Diocese of Buffalo

Technology Curriculum

Effective September 1, 2017

Forward

The Technology Curriculum was designed to provide technology coordinators/teachers with a matrix of skills and guidelines for each application and grade. The standards are a compilation of International Society for Technology in Education (ISTE), the Computer Science Teacher Association (CSTA) and Common Sense Media, digital citizenship.

These guidelines are written in general terms with the understanding that each school within the Diocese of Buffalo has its own devices and software. Educators will take into consideration the technology within their building to promote excellence in an environment that engages students in meaningful learning experiences. Grade Bands were developed to ensure specific skill sets were achieved prior to the advancement of the next grade.
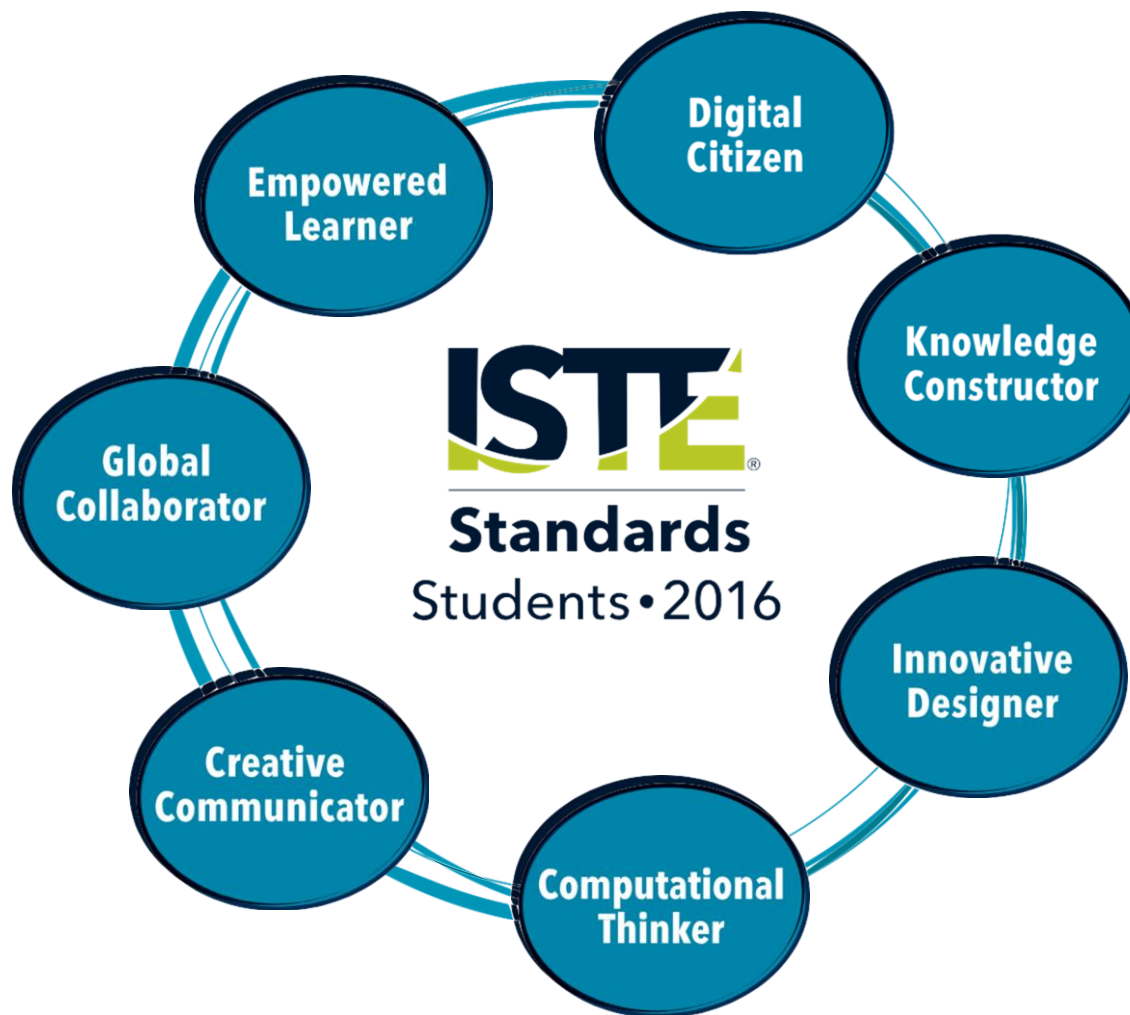
This document will be used in conjunction to a resource spreadsheet found on the Western New York Catholic Schools' website.

2017 Technology Curriculum Committee Members

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1. Empowered Learner

Students leverage technology to take an active role in choosing, achieving and demonstrating competency in their learning goals, informed by the learning sciences. Students:

a. Articulate and set personal learning goals, develop strategies leveraging technology to achieve them and reflect on the learning process itself to improve learning outcomes.
b. Build networks and customize their learning environments in ways that support the learning process.
c. Use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways.
d. Understand the fundamental concepts of technology operations, demonstrate the ability to choose, use and troubleshoot current technologies and are able to transfer their knowledge to explore emerging technologies.

2. Digital Citizen

Students recognize the rights, responsibilities and opportunities of living, learning and working in an interconnected digital world, and they act and model in ways that are safe, legal and ethical.

Students:

a. Cultivate and manage their digital identity and reputation and are aware of the permanence of their actions in the digital world.
b. Engage in positive, safe, legal and ethical behavior when using technology, including social interactions online or when using networked devices.
c. Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property.
d. Manage their personal data to maintain digital privacy and security and are aware of data- collection technology used to track their navigation online.

3. Knowledge Constructor

Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts and make meaningful learning experiences for themselves and others. Students:

a. Plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuits.
b. Evaluate the accuracy, perspective, credibility and relevance of information, media, data or other resources.
c. Curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.
d. Build knowledge by actively exploring real-world issues and problems, developing ideas and theories and pursuing answers and solutions.

