Data Exposé

The Center for Digital Education releases cutting-edge research.

BY CORINE STOFLE

YEAR AFTER YEAR, the Center for Digital Education brings forth pertinent surveys that accurately depict the state of technology integration in learning institutions. In helping educators and administrators to identify emerging trends, discover best practices and learn about cutting-edge technologies, the Center is dedicated to advancing the purpose of education. The stakes are high, and ensuring our schools and colleges remain competitive on the global stage must be a concerted effort. Together with decision-makers, administrators and educators, the Center helps create a thriving education model — one that will successfully prepare tomorrow's leaders.

21st-Century Concepts

The Center for Digital Education and the National School Boards Association (NSBA) are pleased to present the results and winners of the 2008 Digital School Districts Survey. This year's participants have taken original and masterful approaches to implementing 21st-century concepts in the classroom.

"The survey responses show that school districts across the nation are doing an outstanding job of using technology to increase communication with their students, parents and the community," said Marina Leight, vice president of the Center for Digital Education. "In addition to their Web sites, they are using newer technologies such as wireless notifications, blogs and grade portals. We applaud their progress and successes."

The Center and NSBA thank SMART Technologies for sponsoring this year's survey, as well as the participants for their contribution.

Participating districts were classified among three categories:

Small Category — Fewer than 2,500 students
Medium Category — 2,501 to 15,000 students
Large Category — More than 15,000 students

Winners showed great achievements in the domains of communication among parents, students, teachers and administrators, and in online presence and professional development offerings.

Fast Facts

99% of responding districts have an online presence.

91% of responding school boards have put their policies online. This is a considerable improvement from 2007's 75%.

77% of responding districts post their strategic plan or goals online. Among them, 54% post the annual progress toward their goals.

47% of responding districts have updated their IT strategic plan since 2006.

67% of responding districts use "push" technology — a collection of automated systems capable of sending mass information electronically. This increased 18% over 2007.

Developing teacher talent

Today's teachers and educators have one critical mission: to launch students into tomorrow's workforce. To do so, they must not only reach common digital ground with their students — a generation known as Generation Now, which has never experienced a world without Web 2.0 — but they must also go one step further: They must incorporate digital tools and concepts into their classrooms in ways that will successfully engage students and prepare them for 21st-century jobs. Understanding the magnitude of this challenge, school districts nationwide are increasingly providing teachers with the training they need.

Winner Highlight

The **Cherokee County School District** (CCSD) is at the leading edge of professional development. This large district, located in Canton, Ga., has implemented "Teach 21," an intensive training initiative that includes more than 200 hours of training designed to help teachers create engaging lesson plans supported by innovative digital tools. Since the program's inception, more than 33,000 hours of training have been delivered to 977 teachers. CCSD is the first-place winner of the Digital School Districts Survey in the category of large districts.

The 21st-century classroom

The 21st-century classroom defies time and space. Seventy-two percent of the 2008 respondents offer opportunities for their

students to take online classes – sometimes from teachers around the world. Fifty-four percent of the districts surveyed also reported taking students on virtual fieldtrips to museums, zoos or natural monuments – travel opportunities they would not otherwise have access to. With these trends, the Center is identifying a movement forward, away from the traditional brick-and-mortar model, toward the limitless classroom of the future.

Winner Highlight

Twenty-first-century classrooms are equipped with advanced digital instruments, such as interactive whiteboards, tablets and various handheld devices, which provide a seamless platform for Web 2.0 tools, as well as compelling digital content. Most of the districts surveyed also offer hands-on experience with programs, software and hardware students may use in their future careers, such as Web design programs or video equipment.

Andover Public Schools, in Andover, Kan., is recognized for taking advantage of these tools to enhance student collaboration and instill 21st-century skills. Teachers in the district use wikis to promote student collaboration, as well as videoconferencing to expand this collaboration beyond classroom walls. Students there also blog, listen to lectures and announcements via podcast and can take classes in which they produce their own multimedia material. Teachers also use digital content Web sites, such as United Streaming, to enrich classes with interactive exercises.

