

Tully School District Technology Plan

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Executive Summary

The Technology vision of the Tully Central School District is focused around the belief that technology is a tool to improve learning and should be integrated into regular daily instruction. Educational technology will be used to develop students who are able to access information and use technology effectively.

The Tully Central School District is located in rural Upstate New York, about 15 miles south of Syracuse. The school district services an area of 82 square miles and a district population of about 6,500. District enrollment is around 990 students. Ours is a rural district within which dairy farms, apple orchards, row-crop agriculture, and small woodlot forestry are very prevalent. There are many large, active farms and dairy operations within the district, and agriculture in general is a part of the daily life in the community.

In the Tully School District, the learning community will be technologically literate lifelong learners. Learners will be able to interact successfully in a technological environment to achieve their personal, educational, and workplace goals. They will skillfully use technology to access, retrieve and use information school-wide, community wide, nationally, and internationally.

Technology Objectives and Plans

Overview

- Goal 1: All teachers and students, regardless of gender or socioeconomic status, will have equal access to information technology in their classrooms, schools, and communities.
- Goal 2: All teachers will use technology effectively to help students achieve high academic standards.
- Goal 3: All students will have technology and information literacy skills.
- Goal 4: Research and evaluation will improve the next generation of technology applications for teaching and learning.
- Goal 5: Digital content and networked applications will supplement teaching and learning.
- Goal 6: All teachers and students will have the ability to access and work with their files anytime, anywhere they have access to the Internet and the technology to do so beyond the access provided by the school.

Tully Central School District Goals and Strategy for Telecommunications and Information Technology

Students need to be able to use a wide variety of telecommunications tools to enhance their future success as students and workers. It is imperative for all students to have access to information via technology as a basis for lifelong learning. It is essential for all learners, including educators, to process and manage information through the skillful use of technology. Skillful use of telecommunications supports the development of process skills such as flexibility, adaptability, critical thinking, problem solving, collaboration, communication, and creativity

which are essential to success in our rapidly changing information age. Networked technology systems permit efficient and effective communications within and outside the district.

Grade Appropriate Curriculum

A comprehensive scope and sequence was developed by a committee of administrators and faculty members, with input from all K-12 teachers.

- The Scope and Sequences addresses student competencies needed for integration into classroom curricular lessons, as he or she completes each grade. This also includes standards applied (See Scope and Sequence).
- Tully Central Schools provides Computer Technology instruction following the standards and Performance Indicators provided by American Association of School Librarians, New York State Common Core Learning Standards, International Society for Education (ISTE) and The Empire State Information Fluency Continuum. A combination of these curriculums and guidelines ensures students have the fundamental building blocks necessary for inquiry, learning and sharing of new understandings. This combination of skills and benchmarks provides students with skill necessary in the electronic information environment.

Technology Architecture and Infrastructure Plan

During the next three years Tully School District will be concentrating on adding technology hardware and software to the classrooms. Additionally, professional development in the appropriate instructional use of the hardware and software acquisitions is now a requirement for its installation and use.

Current and ongoing renovations:

- Upgrade Surveillance and Building Security
- Upgrade Phone System
- Upgrade Wireless access points.
 - Increase and improve coverage
- Improvement of current computers and technology.
- In district capabilities for delivering and receiving portable distance learning.
- Leases for computer technology to keep systems on a 3 year refresh cycle.

Future trends and upgrades (next 3 years):

- Adding, expanding, and upgrading technology in the classrooms.
- Consideration for and accommodation of Bring Your Own Device (BYOD) to further enable an extension of the learning day and opportunities.

Long Range Planning:

- Ensuring maximization of technology through continued training and professional development.

Equipment and Service Components

Hardware/Software Budget

Hardware	2016-2017	2017-2018	2018-2019	Funding/Aid Source
State Aided Hardware	\$20,956	\$20,956	\$20,956	State Aided
Software				
State Aided Software	\$16,868	\$16,868	\$16,868	State Aided
Staff Development				
Model Schools	\$3,800.00	\$3,800.00	\$3,800.00	BOCES
CSLO CoSer	\$5,635.00	\$5,635.00	\$5,635.00	BOCES
Model Schools Workshops	\$720.00	\$720.00	\$720.00	BOCES
Technical Support Staff				
District IT Staff	\$69,342.00	\$70,729.00	\$72,143.00	District
BOCES Support Tech 0.5 Time	\$45,400.00	\$45,400.00	\$45,400.00	BOCES
Contractual				

Additional BOCES Support hours	\$2,250.00	\$2,250.00	\$2,250.00	BOCES
BOCES Technology Leases	\$98,000.00	\$98,000.00	\$98,000.00	BOCES
Other/BOCES	\$28,000.00	\$28,000.00	\$28,000.00	BOCES
Wide Area Network(601 Telecom)	\$43,549.00	\$43,549.00	\$43,549.00	BOCES
Local (602 Interconnect Services)	\$13,728.00	\$14,003.00	\$14,283.00	BOCES
Long Distance (602 Interconnect Services)	\$1,500.00	\$1,530.00	\$1,561.00	BOCES
602 Base Fee	\$1,000.00	\$1,000.00	\$1,000.00	BOCES
Nutri-Kids	\$8,898	\$8,898	\$8,898	BOCES
Library Software	\$13,109.00	\$13,135.00	\$13,398.00	BOCES
School Website	\$4,800.00	\$4,896.00	\$4,994.00	BOCES
Erate App Fee	\$3,125.00	\$3,125.00	\$3,125.00	BOCES
Copier Leases	\$47,224.00	\$47,224.00	\$47,224.00	BOCES
Materials and Supplies	\$4,358.00	\$4,358.00	\$4,358.00	Local
E-Learning	\$22,764.00	\$23,219.00	\$23,684.00	BOCES

Software

Tully Central School District provides all computers with basic Business Applicable Software. We plan to continue to provide this software with regular upgrades. Additional software and web based services will be provided to teachers based on curriculum needs and justifications, supporting New York State Curriculum Standards. All software purchases are initiated by teacher requests and the use of the Software Requisition form (See Attachments).