4. Innovative Designer

Students use a variety of technologies within a design process to identify and solve problems by creating new, useful or imaginative solutions.
Students:

e. Know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems.
f. Select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.
g. Develop, test and refine prototypes as part of a cyclical design process.
h. Exhibit a tolerance for ambiguity, perseverance and the capacity to work with open-ended problems.

5. Computational Thinker

Students develop and employ strategies for understanding and solving problems   in ways that leverage the power of technological methods to develop and test solutions. Students:

a. Formulate problem definitions suited for technology-assisted methods such as data analysis, abstract models and algorithmic thinking in exploring and finding solutions.
b. Collect data or identify relevant data sets, use digital tools to analyze them, and represent data in various ways to facilitate problem-solving and decision-making.
c. Break problems into component parts, extract key information, and develop descriptive models to understand complex systems or facilitate problem- solving.
d. Understand how automation works and use algorithmic thinking to develop a sequence of steps to create and test automated solutions.

6. Creative Communicator

Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals. Students:

a. Choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.
b. Create original works or responsibly repurpose or remix digital resources into new creations.
c. Communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.
d. Publish or present content that customizes the message and medium for their intended audiences.

7. Global Collaborator

Students use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally. Students:
a. Use digital tools to connect with learners from a variety of backgrounds and cultures, engaging with them in ways that broaden mutual understanding and learning.
b. Use collaborative technologies to work with others, including peers, experts or community members, to examine issues and problems from multiple viewpoints.
c. Contribute constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal.
d. Explore local and global issues and use collaborative technologies to work with others to investigate solutions.

ISTE	CS	Basic Operations & Concepts	PreK	K	1	2	3	4	5	6	7	8
1	1A-C-7-10	Identify the basic components of the computer: monitor, keyboard, mouse, headphones, ports, printers and a variety of devices.	B	B	D	S	S	S	S	S	S	S
1		Turn on/off a computer, laptop and/or hand-held device and log in.	B	B	D	S	S	S	S	S	S	S
1		Use a mouse or trackpad to manipulate shapes, icons; click on URLs, radio buttons, check boxes; use scroll bar.	B	B	D	S	S	S	S	S	S	S
1		Use desktop icons, windows and menus to open and close applications and documents; understand difference between closing and quitting applications.	B	B	B	B	B	B	D	D	S	S
1		Use shortcuts to operate the computer (i.e. Command-P, Command-C, Command-V).		B	B	B	D	D	D	D	S	S
1		Use gestures to navigate hand-held devices.	B	B	D	S	S	S	S	S	S	S
1		Use the print dialog box to select local printers and change settings (i.e. number of copies, color, paper size, orientation, scale, one-sided vs. two-sided).			B	B	B	B	B	D	D	S
1	1A-C-6-11, 1A-C-6-11	Utilize basic troubleshooting steps to solve technical problems independently.	V	B	B	B	D	D	D	D	D	D
1		Apply prior technical knowledge and experiences to figure out how new technologies or applications work.			B	B	D	D	D	D	S	S

ISTE	CS	Logins/File Management	PreK	K	1	2	3	4	5	6	7	8
1		Use login credentials for access to network devices, accounts, servers, printers and cloud services.			B	B	D	D	D	S	S	S
1		Create, name, save, edit, copy, rename, delete and recover documents and understand where files are being saved.			B	B	D	D	D	S	S	S
1		Download, upload and attach files and folders.			B	B	D	D	D	S	S	S
1		Use search tools to locate files and applications.			B	B	D	D	S	S	S	S
1	2-D-7-14	Can associate document extensions with appropriate file types.					B	B	B	D	D	D
1		Understand how cloud computing is different from using software applications.					B	B	B	D	D	D

ISTE	Keyboarding	PreK	K	1	2	3	4	5	6	7	8
1	Use keyboarding programs and games to assist in development of skills.	B	B	B	B	D	D	D	S	S	S
1	Use proper posture and ergonomics.	V	B	B	B	D	D	D	S	S	S
1	Locate and use letter and number keys with correct left and right hand placement (home row).	B	B	B	B	D	D	D	S	S	S
1	Locate and use correct finger/hand for space bar, return/enter and shift key.	B	B	B	B	D	D	D	S	S	S
1	Gain proficiency and speed in touch-typing.	V	B	B	B	D	D	D	S	S	S
1	Learn to use special characters as needed (i.e. accents, tilda).				B	B	B	B	D	D	D

ISTE	CS	Personal Data Management	PreK	K	1	2	3	4	5	6	7	8
2	1A-N-7-17, 1B-I-1-19, 1B-N-7-20	Protect accounts by logging out of shared equipment.	B	B	B	B	D	D	D	D	S	S
2	1A-N-7-17, 1B-I-1-19, 1B-N-7-20	Keep passwords confidential, and be proactive if they are compromised.	V	B	D	D	D	D	S	S	S	S
2	1A-N-7-17, 1B-I-1-19, 1B-N-7-20	Use passcodes/passwords to secure individual devices.	V	B	D	D	D	S	S	S	S	S
2	1A-N-7-17, 1B-I-1-19, 1B-N-7-20	Create robust passwords and effectively manage password privacy.					B	B	D	D	S	S

ISTE	CS	Online Safety	PreK	K	1	2	3	4	5	6	7	8
2	1B-I-1-19	Use technology independently and with peers responsibly and make safe choices.	B	B	B	B	D	D	D	S	S	S
2	1B-I-1-19	Understand how to be safe online and in a digital world.	B	B	B	B	D	D	D	S	S	S
2	1B-I-1-19	Understand the importance of not sharing personal information online.	B	B	B	B	D	D	D	S	S	S
2	1B-I-1-19	Understand how to practice safe internet searches.				B	D	D	D	S	S	S
2	1B-I-1-19	Evaluate whether sources/websites are safe to conduct research.		B	B	B	D	D	D	D	D	D
2	1B-I-1-19	Understand the positive and negative effects social media sites can have on one's life, including but not limited to cyberbullying.		B	B	B	D	D	D	D	D	D

