



Technology Plan

Hooksett School District

SAU 15
2015-2018

Developed by Hooksett School District Technology Committee
September 2014 - April 2015

Approved by Hooksett School Board
June 2, 2015

Contact: Ken Henderson
Director of Technology
e. khenderson@sau15.net
p. (603) 518-5047 ext.5015

Table of Contents

I.) Introduction	Page
a.) Overview	2
b.) Tech Committee Members	3
c.) Mission, Core Values, Vision	4
II.) Goals	
a.) Overview	6
III.) Action Plan	
a.) Access to Technology Resources	7
b.) ICT Literacy	14
c.) Professional Development	18
d.) Community Involvement	22
IV.) Budgeting	25
V.) Evaluation	26
Appendix	
a.) Standards	
b.) Policies & Procedures	
c.) Acronyms and Terms Summary	

I. INTRODUCTION

HOOKSETT COMMUNITY

Hooksett is located between Manchester, the state’s largest city, and Concord, the state Capital. A prominent landmark is Robie’s Country Store, a National Historic Landmark and a frequent stop for presidential candidates during the New Hampshire Primary.

The total land area of the town is 36.3 square miles. Its close proximity to Interstates 93, 293, and 101 make it an ideal location for commuters. Hooksett has seen increased growth in residential and industrial construction in recent years and has attracted many new businesses and retailers to the community.

According to the census of 2010, there were 13,451 people, 4,926 households, and 3,533 families residing in the town.

The town’s five largest non-government employers are:

- General Electric Co. 800 Employees
- Southern NH University 700 Employees
- United Healthcare 500 Employees
- Cigna Health Care 249 Employees
- Target 249 Employees

As of 2010, the town had a labor force of 8,247 with a 5.6% unemployment rate. According to the 2006-2010 Census Bureau survey, per capita income in Hooksett was \$34, 082 with a median household income of \$81,500.

The Hooksett School District is governed by a seven member school board assisted by a superintendent, assistant superintendent, and business administrator. The Hooksett School District is part of SAU #15 which also includes the districts of Auburn and Candia. The townspeople of Hooksett take great pride in their community and continue to support efforts to improve school and town services

Students in grades K-2 attend Fred C. Underhill School, grades 3-5 attend Hooksett Memorial School, and grades 6-8 attend David R. Cawley Middle School. Hooksett does not have it’s own high school. Hooksett maintains the following high schools: Manchester High School Central, Manchester High School West and Pinkerton Academy.

TECHNOLOGY COMMITTEE MEMBERS

The Hooksett School District Technology Committee is made up of stakeholders representing administrators, teachers, technology specialists and community members. Committee members met several times over the course of the 2014-2015 school year to provide balanced input into the development of this Technology Plan.

Ken Henderson	Technology Director
Chris Curtin	Computer Technician
Linda Heuer	Computer Technician
Marge Polak	Assistant Superintendent
Becky Wing	Director of Mathematics, Accountability and Assessment
Justine Thain	Library Media Director
Matthew Benson	Principal - David R Cawley Middle School / Hooksett resident
Stephen HARRISES	Principal - Hooksett Memorial School
Andrew Bairstow	Principal - Fred C Underhill School
Lauren Benson	Technology Educator - Cawley School
Rosanne Beaudoin	Library/Media Educator - Memorial School
Karen Landsman	Library/Media Educator - Underhill School
Diane Miner	Teacher - Memorial School
Janet Champagne	Teacher - Memorial School
Lisa Pollard	Teacher - Underhill School / Hooksett resident
Trisha Korkosz	Paraprofessional Memorial School and Hooksett parent
Cheryl Akstin	Hooksett parent
David Soucy	Hooksett parent

HOOKSETT SCHOOL DISTRICT MISSION STATEMENT

The Hooksett School District is committed to excellence and equity. We believe that all children can learn. Our schools provide a safe, nurturing environment where respect, trust, cooperation, and honesty are revered. We endorse parental involvement and community support and believe these to be vital to our children's education. As a school and community, we encourage learning as a lifelong endeavor. Our ultimate goal is to educate children to become contributing members of society.

HOOKSETT SCHOOL DISTRICT CORE VALUES

Core Value # 1

Schools are for students. All interactions with them must nurture their social, emotional, and academic growth. It is our responsibility to accept all students and treat them with kindness and respect; we are tolerant and non-judgmental. Our decisions are based on what is best for them. We take responsibility for ensuring the success of our students despite the challenges they may face. It is our responsibility to foster an environment of respect through interactions with each other, parents, and our educational community. Parents are partners in the educational development of their children and are deserving of our acceptance and support. Additionally, all members of our staff are committed to working professionally with each other.

Core Value # 2

Students meet and exceed high academic standards. Our high expectations demand varied and rigorous learning experiences that enable students to think critically, work collaboratively, communicate effectively, and act with integrity. Every student is unique and has different abilities, needs, and learning styles that require varying instructional techniques and strategies. Student success is ensured through the use of purposeful, research based, data informed instruction. We continuously build and maintain the knowledge base and collaborative culture required for high levels of performance for all members of the learning community.

Core Value # 3

We each have the responsibility to ensure the success of all students. The needs of all learners are met when outcome based learning occurs and when students, teachers, and policy makers are empowered by data. All students learn when their passions and talents are coupled with high expectations and academic rigor in a safe and caring environment.

Core Value # 4

Twenty-first century instruction is necessary for twenty-first century learning. All members of our learning community hold the responsibility to value technology and achieve technological proficiency to prepare our students for future jobs, which currently may not exist. Customizable learning tools are used to access information and leverage each individual's learning style. With these technological skills, our students will be prepared to participate in the global community and compete in the global marketplace.

Core Value #5

We believe that it does, in fact, "*take a village to raise a child*". We have a unique opportunity and an obligation in our homes, our community, our businesses and our schools to influence the learning outcomes of our children. These collaborative partnerships within the community foster thoughtful and relevant learning, promoting the growth of each child.

TECHNOLOGY VISION STATEMENT

21st Century instruction is necessary for 21st Century learning. Providing students with an environment that fosters and encourages this belief is part of our core values. The Hooksett School District recognizes and embraces the pivotal role of technology within our schools and in today's global society. In an effort to facilitate innovative learning and teaching, the district will strive to provide a safe and secure technological setting with current technology, information resources and training. Students, staff and community members will be able to access, process and communicate information using a wide range of resources and technologies. The goal is to develop individuals that will have the opportunity to become independent, life-long learners in a rapidly changing society.



II. GOALS

To best prepare students for today's 21st Century world technology should be integrated into many facets of the delivery of instruction. The Hooksett School District will strive that all students will exit our schools with appropriate 21st century technology skills that will enable them to compete in a global society.

The International Society for Technology in Education (ISTE) defines the following six goals for today's students. Creativity and Innovation - Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.

1. Communication and Collaboration - Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.
2. Research and Information Fluency - Students apply digital tools to gather, evaluate, and use information.
3. Critical Thinking, Problem Solving, and Decision Making - Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.
4. Digital Citizenship - Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.
5. Technology Operations and Concepts - Students demonstrate a sound understanding of technology concepts, systems, and operations.

In order to help meet these goals the Hooksett School District will be a leader in implementing technology in the classroom. We will provide an environment where students will be encouraged to think critically, problem solve, collaborate and be creative. Specific goals to help meet this vision include.

ACCESS TO TECHNOLOGY

- 1.) Increase access to educational technologies for students.
- 2.) Improve the access to technologies and setup in the classrooms.
- 3.) Improve network performance and scalability infrastructure between each school.

ICT LITERACY

- 1.) Ensure that all students demonstrate grade-appropriate levels of ICT proficiency as outlined in the CCSS.
- 2.) Develop and implement an official curriculum for age appropriate digital citizenship at each grade level.
- 3.) Conduct research and development into embedded assessment technologies.

PROFESSIONAL DEVELOPMENT

- 1.) Assess individual readiness and needs by using a district centric assessment annually.
- 2.) Establish grade level technology collaborative teams.
- 3.) Create new online digital resources for teachers and staff to have access to on demand technology development and training.
- 4.) Establishing and communicating digital citizenship best practices for all staff.

COMMUNITY COLLABORATION

- 1.) Increase awareness of new web sites and school social media outlets within the community.
- 2.) Investigate branded online school stores for each school.
- 3.) Increase community awareness of student activities around technology.
- 4.) Develop and provide digital citizenship presentations and resources for parents and community members.

III. ACTION PLAN

Access to Technology Resources

Current Assessment

Personnel:

The three schools network infrastructure, end user devices, and all applications run there on are serviced and maintained by the district's technology department which includes the Technology Director, one full-time Computer Technician and one part-time Computer Technician. In the coming year the district will explore turning the full time Computer Technician position into a Network Administrator position to better reflect the current duties and responsibilities.

Desktops:

Cawley and Memorial UA classrooms currently have classroom desktops which are the last classrooms to be upgraded to laptops in each of those buildings. All Underhill classrooms and all front offices in the district are also equipped with a desktop computer. Both Cawley and Memorial have two desktop computer labs and Underhill has one desktop lab. Media Centers are equipped

with desktops for access to online information resources.

Laptops:

As part of the last technology plan an effort to provide more mobile computing solutions was implemented in the classrooms. By providing laptops instead of desktops it has enabled educators to bring their laptops to meetings and off site as needed. It has also fostered exploring of educational technology resources. All buildings have one mobile learning lab with laptops. Underhill classrooms have a student laptop or two per classroom . Each building has LCD media carts through Media circulation. Cawley has laptops in the media center for access to circulation software and research. Administrators and Special Education case managers have laptops for daily operations and remote access as needed.

Tablets:

All buildings have an iPad cart available for classroom use (10 iPads for each grade). Administrators have iPads for daily operations (funded through grant). Certain grades have had iPads donated, granted or purchased through fund raising activities. Tablets such as iPads help reinforce group instruction and provide individualized learning while a teacher walks around to monitor. Applications on tablets can help students practice and drill in weaker areas while providing real time feedback.

Printers:

Two team rooms have shared networked multi-function printers at Cawley and Memorial. The Media Center at Cawley and one computer lab at Memorial have a shared networked color printer. Underhill has two shared networked multi-function printers, one in the computer lab and one in the teacher printer room. Each front office including the office of student services have networked printer/scanners.

Interactive Whiteboards:

There are interactive whiteboards in the district (some purchased through grant funding) Each Media Center circulates interactive whiteboards for classroom use.

Cameras/Document Cameras/LCD Projectors & TV's:

The Media Centers circulate cameras, document cameras and LCD projectors and TV carts to classrooms for use.