Telecommunications

- Nortel digital phone system. Each classroom has a phone to increase home and school communication.
 - A Cisco VOIP Phone system is planned for 16-17 to replace this aging system.
- Google Apps web based Email , Calendar, and Documents to allow for staff access via internet, both inside and outside the district network.
- Student produced announcements and emergency alert notification, and continuous streaming of important news and events via the Xibo application.
- Tully Central Schools offers access to outside world via e-mail, web access, digital telephone systems, distance learning, and video conferences.

Services

Computer and Internet Access

- Internet Access
- Teachers and Administrators utilize the following services purchased via CNYRIC (BOCES): record keeping, grades, attendance, test scoring, Special Education tracking and reporting, Streaming media, Mandarin Library Automation, and Nutri-Kids-automated lunch programs allowing the identifying of socio-economic patterns of students.

Web Resources Mention the Oasis library automation system here?

- The Tully Central Schools provides an active Web Page to facilitate communication between the school and the community, in addition to teacher and student interaction. This provides an additional avenue for instruction.
- Tully is offering the following web based services:
 - Web based file and project collaboration through Google Apps. This allows for a simple yet robust means for staff to communicate and share information. There are also many possibilities for student applications with this product.
 - Library automation software for shared library resources across Districts.
 - Remote access to Files and Folders via Google Drive and the WebDav protocol to staff.
 - Select courses via distance learning technologies as well as offering virtual field trips via video conferencing.

Infrastructure

Tully Central School District currently utilizes a Cat6 Ethernet network and a 10 Gbs optical fiber backbone. We have Time Warner optical fiber cable connecting the school district to the OCM BOCES CNYRIC. The District network is connected to the Time Warner fiber cable with a Cisco Catalyst 3560G. Both buildings are connected with semi redundant Cisco 4500X Cores. The remainder of the internal network is connected with Cisco 2960 PEO+'s (Power Over Ethernet Plus) switches.

All classrooms have at least 3 Cat 6e drops with one placed high on the wall for use with the POE Wireless Access Point.

Tully supports 5 static and 2 mobile computer labs at the Junior Senior High School as well as 2 static and one mobile computer lab at the Elementary.

The Aruba Wireless project during 2011-2013 deployed 64 wireless Access Points throughout the District. This allows for near complete WiFi coverage for both the HS and the Elem. There is both an internal private WiFi network as well as a public based WiFi to allow for Bring Your Own Device initiatives.

Physical Servers:

- Three clustered servers running Windows Server 2012 R2 and Hyper-V virtualization technology
 - Three HP Proliant DL380p Gen8 servers
 - These servers host multiple services
 - All of the District's virtual servers.
 - Access to the SAN based file storage.
 - Network DHCP settings
 - These servers are teamed so that they each run a portion of the work load, but will take over in the case of a failure of the most highly needed virtual servers.
- One Seneca Data server running the Symphony Surveillance software.

Virtual Servers:

Tully utilizes a number of virtual servers to save on physical hardware requirements. These servers cover a variety of services utilized by academic and facility needs.

- Virtual Servers
 - 1 Active Directory Authentication Server
 - User login data
 - 1 Wireless Monitoring Server
 - 1 Surveillance Server
 - 1 HVAC Control Server
 - 1 Transfinder Bus Route Server
 - 1 Faronics AV Server
 - 1 Print server
 - 1 Veridium Computer Power Management Server
 - 1 WebDav login server
 - Web based file access

- 1 Kaseya Desktop Management Server
 - Remote management and software deployment suite
- 2 App Servers
 - Hosts several small applications
 - Login Auditing
 - User account management auditing
 - Email passthrough for copier scanning
- 2 Network Monitoring Servers (Nagios and Observium)
 - Overview of status of network based devices
 - Baseline is finished, long term can get more granular
- Additional VM's can be added as needed with no cost to the District

Proposed Upgrades:

Tully is looking to increase the infrastructures wireless capacity and quality to help facilitate classroom technology. Current trends are for dedicated wireless per classroom in preparation for BYOD, increased classroom wireless technology, and future digital testing needs.

Tully is looking to replace the aging Nortel phone system with a VOIP Cisco solution. This solution would tie in with paging and announcements as well as allow for more flexible communication options.

Related Programs

- The district currently has a full time Technology Coordinator. A secondary Technician Position is filled with a 0.6 FTE BOCES Technician, but there may still be need for another part time position or increased BOCES FTE.
- The Central New York Regional Information Center provides the district with a firewall to block unauthorized access to the network and internet filtering using a BOCES supplied system (LIGHTSPEED) to prevent users from accessing inappropriate information on the internet as per the requirements of the Children's Internet Protection Act.
 - See attachments for district wide internet access policy.
- Kaseya is utilized as a means to remotely control and install applications as well as control Windows and software updates.
- Aristotle is in place and installed on the District computers. Aristotle monitors keystrokes and computer use to help ensure compliance with District internet policy.
- PaperCut software is utilized to monitor printer usage from the computers.
- The district is using a system called Xibo to supply announcements and emergency broadcasts. There are currently 2 TV's at the HS and one at the Elem. Announcements can and are generated by both staff and students.

Deployment Schedule

- Initial purchasing of BOCES Lease hardware/software will be completed by July/August of each of the next three years.
- Deployment of purchased hardware/software will begin August/September of each year.
- State Aided funds are spent during the course of the year based on teacher requisitions (See Attachments), forms that are submitted and reviewed by the building tech committees.
- Deployment of these purchases takes place on an as needed basis.

Staffing and Training

There is a plan to develop a means to proficiently communicate district expectations and policies regarding all facets of technology use. An outline of key items is located in the Staff Handbook.