ISTE	CS	Digital Identity	PreK	K	1	2	3	4	5	6	7	8
2	1B-I-7-16, 2-I-1-20	Recognize how overuse of technology can impact one's mental, physical and emotional health.			B	B	D	D	D	D	D	D
2	1B-I-7-16	Set appropriate profile pictures and other profile content across social media, web pages, blogs, etc.			B	B	B	D	D	D	D	D	D
2	1B-I-7-16	Understand that digital content is permanent, cannot be deleted and has long lasting consequences.	V	B	B	B	D	D	D	D	D	D
2	1B-I-7-16	Build a positive digital footprint/reputation.	V	B	B	B	B	D	D	D	D	D
2	1B-I-7-16	Recognize the difference between active and passive data collection when using the internet and social media sites.								B	B	B
2	1B-I-7-16	Understand how browser settings such as cookies track personal information.								B	B	B

ISTE	Painting & Drawing Programs	PreK	K	1	2	3	4	5	6	7	8
4	Use basic drawing tools including pencil, paint brush, shape, line, undo, redo and eraser.	B	D	D	D	S	S	S	S	S	S
4	Use color palette/color wheel to change tool color.	B	B	B	D	S	S	S	S	S	S
4	Use selection tools to copy, paste, move and modify work.	B	B	B	D	D	D	D	S	S	S
4	Use text tool to add text features to artwork.	B	B	B	D	S	S	S	S	S	S
4	Use basic design principles (i.e. whitespace, color, balance, texture).	V	V	V	B	B	B	B	D	D	D

ISTE	CS	Communication & Collaboration Tools	PreK	K	1	2	3	4	5	6	7	8
2, 7	1B-I-7-15, 1B-I-7-16, 1B-N-7-19	Is polite and respectful in all communications and collaborations using technological tools, using appropriate language at all times.	B	B	B	B	D	D	D	S	S	S
7	1B-N-4-21	Use email or other forms of digital messaging to share information and communicate ideas with others.			B	B	B	D	S	S	S	S
7	1B-N-4-21	Compose and send an email or digital message.				B	D	D	D	S	S	S
7		Understand the difference between Reply Send, Reply All and Forward when responding to an email.				B	B	B	D	D	S	S
7		Understand the difference between CC (carbon copy) and BCC (blind carbon copy) and use them appropriately.								B	B	D	D
1, 7		Attach a document or file to an email.						B	B	D	S	S
7		Access class pages, class calendars, school website, portfolios and grades.				B	D	D	D	S	S	S
5, 7		Use features of a course or learning management system such as discussion forums, polls, wikis, dropbox, etc. to access and complete assignments.					B	B	D	D	S	S	S
1, 6, 7		Use audience response tools and apps to participate in class discussions.	B	B	B	B	B	B	D	D	D	S
7	1B-I-1-17	Set up, share and utilize collaborative workspaces, documents or other digital tools for asynchronous and synchronous collaboration.		B	B	B	D	D	D	D	S	S
1, 7		Use virtual world and gaming tools to work collaboratively toward common goals.			B	B	B	D	D	D	D	D
1, 7	1B-I-7-15	Use digital media tools to connect, collaborate and share.	B	B	B	B	D	D	D	D	D	D
1, 7		Create and maintain a digital portfolio or collection of works related to one's learning.		B	B	B	D	D	D	D	D	D
7	2-I-1-21	Describe ways in which the Internet impacts global communication and collaborating.	V	V	V	B	D	D	D	S	S	S
2, 7	2-I-1-22	Describe ethical issues that relate to computing devices and networks (e.g., equity of access, security, hacking, intellectual property, copyright, Creative Commons licensing, and plagiarism.)	V	B	D	D	S	S	S	S	S	S

ISTE	Word Processing	PreK	K	1	2	3	4	5	6	7	8
6	Use a word processing application to write, edit, print and save assignments.	B	B	B	D	D	D	S	S	S	S
6	Use the menu/tool bar functions to format, edit and print a document.			B	D	D	D	D	D	S	S
6	Highlight copy and paste text within a document or from an outside source.			B	B	D	D	S	S	S	S
6	Insert and resize images within a document.			B	B	D	D	D	S	S	S
6	Copy, paste and resize images found from outside sources.			B	B	B	D	D	S	S	S
2, 6	Use the menu/toolbar functions to format a paper using MLA, APA or other appropriate style.								B	B	B
6	Proofread and edit writing using built-in resources (i.e. dictionary, spell checker, thesaurus, and grammar check).			B	B	B	D	D	D	S	S

ISTE	CS	Problem-Solving & Computational Thinking	PreK	K	1	2	3	4	5	6	7	8
3	1A-A-5-3 1A-A-3-7	Use technology tools to represent solutions to problems as well as create and design in a variety of ways including text, sounds, pictures, infographics and numbers.	B	B	B	B	D	D	D	D	D	S
4	1A-A-3-5, 1A-C-6-11	Use technology resources and tools to solve age-appropriate computing problems or for independent learning and be able to describe terminology with accuracy.	B	B	B	B	D	D	D	D	D	S
4, 5	1A-A-3-5 1A-A-6-8, 1B-A-3-7	Define an algorithm as a sequence of instructions and use the basic steps of algorithmic thinking to solve problems and design solutions (debugging).	B	B	B	B	D	D	D	D	D	S
4, 5	1A-A-5-2	Use a block-based visual programming interface to build a game, tell a story or solve a problem independently and collaboratively.		B	B	B	B	B	D	D	D	D
4, 5	1B-A-2-1	Within the design cycle of a program, use 2D/3D design tools to create prototypes, models and simulations to demonstrate solutions and ideas.		B	B	B	D	D	D	D	D	S
4, 5	1B-A-3-6	Decompose (break down) a larger problem into smaller sub-problems, independently or in a collaborative group.		B	B	B	D	D	S	S	S	S

ISTE	CS	Network	PreK	K	1	2	3	4	5	6	7	8
1,6, 7	1A-N-2-16	Use computers or other computing devices to connect with people using a network (e.g., the Internet) to communicate, access, and share information as a class.	V	B	D	D	S	S	S	S	S	S
2	2-N-7-24	Summarize security risks associated with weak passwords, lack of encryption, insecure transactions, and persistence of data.	V	B	D	S	S	S	S	S	S	S
1	2-N-4-25	Simulate how information is transmitted as packets through multiple devices over the Internet and networks.			B	B	D	D	S	S	S	S

