State Technology Resources and Student Success

October 17, 2019

Today's Schools

Agenda

- Competencies
- Open Education Resources
- Data Privacy
- Connectivity
- Cybersecurity
- Digital Equity

Standards for Students

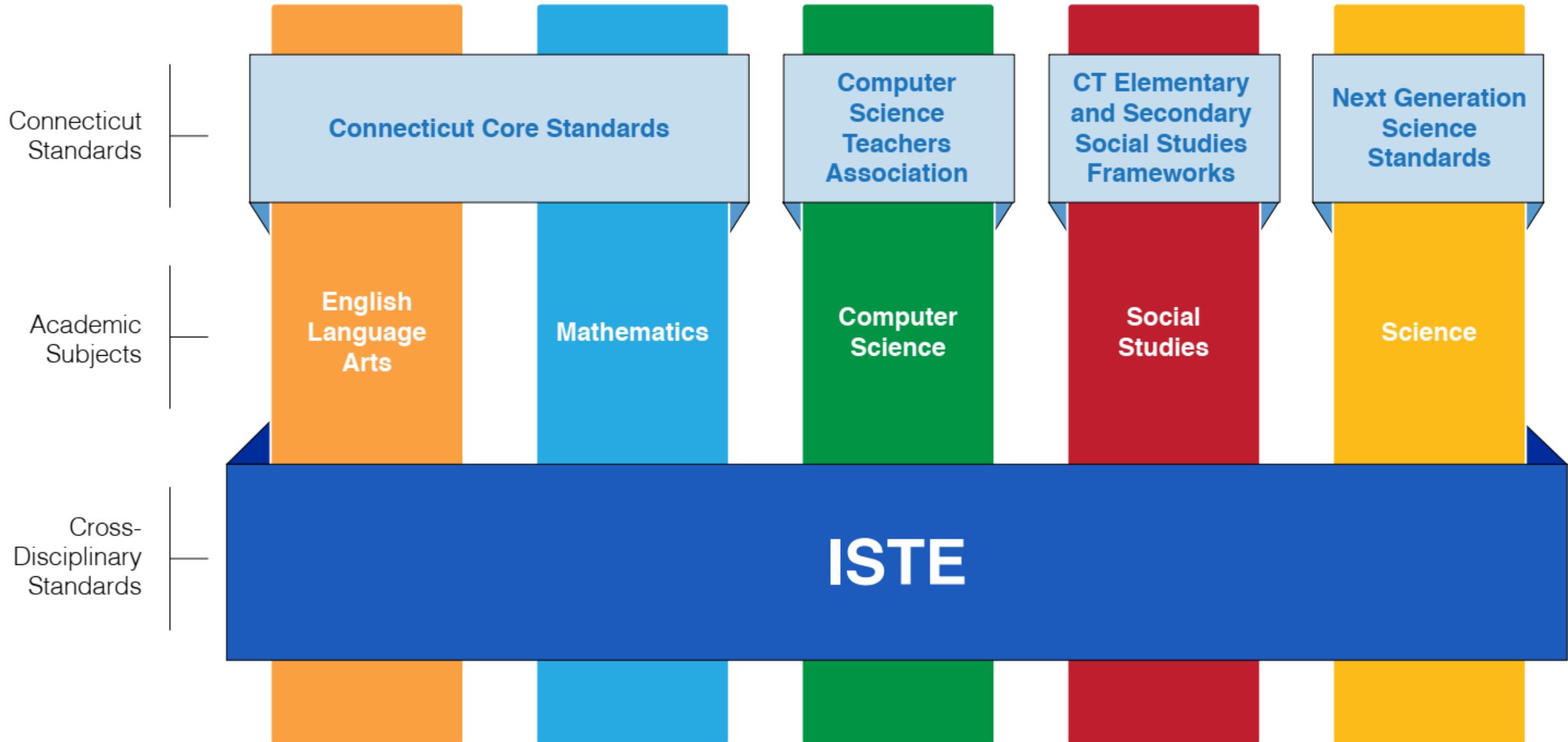- Commission Adoption September 2016

![CTEDTECH – Connecticut Commission for Educational Technology]