Technology Coordination

There is a plan to utilize Google Apps to create an annual survey of faculty and administrator's computer and networking skills to help assess professional development needs. The survey should be revised annually to reflect changes in technology and progress toward distinct goals.

Curriculum Planning

The building level Tech Committees will aid classroom teachers with the integration of computer skill into curriculum units throughout the school year. This will ensure instruction to enable students to master skills defined in the Scope and Sequence (see Attachments). Subcommittees of each Building Technology Committee will review and provide input on any necessary changes to the Tully Central School District Computer Skills Scope and Sequence K-12. We will monitor to assure continued alignment with New York Standards.

Staff Training to Include Administrators

Training sessions will be offered and organized by the District Technology Coordinator and the Building Technology committees on a regular basis.

Results from the monthly building level tech meetings will drive staff development training.

This will be done with the following vehicles:

- In-service
- Mentoring
- Teaching Center/BOCES Workshops
- Staff Development Days
- Release Time
- New Teacher Orientation
- Parent /Community Training
- Online

The most effective staff development addresses individual learning needs. With this, the content

of staff development will vary according to the monthly building level tech meetings.

Topics for Staff Development

The Staff Development Committee will be given a copy of this Technology Plan to help with planning their days.

- Training on Google Apps e-mail as needed to communicate effectively on a professional level with colleagues, and parents.
- Training on online databases purchased via COSER BOCES: NOVEL, Info-bits, Grolier Online, etc.
- Training on online subscriptions to educational reference web sites: Brain Pop, Enchanted Learning, Castle Learning, etc.
- Availability of video and audio resources through services such as Media Connect.
- Use of BOCES and in District webmasters for onsite, individual teacher web page development, as required by the district as a vital communication, informational tool, while also providing curriculum support.
 - Website Development- Tully Central School District encourages each faculty and staff member to operate an active webpage. The webpages will facilitate communication between parents, students and the community.
- Effective integration of technology into instruction.
- New Technologies- as new hardware becomes deployed (as per equipment plan) faculty and administration must undergo formal training.

Other Resources

- CNYOTC
- In District Personnel
- OCM BOCES Curriculum Resource Center, Center for Learning Technologies

Support and Maintenance

- Budget to retain a full time Technology Technician as a district employee. Analyze the need for additional Tech. Support Staff. Will use our current Work Order Software (Quecentre) to look at data and anecdotal diaries.
- Budget to retain a 0.6 FTE BOCES Technician.
- CNY Regional Information Center provides hourly technology support for repair, LAN, and WAN.

Plan Administration and Budgeting

Current Plan Approval Status

This current Technology Plan has been reviewed and approved by district building principals, School Business Administrator and Superintendent of Schools.

The district Technology Committee has developed this plan in accordance with building librarians, computer lab TAs, and administrators.

Independent Review and Approval

OCM BOCES Instructional Technology Department will review this initial submission with comments and suggestion for change.

Budgeting

- Equipment purchases and services schedule
- Annual budgeting and approval
- Special bond issuance and approvals
- Other funding sources
 - Grants
 - E-Rate discounts

Ongoing Planning and Review

Technology program monitoring and evaluation process

- Monthly building level technology committee agendas will be utilized to formally look at our current telecommunications services, hardware, and software to see how to improve education and/or library services.
 - This will be a visionary, proactive process to be sure new technologies are implemented, to enhance the learning process.
 - This serves as a means to monitor our progress toward our goals and assist us in making any adjustments to our current technology plan.
 - This involves keeping official minutes of our meetings as a reference for determining current and future technology needs.

Plan review and revision plans

The District Technology Committee has created hardware and software requisition forms for teachers to request classroom, grade level, department or administrative hardware/software needs, with proper justifications. These forms are submitted, for initial review, to the Building Technology Committees.

There are two building level Technology Committees. These committees will consist of grade/subject area teachers, Technology Coordinator, School Business Administrator, Librarians, Computer Lab TA, and a Principal. If needed each building committee will make

recommendations to the district committee, helping to prioritize needs.

Monthly communication will be disseminated after each of the Building Technology Meetings, to all committee members, Members will help facilitate disseminating information to their departments. Major technology changes, i.e. deviations from the Technology Plan, are submitted to the District Technology Committee for review.

The District Technology Committee will meet twice a year and is made up of the joint building level committees.

The District Committee will review and revise the technology plan, to reflect teacher needs and budgetary capabilities.

Information Technology Assessment

Computer Inventory Tully School District

Kaseya Computer Log

Systems are logged by group.subgroup. Main groups show total # of systems contained within that specific group and its subgroups.

Computer Group	Number of Systems
Elem Total:	181
elem.artlab	2
elem.class_desktops	11
elem.class_laptops	2
elem.ilab1	26
elem.ilab2	25
elem.lib_admin	3
elem.library	8
elem.maintenance	1
elem.minilab	25
elem.office	16
elem.speced	6
elem.teacher.desktop	12
elem.teacher.laptop	44
HS Total	217
hs.artlab	1
hs.chemlab	6
hs.class_laptops	1

hs.class_laptops.room-118	5
hs.fine-arts-lab	25
hs.library	33
hs.mainlab	25
hs.mainlab2	24
hs.maintenance	1
hs.math-lab	5
hs.office	19
hs.physicslab	6
hs.pitstop	2
hs.speced	9
hs.teacher.desktop	7
hs.teacher.laptop	48
hs.techlab	28
Spares	47
Total Computers:	445

There are additional systems not monitored in Kaseya at the time of this writing. These units are at End of Life, but are saved for use as spares, in addition to those listed here.