Teachers at **Henry County Schools**, in Virginia, also have various digital tools at their disposal: They each have laptops and use interactive whiteboards and student response systems in daily instruction. The district also went the extra mile to provide parents with the support they need by opening a resource center in a local mall. In addition, Henry County Schools demonstrated leadership in the realm of sustainability — a critical issue — by partnering with a company to recycle all old computers.

For their achievements, Andover Public Schools and Henry County Schools won first place in the category of medium-size districts.

Fast Facts

67%
The district provides all students with an opportunity to take an introductory class that explores technology-supported careers.

54%
The district utilizes videoconferencing to offer virtual fieldtrips to students.

72%
The district allows students to take online classes for credit.

81%
The district offers advanced technology skills classes such as computer programming, media production or video game development.

Connecting where it counts

The Internet has opened the communication lines between those who participate in a child's education. More than ever, parents can communicate with teachers, administrators and members of the school board via school Web sites and parent portals. This keeps parents in the loop, providing them with access to information, such as attendance reports, grades and school and district news.

Keeping kids safe and cyber-safe

Children safety is an essential component of a thriving school environment. Schools and districts nationwide have taken steps to implement comprehensive contingency plans. But they are not stopping at physical safety: A majority of schools (92 percent) provide Internet safety training, and nearly three-quarters (74 percent) have specifically addressed cyber-bullying.

Fast Facts

86%
The district has completed a district plan for disaster, emergency, safety and crisis management.

81%
The district has an emergency alerting and notification system in place.

69%
The district's plan has been coordinated with local disaster response authorities, including drills with students, teachers and administrators.

66%
District personnel have been trained on the plan, including technology systems recovery aspects.

Absolute convergence

Many responding districts reported deploying converged networks that bring voice, video and data to a common platform. To support such massive amounts of information, districts have increased their bandwidth and installed sturdy 1GB or wireless connections. Several respondents have also cited taking advantage of E-Rate discounts to ensure their schools remained connected.

Winner Highlight

The **Briarcliff Manor Union Free School District**, in New York collaborated with Westchester County to boost its voice and data network. It has fiber optics between campuses and a 1GB bandwidth to ensure a fast connection. The district also collaborates with the local public library on numerous reading projects, including a podcasting program in which students review books.

Briarcliff Manor Union Free School District is an example of what can be done with a comprehensive strategic IT vision — one that takes advantage of advanced network technologies to provide meaningful digital content and engaging classes.
This district is the first-place winner in the category of small districts.

Community Colleges' Digital Innovation

The Center for Digital Education recently released the results of the 2008 Digital Community Colleges Survey. Chief information officers, deans, Web developers and directors of technology services from colleges across the nation responded to this year's survey, offering a comprehensive picture of technology integration in responding U.S. community colleges.

"Our revised 2008 Digital Community College Survey showcases the best utilization of digital technology," Leight said. "Community colleges continue to be the place to look for innovation."

This year, leading colleges demonstrated particular ingenuity in the realm of online admissions, student access to information and campus safety, and they inventively integrated technology into curriculum and campus life.

Colleges were classified according to three categories:

Small Category – less than 3,000 students
Medium Category – between 3,000 and 7,500 students
Large Category – 7,500 students or more

Fast Facts

100% of responding colleges have automated the admissions and class registration processes for prospective students. This is a dramatic increase from 2007's 82 percent.

19% of respondents have enabled admissions via mobile devices, and 17 percent have done so for class registration.

71% of participating colleges offer technical support for student-owned laptops.

100% of responding colleges offer technology skills development training for full-time faculty.

It's easy being green

Recent reports have spurred a long-awaited awakening to environmental issues. Businesses and governments nationwide are pledging to reduce their carbon footprint – in some cases by as much as 30 percent – and leading community colleges are at the forefront of sustainability efforts.