- State Board Adoption June 2018

![ISTE Standards Students·2016 diagram: Empowered Learner, Digital Citizen, Knowledge Constructor, Innovative Designer, Computational Thinker, Creative Communicator, Global Collaborator]
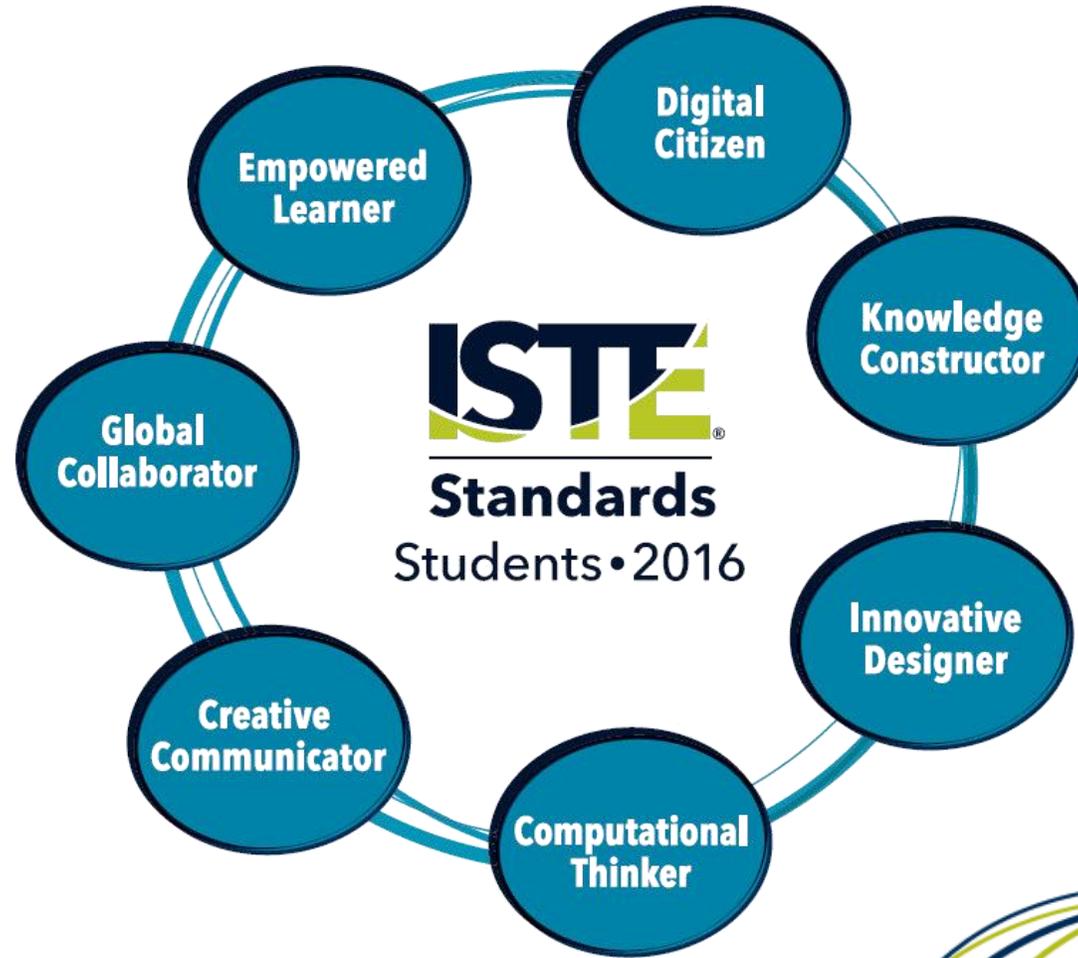
Standards Frameworks

