technology grants to state education agencies (SEAs). The primary goal of the EETT program is to improve student academic achievement using technology in schools. These funds help to support technology rich classroom environments, professional learning communities and virtual learning opportunities.

Report Overview
The findings in the Round 6 report are based on surveys from 50 states and the District of Columbia, representing the federal NCLB IID dollars allocated across the United States in FY07.
In Round 6, the respondent states and the District of Columbia awarded 1,047 competitive grants and 11,351 formula grants that together with the funds allocated for SEA program administration (5% or less) represent $254.2 million in funds expended at the SEA level. (Note: That figure does not include the U.S. territories' allocations for NCLB IID.) To view the full 2009 report and the full 2004-2008 reports please visit: http://www.setda.org/web/guest/nationaltrendsreport.

Included in this pamphlet are examples of programs from SETDA's 2009 National Trends Report. You may view additional examples of effective education technology programs in SETDA's Class of 2020 Action Plan for Education available at http://www.setda.org/web/guest/2020.

Successful 21st Century Integration Programs Replicated

The examples below are current multiyear EETT grants that are based on lessons learned from scientifically based research programs and successful practices demonstrated in previous EETT grants.

North Carolina—IMPACT II
Five local education agencies received grants to support the implementation of the IMPACT model. The model includes a fully funded media and technology program, including personnel, resources, and access, recognizing that effective instructional technology programs support effective teaching and learning. It is expected that this grant will follow the trends of previous EETT grants with significant improvements in both reading and math scores. Student achievement has proven to be consistently higher in the IMPACT schools, and teacher retention is 65% higher with this program. http://www.ncwiseowl.org/impact/igrant2/

Texas—Technology Immersion Pilot Project (TIP)
At Stephen F. Austin Middle School in Bryan, Texas, students were issued laptops to provide uninterrupted access to technology and powerful learning resources. TIP teachers have learned to seamlessly integrate technology tools into the instructional activities of daily lessons. TAKS (Texas Assessment of Knowledge and Skills) scores have increased steadily for all grades 6-8 in both math and reading over the past two years. Grade 7 average reading scores increased from 62% to 75% and math scores from 51% to 65%. http://www.ci.bryanisd.org/1Vision/Welcome.html

West Virginia— 21st Century Teaching and Learning
Teachers at Mount Hope Middle School (5th-8th grade) in rural Fayette County Schools were provided with continuous, quality professional development. A Technology Integration Specialist provided professional development in lesson plan design using research based strategies and 21st Century assessment tools. This program is based on the Technology Model School program, which has shown to improve student academic achievement. In fact, 4th and 5th grade students in past TMS schools made statistically significant (p<.05) gains (compared to similar students in non-TMS schools) on the state's Math WESTEST. http://mounthope.faye.k12.wv.us/

Missouri—eMINTS Grant
In Eldon R-I School District (5th–6th grades) teachers and students are engaged in learning communities where questioning, cooperative learning, and community building are common. Teachers use strategies, lessons, and activities focused on higher-order thinking. In year 1 of the project, the district reports a 50% increase in the depth of knowledge levels reached in eMINTS classrooms, a 13% increase in active student engagement, a 31% increase in technology integration, and a 79% increase in teacher technology literacy skills. http://www.emints.org

Integrating Technology Leads to Positive Academic Results
State directors reported that the integration of technology through NCLB IID projects has resulted in positive academic results.

Arkansas—Technology Integration in the Elementary Classroom
Teachers were provided technology tools and professional development focused on integrating technology into curriculum and instruction. Benchmark scores for students in grade 3 and 4 showed an increase in literacy among third graders from 67% to 84% proficient and above, and among fourth graders from 47% to 69%. In math, student scores in grade 3 increased from 76% to 89% proficient and above, while student scores in grade 4 increased from 64% to 81% proficient and above. http://tie.k12.ar.us

Enhanced Capacity Building and Professional Learning Opportunities Ready Educators for Effective Technology Integration
Systematic planning was a key element of most NCLB IID competitive grants. Such work aligns policies, investments, and practices in support of effective technology use.

Arizona—Technology Enhanced Model Classrooms
Flagstaff Unified School District provides technology hardware to schools to develop technology-enhanced model classrooms (TEMC). TEMC trains teachers in the use of the equipment and to become technology peer coaches for up to three colleagues. Coaches help colleagues develop the instructional strategies needed to integrate technology into teaching and learning. Based on district benchmark assessments, student scores increased 17% in reading and 18% in math. Students also demonstrated an average of 15% growth in technology literacy. http://www.fusd1.org/naticc/

Virtual Learning Options Increase for Students and Educators
Funds were used to support virtual, online learning as a potential solution to the challenges of providing all students and educators with access to high-quality, relevant, state-of-the-art learning opportunities.