Attachments

Technology Scope and Sequence

Grade Level	Technology Awareness And Operation	Using Technology to Compute and Acquire Knowledge	Authoring	Culminating Project	Associated Tasks
K	<ul style="list-style-type: none"> Demonstrate grade appropriate rules and ethical behaviors of computer use Introduction to grade appropriate word processing software Identify basic computer parts (monitor, keyboard, mouse, printer, CPU) 	<ul style="list-style-type: none"> Introduce computer Logon process Introduction to accessing information from electronic encyclopedias or the Internet (teacher models) 	<ul style="list-style-type: none"> Use mouse and keyboard to create a picture with a caption 	<ul style="list-style-type: none"> Teacher models a project using various technologies that supports lifelong learning <p>Suggested activities:</p> <ul style="list-style-type: none"> Story book with simple sentences and illustration 	<ul style="list-style-type: none"> Mouse Navigation Left click/ Double click, Delete, backspace, shift space bar, arrows, enter Use of File Menu or Icons (Exit or Quit) Generic password
Grade Level	Technology Awareness And Operation	Using Technology to Compute and Acquire Knowledge	Authoring	Culminating Project	Associated Tasks
1	<ul style="list-style-type: none"> Demonstrate grade appropriate rules and ethical behaviors of computer use Introduction to the following software: word processing, graphic design Name and Describe the functions of the basic parts of a computer Differentiate between icons Be exposed to peripherals (printers) Explore the uses of grade appropriate technology in the classroom 	<ul style="list-style-type: none"> Use a word processor to type and edit using basic word processing commands Introduction to accessing information from electronic encyclopedias or the Internet (teacher models) Introduce citation of sources 	<ul style="list-style-type: none"> Begin use of a word processing program Grade appropriate citation of sources from electronic encyclopedias and the Internet 	Develop a project using various technologies that support lifelong learning. <p>Suggested activities:</p> <ul style="list-style-type: none"> Create an I-Like/How-to book with simple graphics Design a graphic 	<ul style="list-style-type: none"> Right Click Use of File Menu or Icons (Print, Save,) Introduction to toolbars Change Font Size Insert Graphic Save work
Grade Level	Technology Awareness And Operation	Using Technology to Compute and Acquire Knowledge	Authoring	Culminating Project	Associated Tasks
2	<ul style="list-style-type: none"> Begin using structured keyboard program Demonstrate grade appropriate rules and ethical behaviors of computer use Become familiar with the following software; word processing Explore the uses of grade appropriate technology in the classroom 	<ul style="list-style-type: none"> Use a word processor to type and edit using basic word processing commands with guidance and support from adults Access information from electronic encyclopedias or the Internet 	<ul style="list-style-type: none"> Begin use of graphics in a word processing program Grade appropriate citation of sources from electronic encyclopedias and the Internet 	Develop a project using various technologies that support lifelong learning. <p>Suggested activities:</p> <ul style="list-style-type: none"> Produce a paragraph with graphics Create and print a poem with graphics Write one page of a class book with graphics Write a friendly letter using proper format 	<ul style="list-style-type: none"> Save/Save as and open a file from a designated folder Select text Proper use of: Caps lock, editing, indenting (tab), Dialog boxes, scroll bars

Grade Level	Technology Awareness And Operation	Using Technology to Compute and Acquire Knowledge	Authoring	Culminating Project	Associated Tasks
3	<ul style="list-style-type: none"> • Continue use of structured keyboard program with a focus on accuracy • Become familiar with word processing software • Grade appropriate rules and ethical behaviors of computer use • Introduce file management • Explore the uses of grade appropriate technology in the classroom 	<ul style="list-style-type: none"> • Use a word processor to type and edit using basic word processing commands with guidance and support from adults • Access information from databases, encyclopedias and the Internet 	<p>Students will demonstrate basic knowledge, understanding and application of:</p> <ul style="list-style-type: none"> • Word processing • Desktop publishing • Multimedia • File Management • Citation of sources from electronic encyclopedias and the Internet 	<p>Develop a project using various technologies that support lifelong learning.</p> <p>Suggested activities:</p> <ul style="list-style-type: none"> • Prepare a report with visuals • Creative writing product: cartooning, play, story, poetry • Practical writing product: newsletter, instructional guide, brochure, greeting card • Create a multimedia product for an audience (teacher models) 	<ul style="list-style-type: none"> • Page Setup options (margins, orientation, columns, breaks, tabs) • Save work to a designated folder • Proper use of: Minimize, Maximize, Restore/ Undo, Close • Spellcheck
Grade Level	Technology Awareness And Operation	Using Technology to Compute and Acquire Knowledge	Authoring	Culminating Project	Associated Tasks
4	<ul style="list-style-type: none"> • Keyboard correctly at 5-8 words per minute • Demonstrate grade appropriate rules and ethical behaviors of computer use • Be able to make use of the following kinds of software; word processors • Be exposed to peripherals (printers, servers) • Explore the uses of grade appropriate technology in the classroom 	<ul style="list-style-type: none"> • Use a word processor to type and edit using basic word processing commands • Access information from databases, encyclopedias and the Internet 	<ul style="list-style-type: none"> • Expand the ability to use graphics in work such as: Word Processing, Desktop Publishing, and Multimedia • Expand file management • Citation of sources from electronic encyclopedias and the Internet 	<p>Develop a project using various technologies that support lifelong learning.</p> <p>Suggested activities:</p> <ul style="list-style-type: none"> • Prepare a report with visuals • Creative writing product: cartooning, play, story, poetry • Practical writing product: newsletter, instructional guide, brochure, greeting card • Create an interdisciplinary multimedia presentation to communicate with others (Powerpoint) 	<ul style="list-style-type: none"> • Group and Ungroup graphic objects • Relationship of graphics to text