ISTE	CS	Computer Science	PreK	K	1	2	3	4	5	6	7	8
4,5	1A-A-4-4	Use numbers or other symbols to represent data (e.g. thumbs, up/down for yes/no, color by number, arrows for direction, encoding/decoding a word using numbers or pictographs)	B	B	D	D	S	S	S	S	S	S
5	1A-A-3-6	Categorize a group of items based on the attributes or actions of each item, with or without a computing device.	B	D	D	S	S	S	S	S	S	S
4	1A-C-7-9	Identify and use software that controls computational devices (e.g. use an app to draw on the screen, use software to write a story or control robots.)	B	D	D	S	S	S	S	S	S	S
3,4,5	1B-A-5-4	Construct programs, in order to solve a problem or for creative expression,	V	V	V	B	D	D	D	D	D	D
5	1B-A-5-5	Use mathematical operations to change a degree stored in a variable.	B	B	D	D	D	D	S	S	S	S
4,5	1B-A-6-8	Analyze and debug (fix) an algorithm that includes sequencing, events, loops, conditionals, parallelism, and variables.		V	V	B	D	D	D	D	D	D
1,3	1B-C-7-9	Model how a computer system works. {Clarification: Only basic elements of a computer system, such as input, output, processor, sensors, and storage.]		B	B	D	S	S	S	S	S	S

ISTE	CS	Computer Science	PreK	K	1	2	3	4	5	6	7	8
1	1B-C-7-10	Use appropriate terminology internal and external components of computing devices and describing their relationships, capabilities, and limitations.		V	B	B	D	D	S	S	S	S
1,5	1B-C-6-11	Identify, using accurate terminology, simple hardware and software problems that may occur during use, and apply strategies for solving problems (e.g., reboot device, check for power, check for network availability, close and reopen app).	V	B	B	D	D	S	S	S	S	S
1	2-D-4-17	Represent data using different encoding schemes (e.g., binary, Unicode, Morse Code, shorthand, student-created codes.) (intro)		V	V	B	B	B	D	D	D	D
1,4,6,7	2-A-2-1	Solicit and integrate peer feedback as appropriate to develop or refine a program.	V	B	B	B	D	D	S	S	S	S
3,4,5	2-A-7-2	Compare different algorithms that may be used to solve the same problem in terms of their speed, clarity, and size (e.g., different algorithms solve the same problem, but one might be faster than the other). [Clarification: Students are not expected to quantify these differences.]	V	B	B	D	D	D	S	S	S	S
1,2,4,7	2-A-7-3	Provide proper attribution when code is borrowed or built upon.	V	B	D	D	S	S	S	S	S	S
1,4,5	2-A-7-4	Interpret the flow of execution of algorithms and predict their outcomes. [Clarification: Algorithms can be expressed using natural language, flow and control diagrams, comments within code, and pseudocode.]		B	B	B	D	D	D	D	D	D
1,4,5,7	2-A-5-6	Develop programs, both independently and collaboratively, that include sequences with nested loops and multiple branches. [Clarification: At this level, students may use block- based and/or text-based programming languages.]			B	D	D	D	D	D	D	D

ISTE	CS	Spreadsheets & Databases	PreK	K	1	2	3	4	5	6	7	8
3, 5	1A-D-4-13	Understand that spreadsheets, databases and other specialized data tools are used to collect, manage, analyze and visualize data.				B	B	B	B	D	D	D
5		Identify and explain terms and concepts related to spreadsheets (i.e. cell, column, row, values, labels, chart, graph).					B	B	B	D	D	D
5		Enter/edit data and text into a spreadsheet and format spreadsheet to accommodate data.					B	B	B	D	D	D
5	1B-D-5-13	Calculate numerical equations using spreadsheet formulas and functions.								B	D	D
4		Designate the format of a cell to accommodate different kinds of text and numerical data.						B	B	D	D	D
4		Utilize spreadsheet data to create tables, charts and graphs.						B	B	D	D	D
3		Identify and explain terms and concepts related to database systems (i.e. field, set, subset, query, ordered, sorted).						B	B	D	D	D
5		Enter/edit data and/or text into a database and use queries to find information.						B	B	D	D	D
5	1A-D-7-12, 1B-D-5-13	Use spreadsheets and databases to make predictions, solve problems and draw conclusions.				V	V	V	B	B	D	D
3,5	2-D-7-15	Explain the process used to collect, transform, and analyze data to solve a problem using computational tools (e.g., use an ap or spreadsheet form to collect data, decide which data to use or ignore and chose the visualization method.).			B	B	D	D	S	S	S	S

ISTE	CS	Careers	PreK	K	1	2	3	4	5	6	7	8
2,7	1A-I-7-15	Compare and contrast examples of how computing technology has a changed and improved the way people live, work, and interact.	V	V	B	B	D	D	S	S	S	S
6,7	2-I-7-19	Explain how computer science fosters innovation and enhances nearly all careers and disciplines.	V	V	B	B	D	D	S	S	S	S

ISTE	CS	Multimedia & Presentation Tools	PreK	K	1	2	3	4	5	6	7	8
4		Use a digital camera, video camera or camera on a hand-held device to take pictures and videos.			B	B	D	S	S	S	S	S
6		Capture images that incorporate rules of photography.			B	B	D	D	D	D	S	S
6	1A-D-4-13	Use photo and video editing tools to adjust images and add effects.			B	B	B	D	D	D	S	S
4		Save images in multiple formats.						B	B	D	D	S
6		Use recording and editing equipment to record, edit and publish audio.			B	B	B	D	D	D	S	S
6		Create, edit and format text, visuals and audio within a multimedia presentation.			B	B	D	D	D	S	S	S
3, 6		Create a series of slides and organize them to present research or convey an idea.			B	B	D	D	D	S	S	S
6		Copy/paste or import graphics within a multimedia presentation. Be able to change their size and position on a slide.				B	B	B	D	D	S	S
6		Insert songs, videos or other media on slides.			B	B	B	D	D	D	S	S
6		Add a working hyperlink to a multimedia presentation.				B	B	D	D	D	S	S
2,4,5, 6,7	2-I-6-23	Redesign a computational artifact to remove barriers to universal access (e.g., using captions on images, high contrast colors, and/or larger font sizes).	V	B	B	D	D	D	S	S	S	S