District Wide Infrastructure

- Full wireless (802.11N and G) coverage per building
- Network switches at each school (1-1GB switch per school - several 10/100MB Switches)
- Comcast small business account (download 50mb/upload 10mb) per school
- Internet web filter per school
- Apple file server MacOSX Mavericks per school
- NutriKids Cafeteria software server at Cawley
- Back up drive per school
- Internet Firewall per school

Cawley Middle School

- All Grade level classrooms have Macbook Air Laptops Mavericks (30)
- All UA classrooms have iMac Mavericks Desktop (10)
- 27 iMac Mavericks Desktops (lab-1)
- 27 iMac Mavericks Desktops (lab-2)
- 8 iMac Mavericks Desktops (Media Center)
- 15 MacBooks Lion (mobile-lab)
- 10 MacBooks Lion (Media Center)
- 60 iPad 2
- 3 Multifunction Printers
- 1 Color Printer
- 3 scanners
- 8 digital cameras
- 12 Digital video cameras (includes FlipVideo, DVTape, HandiCam)
- 2 Interactive Whiteboards
- 20 LCD projectors

Memorial School

- All Grade level classrooms have Macbook Air Laptops Mavericks (25)
- All UA classrooms have iMac Mavericks Desktop (4)
- 25 iMac Mavericks Desktops (E2 lab-1)
- 25 iMac Mavericks Desktops (W4 lab-2)
- 7 iMac Lion Desktops (Media Center)
- 15 MacBooks Lion (mobile-lab)
- 38 iPad 2
- 1 Video Conferencing Unit (shared district wide)
- 2 Multifunction Printers
- 1 Printer
- 1 scanner
- 11 digital cameras

- 8 Digital video cameras (includes FlipVideo, Tape, HandiCam)
- 5 SmartBoards
- 15 LCD projectors

Underhill School

- Each classroom has an iMac Lion
- 24 Mac Mini Lab
- 7 iMac Lion Desktops (Media Center)
- 15 MacBooks Lion (mobile-lab)
- 30 iPad 2
- 2 Multifunction printers
- 1 Color Printer
- 1 scanner
- 5 digital cameras
- 5 digital video cameras (includes FlipVideo, DV Tape, HandiCam)
- 5 SmartBoards
- 12 LCD projectors

Three Year Goals

The district strives to provide access to technology resources to all teachers, staff and students. During the 2015-2018 time period a focus will be on expanding access to technology. More access to technology will enable educators to provide a vast number of dynamic learning tools. Students don't all learn the same way and many online resources can be suited for individualized learning. Technology is always changing and the district will evaluate Technology resources year to year to provide the best fit for our district.

In the 2015-2018 time period an effort will be made to provide a mobile device cart per grade level. This would enable teachers to sign out a cart and provide a device to each student in his/her classroom. Currently the district is planning on using Chromebooks for this endeavor. The Chromebooks are fast and boot up within seconds. They also seamlessly integrate with our Google Apps for Education suite including Google Classroom. Chromebooks are more affordable than many other devices and also integrate into our Google Suite for centralized management.

During the next three years there will be an effort to improve the technology setup in the classrooms. By using LED TV's mounted on walls in the classrooms the district can provide a powerful tool to educators and students that is a more economical approach than ceiling mounted Projectors. The use of TV's in the classroom can leverage existing power outlets in the classrooms (Underhill will need to be evaluated here for power) and the TV's and wall mounts for are becoming more inexpensive as time goes on. This will also help eliminate the need for carts and wires run along the floor. Also part of this classroom improvement plan will be the implementation of a system that will allow teachers and

students to present on the TV's remotely with teachers having control over who is presenting.

The current configuration of the computer labs will also change with the current desktops in the labs being replaced with laptops. This will enable more flexibility in the future for teachers to either utilize the lab area or bring laptops into their classrooms. The advantages of augmenting Chromebooks and other tablets with laptops are that they provide the ability to install higher end software packages and offer multiple browsers where some online resources don't work as well in Chrome. Power adapters will be provided in the labs as well as in carts so that they can be charged wherever they are located for the day. The physical setup of the labs will also be reviewed with changes made to enhanced group learning and collaboration. This has already been implemented in one Memorial lab.

An ongoing effort to improve the network infrastructure at the schools will continue in 2015-2018. The linking of the schools to a fiber backbone will be explored. It was recently revealed that the schools have fiber located nearby, running by them, and the ability to provide dark fiber (directly connect fiber between the schools) is a realistic possibility. The advantages of having a fiber backbone connected between the schools are numerous. The district would be able to consolidate several resources at Cawley instead of having to buy in triplicate. A fiber connection would provide a single point of Internet access for the three schools at a much higher bandwidth level. With the use of cloud based and other online resources becoming more prevalent a faster and more reliable Internet connection would be very beneficial. Also along the network infrastructure improvements that will be undertaken include the improvement of a faster and more robust web filtering system. The current web filter employed by the district uses a Barracuda Networks model that can handle between 10MB-50MB depending on the type of traffic being processed, which was more than fine when it was purchased years ago. Based on the Internet connection bandwidth being upgraded and Internet usage increasing a more robust model would improve performance and management. Another internal network undertaking will be upgrading all network switches in the district to support the 1GB standard for access (client) ports. Currently the buildings have several switches of which only one in each supports the 1GB standard. We will also investigate upgrading the Wi-Fi system in each school to one that supports higher throughputs and client density as the number of clients increases.

Goal #1 - Increase Student access to Technologies
Action Steps
1.) Purchase Device Cart with Devices for each grade level (K-8) including UA's as outlined in Tech purchase plan.
2.) Purchase additional tablets per grade level as outlined in Tech purchase plan.
3.) Refresh/Replace media center devices as outlined in Tech purchase plan.
4.) Evaluate devices yearly for best curriculum and budgetary fit for the district.



Goal #2 - Improve access to technology and setup in the classrooms.

Action Steps

- 1.) Investigate the use of mounted LED TV's versus mounted projectors in the district. *
- 2.) Procure and install TV's in instructional use classrooms in each of the schools.
- 3.) Investigate and procure solution to support teacher/student presentation solution.
- 4.) Re-configure Underhill computer lab physical space to support better project based learning*
- 5.) Procure and implement mobile labs in place of desktops as outlined in Tech purchase.

Goal #3 - Improve network performance & scalability infrastructure between each school.

Action Steps

- 1.) Investigate fiber solution to connect schools together to provide faster and more reliable connections.*
- 2.) Replace all remaining switches in schools that are 10/100MB to support 1000MB (1Gig)*
- 3.) Investigate Wi-Fi upgrade and develop RFP in 2017-2018 for faster (802.ac) and more scalable connections.

***(happening currently)**

HSD Computer/Device Replacement Schedule 2015-2025

Student Devices (4 Mobile Carts per School - one per grade and UA)

	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24-25
CMS		X				X				X
HMS			X				X			
UND				X				X		

Classroom Devices (X = Laptops; XX=Mounted LED TV's)

	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24-25
CMS	X-UA	XX			X					XX
HMS	X-UA		XX			X				
UND	X			XX			X			

Computer Labs (Either Mobile Devices w/ two chargers or desktops depending on school)

	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24-25
CMS		X						X		
HMS		X							X	
UND					X					X

Tablets (10 per grade - older Tablets will still be used)

	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24-25
DW		FCU	HMS	CMS				FCU	HMS	CMS

Media Center (Devices vary by School)

	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24-25
CMS			X						X	
HMS		X						X		
UND			X						X	

ICT LITERACY

“To be ready for college, workforce training, and life in a technological society, students need the ability to gather, comprehend, evaluate, synthesize and report on information and ideas, to conduct original research in order to answer questions or solve problems, and to analyze and create a high volume and extensive range of print and nonprint texts in media forms old and new. The need to conduct research and to produce and consume media is embedded into every aspect of today’s curriculum.” - Common Core State Standards

Current Status

LOWER ELEMENTARY (GRADES K - 2)

At the lower elementary level, the goal is to integrate technology with classroom curriculum. ICT standards are connected to lessons during regularly scheduled Media time. Every class does a major research project incorporating ICT standards and resulting in a digital product. These times are arranged with the teacher outside the regular Media schedule to take place in the classroom. Additional projects and activities are often designed to address both content and technology standards. Students learn specific skills as they "need to know" rather than in isolation, but projects and class time are designed to provide assured learning outcomes for all student.

There is additional lab time available, which allows for more flexible scheduling. Students also receive two class periods devoted to Digital Citizenship and Internet Safety (outside the regular Media schedule). Students at this level are beginning to learn how to locate and evaluate digital resources for research purposes, incorporate technology in oral, visual and written presentations, demonstrate respect for the work of others, comply with copyright law and how to avoid plagiarism, and how to use the Internet appropriately.



UPPER ELEMENTARY (GRADES 3 - 5)

At the upper elementary level, the goal is to embed technology in all subject areas. All students visit the computer lab for 45 minutes each week for instruction. Projects and activities are designed to address both content and technology standards. Emphasis is on teaching and learning, rather than on hardware or specific software. There is an additional lab available which allows for more flexible scheduling. Students are expected to use and evaluate electronic resources for research purposes, incorporate technology in oral, visual and written presentations, demonstrate respect for the work of others, comply with copyright law, and use the Internet in accordance with district policy. At each grade level, artifacts are chosen for students' digital portfolios and a student reflection form is completed.

MIDDLE (GRADES 6-8)

At the middle school level, the goal is to continue to embed technology in all subject areas in an effort to encourage students to be thoughtful producers as well as knowledgeable consumers. All grade 6 students have 1 quarter of technology classes. During this quarter, students have 1 - 45 minute computer class each day. The focus of grade 6 is to teach Digital Citizenship through awareness. Students need to be aware of the risks they face online in order to be able to avoid them. As in elementary school, emphasis is placed on teaching and learning, rather than on hardware or specific software.

Students in grades 7 and 8 are eligible to take advanced technology classes. The ICT Rubric from the NH Dept of Ed website is used as a guide for teaching and learning. The focus of these classes is for students to generate new ideas, products or processes to express themselves as well as to collaborate and communicate with others locally and globally in an appropriate manner and in accordance with district policy.

Students are expected to use and evaluate electronic resources for research purposes, incorporate technology in oral, visual and written presentations, demonstrate respect for the work of others, comply with copyright law, and use the Internet in accordance with district policy. At each grade level, students choose artifacts to add to their digital portfolios. A reflection is included with each artifact.

There is an additional lab available which allows for more flexible scheduling, a media center with desktop computers, a chromebook cart, 10 iPads per grade level, and a Bring Your Own Device (BYOD) policy.

Google Apps for Education/Classroom: The Hooksett District participated with the NH Digital Resource Consortium beginning in 2011. Through the consortium funds were allocated to train teachers, administrators and technology departments on the use of Google Apps for Education.

The Hooksett School District registered a domain and began offering the suite of tools to its teachers and students in the fall of 2012.

During the past couple years since its implantation GAFE (Google Apps for Education) has proved to be a huge success and is widely adopted in the district. The district is currently implementing Google Classroom, which was introduced in August 2014 and has provided to be a huge success in providing new more efficient ways to deliver and collect paperless assignments as well as provide real time feedback and grading. Google announced in September 2014 that there would no longer be any storage limitations on drive space for schools.