Alabama—Collaborative Distance Learning
Huntsville City Schools increased and enhanced distance learning opportunities to provide comprehensive curriculum, sharing resources and experiences across cultures. Distance learning capabilities were improved in all 48 schools and centers with interactive video conferencing (IVC), online courses, and social networking and collaboration. According to the state technology survey: distance learning opportunities, provided to enhance learning and access to curriculum content, increased from 17% in FY 04 to 100% in FY 08. http://www.hsv.k12.al.us/DL/DL_Overview.php

States Report Increases in Students' Technology Literacy
States continued to report gains in student technology literacy. While the attainment of technology literacy by all eighth grade students is a stated goal of the NCLB IID program, the definition of the term, and the assessment of eighth-grade literacy are left up to the individual states.

South Carolina—Science and Technology Literacy
The Grade 8 Tech-tonics program is a research-based initiative that uses laptops and an innovative curriculum. Through increased professional development, intense and innovative curriculum planning, and the use of diagnostic and portfolio based assessment, gains in science and technology proficiency scores are outstanding. Both districts had 3-5 point gains in Measure of Academic Progress scores. Average student gains for one academic year are 4 points. Dillon School District increased its percentage of technology proficient students from 34.6% to 55.1%, and Florence School District had an increase from 40.7% to 67% in technology proficiency. http://www.lakeviewschools.com/home.aspx

Positive Academic Results with Technology Infused Curriculum

Thirty-nine of the 50 states and the District of Columbia (76%) guided their LEA's use of competitive grant funds by setting the priority of the NCLB IID goal of increasing academic achievement. Some focused their competitive grant applications on specific academic content areas including mathematics (23 states), reading (22 states), science (18 states), and/or writing (20 states), while others focused on technology literacy or professional development.

English, Math, Science and Social Studies—Georgia
The Instructional Technology Enhanced Environment (ITEE) grant teachers at Georgia's Claxton High School, 11th grade, represent all four academic core content areas: English/language arts, science, social science, and mathematics. Teachers plan common units which incorporate technology. Significant gains were made in all areas with the greatest gains in math and science with a 15% and 16% increase, respectively. http://www.gadoe.org/it.aspx?PageReq=ITEnvGrant

Math—California
The Vallejo EETT-C Project involved Franklin, Solano, Springstowne, and Vallejo Middle Schools. The project focused on the lowest performing students in 6th and 7th grade. While typically these are students who do not engage fully in learning, the different types of technology in this program turned that around. The district saw large gains on California Standards Test (CST) scores for the target students, the 50 lowest performing students in each middle school. Approximately 40% moved up one performance band in the first year, essentially accomplishing the two-year objectives the first year. http://www.vallejo.k12.ca.us

Math—New Jersey
The Alfred C. MacKinnon Middle School in New Jersey received the Math Achievement to Realize Individual eXcellence (MATRIX) grant for technology integration in math instruction for special needs 7th grade students. Students planned and designed the construction of a new bridge connecting New York and New Jersey. Seventh grade special education students won first place for their bridge designs and models during the 2006 National Council of Teachers of Mathematics National Conference. Last year the percentage of students scoring in the GEPA proficient ranges increased to the highest percentage in the district's history (74.4%). http://mcubed4.tripod.com/

Increased student and teacher success demonstrates the power of educational technology tools working hand in hand with job-embedded professional learning that fosters collaboration about the teaching and learning process.
—Georgia Technology Director

Math—Iowa
Great Prairie consortium developed a new initiative that focused on 8th grade math achievement. Great Prairie focused on professional development at the middle school level as the primary change agent for improving student achievement. Comparison of student growth in math achievement for proficient and non-proficient students in six participating school districts showed a statistically significant closing of the gap between proficient (n=327) and non-proficient (n=131) students during the 8th grade. http://www.iowa.gov/educate/index.php?option=com_content&task=view&id=1527&Itemid=2343

Reading and Math—Oregon
The LIVE-C - Learning through Interactive Video Experiences in Three Rivers School District (1st–12th grades) was designed to bring the world to the district's geographically isolated, culturally limited and high poverty students through the use of mobile interactive video conferencing equipment. Teachers invite experts from around the world to enter their classrooms as co-teachers, as well as connect their students to students around the globe. The percentage of fifth graders at Fruitdale Elementary that met or exceeded the standard on the Statewide Assessment in reading/lit rose from 61.4% in 2006-2007 to 95% in 2007-2008. In math, 86.7% of students met or exceeded the standard in 2007-2008, up from 63.6% in 2006-2007. In math, 86.7% of students met or exceeded in 2007-08, up from 63.6% in 2006-07. http://www.soesd.k12.or.us/News.asp?NewsID=278.

SETDA also provides Individual State Profile Reports at http://www.setda.org/web/guest/statemembers