ISTE	Internet Searching & Online Databases	PreK	K	1	2	3	4	5	6	7	8
1, 3	Use refresh, forward and back buttons to navigate a web browser.	B	B	B	D	D	S	S	S	S	S
1, 3	Use tab browsing to navigate multiple pages.	B	B	B	B	D	D	S	S	S	S
1, 3	Locate the URL of a website and make a distinction between the suffixes .org, .com, .edu, .net, .gov and international domains.					B	B	D	D	S	S
1, 3	Use age-appropriate search engines to find information.	B	B	B	B	B	D	D	D	S	S
1, 3	Use browser search tools and advanced search features to find information.					B	B	D	D	S	S
1, 3	Use a browser's History feature to locate previously visited sites.					B	B	D	D	S	S
1, 3	Identify and use hyperlinks within web pages or documents.	B	B	B	D	D	S	S	S	S	S
1, 3	Use digital tools or platforms to organize, display, annotate and/or share a curated collection.						B	B	B	D	D
1, 3	Access online catalogs and databases for research.				B	B	B	B	D	D	D

ISTE	CS	Acceptable Use, Copyright & Plagiarism	PreK	K	1	2	3	4	5	6	7	8
2	1A-A-7-1, 1B-A-7-2	Locate required citation information on web pages and other digital resources and cite in the appropriate style.		V	V	B	D	D	D	D	D
3	1B-A-7-2	Use age-appropriate guidelines to evaluate websites and other resources for accuracy, perspective, credibility and relevance.		B	B	B	D	D	D	D	D
6	1B-A-7-2	Transfer the information learned from online sources into your own words.					B	B	D	D	D	D
2	1B-A-7-2	Understand all rules and guidelines in the school's Responsible Use Policy.	B	B	B	B	D	D	D	D	D	D
2	1B-A-7-2	Understand Fair Use guidelines and their application to all forms of work.					B	B	B	D	D	D

ISTE	CS	Organizational & Project Tools	PreK	K	1	2	3	4	5	6	7	8
5		Use a calendar, task manager or other tools to organize one's self as well as manage projects.					B	B	B	D	D	D
6		Use age-appropriate note-taking tools.		B	B	B	D	D	D	D	S	S
6	1A-D-4-14, 1B-D-5-12	Use graphic organizers, brainstorming applications or other digital tools to gather and organize information.		B	B	B	D	D	D	S	S	S
6	1A-D-4-14, 1B-A-5-3, 1B-D-5-12	Use digital tools to plan and create timelines of people, historical events, etc. to organize information sequentially.				B	B	B	B	D	D	D

CS – Computer Science Teacher Association Standards

*CS Standards - 1A's are Grades K-2; 1B's are Grades 3-5; 2's are Grades 6-8

Teacher resources for technology standards can be obtained through your technology coordinator/teachers.

Diocese of Buffalo Technology

"I Can" Statements

for grades K-8

Pre-K-2
By grade 2:
- I can turn on and operate the device
- I can safely and appropriately navigate the internet
- I can use basic troubleshooting strategies
- I can create and publish my work using multimedia

Grade 3-5
By grade 5:
- I can keep passwords confidential
- I can use digital media to format various concepts
- I can search safely and use multiple tabs for processing
- I can use technology to solve problems

Grades 6-8
By grade 8:
- I can determine if I have used a trustworthy website, reliable tech source and properly cite my work
- I can save and retrieve my digital files
- I can use digital tools to gather, evaluate, and use information
- I can create a mutli-media project that uses text, graphics, audio and video

Computer Science

- I can understand how a computer system work
- I can understand and create computer coding
- I can identify and use software to control robotic devices
- I can use proper terminology to describe internal and external components of a computer

Technology Vocabulary

Acceptable Use Policy	AUP. guidelines to regulate Internet use and to protect the user.
Active Cell	The thick-bordered cell where you can enter numbers or formulas in a spreadsheet.
Algorithm	Process or set of rules to be followed in problem-based operations.
Alignment	How your text conforms to the left and right margins of a page. The text can be right-aligned, centered, left-aligned, or fully-aligned/justified.
App	Short for application which is the same thing as a software program.
Applications	Programs that allow you to accomplish certain tasks such as write letters, analyze numbers, sort files, manage finances, draw pictures, and play games.
Arrow Keys	To move the cursor in the direction of the arrows.
Avatar	Character that represents an online user.
.AVI	A file saved in a multimedia container format created by Microsoft. It stores video and audio data.
B Bold	Making letters darker
Backup	Copy of one or more files created as an alternate in case the original data is lost or becomes unusable.
.BAT	It is a DOS batch file used to execute commands with the Windows Command Prompt.
Binary	Numeric system that only sues two digits - 0 and 1.
Blog	An online daily website maintained by an individual with regular entries of commentary, descriptions of events or other materials such as graphics or video.
Bluetooth	Type of wireless technology that uses radio waves to transmit data over short distances.
.BMP	A Windows Bitmap image file.
Bookmark/Favorite	Feature in some browsers that places a marker of a website URL in an easily retrievable list
Browser	Software installed on a computer system that allows individuals to locate, view and navigate the Web.
Bug	An error in a software program.
Byte	A series of 8 binary bits that digitally represents a single character to the computer.
CSS	Cascading Style Sheet used to describe the design of a markup language.
CD (Compact Disc) or DVD (Digital Versatile Disc)	Piece of equipment you can store files on and physically move to another computer; holds less data or information than the flash drive, jump drive or thumb drive.
Cell	The space at the intersection of a row and column in a spreadsheet.