Three Year Goals

In an effort to align all standards with the Common Core the Hooksett School District has revised the existing SAU 15 Technology Standards to reflect the ICT Literacy embedded in the Common Core State Standards for grades K-8 along with the AASL Standards for the 21st Century Learner, ISTE-S and NH ICT Standards. (Standards can be found in Appendix A)

The first step toward establishing a new ICT Literacy Plan has been completed - identifying all related Common Core State Standards, AASL Standards for 21st Century Learners, National Educational Technology Standards for Students, and New Hampshire Information Communication Technology Standards. The next action steps will be to:

1. Integrate these standards into one comprehensive set of standards
2. Identify exemplary instructional plans
3. Identify exemplary assessments
4. Have students complete an e-portfolio (currently using Digication)

While this work is being completed, we continue to use our established SAU15 Technology Standards as a basis for instruction and assessment across grades K - 8, including collection of digital artifacts into student portfolios which demonstrate student progress toward proficiency of ICT Literacy and provides opportunities for student reflection.

Students are engaged in learning opportunities throughout content area instruction, practice and assessment that are problem and project based. The six ISTE-S standards of Creativity and Innovation; Communication and Collaboration; Research and Information Fluency; Critical thinking, problem solving & decision making; Digital Citizenship; and Technology Operations and Concepts are addressed naturally within the context of regular classroom instruction and not in isolation.

The district will also conduct research and development that explores how embedded assessment technologies, such as simulations, collaboration environments, virtual worlds, games and cognitive tutors, can be used to engage and motivate learners while assessing complex skills.

Goal #1 - Ensure that all students demonstrate grade-appropriate levels of ICT proficiency as outlined in the CCSS.

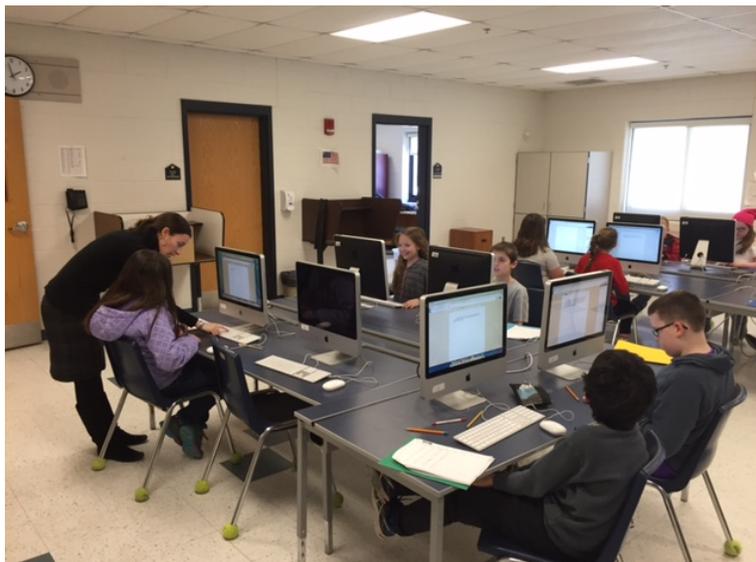
- 1.) Analyze, identify and document where ICT standards are embedded in CCSS/ISTE by grade and content level. *
- 2.) Define and secure necessary resources to ensure district wide implementation.
- 3.) Provide opportunities for professional development to support implementation activities.
- 4.) Ensure all students create and maintain e-portfolios and collect relevant digital artifacts that demonstrate their proficiency in these standards.

Goal #2 - Develop and implement curriculum for age appropriate digital citizenship at each grade level.

- 1.) Development appropriate digital citizenship curriculum for each grade level.*
- 2.) Create and implement new responsible use policies.
- 3.) Offer opportunities for professional development to support the implementation.

Goal #3 - Conduct research and development into embedded assessment technologies.

- 1.) Implement simulation technologies like Scratch coding and MIT App Inventor.*
- 2.) Explore and assess gaming for learning technologies like Minecraft for Schools.



PROFESSIONAL DEVELOPMENT

Current Status

Technology professional development is being conducted in conjunction with the SAU15 Professional Development Master Plan. PD opportunities are offered in a variety of formats, including: drop in sessions, scheduled topic specific sessions, as well as on-demand learning through Google and other sources (Synergise Training). Across the district, the technology/media integration specialists, library media director, instructional technology specialist, the Director of Mathematics, Assessment, and Accountability, and the Technology Director, work collaboratively to arrange these opportunities for faculty and staff.

Teachers are contractually allocated \$275 a year for attending out of the district PD based conferences and seminars. The funding is intended for each teacher's professional goals which includes, but is not limited to, technology goals.

Three Year Goal

We in the Hooksett School District believe that a culture of continued growth directly benefits our students and that educators need mentoring and learning opportunities in technology as much as our students. Our professional development program seeks to provide a range of training and professional development to promote high quality instructional effectiveness. The district will promote and support curricula and teaching strategies that integrate technology effectively into curriculum and instruction. The goal of promoting these curricula and teaching strategies is to link them to relevant research and to use them to increase student growth and achievement.

As stated in the *The ISTE Standards for Teachers* our goals will be to assist teachers in the following areas:

1. Facilitate and inspire Student learning and creativity.

Teachers use their knowledge of subject matter, teaching and learning, and technology to facilitate experiences that advance student learning, creativity, and innovation in both face-to-face and virtual environments.

2. Design and develop digital age learning experiences and assessments.

Teachers design, develop, and evaluate authentic learning experiences and assessments incorporating contemporary tools and resources to maximize content learning in context and to develop the knowledge, skills, and attitudes identified in the ISTE.S.

3. Model digital age work and learning.

Teachers exhibit knowledge, skills, and work processes representative of an innovative professional in a global and digital society.

4. Promote and model digital citizenship and responsibility.

Teachers understand local and global societal issues and responsibilities in an evolving digital culture and exhibit legal and ethical behavior in their professional practices.

5. Engage in professional growth and leadership.

Teachers continuously improve their professional practice, model lifelong learning, and exhibit leadership in their school and professional community by promoting and demonstrating the effective use of digital tools and resources.

Professional Development Action Plan

The district will provide on-going assessment of the individual needs and competencies of the district staff through a self-assessment tool, so that appropriate training opportunities can be offered. This data provides valuable information for professional development needs in the District. In an effort to promote 21st century learning, the Hooksett School District embraces the International Society for Technology in Education for Teachers (ISTE.T) and Administrators (ISTE.A). These standards and performance indicators define the fundamental concepts, knowledge, skills, and attitudes for applying technology in educational settings.

Professional development will be available in a variety of formats to allow staff members the opportunity to select professional learning experiences that best match their identified needs. Workshops, conferences and other digital learning formats will continue to be offered. An on-demand library of professional development resources will be created to include: online courses or tutorials, e-bulletin boards, podcasts, distance learning and video conferencing opportunities. Library selections may be acquired through District affiliations or created by Hooksett students and staff. This digital library will be consolidated into our Teacher Resources page of the newly developed website for ease of use.

There will also be a newly created Technology Helpdesk site created and linked to from the Teacher Resources page. This new Helpdesk will have the following incorporated into it:

- FAQ's, a new knowledge base of common issues.
- Open forum for teachers to ask questions or post things they find helpful.
- Sharing experiences from conferences and seminars.
- On demand training videos within the district. Many districts have found that providing these kind of videos work best for teachers as they can view when they have the time and use as a reference when they need most. Downloadable certificates will be made available for most lessons upon completion.

The district will provide training during New Teacher Orientation to new faculty and administrators in specific classes of software and productivity tools, including student information systems, grading tools and parent/student portals.

Goal #1 - Assess individual Technology readiness and needs for the district
1.) Create a customized assessment that borrows from current standards like the NH School Technology and Readiness Chart (STaR) with district specific categories.
2.) Send assessment to all faculty and staff yearly (end of year) to help determine areas strength and weakness.
3.) Plan Professional development for in house trainings, screencasting lessons and other materials towards the identified needs of the district.

Goal #2 - Establish grade level technology collaborative teams
1.) Identify and establish tech leaders within each grade level team and support them to implement new classroom technologies.
2.) Meet grade level teams on a regular basis (2-4 times a year) to discuss technologies in the classroom and keep abreast of any issues or training opportunities.

Goal #3 - Create new online digital resources for teachers and staff to have access to on demand technology development and training.
1.) Develop and implement new Technology Helpdesk site that will help provide a single source for technology PD and resources.
2.) Develop and implement an online Technology form open to all Hooksett personal for sharing and collaboration.

Goal #4 -Establishing and communicating digital citizenship best practices for all staff.
1.) Develop a new RUP (responsible use policy) that will incorporate Internet, social media and other Web 2.0 applications do's and dont's.
2.) Develop an in house seminar on best practices around these technologies and present at each school to faculty and staff.

The district is currently able to offer professional development technology training through, but not limited to, the following programs and affiliations:

- Apple Computer Staff Development
- ATECH
- BrainPop
- Danielson Training
- Discovery Education Network/ United Streaming
- Granite State Billing ??
- Local Educational Support Centers Network (LESCN)
- New Hampshire Department of Education
- New Hampshire Digital Resources Consortium
- New Hampshire Public Television (NHPTV) Knowledge Network - ??
- New Hampshire School Library Media Association
- New Hampshire Society for Technology in Education (NHSTE)
 - Christa McAuliffe Technology Conference
- New Hampshire State Library
- Online Professional Education Network (OPEN NH)
 - New Hampshire e-Learning for Educators
- Partnership for 21st Century Skills
- Plymouth State University
- Rivier College
- Southeastern Educational Service Center (SERESC)
- Southern New Hampshire University
- Synergise Google Apps Online Training
- University of New Hampshire



COMMUNITY INVOLVEMENT

Current Status

Each school in the Hooksett School District has a website that can be accessed at:

- <http://underhill.sau15.net/>
- <http://memorial.sau15.net/>
- <http://cawley.sau15.net/>

The SAU 15 School District website can be accessed at:

- <http://sau15.net/>

The school websites contain the latest news from the different departments and administration, access to staff listings, event calendars, student handbooks, lunch menus, and more. Each site has an RSS feed that community members can subscribe to for instant notification of site updates.

The district home page also includes access SAU15 staff listings, human resources, news and events, and links to sites for each of the SAU communities' school boards. These school board sites provide access to live video streaming of school board meetings as well as archived meeting video, agendas, minutes and reports.

In addition, our schools also have a presence on social media, with accounts on Facebook and Twitter.

Facebook:

- <https://www.facebook.com/pages/David-R-Cawley-Middle-School/539344299510665>
- <https://www.facebook.com/pages/Hooksett-Memorial-School/648776968541603>
- <https://www.facebook.com/hooksettfcu>

Twitter:

- <https://twitter.com/hooksettcms>
- <https://twitter.com/hooksetthms>
- <https://twitter.com/hooksettfcu>

SAU 15 on Twitter:

- <https://twitter.com/sau15nh>

Three year goal

With the recent dramatic improvements in the schools' web sites and social media presence, it should be a goal of this committee to find ways to leverage these improvements and increase awareness of them in the community.

Online school stores will be established that the new web sites will link to. These school stores will be able to take online payments from credit cards and Paypal for items such as spirit wears and other school related items such as field trip expensive, event tickets, etc. This will enable parents and other members of the community to purchase these items much easier than the current process.