Standards for Educators

- Commission Adoption September 2017

CTEDTECH
Connecticut Commission for Educational Technology

ISTE Standards Educators

- Analyst
- Learner
- Leader
- Citizen
- Collaborator
- Designer
- Facilitator

ISTE

Standards for Educational Leaders

Commission Adoption December 2018

CTEDTECH
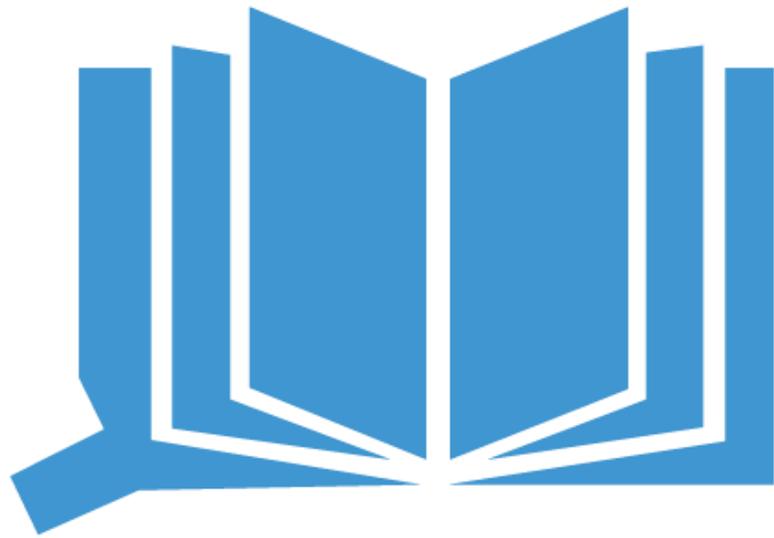Connecticut Commission for Educational Technology

State Resources (www.CT.gov/ISTE)

- Implementation Guide

- CT Leader Webinar Series

- ISTE Books, Guides, etc. on Classroom Integration, Project-Based Learning, ELL, CS, etc.

- 25% ISTE Member Discount on Many Purchases

www.bit.ly/ISTE-Guide
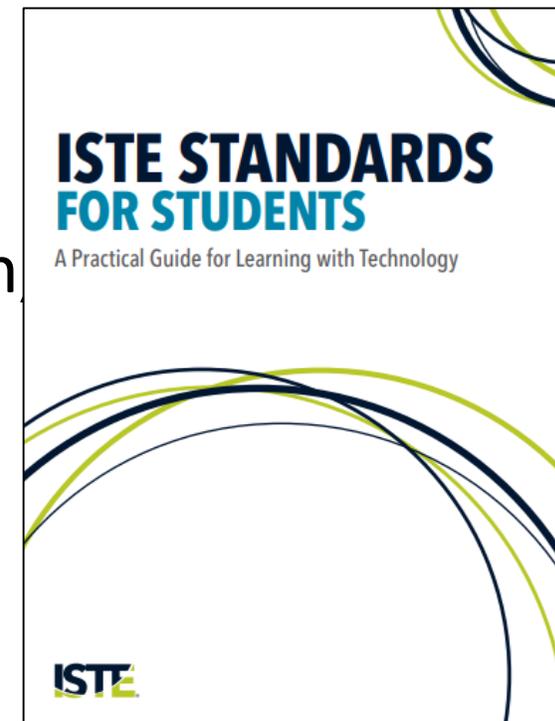
Open Education Resources

Free and openly licensed educational materials that can be used for teaching, learning, research, and other purposes.

– Creative Commons

Open Education Resources

Meeting Educational Challenges with OER

Benefits

- Equity of Access

- Relevancy and Currency

- Teacher and Student Voice

- Cost Savings

- Technology Investment

- Eliminates Barriers Between K – 12 and Higher Education

- Connection with Other Educators

X 169

www.GoOpenCT.org

- Resources for Schools and Colleges
  - District Launch Packet
  - Search Engines for Free and Open Materials
- Video Testimonials
  - Voices from CT Leaders
  - Success Stories and Inspiration
- Survey
  - Resources to Share
  - Current and Expected Needs
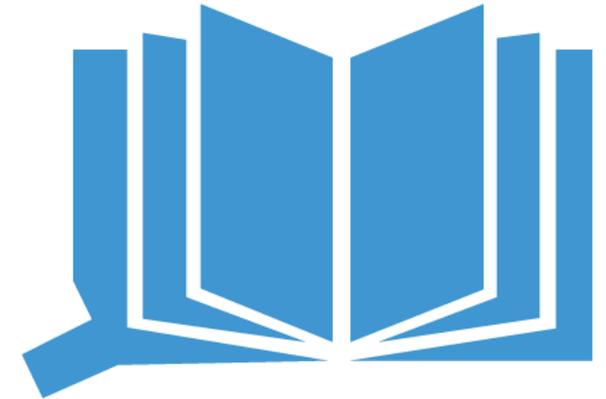
www.GoOpenCT.org
#GoOpenCT