Grade Level	Technology Awareness And Operation	Using Technology to Compute and Acquire Knowledge	Authoring	Culminating Project	Associated Tasks
5	<ul style="list-style-type: none"> • Demonstrate sufficient keyboarding skills to type at 9-17 words per minute • Demonstrate grade appropriate rules and ethical behaviors of computer use • Be able to make use of the following kinds of software, word processor, Desktop publishing/ presentation • Make use of available presentation peripherals (projectors, document camera, etc) • Explore data collection technology (SS) 	<ul style="list-style-type: none"> • Demonstrate use of the following types of software: word processors and graphics programs • Use technology in the classroom (calculators, video, audio, microphone, projectors, document camera, video recorders • Use technology to collect, organize and analyze data using spreadsheets • Access information from databases, encyclopedias and the Internet 	<p>Students will demonstrate basic knowledge, understanding and application of:</p> <ul style="list-style-type: none"> • Word processing • Desktop publishing • Multimedia • File Management • Citation of sources from electronic encyclopedias and the Internet 	<p>Develop a project using various technologies that support lifelong learning.</p> <p>Suggested activities:</p> <ul style="list-style-type: none"> • Prepare a report with visuals • Creative writing product: cartooning, play, story, poetry • Practical writing product: newsletter, instructional guide, brochure, greeting card • Spreadsheets: collect, manipulate, and analyze data • Create an interdisciplinary multimedia presentation to communicate with others (Powerpoint) 	<ul style="list-style-type: none"> • Text boxes and tables in word processing, page break • Spreadsheet: Sum Formula
Grade Level	Technology Awareness And Operation	Using Technology to Compute and Acquire Knowledge	Authoring	Culminating Project	Associated Tasks
6	<ul style="list-style-type: none"> • Demonstrate sufficient keyboarding skills to type at 18-25 words per minute • Demonstrate grade appropriate rules and ethical behaviors of computer use • Become familiar with available peripherals 	<ul style="list-style-type: none"> • Demonstrate use of the following types of software: word processors and graphics programs • Use visual presentation tool (projectors, document camera, video recorders • Use technology to collect, organize and analyze data using spreadsheets • Access information from databases, encyclopedias and the Internet 	<p>Students will demonstrate solid knowledge, understanding and application of:</p> <ul style="list-style-type: none"> • Word processing • Desktop publishing • Multimedia • Grade appropriate citation of sources from electronic encyclopedias and the Internet 	<p>Develop a project using various technologies that support lifelong learning.</p> <p>Suggested activities:</p> <ul style="list-style-type: none"> • Research paper • Creative writing product: cartooning, play, story, poetry • Practical writing product: newsletter, instructional guide, brochure, greeting card • Spreadsheets: collect, manipulate, and analyze data • Create an interdisciplinary multimedia presentation to communicate with others (Powerpoint) 	<p>Spreadsheet</p> <p>Introduce grade appropriate formulas (+, -, /, *, average)</p> <p>Sorting</p> <p>Fill Right and Fill Down</p> <p>Organize and manage student server files</p>

Grade Level	Technology Awareness And Operation	Using Technology to Compute and Acquire Knowledge	Authoring	Culminating Project	Associated Tasks
7	<ul style="list-style-type: none"> • Demonstrate rules and ethical behaviors of computer use. • Use hardware and software designed to create presentations of information and products to groups, using computers and appropriate peripherals • Explore new technologies that are used in all career areas: Agriculture, Arts, Media and Entertainment, Business, Engineering Technology, Health Careers, Home Economics, Careers and Technology, Industrial and Technology, Public and Human Services. 	<ul style="list-style-type: none"> • Effectively select and use software programs. • Obey copyright laws, record sources for citation, and quote directly from sources. • Use pictures, sound, text and video to acquire information. • Use visual information to communicate information and ideas. • Use technology to collect, organize and analyze problems using a database or spreadsheet. • Use of telecommunications to send and receive information 	<p>Students will demonstrate a strong knowledge, understanding, application of:</p> <ul style="list-style-type: none"> • Word processing • Desktop publishing • Multimedia 	<p>Develop a project using various technologies that support lifelong learning.</p> <p>Suggested activities:</p> <ul style="list-style-type: none"> • Research paper for a subject area. • Creative writing product: play, story, poetry • Practical writing product: newsletter, brochure, business card • Product for solving problems in the real world • Create an interdisciplinary multimedia presentation to communicate with others (Powerpoint) 	<p>To be completed at each site.</p>
8	<ul style="list-style-type: none"> • Demonstrate rules and ethical behaviors of computer use. • Use hardware and software designed to create presentations of information and products to groups, using computers and appropriate peripherals • Explore new technologies that are used in all career areas: Agriculture, Arts, Media and Entertainment, Business, Engineering Technology, Health Careers, Home Economics, Careers and Technology, Industrial and Technology, Public and Human Services. 	<ul style="list-style-type: none"> • Effectively select and use software programs. • Obey copyright laws, record sources for citation, and quote directly from sources. • Use pictures, sound, text and video to acquire information. • Use visual information to communicate information and ideas. • Use technology to collect, organize and analyze problems using a database or spreadsheet. • Expand the use of telecommunications to send and receive information. • Effectively use electronic research tools. 	<p>Students will demonstrate a strong knowledge, understanding, application of:</p> <ul style="list-style-type: none"> • Word processing • Desktop publishing • Multimedia 	<p>Develop a project using various technologies that support lifelong learning.</p> <p>Suggested activities:</p> <ul style="list-style-type: none"> • Research paper for a subject area. • Creative writing product: play, story, poetry • Practical writing product: newsletter, brochure, resume, business letter • Product for solving problems in the real world • Create an interdisciplinary multimedia presentation to communicate with others (Powerpoint) 	<p>To be completed at each site.</p>