Simple methods such as the creation of educational pieces that instruct people on how to access RSS feeds, create interest lists on Facebook and Twitter, receive automatic notifications of Facebook

updates, etc. would go a long way in keeping interested community members up to date on the daily activity of our schools.

An active effort should be made to demonstrate to the community the benefits of an up to date technology program in our schools. Real life demonstrations of how our children are keeping pace with their peers will be helpful in generating community support for technology planning and budgeting. Actively publicizing the achievements of students, such as through the Cawley Commanders and Destination Imagination teams, should become standard.

Collaboration with outside groups such as the Hooksett Library should be pursued when appropriate. A potential example of such collaboration could be involving the Cawley Commanders and/or other students to lead an adult technology literacy program.

Our children often have a better understanding of the technology they use, inside and outside of the classroom, than their parents. It should be a goal to enlist teacher and parent volunteers to lead educational presentations aimed at helping parents gain a working knowledge of that technology. While technology can be a great tool for our children, it also has the opportunity to be used inappropriately. Educating the community on how to recognize both the benefits and potential abuse of this technology is critical.

Community members should be surveyed to seek out other opportunities for greater involvement with school technology programs, as well as to seek partners, mentors, and sponsors who can help us expand our technology programs in the schools.



Goal #1 - Increase awareness of new web sites and school social media outlets within the community

1.) Develop and hand out take home papers at each school advertising web sites and social media outlets.*

2.) Promote school sites on entry level TV displays entering schools.*

Goal #2 - Investigate branded online school stores for each school.

1.) Gather information from vendors on price, implementation process and order fulfillment.*

2.) Solicite PTA and PTSA for their input and involved in the process.*

3.) Setup store and advertise on school websites if approved.

Goal #3 - Increase community awareness of student activities around technology

1.) Continue to advertise and invite parents/public to events that involve technology integrated in the schools. (i.e. ALPS Community Challenge, etc.)

2.) Investigate more parental involvement in technology school activities and events. (i.e. Robotics, coding, Minecraft, etc.)

3.) Develop and host community computer training classes involving students to help facilitate.

Goal #4 - Develop and provide digital citizenship presentations and resources for parents and community members

1.) Incorporate a Digital Citizenship page into the school's websites with FAQ's and a knowledge base of information.

2.) Develop a presentation and screencast a presentation of best practices principals.

3.) Offer a yearly presentation for families and other community members.

***(happening currently)**

IV. BUDGETING

The Hooksett School District's technology budget includes budget lines for hardware, software, repairs, contracted services, professional development and replacements. Budget items are discussed at the technology committee level and are evaluated and adjusted throughout the school year. Items are strategically designed to support daily functions of the school district.

Southern New Hampshire University (Learning Studios)

The David R. Cawley Middle School partnered with the school of Education at Southern New Hampshire University to create a learning studio made possible by a grant from the Cogswell's Foundation. University students going into the teaching profession will have the opportunity to work hands on with students at the Cawley Middle School as well as local professionals in the Science, Technology, Engineering, and Math professions can come together to provide real world experiences for students. The Hooksett District plans to continue this partnership with Southern New Hampshire University.

E Rate

The E-Rate Program - or, more precisely, the Schools and Libraries Universal Service Support Mechanism - provides discounts to assist most schools and libraries in the United States to obtain affordable telecommunications and Internet access. Four service categories are funded: Telecommunications Services, Internet Access, Internal Connections Other Than Basic Maintenance, and Basic Maintenance of Internal Connections. Discounts range from 20% to 90% of the costs of eligible services, depending on the level of poverty and the urban/rural status of the population served. Eligible schools, school districts and libraries may apply individually or as part of a consortium.

Projected Budget

	2015-2016 APPROVED	2016-2017 PROJECTED	2017-2018 PROJECTED
Software	19,000	20,700	21,400
Supplies	10,000	10,000	10,000
Repairs	5,000	5,000	5,000

Technology Contracted	4,600	4,600	4,600
Professional Development	2,900	2,900	2,900
Classroom and Student Devices	77,000	125,500	80,000
Infrastructure	19,000	19,000	19,000
Personnel	Per Contract	Per Contract	Per Contract

V. EVALUATION

The Hooksett School District Technology Plan is a dynamic document that changes with evolving technology and district needs. The Technology Committee which meets bi-monthly during the school year will continually monitor the progress of the plan and make any revisions or updates as needed.

Methods of evaluation will include a variety of ways and means to get recommendations and input, including regular Technology Committee meetings, surveys, and other tools:

- The Technology Committee will review each goal for effect on teaching and learning and progression or completion.
- All schools complete the annual NHDOE School Building Technology Survey and use the results for evaluation and planning.
- Annually collect feedback from the Speak Up survey. Speak up, a national online research project facilitated by Project Tomorrow®, will be made available to staff, students, parents and community members giving them the opportunity to share their viewpoints about 21st century education and technology. This survey provides invaluable data and insights from all local stakeholders.
- The district maintains an asset inventory system.
- The district uses a web based help desk solution that tracks technology support requests.
- Resource calendars are used in each building to track usage of hardware.

Standards - see Appendix A

Policies and Procedures - see Appendix B

Acronyms and Terms Summary - see Appendix C

Appendix A

Standards

Common Core State Standards with ICT Component

Kindergarten - Grade 2

Reading - Craft and Structure

(5) - Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene or stanza) relate to each other and the whole

Informational Text

Kindergarten	Grade 1	Grade 2
	Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text	Know and use various text features (e.g., captions, bold print, sub-headings, glossaries, indexes, electronic menus, icons) to locate key facts or information in a text efficiently

Reading - Integration of Knowledge and Ideas

(7) - Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words

Literature

Kindergarten	Grade 1	Grade 2
		Use information gained from the illustrations and words in a print or digital text to demonstrate understanding of its characters, setting, or plot.

Writing - Production and Distribution of Writing

(6) - Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others

Kindergarten	Grade 1	Grade 2
With guidance and support from adults, explore a variety of digital tools to produce and publish writing, including in collaboration with peers	With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers	With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers

Writing - Research to Build and Present Knowledge

(7) - Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation

Kindergarten	Grade 1	Grade 2
Participate in shared research and writing projects; explore a number	Participate in shared research and writing projects; explore a number	Participate in shared research and writing projects; read a

of books by a favorite author and express opinions about them	of “how-to” books on a given topic and use them to write a sequence of instructions	number of books on a single topic to produce a report; record science observations
---	---	--

(8) - Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism

Kindergarten	Grade 1	Grade 2
With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question	With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question	Recall information from experiences or gather information from provided sources to answer a question

Speaking and Listening - Comprehension and Collaboration

(2) - Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally

Kindergarten	Grade 1	Grade 2
Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification of something that is not understood	Ask and answer questions about key details in a text read aloud or information presented orally or through other media	Recount or describe key ideas or details from a text read aloud or information presented orally or through other media

Speaking and Listening - Presentation of Knowledge and Ideas

(5) - Make strategic use of media and visual displays of data to express information and enhance understanding of presentations

Kindergarten	Grade 1	Grade 2
Add drawings or other visual displays to descriptions as desired to provide additional detail	Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings	Create audio recordings of stories or poems; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings

Grades 3 - 5

Reading - Integration of Knowledge and Ideas

(7) - Integrate and evaluate content presented in diverse formats and media, including visually and quantitatively, as well as in words.

Literature

Grade 3	Grade 4	Grade 5
		Analyze how visual and multimedia elements contribute to the meaning, tone, or beauty of a text (e.g., graphic novel, multimedia presentation of fiction, folktale, myth, poem).

Informational Text

Grade 3	Grade 4	Grade 5
	Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, timelines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.	Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.

Writing - Production and Distribution of Writing

(6) - Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others

Grade 3	Grade 4	Grade 5
Using keyboarding skill	Demonstrate sufficient command of keyboarding skills to type a minimum of one page in a single sitting	Demonstrate sufficient command of keyboarding skills to type a minimum of two pages in a single sitting

Writing - Research to Build and Present Knowledge

(7) - Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation

Grade 3	Grade 4	Grade 5
Conduct short research projects that build knowledge about a topic	Conduct short research projects that build knowledge through investigation of different aspects of a topic	Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic

(8) - Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism

Grade 3	Grade 4	Grade 5
Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories.	Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.	Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources.

Speaking and Listening - Comprehension and Collaboration

(2) - Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally

Grade 3	Grade 4	Grade 5
Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.	Paraphrase portions of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.	Paraphrase portions of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.

Speaking and Listening - Presentation of Knowledge and Ideas

(5) - Make strategic use of media and visual displays of data to express information and enhance understanding of presentations

Grade 3	Grade 4	Grade 5
Create engaging audio recordings of stories or poems that demonstrate fluid reading at an understandable pace; add visual displays when appropriate to emphasize or enhance certain facts or details.	Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes.	Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes.

Language - Vocabulary Acquisition and Use

(4) - Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate

Grade 3	Grade 4	Grade 5
Use glossaries or beginning dictionaries, both print and digital, to determine or clarify the precise meaning of key words and phrases.	Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.	Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.

Grades 6 - 8

Reading - Integration of Knowledge and Ideas

(7) - Integrate and evaluate content presented in diverse formats and media, including visually and quantitatively, as well as in words.

Literature

Grade 6	Grade 7	Grade 8
Compare and contrast the experience of reading a story, drama, or poem to listening to or viewing an audio, video, or live version of the text, including contrasting what they “see” and “hear” when reading the text to what they perceive when they listen or watch.	Compare and contrast a written story, drama, or poem to its audio, filmed, staged, or multimedia version, analyzing the effects of techniques unique to each medium (e.g., lighting, sound, color, or camera focus and angles in a film).	Analyze the extent to which a filmed or live production of a story or drama stays faithful to or departs from the text or script, evaluating the choices made by the director or actors.

Informational Text

Grade 6	Grade 7	Grade 8
Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.	Compare and contrast a text to an audio, video, or multimedia version of the text, analyzing each medium’s portrayal of the subject (e.g., how the delivery of a speech affects the impact of the words).	Evaluate the advantages and disadvantages of using different mediums (e.g., print or digital text, video, multimedia) to present a particular topic or idea.

Writing - Production and Distribution of Writing

(6) - Use technology, including the internet, to produce and publish writing and to interact and collaborate with others.

Grade 6	Grade 7	Grade 8
Use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of three pages in a single sitting.	Use technology, including the Internet, to produce and publish writing and to link to and cite sources as well as to interact and collaborate with others, including linking to and citing sources.	Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas efficiently as well as to interact and collaborate with others.

Writing- Research to Build and Present Knowledge

(7) - Conduct short as well as more sustained research project based on focused questions, demonstrating understanding of the subject under investigation.

Grade 6	Grade 7	Grade 8
Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiring when appropriate	Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.

(8) - Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.

Grade 6	Grade 7	Grade 8
Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources.	Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.	Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.

Speaking and Listening - Comprehension and Collaboration

(2) - Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.