Data Privacy

Essential Components of CT Law

- **Ensures Control and Transparency of Data**
- **Articulates Best Practices**
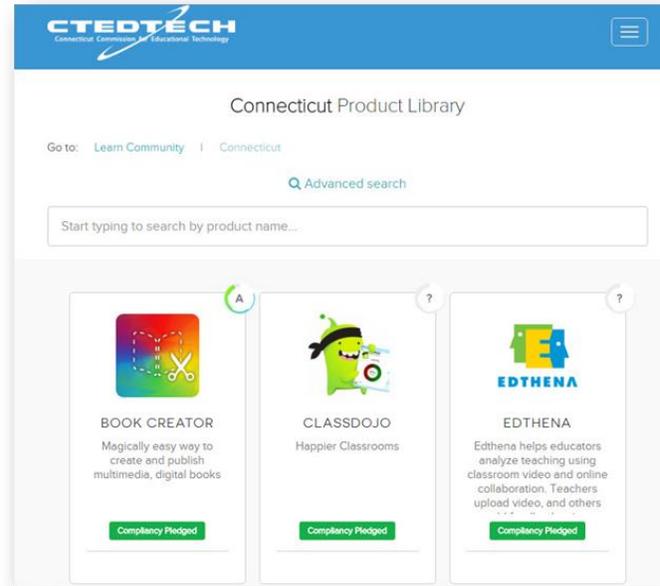- **Requires "Written Contracts"**
- **Requires Posting of Ed Tech Usage**
- **Details at bit.ly/CT_Privacy_ Law**

Education Community

Educational Technology Providers

Account Creation → Product Search

Account Creation → Education and Awareness → Product Registration → Privacy Pledge → TOS Addendum Details → Product Listing

Connecticut Product Library

Go to: Learn Community | Connecticut

Advanced search

Start typing to search by product name...

BOOK CREATOR
Magically easy way to create and publish multimedia, digital books
Compliancy Pledged

CLASSDOJO
Happier Classrooms
Compliancy Pledged

EDTHENA
Edthena helps educators analyze teaching using classroom video and online collaboration. Teachers upload video, and others
Compliancy Pledged

Educational Software Hub
connecticut.learnplatform.com

LearnPlatform Analytics

- Free
- Educator and Student Totals
- Actual Usage by Product
- Product Drill-Down (Compliance, Reviews, etc.)
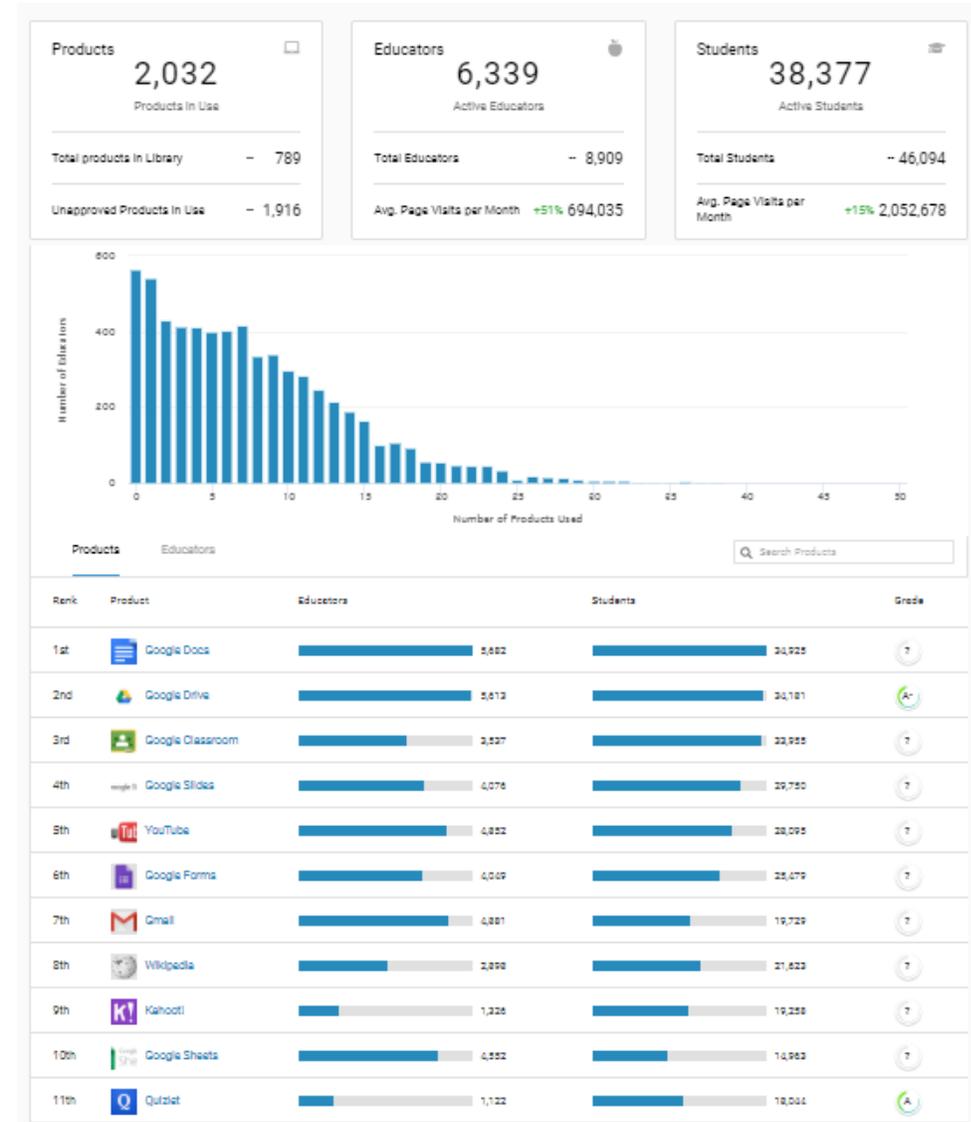
Model Terms of Service Addendum

