TECHNOLOGY CURRICULUM OBJECTIVES

DIOCESE OF ARLINGTON

PHILOSOPHY

Advancements in our rapidly changing world necessitate the acquisition of technological skills to enable students to function in the 21st Century. As lifelong learners and followers of Jesus, students should strive to become citizens who are capable of making significant contributions to our global society. They must also become aware of the social and ethical impact of technology. To this end, the Diocese of Arlington endeavors to make our students not only knowledgeable, but also effective technology users.

Our goal is to present and strengthen the skills students need to access, interpret, and synthesize information which is constantly changing. Thus, technology will be used as a tool for learning and developing critical thinking skills across the content area. Having students acquire these skills will result in the development of self-directed learners who can independently and cooperatively apply technology to solve problems and make informed decisions. Following the established end goals/target areas, given the varying resources at the elementary level, the students will be well equipped with a strong foundation to enhance their learning with advanced technology resources at the high school level.

Technology should enhance and enrich as well as extend the existing curriculum. It should be used in a variety of ways within the classroom and computer lab setting. The classroom teacher, the media specialist, the technology coordinator, and the librarian should collaborate to maximize the effective use of technology in support of the Diocesan curriculum.

Due to the rapid advancements and changes in technology, the curriculum will be reviewed annually or as needed. The review process will reflect appropriate changes and or adjustments as needed.

TECHNOLOGY AND CURRICULUM INTEGRATION

Technology for technology's sake does little to enhance the academic lives of our students or our role as Catholic educators. Accordingly, technology curriculum coordinators will, to the greatest extent possible, work toward achievement of the following skills-based target areas by close collaboration with teachers. Sharing of written curriculum objectives, one-on-one meetings and teacher hands-on participation in technology instruction are examples of proven collaborative methods. In this way, student technology skill achievement is successfully integrated with content/subject-based, curriculum objectives achievement. Successful integration, whether in a lab or classroom environment:

- Leads to maximum use of technology resources

- Provides more substantive learning experiences

- Encourages teachers to creatively incorporate instructional technology tools into their curriculum over time

THE DIOCESE OF ARLINGTON TECHNOLOGY STANDARDS (DOATS)

1. TECHNOLOGY SYSTEMS (USE IT)
Develop foundations in the understanding of technology concepts, systems, and operations.

- understand and use technology systems
- select and use applications effectively and productively
- troubleshoot systems and applications
- transfer current knowledge to learning of new technologies
- perform computational thinking (binary logic, bits and bytes, etc.)

2. DIGITAL CITIZENSHIP (PROTECT IT)
Demonstrate an understanding of the history of technology and its impact on society. Practice ethical, legal, and responsible use of technology.

- advocate and practice safe, legal, and responsible use of information and technology
- exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity
- demonstrate personal responsibility for lifelong learning

3. RESEARCH AND INFORMATION MANAGEMENT (FIND AND ORGANIZE IT)
Use digital tools to locate, gather, evaluate, and organize information and data.

- plan strategies to guide inquiry
- locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media
- process data and report results

4. LEARNING, COLLABORATION, AND PROBLEM SOLVING (SOLVE IT)
Use a variety of technologies to support and enhance learning, encourage collaboration, increase productivity, and solve problems.

- interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media
- contribute to project teams to produce original works or solve challenges
- code and write programs, logically solve problems, and perform critical thinking

5. COMMUNICATION AND CREATIVITY/INNOVATION (CREATE AND COMMUNICATE IT)
Use technology for communication, creative thinking, and developing innovative products using various media formats.

- communicate information and ideas effectively to multiple audiences using a variety of media and formats
- apply existing knowledge to generate new ideas, products, or processes
- create original works as a means of personal or group expression

KINDERGARTEN

Standard 1.0 – Technology Systems: *Develop foundations in the understanding and uses of technology systems*

T.K.1.A Demonstrate knowledge of the nature and operation of technology systems

T.K.1.A.1 Identify the parts of the computer and their functions (Input and Output)

T.K.1.A.2 Demonstrate the proper care of the computer hardware and software

T.K.1.B Demonstrate proficiency in the use of technology

T.K.1.B.1 Follow verbal instructions to navigate within application software

T.K.1.B.2 Know the keyboard layout - Use age appropriate keyboard charts

T.K.1.B.3 Develop good mouse, trackball, touchpad and/or touchscreen skills

Standard 2.0 – Digital Citizenship: *Demonstrate an understanding of the history of technology and its impact on society; practice ethical, legal, and responsible use of technology*