Grade 6	Grade 7	Grade 8
Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study.	Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study.	Analyze the purpose of information presented in diverse media and formats (e.g., visually, quantitatively, orally) and evaluate the motives (e.g., social, commercial, political) behind its presentation.

Speaking and Listening - Presentation of Knowledge and Ideas

(5) - Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.

Grade 6	Grade 7	Grade 8
Include multimedia components (e.g., graphics, images, music, sound) and visual displays in	Include multimedia components and visual displays in presentations to clarify claims and	Integrate multimedia and visual displays into presentations to clarify information, strengthen

presentations to clarify information.

findings and emphasize salient points.

claims and evidence, and add interest.

ISTE Standards

Students

1. Creativity and innovation

Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.

- a. Apply existing knowledge to generate new ideas, products, or processes
- b. Create original works as a means of personal or group expression
- c. Use models and simulations to explore complex systems and issues
- d. Identify trends and forecast possibilities

2. Communication and collaboration

Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.

- a. Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media
- b. Communicate information and ideas effectively to multiple audiences using a variety of media and formats
- c. Develop cultural understanding and global awareness by engaging with learners of other cultures
- d. Contribute to project teams to produce original works or solve problems

3. Research and information fluency

Students apply digital tools to gather, evaluate, and use information.

- a. Plan strategies to guide inquiry
- b. Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media
- c. Evaluate and select information sources and digital tools based on the appropriateness to specific tasks
- d. Process data and report results

4. Critical thinking, problem solving, and decision making

Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.

- a. Identify and define authentic problems and significant questions for investigation
- b. Plan and manage activities to develop a solution or complete a project
- c. Collect and analyze data to identify solutions and/or make informed decisions
- d. Use multiple processes and diverse perspectives to explore alternative solutions

5. Digital citizenship

Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.

- a. Advocate and practice safe, legal, and responsible use of information and technology
- b. Exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity
- c. Demonstrate personal responsibility for lifelong learning
- d. Exhibit leadership for digital citizenship

6. Technology operations and concepts

Students demonstrate a sound understanding of technology concepts, systems, and operations.

- a. Understand and use technology systems
- b. Select and use applications effectively and productively
- c. Troubleshoot systems and applications
- d. Transfer current knowledge to learning of new technologies

Standards•S © 2007 International Society for Technology in Education.

ISTE® is a registered trademark of the International Society for Technology in Education.

If you would like to reproduce this material, please contact permissions@iste.org.



ISTE Standards

Teachers

Effective teachers model and apply the ISTE Standards for Students (Standards•S) as they design, implement, and assess learning experiences to engage students and improve learning; enrich professional practice; and provide positive models for students, colleagues, and the community. All teachers should meet the following standards and performance indicators.

1. Facilitate and inspire student learning and creativity

Teachers use their knowledge of subject matter, teaching and learning, and technology to facilitate experiences that advance student learning, creativity, and innovation in both face-to-face and virtual environments.

- a. Promote, support, and model creative and innovative thinking and inventiveness
 - b. Engage students in exploring real-world issues and solving authentic problems using digital tools and resources
 - c. Promote student reflection using collaborative tools to reveal and clarify students' conceptual understanding and thinking, planning, and creative processes
 - d. Model collaborative knowledge construction by engaging in learning with students, colleagues, and others in face-to-face and virtual environments
-

2. Design and develop digital age learning experiences and assessments

Teachers design, develop, and evaluate authentic learning experiences and assessments incorporating contemporary tools and resources to maximize content learning in context and to develop the knowledge, skills, and attitudes identified in the Standards•S.

- a. Design or adapt relevant learning experiences that incorporate digital tools and resources to promote student learning and creativity
 - b. Develop technology-enriched learning environments that enable all students to pursue their individual curiosities and become active participants in setting their own educational goals, managing their own learning, and assessing their own progress
 - c. Customize and personalize learning activities to address students' diverse learning styles, working strategies, and abilities using digital tools and resources
 - d. Provide students with multiple and varied formative and summative assessments aligned with content and technology standards, and use resulting data to inform learning and teaching
-

3. Model digital age work and learning

Teachers exhibit knowledge, skills, and work processes representative of an innovative professional in a global and digital society.

- a. Demonstrate fluency in technology systems and the transfer of current knowledge to new technologies and situations
- b. Collaborate with students, peers, parents, and community members using digital tools and resources to support student success and innovation

- c. Communicate relevant information and ideas effectively to students, parents, and peers using a variety of digital age media and formats
- d. Model and facilitate effective use of current and emerging digital tools to locate, analyze, evaluate, and use information resources to support research and learning

4. Promote and model digital citizenship and responsibility

Teachers understand local and global societal issues and responsibilities in an evolving digital culture and exhibit legal and ethical behavior in their professional practices.

- a. Advocate, model, and teach safe, legal, and ethical use of digital information and technology, including respect for copyright, intellectual property, and the appropriate documentation of sources
- b. Address the diverse needs of all learners by using learner-centered strategies providing equitable access to appropriate digital tools and resources
- c. Promote and model digital etiquette and responsible social interactions related to the use of technology and information
- d. Develop and model cultural understanding and global awareness by engaging with colleagues and students of other cultures using digital age communication and collaboration tools

5. Engage in professional growth and leadership

Teachers continuously improve their professional practice, model lifelong learning, and exhibit leadership in their school and professional community by promoting and demonstrating the effective use of digital tools and resources.

- a. Participate in local and global learning communities to explore creative applications of technology to improve student learning
- b. Exhibit leadership by demonstrating a vision of technology infusion, participating in shared decision making and community building, and developing the leadership and technology skills of others
- c. Evaluate and reflect on current research and professional practice on a regular basis to make effective use of existing and emerging digital tools and resources in support of student learning
- d. Contribute to the effectiveness, vitality, and self-renewal of the teaching profession and of their school and community

Standards•T © 2008 International Society for Technology in Education.

ISTE® is a registered trademark of the International Society for Technology in Education.

If you would like to reproduce this material, please contact permissions@iste.org.



ISTE Standards Administrators

1. Visionary leadership

Educational Administrators inspire and lead development and implementation of a shared vision for comprehensive integration of technology to promote excellence and support transformation throughout the organization.

- a. Inspire and facilitate among all stakeholders a shared vision of purposeful change that maximizes use of digital-age resources to meet and exceed learning goals, support effective instructional practice, and maximize performance of district and school leaders
- b. Engage in an ongoing process to develop, implement, and communicate technology-infused strategic plans aligned with a shared vision
- c. Advocate on local, state and national levels for policies, programs, and funding to support implementation of a technology-infused vision and strategic plan

2. Digital age learning culture

Educational Administrators create, promote, and sustain a dynamic, digital-age learning culture that provides a rigorous, relevant, and engaging education for all students.

- a. Ensure instructional innovation focused on continuous improvement of digital-age learning
- b. Model and promote the frequent and effective use of technology for learning
- c. Provide learner-centered environments equipped with technology and learning resources to meet the individual, diverse needs of all learners

- d. Ensure effective practice in the study of technology and its infusion across the curriculum
- e. Promote and participate in local, national, and global learning communities that stimulate innovation, creativity, and digital age collaboration

3. Excellence in professional practice

Educational Administrators promote an environment of professional learning and innovation that empowers educators to enhance student learning through the infusion of contemporary technologies and digital resources.

- a. Allocate time, resources, and access to ensure ongoing professional growth in technology fluency and integration
- b. Facilitate and participate in learning communities that stimulate, nurture and support administrators, faculty, and staff in the study and use of technology
- c. Promote and model effective communication and collaboration among stakeholders using digital age tools
- d. Stay abreast of educational research and emerging trends regarding effective use of technology and encourage evaluation of new technologies for their potential to improve student learning

4. Systemic improvement

Educational Administrators provide digital age leadership and management to continuously improve the organization through the effective use of information and technology resources.

- a. Lead purposeful change to maximize the achievement of learning goals through the appropriate use of technology and media-rich resources
- b. Collaborate to establish metrics, collect and analyze data, interpret results, and share findings to improve staff performance and student learning
- c. Recruit and retain highly competent personnel who use technology creatively and proficiently to advance academic and operational goals
- d. Establish and leverage strategic partnerships to support systemic improvement
- e. Establish and maintain a robust infrastructure for technology including integrated, interoperable technology systems to support management, operations, teaching, and learning

5. Digital citizenship

Educational Administrators model and facilitate understanding of social, ethical and legal issues and responsibilities related to an evolving digital culture.

- a. Ensure equitable access to appropriate digital tools and resources to meet the needs of all learners
- b. Promote, model and establish policies for safe, legal, and ethical use of digital information and technology
- c. Promote and model responsible social interactions related to the use of technology and information
- d. Model and facilitate the development of a shared cultural understanding and involvement in global issues through the use of contemporary communication and collaboration tools

Standards•A © 2009 International Society for Technology in Education.
ISTE® is a registered trademark of the International Society for Technology in Education.

If you would like to reproduce this material, please contact permissions@iste.org.