Model Terms of Service Addendum

For the purposes of this Agreement, "directory information," "de-identified student information," "school purposes," "student information," "student records," "student-generated content," and "targeted advertising" shall be as defined by Conn. Gen. Stat. § 10-234aa.

1. All student records, student information, and student-generated content (collectively, "student data") provided or accessed pursuant to the contract are not the property of, or under the control of, the Contractor.

2. The Board shall have access to and the ability to delete student data in the possession of the Contractor except in instances where such data is (A) otherwise prohibited from deletion or required to be retained under state or federal law, or (B) stored as a copy as part of a disaster recovery storage system and that is (i) inaccessible to the public, and (ii) unable to be used in the normal course of business by the Contractor. The Board may request the deletion of any such student information, student records or student-generated content if such copy has been used by the operator to repopulate accessible data following a disaster recovery. The Board may request the deletion of student data by [insert specific protocols here].

3. The Contractor shall not use student data for any purposes other than those authorized pursuant to the [insert name of contract or addendum].

4. A student, parent or legal guardian of a student may review personally identifiable information contained in student data and correct any erroneous information, if any, in such student data. He or she may do so by [insert specific protocols here].

5. The Contractor shall take actions designed to ensure the security and confidentiality of student data.

6. The Contractor will notify the Board, in accordance with Conn. Gen. Stat. § 10-234dd, when there has been an unauthorized release, disclosure or acquisition of student data. Such notification will include the following steps: [insert specific protocols here].

7. Student data shall not be retained or available to the Contractor upon expiration of the contract between the Contractor and Board, except a student, parent or legal guardian of a student may choose independently to establish or maintain an electronic account with the Contractor after the expiration of such contract for the purpose of storing student-generated content.

8. The Contractor and Board shall each ensure their own compliance with the Family Educational Rights and Privacy Act of 1974, 20 U.S.C. § 1232g, as amended from time to time.

9. The laws of the State of Connecticut shall govern the rights and duties of the Contractor and the Board.

10. If any provision of the contract or the application of the contract is held invalid by a court of competent jurisdiction, the invalidity does not affect other

Privacy Resources

www.CT.gov/CTEdTech

- Background for Educators and Vendors
- Educational Software Hub (LearnPlatform)
- Model Terms of Service
- Webinars
- Privacy Toolkit

Connecticut Education Network

ABOUT CEN

CEN
Connecticut's Trusted Internet Partner

- Internet Service Provider
- All fiber, high capacity, low latency network
- Established in 2000
- State owned infrastructure
- Managed by UConn
- Governed by the CET (ct.gov/ctedtech)
- Serves Community Anchor Institutions
- Cost recovery model (no profit)
- Nation's first all optical network to connect every K-12 district (2005)