Grade Level	Technology Awareness And Operation	Using Technology to Compute and Acquire Knowledge	Authoring	Culminating Project	Associated Tasks
9-12	<ul style="list-style-type: none"> • Demonstrate an understanding of the basic operations and concepts of technology. • Demonstrate rules and ethical behaviors of computer use. • Use hardware and software designed to create presentations of information and products to groups, using computers and appropriate peripherals • Use technology to collect data and analyze problems of the real world. • Apply technology to enhance productivity. • Use technology as a communication tool. • Transfer current knowledge and explore new technologies that are used in all career areas: Agriculture, Arts, Media and Entertainment, Business, Engineering Technology, Health Careers, Home Economics, Careers and Technology, Industrial and Technology, Public and Human Services. • Demonstrate personal responsibility for lifelong learning. 	<ul style="list-style-type: none"> • Perform and refine searches using multiple electronic sources. • Evaluate and compare sources to determine credibility, bias and relevance • Obey copyright laws, record sources for citation, and quote directly from sources. • Use pictures, sound, text and video to acquire information. • Use visual information to communicate information and ideas. • Use technology to collect, organize and analyze problems using a database or spreadsheet. • Expand the use of telecommunications to send and receive information. 	<p>Students will demonstrate a strong knowledge, understanding, application of:</p> <ul style="list-style-type: none"> • Word processing • Desktop publishing • Multimedia • Mathematical and statistical models • Electronic collaboration 	<p>Develop a project using various technologies that support lifelong learning.</p> <p>Suggested activities:</p> <ul style="list-style-type: none"> • Research paper for a subject area. • Creative writing product: play, story, poetry • Practical writing product: newsletter, brochure, magazine, yearbook, resume, business card • Product for solving problems in the real world • Create an interdisciplinary multimedia presentation to communicate with others (Powerpoint, Video, Prezi, Smart Notebook) 	To be completed at each site.

Tully Central School Attachment E
Computer Software Justification and Use Form

Name _____ Date _____ School building/room/grade _____

Software Desired: _____

Minimum hardware requirements:

Operating System _____ Processor _____ Ghz/Mhz Ram _____ Hard Disk space _____ GB/MB

Description (or title) of Learning Activity it supports: _____

I will _____ or will not _____ need **training** to support this project.

Date I would like to have this ready for training/ planning/ use by: _____

Check all NY StateCORE areas in which you anticipate using this software:

ELA Social Studies Science Math Art Music Foreign Language Technology Other: _____

List at least ONE NY State Standard supported by this software (be as specific as possible): _____

State specific rational or need (optional, but may be used to prioritize requests)

Be sure to fill in other side of the Requisition Form Return form to Technology Coordinator

Tully Central School District
SOFTWARE REQUISITION FORM
 (Use Separate Form For Each Vendor)

Requisitioner	

Building/Program	

Room	Date
_____	_____
Grade and/or Subject Area	

BUDGET CODES	

Quote Source: (catalog or URL, date, page)		

Company		

Address		

City	State	Zip
_____	_____	_____
Telephone: _____		
Fax: _____		

1. Tech Check:	_____	Date: _____
2. Curriculum Check:	_____	Date: _____
3. Budget Check:	_____	Date: _____

Routing Procedure:
 Submit to Technology Coordinator to check for hardware compatibility
 He/She will then forward to the building administrator for curricular approval.
 He/She will then submit to the district office for final budget approval.

Quantity	Catalogue Number/Product Number	Item Description (including color, size, style, etc.)	Cost Each	Total
Page Total =				
Shipping and Handling Charges				
Total for Vendor				

Attention: Business Office – Copies of all **approved**
 Software Requisitions must be forwarded back to the
Technology Coordinator for notification

**SUBJECT: STUDENT USE OF COMPUTERIZED INFORMATION RESOURCES
(ACCEPTABLE USE POLICY)**

The Board of Education will provide access to various computerized information resources through the District's computer system ("DCS" hereafter) consisting of software, hardware, computer networks and electronic communications systems. This may include access to electronic mail, so-called "on-line services" and the "Internet." It may include the opportunity for some students to have independent access to the DCS from their home or other remote locations. All use of the DCS, including independent use off school premises, shall be subject to this policy and accompanying regulations. Further, all such use must be in support of education and/or research and consistent with the goals and purposes of the School District.

Access to Inappropriate Content/Material and Use of Personal Technology or Electronic Devices

This policy is intended to establish general guidelines for the acceptable student use of the DCS and also to give students and parents/guardians notice that student use of the DCS will provide student access to external computer networks not controlled by the School District. The District cannot screen or review all of the available content or materials on these external computer networks. Thus some of the available content or materials on these external networks may be deemed unsuitable for student use or access by parents/guardians.

Despite the existence of District policy, regulations and guidelines, it is virtually impossible to completely prevent access to content or material that may be considered inappropriate for students. Students may have the ability to access such content or material from their home, other locations off school premises and/or with a student's own personal technology or electronic device on school grounds or at school events. Parents and guardians must be willing to establish boundaries and standards for the appropriate and acceptable use of technology and communicate these boundaries and standards to their children. The appropriate/acceptable use standards outlined in this policy apply to student use of technology via the DCS or any other electronic media or communications, including by means of a student's own personal technology or electronic device on school grounds or at school events.

Standards of Acceptable Use

Generally, the same standards of acceptable student conduct which apply to any school activity shall apply to use of the DCS. This policy does not attempt to articulate all required and/or acceptable uses of the DCS; nor is it the intention of this policy to define all inappropriate usage. Administrative regulations will further define general guidelines of appropriate student conduct and use as well as proscribed behavior.

District students shall also adhere to the laws, policies and rules governing computers including, but not limited to, copyright laws, rights of software publishers, license agreements, and student rights of privacy created by federal and state law.

(Continued)

**SUBJECT: STUDENT USE OF COMPUTERIZED INFORMATION RESOURCES
(ACCEPTABLE USE POLICY) (Cont'd.)**

Students who engage in unacceptable use may lose access to the DCS in accordance with applicable due process procedures, and may be subject to further discipline under the District's school conduct and discipline policy and the District Code of Conduct. The District reserves the right to pursue legal action against a student who willfully, maliciously or unlawfully damages or destroys property of the District. Further, the District may bring suit in civil court against the parents/guardians of any student who willfully, maliciously or unlawfully damages or destroys District property pursuant to General Obligations Law Section 3-112.

