

# ***Technology and Education:***

Assistance and Advancement for K-12 Schools  
2008

Submitted in Accordance with Conn. Gen. Stat. § 4d-83

State of Connecticut Department of Information Technology

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# Introduction

Conn. Gen. Stat. § 4d-83 requires the Department of Information Technology (DOIT) to report annually on assistance to “local and regional boards of education and regional vocational-technical schools to expand their educational technology capabilities, including, but not limited to, wiring, Internet connectivity and technical support, and (2) opportunities for such boards of education and schools to purchase under state-wide contracts.”

This report outlines calendar year 2008 assistance to K - 12 educational institutions, including support for the Connecticut Education Network (CEN), to which DOIT provides project management, network architecture, and operational support via a dedicated program team.

CEN was created as a result of a multi-year initiative that began in 1999 by then Lt. Governor M. Jodi Rell to ensure Connecticut schools and libraries had access to the best possible educational technology.



# Connecticut Education Network



CEN is the nation's first all-optical network linking K-12 public schools, higher education campuses and library locations throughout Connecticut.

CEN operates at speeds one thousand times faster than a home broadband connection. It provides schools with a no-to-low cost internet connection that enables them to access to a wide variety of education resources.

## **K-12: 224 Connections**

Optical connections are active in all school districts. Individual schools connect to the CEN through these district connections. Many districts have leveraged state infrastructure grant funds to connect individual schools.

All of the state's **Regional Technical High Schools** have been connected to the CEN, as well as all six **Regional Education Service Centers**, which collectively serve 160 school districts.

## **Libraries: 174 Connections**

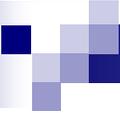
174 public library sites, including public libraries, library service centers and secondary libraries, are directly connected to the CEN.

## **Higher Education: 51 Connections**

All public and non-profit higher education institutions have connections to the CEN, including the Connecticut State University System, the University of Connecticut, Charter Oak State College, and the Community Technical College system.

***Since 2006, CEN usage has risen by nearly 250 percent.***

***In 2008, peak usage hit 3.6 gigabits per second, a 50 percent increase from the previous year.***



# Service and Support

***"In addition to enhanced levels of connectivity, the CEN has allowed many districts to realize huge savings by being able to cancel previously held Internet and filtering contracts. These savings amount to millions of dollars statewide." 1***

## **Financial Support and Contracts**

The CEN Program office each year applies for and secures discounted telecommunication service rates via the federal Universal Service Fund (USF).

These discounts have reduced CEN costs of providing schools with an internet connection by \$21.8 million since FY 2006. In FY 2009, \$5.04 million was saved in CEN costs.

1. Commission for Education Technology, January 2009. [Technology and Learning in Connecticut: Recommendations and Progress on the Attainment of Statewide Educational Technology Goals](#)

## **Contract Discounts**

DOIT also continues to offer contracts off of which school districts can purchase. The contracts, posted on the DOIT website at [www.ct.gov/doit](http://www.ct.gov/doit), offer favorable pricing on technology hardware, software and services.

## **Customer Service**

The CEN Program Office continued to improve customer service in 2008, offering tools and training for CEN customers throughout the year in addition to providing direct network support.

Of the nearly 1,000 customer service requests received in 2008, the CEN Program team resolved 94 percent within one business day.

# Service and Support (continued)

## **CEN Wiki Established, 230 Join**

In 2008, the CEN Program team established a special CEN wiki to leverage the collective knowledge of district network staff across the state. There are currently 230 members.

The CEN program team also conducted free training sessions for school districts throughout the year

## **Network Training**

75 technology coordinators from 60+ school districts and library service centers attended a March 2008 seminar sponsored by the CEN program team on network baselines and anomaly identification.

## **Videoconferencing Training**

In November 2008, the CEN program team held a videoconferencing training session for school district technology coordinators.

## **Internet Content Filtering Training**

Three training sessions were held between May and December 2008 and attended by 210 school district staff.



## **No-Cost Filtering Tool and Training**

The CEN Program office deployed a new, upgraded internet filtering system to enable CEN customers to continue blocking inappropriate web content

In addition to sponsoring three training sessions, the CEN program team assisted CET in the creation of an online survey to solicit feedback on the new system settings, and adjusting the default filter as required by CET directive.

# New Content Highlights

In 2008, the collaboration continued between CEN staff and the CET advisory council to identify and acquire new content resources for CEN users.

New resources, accessible through [www.cen.ct.gov](http://www.cen.ct.gov), include

## **Educator Resources**

Digital media for professional development, research and guidelines on online social and educational networking, Tools/tutorials for creating podcasts and other digital content and Educational conference recordings and resources were added in 2008.

**teachers'domain** Digital Media for the Classroom and Professional Development

## **Student Resources**



New additions for Connecticut K-12 students including student news webcasts, creative programming tools, student project galleries, and more.

A *Virtual Learning* section was also added that describes the opportunities offered by the Connecticut Virtual Learning Center, Virtual High School, and Virtual Learning Academy

## **Multimedia on Demand**

New multi-media materials from providers such as PBS, National Geographic, the National Archives, the U.S. Government, the BBC, and leading universities from around the globe are now available.



# New Content Highlights (continued)



## Middle School Science Multimedia Content

In 2008, a new, multi-media Middle School Science resource collection was launched via a contract between the Connecticut State Library and Discovery Education. All 428 of the state's public middle schools received passwords for their science teachers to access teaching resources, including online training materials and video based tutorials.



## Online Financial Literacy Module

In 2008, a new online CEN financial literacy module was launched. The multi-media module targets high school seniors and college students and was produced by Connecticut Public Television and the UConn School of Business.

*To access more new online content,  
visit [www.cen.ct.gov](http://www.cen.ct.gov).*