Focus Areas / Levels of Progress		Early Tech	Developing Tech	Proficient Tech	Advanced Tech
		1	2	3	4
T&L 1	Impact of Technology on Teacher Role	Mostly teacher-centered lectures. Minimal student use of technology in instruction.	Mostly teacher directed learning. Students use technology to work on individual projects	Mostly teacher facilitated learning. Students use technology for cooperative projects in their own classroom.	Mostly student-centered learning, teacher as mentor/facilitator. Students use technology to communicate and collaborate outside the classroom.
T&L 2	Patterns of Teacher Use	85% of teachers use technology as a productivity tool (e.g. e-mail, grades) and/or as a classroom supplement (e.g. drill and practice).	85% of teachers explore using technology to support curriculum goals (e.g. research, lesson planning)	85% of teachers use technology for research, lesson planning, multimedia and graphical presentations and simulations, and share technology uses with colleagues.	85% of teachers integrate evolving technologies that transform the teaching process by allowing for greater levels of access, interest, inquiry, analysis, collaboration, creativity, and content production.
T&L 3	Design of Instructional Setting	Mostly computer labs or libraries; scheduled use only.	Labs, libraries, many classrooms; flexible scheduling.	Lab, libraries, all classrooms, and portable technology (e.g. wireless laptops or handheld electronic devices); flexible scheduling.	Seamlessly integrated throughout classes and all content areas. Technology is available anytime both in school and within the community.
T&L 4	Curriculum Areas	Limited to teaching technology skills at different grade levels.	Use of technology is minimal in a few curricular areas across grade levels.	Integrated into most Framework curricular areas and activities at all grade levels.	Integral to all curricular areas at all grade levels.
T&L 5	Patterns of Student Use	85% of students are developing some of the ICT literacy skills and artifacts as described in Ed 306.42.	85% of students show proficiency in some of the ICT literacy skills and artifacts as described in Ed 306.42.	85% of students show proficiency in all of the ICT literacy skills as described in Ed 306.42 and demonstrated within their digital portfolios.	All students show proficiency in all of the ICT literacy skills as described in Ed 306.42 and demonstrated within their digital portfolios.
PD 1	Content of Training	Technology skills (email, word processing, internet browser use, etc.) for teachers' professional use.	Training encompasses more complex professional uses (district applications such as attendance and report cards, scanners, cameras) and curriculum integration strategies.	Training directly ties technology to its use in content areas and how to effectively manage it in the classroom.	Training focuses on modeling, mentoring and adopting new technologies as well as the integration of Universal Design and access considerations for all students.
PD 2	Capabilities of Educators	10% meet ISTE and/or local district teacher technology competencies and implement them into the school environment.	30% meet ISTE and/or local district teacher technology competencies and implement them into the school environment.	60% meet ISTE and/or local district teacher technology competencies and implement them into the school environment.	90% meet ISTE and/or local district teacher technology competencies and implement them into the school environment.
PD 3	Leadership and Capabilities of Building Principals and District Administrators	Recognizes benefits of technology in instruction to improve learning outcomes for all students. Minimal personal use (email, word processing, internet browser use, etc.). Awareness of national standards for administrators.	Supports use of technology in instruction. Uses technology in daily work. Approaching proficiency of national standards for administrators.	Recognizes and identifies exemplary use of technology in instruction. Uses technology skills in daily work such as research and communication and models appropriately with staff. Provides constructive feedback to teachers on their technology use.	Promotes exemplary use of technology in instruction. Models and uses in daily work in communication, presentations, on-line collaborative projects, and management tasks. Develops a school culture that expects all teachers to use technology. Advocates in the community for the integration of technology in instruction. Expects all teachers to use technology well.
PD 4	Models of Professional Development	Whole group, skill based training with minimal follow-up.	Whole group curriculum-based training with follow-up to facilitate classroom implementation.	Coaching, modeling best practices, district-based mentoring. Involvement in a development / improvement process. Study groups.	Creates a culture of inquiry, sharing and knowledge building. Anytime learning available through a variety of delivery systems (e.g. Just in time support, mentoring, peer observation).
PD 5	Levels of Understanding	Most at entry or adoption stage (Students learning to use technology; teachers use technology to support traditional instruction).	Most at adaptation stage (technology used to enrich curriculum). Most beginning to use with students.	Most at appropriation stage (technology is integrated, used for its unique capabilities).	Most at invention stage (teachers discover and accept new uses for technology).

Focus Areas / Levels of Progress		Early Tech	Developing Tech	Proficient Tech	Advanced Tech
		1	2	3	4
PD 6	Universal Access: Integration of Universal Design and Assistive Technology	Emerging awareness of universal design and assistive technologies (hardware/software) limited to special educators; few examples across the district of universal design strategies or assistive technology used to promote access to the general curriculum.	Awareness of universal design and assistive technologies (hardware/software) by special educators & some general educators; universal design strategies or assistive technology used to promote access to the general curriculum demonstrated across all grade levels.	Awareness of universal design and assistive technologies (hardware/software) by special educators & most general educators; universal design strategies or assistive technology used to promote access to the general curriculum demonstrated across all grade levels; staff are designated to provide AT assessment, procurement, support (training) and maintenance.	Systemic adoption of universal design curriculum development strategies and the seamless integration of assistive technology to promote access to the general curriculum for all students; staff are designated to provide AT assessment, procurement, support (training), and maintenance.
A&S 1	Vision and Planning	Minimal technology plan; technology used mainly for administrative tasks such as word processing, budgeting, attendance, grade book.	The technology plan is approved by the School Board & supported by the Superintendent. The plan is collaboratively developed by key stakeholders (e.g., teachers, parents, community members, local business & individuals w/disabilities), guiding policy & practice. Addresses local district teaching & learning standards.	The technology plan is integrated into the district professional development and school improvement plans; used for internal planning, budgeting, applying for external funding and discounts. Teachers / administrators have a vision for technology use in support of student learning, teacher professionalism, and data management.	The technology plan & vision are focused on improving the success of all students based on needs, research, proven teaching and learning principles and is actively supported by the School Board and Superintendent. The plan is collaboratively developed, guiding policy & practice; updated at least annually.
A&S 2	Technical Support (hardware, operating system, network)	Technical support call-in; response time greater than 24 hours. Problems cause major disruptions to curriculum delivery using technology.	At least one technical staff per 350 computers. Same-day technical support for infrastructure problems by call-in. Problems sometimes cause major disruptions to curriculum delivery using technology. Network Administrator.	At least one technical staff per 200 computers. Same-day in-classroom technical support available. Problems infrequently cause major disruptions to curriculum delivery using technology. Network administrator.	At least one technical staff per 150 computers for just-in-time support. Technical support is readily available on-site for both infrastructure and application problems. Problems do not cause major disruptions to curriculum delivery using technology. Network administrator.
A&S 3	Technology Integration Specialist	No district level Technology Director. Local instructional technology support is inconsistent.	District level Technology Director. One-half instructional technology specialist per 60-120 staff.	District level Technology Director. Dedicated instructional technology specialist - one half person per 30-60 staff. Dedicated staff at district level for data management and assessment.	District Technology Director. Dedicated instructional technology specialist - one half person per 30-60 staff. Dedicated staff at district level for data management and assessment and to help produce integrated curriculum content.
A&S 4	Budget Levels	Budget for hardware and software purchases and professional development.	Budget for hardware and software purchases (new and replacement) and professional development, minimal staffing support, and some ongoing costs.	Budget for purchases, professional development, adequate staffing support, and ongoing costs. Other state, federal, and local programs directed to support technology funding. Business partnerships, donations, and other local funding designated for technology.	Budget for purchases, incentives for professional development, sufficient staffing support, and ongoing costs. Appropriate budget to support district technology plan.
A&S 5	Budget Allocated for Technology (Total Cost of	Less than \$175 per student.	Between \$175- \$300 per student.	Between \$300 - \$425 per student	\$425 or more per student

Focus Areas / Levels of Progress		Early Tech	Developing Tech	Proficient Tech	Advanced Tech
		1	2	3	4
IN 1	Universal Design and Accessible Technology Considerations (e.g. Section 508)	Considerations for universal design and accessible technologies are limited to the Individual Education Program (IEP) process for students with disabilities. Procurement policies for information and instructional technologies do not ensure usability, equivalent access, or interoperability.	Considerations for universal design and accessible technologies are established in areas of high student use (e.g., libraries, computer labs); inconsistent implementation of procurement policies for information and instructional technologies that ensure usability, equivalent access, and interoperability.	Considerations for universal design and accessible technologies are established in areas of high student use (e.g., libraries, computer labs), some classrooms and administrative offices; routine implementation of procurement policies for information and instructional technologies that ensure usability, equivalent access, and interoperability.	Universal design and accessible technologies considerations are established throughout the district; procurement policies for information and instructional technologies that ensure usability, equivalent access, and interoperability in accordance to the guidelines established by Section 508.
IN 2	Students Per Instructional Computer	10 or more students per modern computer; no firm computer replacement policy established by district. [Modern is defined by the most recent NH annual tech survey computer levels.]	Less than 10 students per modern computer; replacement policy established; one computer per teacher.	Less than 5 students per modern computer; replacement cycle established for 6 years or less; one computer per teacher - possibly a laptop for homework. Most students have access to handheld electronics (e.g., PDA's, graphing calculators, Alpha Smarts). Maintains a list of places students can use technology outside of school.	One student per modern computer or other electronic device. Replacement cycle established for 5-6 years or less; one computer per teacher - possibly a laptop for homework. 75% of computers meet modern standards. School works with community to provide equitable access to technology for students and community members after school hours.
IN 3	Internet Access Connectivity/Speed	Dial-up connectivity to the Internet available only on a few computers. District wide acceptable use policy in place.	Direct connectivity to the Internet available at each school and in most rooms. Adequate bandwidth to the school to avoid most delays.	Direct connectivity to the Internet available in all rooms in all schools. Adequate bandwidth to each classroom over the LAN (10/100mb) to avoid most delays. Easy access for students and teachers including some wireless.	Direct connectivity to the Internet available in all rooms in all schools. Adequate bandwidth to each classroom over the LAN (10/100mb). Easy access for students and teachers including most wireless connectivity to enable interactive presentations and video.
IN 4	E-Learning Environments	Limited web- and/or satellite-based interactive learning opportunities delivered synchronously, or asynchronously, on a scheduled or unscheduled basis, primarily for professional development and limited exploration of web 2.0 technologies.	Expanded interactive learning opportunities with the possible addition of asynchronous video streaming or synchronous videoconferencing; addition of courses for teachers and student courses at the high school and college level (K-16); some use of web 2.0 technologies.	Improved access to web-based and/or interactive IP-based video learning on the local, state, regional, national, and international level; applications include courses, cultural projects, virtual field trips, etc.; expanded use of web 2.0 technologies by both teachers and students.	Seamless IP-based infrastructure expanded to K-16 to allow development of high-quality web- and video-based content. Content distribution available for all students and teachers. Archives allow for content review asynchronously and sharing/distribution of these resources. Extensive use of web 2.0 technologies.

Focus Areas / Levels of Progress		Early Tech	Developing Tech	Proficient Tech	Advanced Tech
		1	2	3	4
IN 5	LAN/WAN	Limited print/file sharing network at each school for lab, administration, and some classrooms. Some shared resources and providing some secure storage space.	Most rooms connected to Internet via LAN/WAN and wireless connectivity where possible at each school with student access. Minimum 10/100 mb Cat 5 hubbed network. Basic servers for sharing some resources at each school.	All rooms connected to Internet via LAN/WAN with significant wireless connectivity at each school with sufficient bandwidth for effective student access. Minimum 10/100 mb Cat 5 switched network. Servers for providing secure storage, backups, schedule, e-mail, web. Students, teachers and parents have easy access to educational resources from home and school (e.g., web portal).	All rooms connected to Internet via LAN/WAN with significant wireless connectivity at each school with sufficient bandwidth for effective student access. All schools connected to the WAN (100 mb/gb switched network) have sufficient servers and bandwidth for content delivery through resources such as video streaming and conferencing. Students, teachers and parents have easy access to educational resources from home and school (e.g., web portal).
IN 6	Other Technologies	Shared teacher use of resources such as telephone, TVs, VCRs, DVDs, and classroom sets of programmable calculators.	Shared use of resources such as telephone, TVs, VCRs, DVDs, classroom sets of programmable calculators, digital cameras, and scanners. Computer/Video projectors available.	Dedicated and assigned use of common technologies such as telephone, TVs and VCRs and DVDs. Programmable calculators assigned to each student as needed. In each school there is shared use of specialized technologies, digital cameras, scanners, handheld electronic devices, and computer/video projectors.	Fully equipped classrooms with computer/video projectors and technology that will enhance student instruction readily available as above as well as using new and emerging technologies (i.e., interactive whiteboards, student response systems, netbooks, etc.)
IN 7	Security	Backup and restoration procedures and virus protection to guard individual computers.	Basic firewall protection and diligent upgrading of network vulnerabilities added to protect against external threats.	Adequate server and availability protection added to above for expanded capabilities and to ensure dependable access.	Usage authentication added to above for mobile computer and home/external access requirements.