Student data files and other electronic storage areas will be treated like school lockers. This means that such areas shall be considered to be School District property subject to control and inspection. The Computer Coordinator may access all such files and communications without prior notice to ensure system integrity and that users are complying with the requirements of this policy and accompanying regulations. Students should **NOT** expect that information stored on the DCS will be private.

Notification

The District's Acceptable Use Policy and Regulations will be disseminated to parents and students in order to provide notice of the school's requirements, expectations, and students' obligations when accessing the DCS.

Regulations will be established as necessary to implement the terms of this policy.

NOTE: Refer also to Policy #8271 -- Internet Access and Acceptable Use Policy for Students, Faculty and Staff/Internet Content Filtering

Adoption Date: 04-02-2012

SUBJECT: INTERNET ACCESS AND ACCEPTABLE USE POLICY FOR STUDENTS, FACULTY AND STAFF/INTERNET CONTENT FILTERING

We are pleased to offer the students, faculty and staff of the Tully Central School District use of the latest in computer technology hardware and software as well as access to the Internet and the World Wide Web.

Families should be aware, however, that some material available via the Internet and World Wide Web may contain things that are not age-appropriate and could be potentially offensive, defamatory, inaccurate or even illegal.

Independent use of the computers at Tully is a privilege, not a right. Independent access is defined as access that is not under DIRECT teacher supervision and that is for any purpose other than access to web-delivered course content assigned by a teacher (e.g. classroom support sites and District-purchased web-delivered electronic materials). This privilege may be, and will be, revoked or denied as a result of improper account holder behavior. System administrators may deny independent access at any time as required. The administration, faculty and staff at Tully Central School District as well as parents/guardians may request the System Administrator to deny, revoke or suspend such independent access.

- a) Prior to access to the Internet, training will be given in both its use and etiquette (“netiquette”).
- b) Users are expected to treat computers, other hardware peripherals and software with respect. Failure to do so will be considered misuse/abuse. This includes, but is not limited to:
 - 1. Placing/installing personal software or information on District workstations without the expressed permission of the System Administrator;
 - 2. Placing/installing unlawful information on District workstations;
 - 3. Willfully destroying District property, stored information and/or system programs/software;
 - 4. Accessing and/or using obscene, abusive or otherwise objectionable text, sounds or images;
 - 5. Downloading unauthorized information to workstations, file servers or diskettes;
 - 6. Ignoring rules of cleanliness in workstation work areas (e.g. no food or drink spills)
- c) Users are to protect their passwords at all times. The network is intended for the exclusive use of its registered users, who are responsible for the use and security of their passwords and accounts. **ANY PROBLEMS WHICH ARISE FROM MISUSE OF A USER’S ACCOUNT ARE THE RESPONSIBILITY OF THE ACCOUNT HOLDER.** Any misuse

(Continued)

SUBJECT: THE CHILDREN'S INTERNET PROTECTION ACT: INTERNET CONTENT FILTERING/SAFETY POLICY (Cont'd.)

of password security, such as a person using another person's account, will result in the immediate suspension of account privileges for one or both parties involved in the misuse.

- d) Account holders should understand that District-supplied Electronic Mail is not secure and can be read by others.
- e) Student, Faculty and Staff data files and electronic storage areas shall remain the property of Tully Central Schools, subject to District control and inspection. The system administrator may access all such files and communications to insure system integrity and that users are complying with the requirements of this policy.
- f) All communications and information collected via the Internet are assumed to be private property and must be properly cited by users, as would any other copyrighted material.
- g) In order to support the vision and mission of the Tully Central School District, the district may maintain a website for the following purposes.
 - 1. As a place to showcase innovative student and staff educational projects, presentations, and learning experiences;
 - 2. As a gateway to a district and community resources and educational websites that support the instructional goals of the District;
 - 3. A method for community members to access district information and publications;
 - 4. A means of communications to and from students, district personnel, the community and associated organizations.
 - (a) All web authors (students, faculty or staff) must participate in training to familiarize themselves with appropriate and acceptable website posting procedures. Failure to follow the outlined regulations and procedures may result in the loss of authoring privileges or more stringent disciplinary measures.
 - (b) Documents may not contain objectionable material or link to objectionable material. Objectionable material is defined as text, images, sounds, etc. of obscene, abusive or violent nature, or any materials not directly congruent with the purpose and mission of the Tully Central School District. Web pages must also be adhere to copyright laws.

(Continued)

SUBJECT: THE CHILDREN'S INTERNET PROTECTION ACT: INTERNET CONTENT FILTERING/SAFETY POLICY (Cont'd.)

- (c) Where feasible, links to non-district supported services should contain a disclaimer indicating that the user is leaving the District server and that the District does not necessarily approve the linked material. Web pages on the District's server are the property of the District. The web server may be examined periodically to check for the timelines and relevance of its pages.
- (d) Safeguards for the Students:
 - 1) Web pages may include only the first name and initial of the last name of any student. Pages or filenames may not include a student's phone number, address, Email address or names of other family members, friends and/or relatives.
 - 2) Use of individual student pictures (video/still) and audio clips on the District web page must have signed parent/guardian approval on file for the students under 18 years of age. Group pictures (video/still), audio clip, etc may be published without parent/guardian approval if names are omitted.
 - 3) Teachers who have students create web pages must use due diligence to monitor the student work on these web pages for appropriate content.

Internet Content Filtering

The Tully Central School District, in accordance with the provisions of the Children's Internet Protection Act, requires all District computers with Internet access that are used by elementary and secondary students and staff to be equipped with filtering or blocking technology.

(Continued)

Instruction

SUBJECT: THE CHILDREN'S INTERNET PROTECTION ACT: INTERNET CONTENT FILTERING/SAFETY POLICY (Cont'd.)

No filtering technology can guarantee that students will be prevented from accessing all inappropriate locations. Proper supervision will be provided to students while accessing the Internet to further ensure appropriate usage.