By harnessing wind, geothermal and solar power, consolidating data centers and virtualizing servers, community colleges are not only preserving the environment, but they are also realizing tremendous savings. For instance, Miami Dade College in Miami, Fla., has reported saving approximately $30,000 annually by virtualizing 73 servers – one of the many successful examples proving that being green can be easy after all.

Winner Highlight

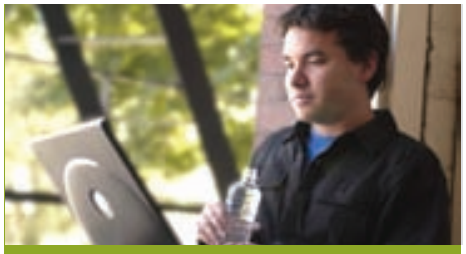
In **Montgomery County Community College** (MCCC) in Blue Bell, Pa., IT initiatives are well-aligned with environmental concerns. Having signed the President's Climate Commitment in 2007, the college is in the developing stages of a carbon neutrality plan. To reduce energy consumption, it virtualized servers using the Green Grid Initiative and consolidated its data centers. A host of efficient energy-managing tools, such as light-sensitive Smart Panels or devices with automated on/off settings, help keep energy costs low. MCCC also promotes videoconferencing for meetings, holds various sustainability workshops and maintains a sustainability blog. For these rigorous green principles, as well as many other practical IT applications, MCCC is the first-place winner in the large college category.

Web 2.0 goes to college

The newest generations of college students are known for their signature Internet savvy. They blog, listen to podcasts, post pictures and watch videos online – and they do it a lot. Community colleges nationwide are beginning to see the education advantages of the tools with which their students are so familiar, and are increasingly exploring ways to incorporate them into their administrative or instructional offerings.

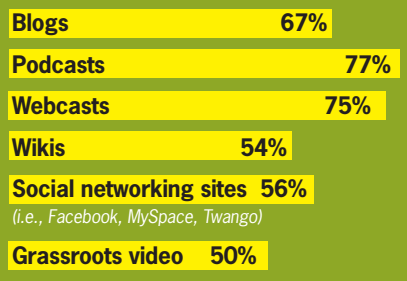
Winner Highlight

Faculty at **Wyoming's Laramie County Community College** have adapted Web 2.0 tools to their teaching methods. Instructors use blogs, wikis, podcasts and grass roots videos. They frequently have a presence on social networking utilities or their own social operating systems, and they encourage students to link to each other to promote peer-to-peer collaboration. Some instructors also use Google Mashup Editor to create applications custom-made for a particular lesson or project. These innovative integrations of technology, as well as many other achievements, have earned Laramie County Community College a first-place award in the medium college category.



Fast Facts

Responding community colleges using Web 2.0 tools:



All about students

As evidenced by this year's survey, community colleges strive to provide students with IT tools for success. More than half of responding colleges (54 percent) offer a laptop-purchasing program for new students, and a majority (96 percent) provide online advising services.

Winner Highlight

Carl Sandburg College in Galesburg, Ill., deployed a module allowing counselors to collaborate with students in mapping out their academic goals. eAdvising, as the module is known, is a comprehensive tool that helps students make the most of their time at the college, suggesting courses and academic services that fit into their schedules. With the application, students can also generate "what if" scenarios, a valuable resource when considering a change in major or career. For its student-oriented applications, Carl Sandburg College has been selected as the first-place winner of this year's survey in the small college category.

Up to the Virtual Challenge

As digital natives join the ranks of students nationwide, they bring with them expectations of anytime, anywhere learning.

Education officials in various jurisdictions are taking the challenge by offering virtual classes that suit students' needs, goals and lifestyle.

To evaluate their progress and determine the status of online learning policy and practice in the country, the Center for Digital Education conducted a review of state policy and programs. This report, underwritten by Blackboard and Pearson Education, was produced with the advice and consultation of the Council of Chief State School Officers and the North American Council for Online Learning (NACOL).

Fast Facts

21 states reported their K-12 students can take higher education courses via K-20 ventures.