1.8 Million Citizens Served

Community Anchor Institutions	Public K-12 Districts	Public Colleges & Universities	Private Colleges & Universities	CT Public Libraries	CT Municipal Government	CT Govt Branch	Open Access
Connected	170	19	17	144	102	2	38
CT Total	170	19	20	238	169	3	n/a
% of Total	100%	100%	85%	61%	60%	66%	n/a

PARTNERSHIP OVER PROFIT

CEN
Connecticut Education Network

- Not for profit/cost recovery model = true partnership

- For stakeholders not stockholders

- Built for peak performance

- Tuned for rigors of education

- Blended Internet services

- Economical pricing structure

- Equitable service across all districts

- Member led advisory councils

- Most advanced network Infrastructure in the region

- 6X capacity of traditional networks

CEN Advisory Councils

Technical

Engagement & Development

Service
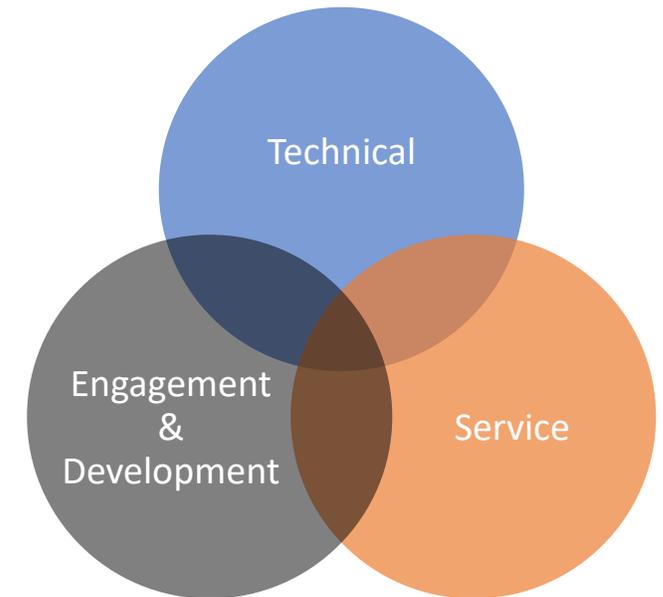
WHY AN EDUCATOR SHOULD CARE

- Digital Equity to *every* district was solved in 2005, then enhanced in 2010 through BTOP

- CT can focus on connectivity equity at home, not to the school districts like other states

- Exceeds the SETDA recommended bandwidth allocation per student –> 791Kbps

- Services tailored to YOUR needs

- CEN saves the state ~ $25M annually through our model

- NY, MA, RI for similar services pay 137%, 89%, and 20% more respectively

- Platform for digital transformation & success for schools
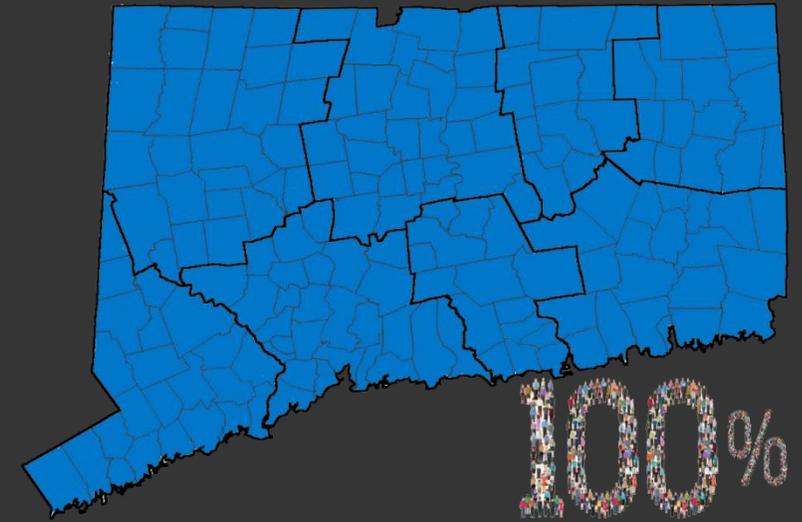
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Cybersecurity

BASIC CYBERSECURITY APPROACH

- Leadership / Cabinet-level
- Culture continuum
- Have an Incident Response plan
- Patch & verify all your systems
- Least privilege required on systems
- Train your IT staff as responders
- Train your non-technical staff
- Purge old data (retention requirements).
- Practice, Practice, Practice