Characters	Letters, numbers or symbols input by the keyboard.
Chat Room	An area on the Web where people come together to communicate online. The conversations are in "real" time and are visible to everyone in the cat room.
.CLASS or JAVA	Java compiled files.
Click	Tap on screen with mouse. Left or right buttons do different things.
Clipart	Drawings you can add to your documents or presentations. Clipart includes items such as cartoons, maps, symbols and flags.
Close at the Red X	Part of logging off. You have to Close each tab or window.
Cloud Computing	Saving your work and working on it "in the cloud" or online, instead of saving it to one computer only.
Code	Programming instructions/language.
Column	The vertical divisions in a spreadsheet that are names with an alphabetical letter.
.com	A commercial organization's website.
Command Prompt	Used in a text-based or "command-line" interface, such as a Unix terminal or a DOS shell.
Compatibility	The capacity for two systems to work together without having to be altered to do so.
Computer	A programmable electronic device for storing and processing data.
Computer Program	The special codes or directions to make a computer work.
Connectivity	The successful completion of necessary arrangements so that two or more parties can communicate.
Copy	Ctrl + C (c for copy) Shortcut for copying typing or pictures from one document or website to another.
Copyright	The law that protects the exclusive legal right to produce, publish, sell, or distribute the matter and form of something.
CPU	Central Processing Unit. Gives all directions to your computer. "Brains" of the computer.
.CSV	Comma separated, variable length file
Ctrl + Alt + Delete	Part of the logging on or starting up process.
Cursor	A blinking line that shows your location in a document.
Cut	Ctrl + X shortcut. Remove a highlighted part of text.
Cyberbullying	Using the Internet, cell phones, or other devices to send or post text or images intended to hurt or embarrass another person.
Data	Information or work in a document. Numbers, words, pictures or sounds that represent facts, figures or ideas.

Database	An organized collection of information online.
Debug	Small errors that are eliminated in programs.
Desktop	The screen on the computer where all the elements necessary for a productive work session are placed.
Desktop Computer	A computer that is intended for use at a single location.
Device	A machine designed for a purpose. A unit of hardware, outside or inside the case or housing for the essential computer providing input or receiving output or both.
Digital	Characterized by electronic and especially computerized technology.
Digital Citizenship	Norms of appropriate and responsible behavior with regards to technology use.
Digital Footprint	Trail of data you create while using the internet. It includes websites visited, emails sent and information you submit to online services.
Direct Message	A private message to another user.
.doc	The file extension for a Microsoft Word Document. Note that in more recent versions of MS Word the file extension is DOCX.
Document	A typed work you create on the computer. Your work. Sometimes called a "word document".
Documents/My Documents/Drive	A collection of your files and your folders. Your work.
Domain	The part of an Internet address that identifies where a person's account is located. For example, in the address jdoe@dpi.state.nc.us the domain is everything after the @.
Download	Program that lets you receive data or documents from another computer.
Drag and Drop	Using a cursor or mouse to select and then move an object on the computer screen to a new location.
Drive	Computer component used to store data.
Dropdown Menu	At an arrow, click to see choices.
e-Book	A book composed in or converted to digital format for display on a computer screen or handheld device.
Edit	Change or correct
.edu	An educational website.
Email	Electronic mail. One way to "talk to" or communicate with someone else on the "web".
Email Server	Address? Unique identifier for an email account.
Emoji	Small icon that can be placed in-line with text. The name comes from a Japanese phrase which translates to "picture character."
Enter	To type in or to send a message, click Enter key.

e-Reader	A portable hardware device that is designed to display textual data like e-books, electronic magazines and digital newspapers.
.Exe	An executable file created for the Windows operating system to install or run a software program.
Executable File	Type of computer file that runs a program when opened.
Export	Command usually found within a program's File menu. Typically used to transfer data out of the system.
Fair Use	Legal concept that allows the reproduction of copyrighted material for certain purposes with obtaining permission and without paying a fee or royalty.
FAQ	"Frequently Asked Questions." List of answers to common questions about a specific product or service.
Favorites	Most Web browsers store saved webpage locations as bookmarks; Internet Explorer saves them as favorites.
Field	A place in a database record where a category of information can be entered or located.
File	1.) Menu option. 2.) A collection of data stored in one unit, identified by a filename.
File extension	It is the suffix at the end of a filename that indicates what type of file it is. For example .docx is used for a Microsoft Word document.
FiOS	Fiber Optic Service. The use of fiber optic cables to transmit data via pulses of light.
Firewall	Technology that prevents users from visiting inappropriate websites, and protects the network from unauthorized users.
Flash Drive, or Jump Drive, or Thumb Drive	Piece of equipment that plugs into the universal serial bus (USB) port you can store files on and physically move to another computer.
Folder	A place to keep files or work together. Usually for work that is on the same subject or topic. A folder gets a name too.
Font	What the typing looks like. The style of the letters.
Font Size (pixels)	The size of the letters you type.
Format	To set the margins, tabs, font or line spacing in layout of a document.
Function Keys	On the top of a keyboard, they are F1 through F16. These keys perform certain functions. Also known as "modifier keys", can be used in conjunction with other keys as "shortcuts" to perform certain operations.
.GIF	Graphic Interchange Format. (pronounced jiff) A file format for pictures, photographs, and drawings that are compressed so that they can be sent across telephone lines quickly.
Gigabit	A gigabyte is 10^9 or 1,000,000,000 bits. One gigabit (abbreviated "Gb") is equal to 1.000 megabits or 1,000,000 kilobits. It is one-eighth the size of a gigabyte (GB). Gigabits are most often used to measure data transfer rates of local networks and I/O connections.
Gigabyte	A gigabyte is 10^9 or 1,000,000,000 bytes. One gigabyte (abbreviated "GB") is equal to 1,000 megabytes and precedes the terabyte unit of measurement.
Google Apps	A collection of tools that use "the cloud".
Google Chrome	An open source program for accessing the World Wide Web and running Web-based applications.