CIPA Compliance and the
Barracuda Web Filter

White Paper

The Children's Internet Protection Act (CIPA) is a federal law enacted by Congress in December 2000 to address concerns about access to offensive content over the Internet on school and library computers. CIPA imposes certain types of requirements on any school or library that receives funding support for Internet access or internal connections from the "E-rate" program – a program that makes certain technology more affordable for eligible schools and libraries. In early 2001, the Federal Communications Commission (FCC) issued rules implementing CIPA.

What CIPA Requires

1. Schools and libraries subject to CIPA may not receive the discounts offered by the E-Rate program unless they certify that they have an Internet safety policy and technology protection measures in place. An Internet safety policy must include technology protection measures to block or filter Internet access to pictures that: (a) are obscene, (b) are child pornography, or (c) are harmful to minors, for computers that are accessed by minors.
2. Schools subject to CIPA are required to adopt and enforce a policy to monitor online activities of minors; and Schools and libraries subject to CIPA are required to adopt and implement a policy addressing: (a) access by minors to inappropriate matter on the Internet; (b) the safety and security of minors when using electronic mail, chat rooms, and other forms of direct electronic communications; (c)
3. Unauthorized access, including so-called "hacking," and other unlawful activities by minors online; (d) unauthorized disclosure, use, and dissemination of personal information regarding minors; and (e) restricting minors' access to materials harmful to them.

Schools and libraries are required to certify that they have their safety policies and technology in place before receiving E-Rate funding.

Source: Federal Communications Commission: "Children's Internet Protection Act"
<http://www.fcc.gov/cgb/consumerfacts/cipa.html>

Content Filtering and CIPA Compliance

The CIPA rules state that schools and library computers must demonstrate that they have a solution in place to address the rules put forth by the FCC. In order to ensure they are able to "monitor the online activities of minors" and have policies addressing the safety of minors by blocking or filtering access to obscene pornographic, or harmful communications. A solution must be put in place to monitor and limit Web access to prohibited sites.

In addition to protecting the overall security of a computer network, the Barracuda Web Filter also provides the specific content filtering protections typically required to enforce policies necessary to obtain CIPA compliance.

The Barracuda Web Filter

Content filtering is becoming increasingly important in most organizations. Controlling access to controversial and offensive content such as pornography, violence, hacking, and other "fringe" sites has become a necessity. To block access to these sites, the Barracuda Web Filter includes a preinstalled URL list containing millions of URLs classified into 95 categories for easy and efficient content filtering. This list is continuously updated by engineers at Barracuda Central and delivered hourly via the Energize Updates subscription service sold with the Barracuda Web Filter.

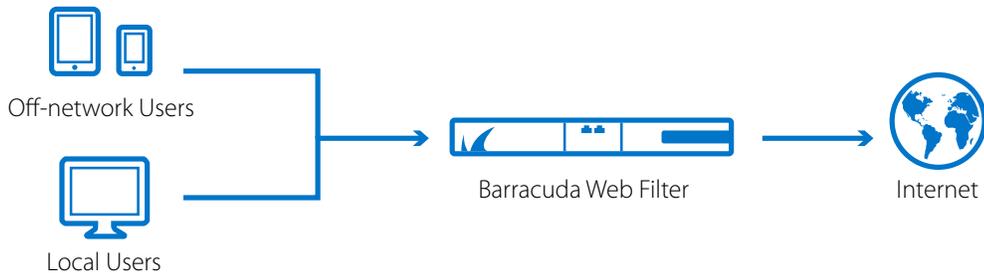
In developing content filtering policy for the Barracuda Web Filter, Barracuda Central has leveraged both Web crawling technologies and its network of spam honeypots and customer opt-in systems to monitor those sites most heavily promoted and visited on the Internet. Unlike competing solutions which simply build large URL databases independent of popularity, Barracuda Networks is effective at blocking those sites that currently receive 99 percent of the Internet traffic in their respective categories.

Schools and libraries seeking CIPA compliance prefer the Barracuda Web Filter because of the simplicity of its use and design. Typical installations take hours, not days, and the Barracuda Web Filter is far more attractively priced compared to competing solutions. As an added value, the Barracuda Web filter also provides award-winning protection against spyware and other malware threats by blocking downloads of malicious content and scrubbing infected machines.

CIPA REQUIREMENT*	BARRACUDA NETWORKS TECHNOLOGY
1(a)(b)(c), 3(a)(c)(e)	Content filtering database of millions of URLs broken into 95 categories for targeted content filter policies.
1(a)(b)(c), 3(a)(e)	Safe Search features to block the media caches of popular search engines
2	Identification of where threats are coming from, both externally and internally
1(a)(b)(c), 3(a)(c)(e)	URL block and allow lists
1(c), 2, 3(a)(c)(e)	File type blocking
3(c)(d)	Prevention of keystroke logging and personal information theft
1(a)(b)(c), 3(a)(d)(e)	Monitoring of Web traffic for virus and spyware downloads
1(a)(b)(c), 3(a)(d)(e)	Inspection of network traffic for spyware infection activity
3(b)	Instant Message blocking
3(c)(e)	Client Lockdown features to prevent system hacking and hijacking
3(c)(e)	Examination of inbound and outbound spyware and Web surfing activity
3(c)(e)	Prevention of new spyware infections
3(c)(e)	Clean up of detected infections from Windows desktop computers through the Barracuda Spyware Removal Tool
1(a)(b)(c), 3(a)(e)	Blocking applications which can be dangerous to the minors
3(c)(e)	Blocking hacked, hijacked, or otherwise compromised systems

Location, Location, Location

Since the Barracuda Web Filter sits inline on the network, all traffic passes through it. This gives the product the ability to intercept, manage, and redirect, not only curious young Web surfers, but spyware and malware as well.



Powerful, Easy, and Affordable

Barracuda Networks is the trusted source for spam, spyware, virus, and content blocking. Organizations seeking powerful products with the options they require, that can be easily installed and maintained at an affordable price, choose Barracuda. Join the more than 150,000 customers worldwide who put their trust in our products.

CIPA compliance is a complex problem with an easy solution: the Barracuda Web Filter.

For questions about the Barracuda Web Filter, please visit <http://www.barracuda.com/webfilter> or call Barracuda Networks for a free 30-day evaluation at +1 408-342-5400. For more information on our other security and productivity solutions, please visit <http://www.barracuda.com/products>.

To learn more about Barracuda's web security solutions, please visit www.barracuda.com/products or call Barracuda for a free 30-day evaluation at 1-408-342-5400 or 1-888-268-4772 (US & Canada).

About Barracuda Networks, Inc.

Protecting users, applications, and data for more than 150,000 organizations worldwide, Barracuda Networks has developed a global reputation as the go-to leader for powerful, easy-to-use, affordable IT solutions. The company's proven customer-centric business model focuses on delivering high-value, subscription-based IT solutions for security and data protection. For additional information, please visit www.barracuda.com.



Barracuda Networks
 3175 S. Winchester Boulevard
 Campbell, CA 95008
 United States
 408-342-5400
 888-268-4772 (US & Canada)
www.barracuda.com
info@barracuda.com

HOOKSETT SCHOOL DISTRICT
SCHOOL DISTRICT INTERNET ACCESS FOR STUDENTS

The School Board recognizes that technological resources can enhance student performance by offering effective tools to assist in providing a quality instructional program, facilitating communications with parents/guardians, teachers, and the community, supporting District and school operations, and improving access to and exchange of information. The Board expects all students to learn to use the available technological resources that will assist them in the performance of their education. As needed, students shall receive lessons and instruction in the appropriate use of these resources.

Students shall be responsible for the appropriate use of technology and shall use the District's technological resources primarily for purposes related to their education. Students are hereby notified that there is no expectation of privacy on district computers, computer files, email, internet usage logs, and other electronic data.

The Superintendent or designee shall ensure that all District computers with Internet access have a technology protection measure that prevents access to visual depictions that are obscene or pornographic and that the operation of such measures is enforced. The Superintendent or designee may disable the technology protection measure during use by an adult to enable access for bona fide research, educational or other lawful purpose.

The Superintendent shall establish administrative regulations and an Acceptable Use Agreement that outlines student obligations and responsibilities related to the use of District technology. He/she also may establish guidelines and limits on the use of technological resources. Inappropriate use may result in a cancellation of the student's user privileges, disciplinary action, and/or legal action in accordance with law, Board policy, and administrative regulations.

The Superintendent or designee shall provide copies of related policies, regulations, and guidelines to all students. Students shall be required to acknowledge in writing that they have read and understood the District's Acceptable Use Agreement.

Appendix: JICL-R

Adopted: June 20, 2012
(replaces EGA and EGA-A)

Legal References:
RSA 194:3-d,
47 U.S.C. §254,
20 U.S.C. §6777

**HOOKSETT SCHOOL DISTRICT
ACCEPTABLE INTERNET USE PROCEDURES - STUDENTS**

Purpose

The purpose of the Acceptable Use Procedures is to provide the procedures, rules, guidelines, and the code of conduct for the use of technology and the Internet.

Definition

The definition of "information networks" is any configuration of hardware and software, which connects users. The network includes, but is not limited to, all of the computer hardware, operating system software, application software, stored text and data files. This includes electronic mail, local databases, externally accessed databases, CD-ROM, recorded magnetic or optical media, clip art, digital images, digitized information, communications technologies, and new technologies as they become available. Stand-alone workstations are also governed by this acceptable use procedure.

The School District Services

The School District provides resources for teaching and learning, communication services, and business data services by maintaining access to local, regional, national, and international sources of information. The School District information resources will be used by members of the school community with respect for the public trust through which they have been provided and in accordance with policy and regulations established by the School District. These procedures do not attempt to articulate all required for proscribed behavior by its users.

Successful operation of the network requires that all users conduct themselves in a responsible, decent, ethical and polite manner while using the network. The user is ultimately responsible for his/her actions in accessing network services.

Guidelines

1. Access to the networks and to the information technology environment within the District is a privilege and must be treated as such by all users of the network and its associated systems.
2. Information networks will be used for the purposes of research, education, and school-related business and operations.
3. Any system which requires password access or for which the District requires an account, such as the Internet, will only be used by the authorized user. Account owners are ultimately responsible for all activity under their accounts.
4. The resources of the District are limited. All users must exercise prudence in the shared use of this resource.

Unacceptable Use

The District has the right to take disciplinary action, remove computer and networking privileges and/or take legal action, for any activity characterized as unethical and unacceptable.