In addition to the use of technology protection measures, the monitoring of online activities and access by minors to inappropriate matter on the Internet and World Wide Web *may* include, but shall not be limited to, the following guidelines:

- a) Ensuring the presence of a teacher and/or other appropriate District personnel when students are accessing the Internet including, but not limited to, the supervision of minors when using electronic mail, chat rooms, and other forms of direct electronic communications. As determined by the appropriate building administrator, the use of e-mail and chat rooms may be blocked as deemed necessary to ensure the safety of such students;
- b) Monitoring logs of access in order to keep track of the web sites visited by students as a measure to restrict access to materials harmful to minors;
- c) In compliance with this Internet Safety Policy as well as the District's Acceptable Use Policy, unauthorized access (including so-called "hacking") and other unlawful activities by minors are prohibited by the District; and student violations of such policies may result in disciplinary action; and
- d) Appropriate supervision and notification to minors regarding the prohibition as to unauthorized disclosure, use and dissemination of personal information regarding such students.

The determination of what is "inappropriate" for minors shall be determined by the District and/or designated school official(s). It is acknowledged that the determination of such "inappropriate" material may vary depending upon the circumstances of the situation and the age of the students involved in online research.

The terms "minor," "child pornography," "harmful to minors," "obscene," "technology protection measure," "sexual act," and "sexual contact" will be as defined in accordance with CIPA and other applicable laws/regulations as may be appropriate and implemented pursuant to the District's educational mission.

Under certain specified circumstances, the blocking or filtering technology measure(s) may be disabled for adults engaged in bona fide research or other lawful purposes. The power to disable can only be exercised by an administrator, supervisor, or other person authorized by the School District.

The District shall provide certification to document the installation of filtering/blocking technology for its computers with Internet access for students. This certification will fulfill the requirements under the Children's Internet Protection Act to ensure the continuation of Federal Universal Service Discounts.

(Continued)

Instruction

SUBJECT: THE CHILDREN'S INTERNET PROTECTION ACT: INTERNET CONTENT FILTERING/SAFETY POLICY (Cont'd.)

Consequences for the Misuse/Abuse of District Property and/or the Internet

Depending on the severity of the misuse, the disciplinary process may include combinations of the following:

- a) Verbal warning
- b) Written warning and parental notification
- c) Referral to Building Principal
- d) Loss of email and Internet accounts
- e) Possible criminal charges

Notification/Authorization

The District's Acceptable Use Policy and accompanying Regulations will be disseminated to parents and students in order to provide notice of the school's requirements, expectations, and student's obligations when accessing the Internet.

"Passive Consent" (Opt-out) Student access to the District's computer system will automatically be provided unless the parent has submitted written notification to the District that such access not be permitted. Procedures will be established to define the process by which parents may submit a written request to deny or rescind student use of District computers.

The District has provided reasonable public notice and has held at least one (1) public hearing or meeting to address the proposed Internet Content Filtering/Safety Policy prior to Board adoption. Furthermore, appropriate actions will be taken to ensure the ready availability to the public of the District's Internet Content Filtering/Safety Policy, as well as any other District policies relating to the use of technology.

47 United States Code (USC) Sections 254(h) and 254(l)
47 Code of Federal Regulations (CFR) Part 54

Adoption Date: 03-16-09

Personnel

SUBJECT: STAFF USE OF COMPUTERIZED INFORMATION RESOURCES

The Board of Education will provide staff with access to various computerized information resources through the District's computer system (DCS hereafter) consisting of software, hardware, computer networks and electronic communication systems. This may include access to electronic mail, so-called "on-line services" and the "Internet." It may also include the opportunity for some staff to have independent access to the DCS from their home or other remote locations. All use of the DCS, including independent use off school premises, shall be subject to this policy and accompanying regulations.

The Board encourages staff to make use of the DCS to explore educational topics, conduct research and contact others in the educational world. The Board anticipates that staff access to various computerized information resources will both expedite and enhance the performance of tasks associated with their positions and assignments. Toward that end, the Board directs the Superintendent or his/her designee(s) to provide staff with training in the proper and effective use of the DCS.

Staff use of the DCS is conditioned upon written agreement by the staff member that use of the DCS will conform to the requirements of this policy and any regulations adopted to ensure acceptable use of the DCS. All such agreements shall be kept on file in the District office.

Generally, the same standards of acceptable staff conduct which apply to any aspect of job performance shall apply to use of the DCS. Employees are expected to communicate in a professional manner consistent with applicable District policies and regulations governing the behavior of school staff. Electronic mail and telecommunications are not to be utilized to share confidential information about students or other employees.

This policy does not attempt to articulate all required and/or acceptable uses of the DCS; nor is it the intention of this policy to define all inappropriate usage. Administrative regulations will further define general guidelines of appropriate staff conduct and use as well as proscribed behavior.

District staff shall also adhere to the laws, policies and rules governing computers including, but not limited to, copyright laws, rights of software publishers, license agreements, and rights of privacy created by federal and state law.

Staff members who engage in unacceptable use may lose access to the DCS and may be subject to further discipline under the law and in accordance with applicable collective bargaining agreements. Legal action may be initiated against a staff member who willfully, maliciously or unlawfully damages or destroys property of the District.

Privacy Rights

Staff data files and electronic storage areas shall remain District property, subject to District control and inspection. The computer coordinator may access all such files and communications to

(Continued)

Personnel

SUBJECT: STAFF USE OF COMPUTERIZED INFORMATION RESOURCES (Cont'd.)

ensure system integrity and that users are complying with requirements of this policy and accompanying regulations. Staff should **NOT** expect that information stored on the DCS will be private.

Implementation

Administrative regulations will be developed to implement the terms of this policy, addressing general parameters of acceptable staff conduct as well as prohibited activities so as to provide appropriate guidelines for employee use of the DCS.

NOTE: Refer also to Policy #8271 – [Internet Access and Acceptable Use Policy for Students Faculty and Staff/Internet Content Filtering](#)

Adoption Date: 11-14-05