Google Docs	Documents created in "the cloud".
Google Sites	Short for websites created by Google Suite.
G Suite	A collection of Google tools that use "the cloud"; Docs, Slides, Sheets
.gov	A government website.
GPS	Global Positioning System. Navigating using 24 satellites which are positioned above the earth.
Graphic	Images/pictures created, edited and/or published using a computer.
GUI	Graphical User Interface (pronounced gooey) The graphics on the screen that allows users to click, drag and drop with a mouse instead of using the command prompt.
Hacker	An unauthorized person who secretly gains access to computer files.
Hard Drive	Inside the tower or box, part of the CPU, this has the "guts" of the equipment to run the computer and store the programs and files.
Hardware	Any part of the computer you can physically touch. – keyboard, screen, mouse, joystick, printer, speakers, etc.
Highlight	Select by holding down mouse button and rolling over a section to "highlight" it
Home Page	The main or opening page of a Website
Home Row	Keys on the keyboard with fingers of the left hand on A-S-D-F and fingers on the right hand on J-K-L-;
Host	The name given to a computer directly connected to the Internet. Host computers are associated with computer networks, online services or bulletin board systems.
HTM or HTML	Web Page source text
HTML	Hyper-text Markup Language. The computer language that web pages are written in.
HTML5	Fifth major standard of HTML. A simpler standard that was designed to supersede both HTML 4 and XHTML with a simpler standard that includes several new features for the modern web.
http://	Hypertext Transfer Protocol. The set of rules for transferring files (text, graphic images, sound, video, and other multimedia files) on the World Wide Web. As soon as a Web user opens their Web browser, the user is indirectly making use of http.
Hyperlink	A type of specially coded text that, when clicked, enables the user to jump from one location, or Webpage, to another.
Icon	A picture on a computer display that represents an object such as a software application or a file or folder.
Identity Theft	The crime of using someone else's personal information in order to obtain money or credit in their name.
Italics	Making letters slant
IM	Instant Messaging. Like talking to someone online, but typing your conversation instead. Happened in "real" time. You are both communicating at once.

Image	A visual representation of something like a likeness of an object produced on a photographic material or a picture produced on an electronic display.
Inbox	The main folder that your incoming mail gets stored in.
Input Device	A hardware device used to enter, or input, data (text, images, sounds) and instructions into a computer.
Interface	The term can refer to either a hardware connection or a server interface. It can also be used as a verb describing how two devices connect to each other.
Internet	A computer network that offers email and service to millions of users around the world. A collection of all the websites around the world, creating a web of computers and programs, sort of like a spider's web.
Intranet	An internal or private network that is only available in one geographic location.
iOS	Mobile operating system developed by Apple. The iOS currently runs the iPhone, iPod touch and iPad.
IP	Stands for "Internet Protocol." IP provides a standard set of rules for sending and receiving data over the Internet. It allows devices running on different platforms to communicate with each other as long as they are connected to the Internet.
IP Address	Or simply an "IP". Is a unique address that identifies a device on the Internet or a local network.
ISP	Internet Service Provider. The company that you contract with to supply you with a connection to the internet.
.JPG or Jpeg	Joint Photographic Experts Group. A standard for shrinking graphics so they can be sent faster between modems and take up less space on your hard drive. A file format used to display and print documents.
Keyboard	Place to type on. An input device.
Keyword	A word or reference point used to describe content on a web page that search engines use to properly index the page.
Kilobyte	Approximately 1,000 bytes.
Label	The term given to the words entered on a spreadsheet usually naming a column. In Gmail, they are used to organize mail. (similar to folders).
LAN	Stands for "Local Area Network". A LAN is a network of connected devices that exist within a specific location.
Landscape	The page setup that permits a document to be printed in a horizontal position.
Laptop	Also known as notebook computers. They are portable computers that consist of a screen, keyboard and mouse device.
Line spacing	The span between lines and texts.
Links	Connections that bridge one image, page or word to another by clicking on a highlighted word or phrase.
Log In	The way to get "into" or access the computer.
MAC	Stands for "Macintosh" and also refers to the specific operating system on that line of computers as developed by the Apple Corporation.
Malware	Short for "malicious software," malware refers to software programs designed to damage or do other unwanted actions on a computer system.

.MDB	A database file created by Microsoft Access.
Megabyte	Approximately 1,000,000 bytes.
Memory	Memory can refer to any medium of data storage. It usually refers to RAM, or random access memory.
Menu	A list of commands that displays on the screen.
Microphone	A device that allows you to capture sound waves, such as those created by your voice, and transfers them to digital format on your computer.
.MID or .MIDI	A standard MIDI (Musical Instrument Digital Interface) file used by music and mixing programs.
.mil	A military website.
Modem	The word is short for Modulator/Demodulator. It is a communications device that can be either internal or external to your computer. It allows one computer to connect to another computer and transfer data.
Monitor	Computer screen. An output device.
Mouse	Piece of equipment that helps us move around the screen. An input device.
.MOV or .QT	A common multimedia container file format developed by Apple. QuickTime Audio/Video
MP3/MP4	A popular compressed file format for digital music/video downloads.
Multimedia	To use a combination of text, pictures, sounds, movies, and/or animation in a presentation.
Netiquette	Using good manners on the Internet.
Network	A group of computers that work together or share information.
Online	Controlled by or connected to another computer or network
Operating System	The software that communicates with the hardware and allows other programs to run (i.e. Windows 7, Apple OS X)
Output Device	A device that sends processed data and information out of a computer in the form of text, pictures, sounds or videos.
Page Setup	The term in reference to the way a document is formatted to print.
Password	A string of characters used for authenticating a user on a computer system.
Password	Secret code for each user. Strong passwords contain uppercase, lowercase and special characters
Paste	Ctrl + V. Shortcut for pasting something that you are moving from another document or website to another.
PC	Personal Computer. Refers to the specific computer format developed by the IBM Corporation that eventually became the predominant format for all computers.
PDF	Portable Document Format. A file format that can be used to display and print documents, text, fonts, and formatting from a variety of applications.