Unacceptable use activities constitute, but are not limited to, any activity through which any user:

1. Violates such matters as institutional or third-party copyright, license agreements or other contracts. The unauthorized use of and/or copying of software is illegal.
2. Interferes with or disrupts other network users, services or equipment. Disruptions include, but are not limited to: distribution of unsolicited advertising, propagation of computer worms or viruses, distributing quantities of information that overwhelm the system, and/or using a District network to make unauthorized entry into any other resource accessible via the network.
3. Seeks to gain or gains unauthorized access to information resources.
4. Uses or knowingly allows another to use any computer or computer system to devise or execute a scheme to defraud or to obtain money, property, services, or other things of value by false pretenses, promises, or representations.
5. Destroys, alters, dismantles or otherwise interferes with the integrity of computer based information and/or information resources.
6. Invades the privacy of individuals or entities.
7. Uses the network for commercial or political activity.
8. Installs unauthorized software for use on District computers.
9. Uses a network to access inappropriate materials.
10. Submits, publishes or displays any defamatory, inaccurate, racially offensive, abusive, obscene, profane, sexually oriented, or threatening materials or messages either publicly or privately.
11. Uses a District network for illegal harassing, vandalizing, inappropriate or obscene purposes, or in support of such activities.

School District Rights

The District reserves the right to:

1. Monitor all activity. Notwithstanding FERPA and other related laws, students have no expectation of privacy regarding their use on the school district computer network.
2. Make determinations on whether specific uses of a network are consistent with these acceptable use procedures.
3. Log network use and monitor storage disk space utilization by users.
4. Determine what is appropriate use.
5. Remove a user's access to the network at any time it is determined that the user engaged in unauthorized activity or violated these acceptable use procedures.
6. Cooperate fully with any investigation concerning or relating to the District's network activity.

School District Internet Code of Conduct

Use of the Internet by students and staff of the District shall be in support of education and research that is consistent with the mission of the District. Internet use is limited to those persons who have been issued District-approved accounts. Use will be in accordance with the District's Acceptable Use

Procedures and this Code of Conduct. Users are expected to abide by the following terms and conditions:

1. Protect their Internet log from information from others.
2. Respect the privacy of other users. Do not use other users' passwords.
3. Be ethical and courteous. Do not send hate, harassing or obscene mail, discriminatory remarks, or demonstrate other antisocial behaviors.
4. Maintain the integrity of files and data. Do not modify or copy files/data of other users without their consent.
5. Treat information created by others as the private property of the creator. Respect copyrights.
6. Use any network in a way that does not disrupt its use by others.
7. Do not destroy, modify or abuse the hardware or software in any way.
8. Do not develop or pass on programs that harass other users or infiltrate a computer or computing system and/or damage the software components of a computer or computing system, such as viruses, worms, "chain" messages, etc.
9. Do not use the Internet to access or process pornographic or otherwise inappropriate material.
10. Do not use the Internet for commercial purposes.

The District reserves the right to remove a user's account if it is determined that the user is engaged in unauthorized activity or is violating this code of conduct.

School District Internet Access Release Form

As a condition of my right to use the School District network resources, including access to the Internet, students understand and agree to the following:

1. To abide by the District Acceptable Use Procedures and Code of Conduct.
2. That District administrators and designated staff have the right to review any material stored on District computers in files and to edit or remove any material which they, in their sole discretion, believe may be unlawful, obscene, abusive, or otherwise objectionable and students hereby waive any right of privacy which I may otherwise have to such material.
3. That the School District will not be liable for any direct or indirect, incidental, or consequential damages due to information gained and/or obtained via use of the District's network resources.
4. That the School District does not warrant that the functions of any District network, or any network accessible through District resources, will meet any specific requirements you may have, or that the network resources will be error-free or uninterrupted.
5. That the School District shall not be liable for any direct or indirect, incidental, or consequential damages (including lost data or information) sustained or incurred in connection with the use, operation, or inability to use District networks and resources.

6. That the use of the District network(s), including access to public networks, is a privilege which may be revoked by network administrators at any time for violation of the Acceptable Use Procedures and Code of Conduct. The School District will be the sole arbiter(s) of what constitutes violation of the Acceptable Use Procedures or Code of Conduct.

7. In consideration for the privilege of using the School District network resources and in consideration for having access to the public networks, I hereby release the School District, its operators, and any institutions with which they are affiliated from any and all claims and damages of any nature arising from my use, or inability to use, the District network resources.

Name of User/Student: _____
Home phone: _____
School of Attendance: _____

I hereby certify that I have read the Acceptable Use Policy and Procedures; that I fully understand their terms and conditions; and that I will abide by the terms and conditions set forth in this document.

Signature of User/Student: _____
Date: _____

Signature of Building Principal: _____
Date: _____

See Policy JICL

Adopted: June 20, 2012
(replaces EGA and EGA-A)

**HOOKSETT SCHOOL DISTRICT
PERSONAL DEVICE USAGE POLICY**

The Hooksett School District has a right to protect its network and technical resources. Thus, any network user who brings his/her own personal device into the school building is required to adhere to the Acceptable Use Policy (AUP), Policy Number JICL and JICL-R, and sign a copy of the Hooksett School District Acceptable Use Contract. In addition, the student and parent/legal guardian must also sign the BYOD (Bring Your Own Device) Student User Agreement.

The BYOD Student User Agreement will be reviewed and adopted annually.

Adopted: October 4, 2011
Revised: June 20, 2012
Revised: December 4, 2012
Revised: August 5, 2014

**Hooksett School District
Bring Your Own Device (BYOD)
Student User Agreement**

Purpose:

Many students' lives today are filled with media that gives them mobile access to information and resources 24/7. Outside school, students are free to pursue their interest in their own way and at their own pace. The opportunities are limitless, borderless, and instantaneous. In an effort to put students at the center and empower them to take control of their own learning, the Hooksett School District will allow students to use personal technology devices. Students wishing to participate must follow the responsibilities stated in the Acceptable Use Policy as well as the following guidelines.

Device Types:

The word "device" means a privately owned wireless and/or portable electronic piece of equipment that includes laptops, netbooks, tablets/slates, iPod Touches, cell and smart phones.

Guidelines:

1. Any student who wishes to use a personally owned electronic device within the Hooksett School District must read and sign this agreement and submit it to the building principal. The student's parent/guardian must also sign this agreement.
2. The student takes full responsibility for his or her device. The school is not responsible for the security of the device.
3. The student is responsible for the proper care of their personal device, including any costs of repair, replacement or any modifications needed to use the device at school.
4. The school reserves the right to inspect a student's personal device if there is reason to believe that the student has violated Board policies, administrative procedures, school rules or has engaged in other misconduct while using their personal device.
5. Violations of any Board policies, administrative procedures or school rules involving a student's personally owned device may result in the loss of use of the device in school and/or disciplinary action.
6. The student complies with the request of an adult in charge regarding the use of device.

7. Personal devices shall be charged prior to bringing it to school and shall be capable of running off its own battery while at school.
8. The student may not use the devices to record, transmit or post photos or video of a person or persons, nor can any images or video recorded be transmitted or posted at any time without the express permission of a teacher.
9. The student should only use their device to access relevant files.
10. The student will use the designated school wireless network. Use of 3G, 4G or similar wireless connections is not allowed.
11. I understand that my device(s) will be electronically registered and monitored and if needed removed from the network.
12. Students in grades 6-8 will be permitted to utilize their device during lunch consistent with the guidelines.
13. Students in grades 2-8 will be permitted to utilize their device on school buses consistent with the guidelines.
14. Students in grades 2-8 will not be permitted to use their device in the bathroom.

**Hooksett School District
Bring Your Own Device (BYOD)
Student User Agreement**

As a student I understand and will abide by the above policy and guidelines. I further understand that any violation of the above may result in the loss of my network and/or device privileges as well as other disciplinary action.

As a parent I understand that my child will be responsible for abiding by the above policy and guidelines. I have read and discussed them with her/him and they understand the responsibility they have in the use of their personal device.

Device #1

Serial Number

Device #2

Serial Number

Homeroom Teacher

Student's Signature

Date

Please print Student's Name

Student's Grade

Parent's Signature

Date

Please print Parent's Name

NOTE: Students must also complete the Acceptable Use Contract (Policy #JICL-R).

Adopted: October 4, 2011
Revised: June 20, 2012
Revised: December 4, 2012
Revised: August 5, 2014

HOOKSETT SCHOOL DISTRICT
COMPUTER SECURITY, E-MAIL AND INTERNET COMMUNICATIONS POLICY

The school district has established this policy with regards to access and disclosure of electronic data composed, stored, sent, or received by employees using the district computer system. This policy is designed to protect the safety and security of the district's computer systems including e-mail and internet use.

The district intends to enforce the rules set forth below and reserves the right to change these rules at any time:

1. The computer hardware system, software and e-mail system are owned by the district, and all messages or data composed, stored, sent, or received using the system are and remain the private property of the district. They are not the property of the employee.
2. The computer and e-mail system is to be used for business purposes only. Personal business is unauthorized and should not be conducted on the system.
3. The electronic mail system may not be used to solicit or proselytize for commercial ventures, religious or political causes, outside organizations, or other non-job related solicitations.
4. The district prohibits discriminatory, harassing, or offensive materials in any form of media. Among those which are considered offensive are any messages which contain sexual implications, racial slurs, gender-specific comments, or any other comments that offensively address someone's age, sexual orientation, religious or political beliefs, national origin, or disability.
5. The electronic mail system shall not be used to send (upload) or receive (download) copyrighted materials, trade secrets, proprietary financial information, or similar materials without prior authorization.
6. The district reserves and intends to exercise without prior notice, the right to read, review, audit, intercept, access or disclose any and all information on an employee's computer system or messages created, received or sent over the electronic mail system for any purpose, even if coded or passworded.
7. The confidentiality of any message or data should not be assumed. Even when a message is erased, it is still possible to retrieve and read that message. The use of passwords for security does not guarantee confidentiality, or that the district will not retrieve it.
8. Any communications created, sent, or retrieved using e-mail may be read by individuals other than the intended recipient.
9. Notwithstanding the district's right to retrieve and monitor any e-mail messages, such messages should be treated as confidential by other employees and accessed only by the intended recipient. Employees are not authorized to retrieve or read any e-mail that is not sent to them. Any exception to this policy must receive prior approval by the Superintendent.

10. Any employee who violates this policy or uses the computer system or electronic mail system for improper purposes shall be subject to discipline up to and including discharge.
11. The district has the authority to terminate or limit access to any program at any time.

Adopted: February 15, 2000
Revised: June 20, 2012

Legal Reference:
RSA 194:3-d

Appendix C

Acronyms and Terms Definitions

802.11n - Older Wi-Fi Standard Supporting up to 300Mbps

802.11ac - Newer Wi-Fi Standard Supporting up to almost 7,000 Mbps

AUP - Acceptable Use Policy

CCSS - Common Core State Standards

E-Rate - Commonly used name for a Government grant program formerly known as the Schools and Libraries Program

FAQ - Frequently Asked Questions

ICT - Information and Communication Technologies

ISTE - International Society for Technology in Education

NHDOE - New Hampshire Department of Education

Mbps - A measure of data transfer short for megabits per second

Mb - A unit of measure equaling one million bits

Gb - A unit of measure equaling one billion bits

PD - Professional Development

RUP - Responsible Use Policy

STaR - School Technology and Readiness

STEM - Science, Technology, Engineering and Math

Web 2.0 - Newer web applications, usually referring to social media sites like Facebook and Twitter