37 states have some form of licensure reciprocity agreements, whereby teachers can dispense distance online course in other states.

Leading the way

The Center asked state education officials to describe the breadth of online offerings available to their students. The following states were particularly successful in aligning their vision, policies, programs and strategies to provide thriving online offerings adapted to the 21st-century student.

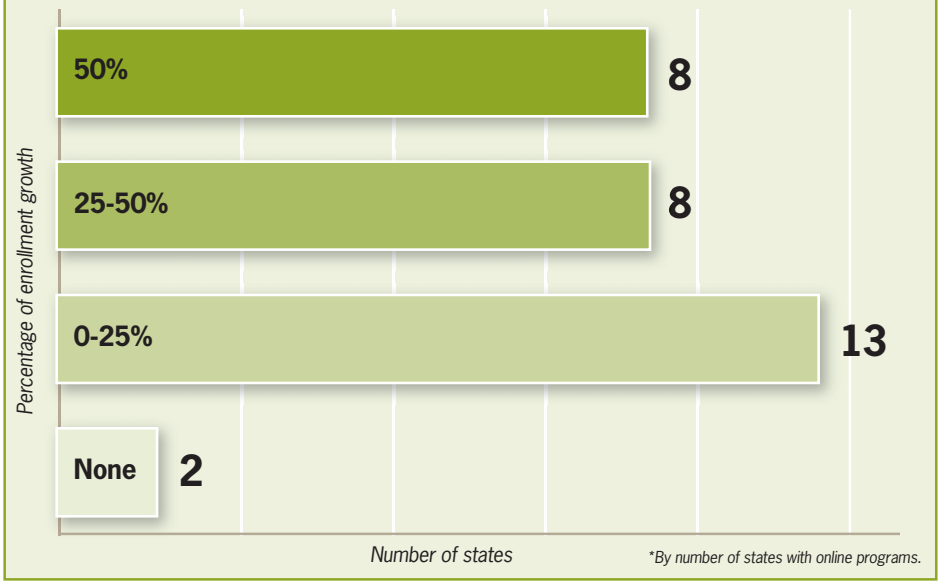
The Florida Virtual School is a vast program, serving approximately 57,000 students. With more than 250,000 course registrations, this is the largest state-led program, according to NACOL. For this successful initiative and its focus on technology and education, Florida is recognized as an online learning leader.

Growing ranks

In most states, the number of students enrolled in online courses has dramatically increased, with 16 percent of respondents experiencing growth of 50 percent or more.

2007-2008 Enrollment Growth*

Students are increasingly enrolling in virtual schools, a clear sign that such offerings suit the busy lifestyles and curriculum needs of 21st-century pupils and college-goers. Of the 50 states, 36 offer online programs. Among these, 31 states collected growth enrollment data:



These figures indicate students are widely embracing this type of instructional offering, and states will have to find ways to accommodate these growing ranks of virtual scholars. For example, in Arkansas, the demand already exceeds the supply.

Strategizing for the future

As highlighted by the report, online education doesn't just address students' learning preferences, but it can also be a solution to various education conundrums, such as teacher shortages, limited curriculum offerings and reaching students in rural areas. As a result, a majority of states have made online learning an integral part of their strategy for school reform. Officials of the states that have not done so say virtual education is nevertheless a recurring topic in strategic discussions.

Fast Facts

Leading States

Following are the top 10 states in the nation regarding technology intergration in the classroom.

1. Florida
2. Michigan
3. Idaho
4. Arkansas
5. Louisiana
6. New Mexico
7. West Virginia
8. North Carolina
9. Minnesota
10. Hawaii

Funding

Funding is necessary to procure the hardware and software tools that make virtual learning a reality. The report noted that 11 states fund and support district-run programs, including cyber-charter schools. Nine states only fund online programs located within certain geographic jurisdictions. Still, a majority of programs are subsidized locally, with general fund dollars allotted to school districts.

For more information

visit www.centerdigitaled.com/surveys.php