If/when a cybercrime victim, call:
- CTIC
  - CT Intelligence Center
  - ctic@ct.gov
  - 860 706 5500
- CCIU
  - Cyber Crimes Investigation Unit
  - cybercrimes@ct.gov
 - 860 685 8450

WHAT IS CEN DOING

CURRENT STATE

DDoS Mitigation -

CIPA Filtering -

NextGen Firewalls -

Training/Workshops -

FUTURE STATE

- DNS Firewall (estimated Jan2020)

- More training/workshops

- Member Incident Response Teams

- Collaboration with CTIC

- Managed Security Services

- Security Operations Center (SOC)

Cybersecurity Resources

- CEN (https://ctedunet.net/)
  - DDoS is included with ISP – 700+ Mitigated DDoS Attacks Since January 1, 2019
  - Firewall Solution – vFirewall and Managed Firewall
  - Hosted DNS with Free Firewall Add-on
- CTIC (https://portal.ct.gov/DEMHS/Homeland-Security/Intelligence-and-Counter-Terrorism)
  - CTIC, CCIU, and Homeland Security collaborating
  - Reporting cyber Crimes
- CoSN (www.CoSN.org)
  - Trusted Learning Environment (TLE)
  - Cybersecurity Best Practices
- CIS / MS-ISAC (https://www.cisecurity.org/ms-isac/)
  - Best Practice, Tools, Information sharing
- NIST CyberSecurity (www.NIST.gov/topics/cybersecurity)
  - Frameworks, Resource Center, Education
- SANS Institute (www.SANS.org)
  - Education, training, certifications
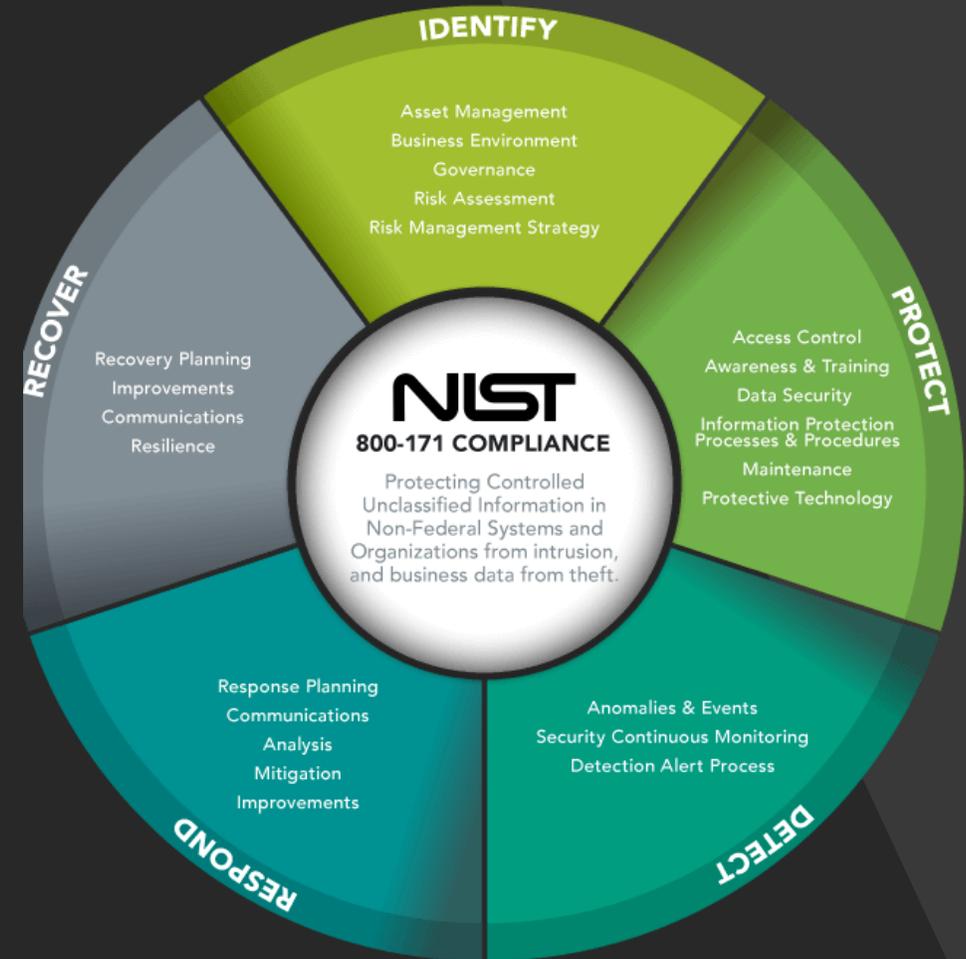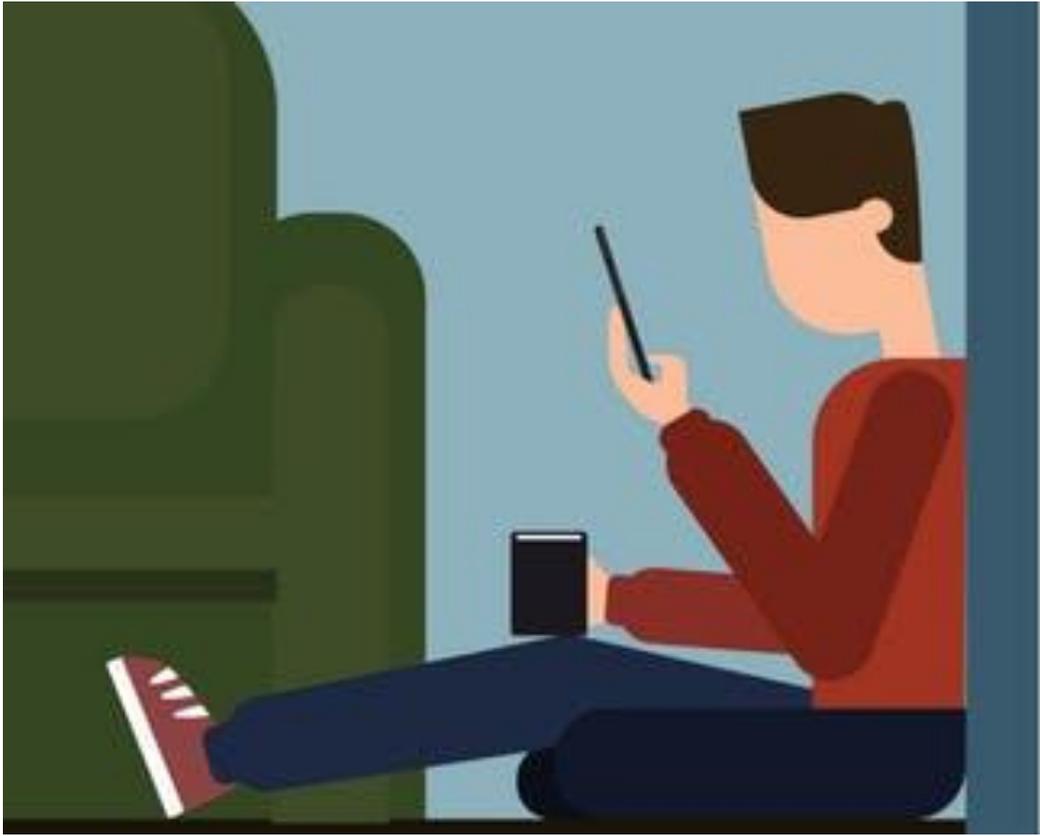
Digital Equity

Digital Equity

Broadband Internet

Devices

Skills

Support

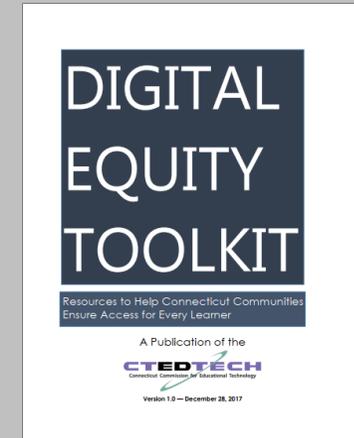# Digital Equity Solutions

- Digital Equity Toolkit: **www.CT.gov/CTEdTech**
  - Information Gathering: Identify Need
  - Community-Based Approaches
  - Leadership Teams
  - Current Programs (e.g., Internet Essentials)
  - Leveraging Existing Resources

- Eduroam
  - Higher Education Solution
  - Connects Learners to Existing Hot Spots
  - Pilot Towns

Contact

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