Peer-to-Peer (P2P)	In a network the "peers" and separate computer systems that are connected through the internet allowing files to be shared directly from one computer system to the other without a central server.
Peripherals	All types of input/output devices that connect or work with the computer. (i.e. cameras, monitors, storage devices)
Piracy	When someone installs and uses commercial software without paying for the program.
Pixel	Picture Element. The small dots which make up the images on a computer display.
Plagiarism	The act of copying someone else's work and publishing it as your own.
.PNG	It is an image file stored in the Public Network Graphic format.
Portrait	The default page setup that prints the document vertically.
.PPT or .PPTX	A file that is an editable slide show created by Microsoft PowerPoint.
Print	To make a hard copy of work.
Printer	Machine that prints what the computer directs it to. An output device.
Privacy Rights	The right to be protected from unwanted or unsanctioned intrusions.
Processer	A small chip that resides in computers and other electronic devices. Its function is to receive input and provide the appropriate output.
Program	1.) A tool or platform. 2.) The special codes or directions to make a computer work.
Programmer	Individual who writes code to create software.
.PSD	An Adobe PhotoShop image file which is a professional image-editing program often used to enhance digital photos and create web graphics.
Public Domain	Software written and then donated to the public. Anyone can use and copy public domain software free of charge, but it is not always the same quality as commercial software.
Publish	To make publicly available.
QWERTY	Term used to describe a standard (Latin alphabet-based) keyboard and refers to the letters at the top left of the keyboard.
RAM	Random Access Memory. Running programs from the computer's RAM allows for it to function without any lag time.
Remix/Mash-up	Editing together clips of video, sound, images and text by "remixing" or "mashing". The term can also be used to describe a Web application that combines multiple services into a single application.
Retrieve	Open a saved document.
ROM	Read Only Memory, built in computer memory.
Router	Hardware device that routes data from a local area network (LAN) to another network connection.

Row	The horizontal divisions in a spreadsheet named with a number.
.RTF	Rich Text Format
Save	To save your work or a document on the computer. It has to be named first.
Save As	Naming your work or document before saving it on the computer.
Screen Saver	Images that appear on a computer monitor when no user activity has been sensed for a certain time.
Scroll	Move up or down a page on the screen.
Search	A method for finding information.
Search Engine	Software that searches, gathers and identifies information from a database based on keywords, indices, titles and text.
Security	The defense of digital information against internal and external, malicious and accidental threats.
Select	Choose, highlight
Select All	(Ctrl + A) Choose all
Server	A special computer used to store programs and files, and then sends it out to other computers one or all at a time.
Share	The way to share your work with someone else in the Google Docs system (this is different from emailing your work).
Sign Out	Important step in leaving a website where you have a personal private account and need to keep your own work safe and private.
Smartphone	A mobile phone with advanced functions beyond just making phone calls and sending text messages.
Social Network	A place to communicate with or "talk to" other people online. Such as Facebook, Twitter, Instagram, Snapchat, etc.
Software	The set of computer programs or instructions that ells the computer what to do and enables it to perform different tasks.
Sort	Arranging information in a specific order.
Spam	Unwanted or junk email.
Spell Check	Tool that checks for misspelled words.
Spreadsheet	An electronic document in which data is arranged in rows and columns of a grid that can be manipulated and used in calculations and graphics.
Start Menu	Central launching point for computer programs and performing tasks.
Storyboard	A graphic organizer used for planning and developing a multimedia report/presentation. The contents, layout, and formatting of each card/slide and the linking together of the cards/slides.
Switch	Ports used to network multiple computers together.

Syncing	Short for synchronizing. You connect two devices together via a USB or wireless Bluetooth connection.
Table	Columns and rows of cells that can be filled with text that are used to organize information.
Tablet	A portable computer that uses a touchscreen as the primary input device instead of a keyboard and/or mouse.
Tabs	1) a key on the keyboard or 2) a document header inside a window.
Telecommunications	The act of sending and receiving information, such as data, text, pictures, voice and video. The exchange of information can be within a building or around the globe.
Text	Words in a document. What you type.
The Cloud	A way to store data online.
The Web	Another way of saying the Internet. The World Wide Web. The "information highway".
.TIF	A file saved in a high-quality graphics format. Tiff graphic
Toolbar	A group of icons collected for easy access.
Touch Screen	A type of monitor (or display in a notebook or PDA) that accepts input from a user touching the screen.
Troubleshoot	To examine and repair computer issues with hardware, software, connections and electronic communications.
.TXT	A standard text document that contains unformatted text. It is recognized by any text editing or word processing program and can be processed by most software programs.
U Underline	Ctrl + U. Underlining words
Upload	The ability to transfer data or documents from one computer to another computer.
URL	Universal Resource Locator or website address.
USB	Universal Serial Bus. The most common type of computer port used to connect peripheral devices to computers.
USB Port	Location on the computer where you plug in peripherals to connect them with/to the computer system.
Username	Specific I.D. for the user of a computer/program.
Video	A recording similar to a videotape but stored in digital form.
Virus	A harmful program that can be destructive to your computer, files, and documents.
WAN	Wide Area Network. It is similar to a Local Area Network (LAN), but it's a lot bigger. WANs are not limited to a single location.
.WAV	An audio file that uses a standard digital audio file format for storing waveform data. Windows sound
Web Based App	A tool or program on the internet that are put together for a special purpose.

Web Browser	An application that allows you to connect to the internet such as Chrome, Safari, Internet Explorer, Foxfire, Bing, etc.
Webcam	A video camera used to broadcast streaming or still video using the internet.
Webinar	A seminar conducted over the internet.
Webpage	Part of a website.
Website	A place on the internet where you can get information, see picture or videos, find maps, learn new things.
WiFi	Wireless Fidelity. Wireless networking technology that allows computers and other devices to communicate over a wireless signal.
Wiki	A collaborative online web page that allows all users to edit and make changes to create a document seen and used by all.
Windows	Another way to have more than one page open at the same time. Also the name of an operating system that makes a computer run.
Word Processing	Using keyboarding skills to produce documents such as letters, reports, manuals and newsletters.
Word Wrap	This occurs when you get to the end of a line and continue typing the text will then go to the next line.
Worm	A computer file designed to do damage that goes through a computer and possibly a network.
www	World Wide Web. The section of the Internet that allows access to text, graphics, sound and even video.
WYSIWYG	What You See Is What You Get. Software that accurately shows you what something will look like when it is printed.
.XLS or XLSX	Excel spreadsheet extensions
.ZIP	A file that is an archive that contains one or more files compressed or "zipped" using Zip compression.