T.K.2.A Technology and Society: Explain how technology affects people

T.K.2.A.1. Identify and explain that technology is used in their daily lives to do things better or more easily (such as telephone, microwave, television, cameras, and computers)

T.K.2.A.2. Identify examples of how technology affects the environment (including home and school environments)

T.K.2.B Ethical and Legal Issues: Practice responsible and appropriate use of technology systems, software, and information

T.K.2.B.1. Understand and follow the acceptable use policy

T.K.2.B.2. Recognize responsible use of technology systems and software (such as following lab rules, handling equipment with care)

T.K.2.C Ethical and Legal Issues: Demonstrate an understanding of current legal standards

T.K.2.C.1. Recognize social and ethical behaviors when using technology

T.K.2.D Ethical and Legal Issues: Understand current online safety guidelines

T.K.2.D.1. Discuss safety issues related to use of the Internet

Standard 3.0 – Research and Information Management: *Use technology to locate, evaluate, gather, and organize information and data*

T.K.3.A Use technology resources to locate information (such as bookmarked websites, or shortcut icons).

Standard 4.0 – Technology for Learning, Collaboration, and Problem Solving: *Use a variety of technologies for learning and collaboration*

T.K.4.A Learning: Explore and use technology tools in an instructional setting for learning

> T.K.4.A.1. Explore and use teacher selected technology tools, including software and hardware, to learn new content or reinforce skills

T.K.4.B Collaboration: Explore and use technology in an instructional setting to encourage collaboration

> T.K.4.B.1. Participate in a class or small group lessons using technology for shared writing or language experience stories

T.K.4.C Productivity and Problem Solving: Explore and use technology to increase productivity

> T.K.4.C.1. Use appropriate technology tools to support learning goals (e.g., word processing, graphics)

> T.K.4.C.2. Identify that a variety of forms of digital content (CDs, DVDs, websites, videos) can be used to learn information about a subject

Standard 5.0 –Technology for Communication and Creativity/Innovation: *Use technology to communicate using various media formats*

T.K.5.A Communication - Tools: Explore how technology is used for communication

> T.K.5.A.1 Describe ways technology is used at home and in school for communication

T.K.5.B Communication - Media Formats: Not yet introduced

T.K.5.C Creativity/Innovation – Multimedia: Explore and use technology in an instructional setting to express ideas

> T.K.5.C.1Use multimedia tools to express original ideas with print, drawings, digital images, sounds, and/or personal recordings

FIRST GRADE

Standard 1.0 – Technology Systems: *Develop foundations in the understanding and uses of technology systems*

T.1.1.A Demonstrate knowledge of the nature and operation of technology systems

T.1.1.A.1 Identify the parts of the computer and their functions (Input; Output; Storage)

T.1.1.A.2 Demonstrate the proper care of the computer hardware and software

T.1.1.B Demonstrate proficiency in the use of technology

T.1.1.B.1 Follow verbal instructions to navigate within application software (such as starting applications and saving and retrieving files)

T.1.1.B.2 Know the keyboard layout - Use age appropriate keyboard charts and teacher generated worksheets

T.1.1.B.3 Develop good mouse, trackball, touchpad and/or touchscreen skills

T.1.1.B.4 Use correct sitting position when keyboarding

Standard 2.0 – Digital Citizenship: *Demonstrate an understanding of the history of technology and its impact on society; practice ethical, legal, and responsible use of technology*

T.1.2.A Technology and Society: Explain how technology affects individuals and institutions (home and school)

T.1.2.A.1. Recognize that technologies (such as computers, calculators, television, cameras, PDAs, CD-ROM, and DVD) have influenced daily life, past and present

T.1.2.A.2. Identify examples of how technology has affected the environment, past and present

T.1.2.A.3. Identify how technology tools have been and are used to meet people's needs

T.1.2.B. Ethical and Legal Issues: Practice responsible and appropriate use of technology systems, software, and information

T.1.2.B.1. Understand and follow the acceptable use policy

T.1.2.B.2. Demonstrate proper care of equipment (such as following lab rules, handling equipment with care)

T.1.2.B.3. Recognize the potential harm of intrusive applications (such as viruses, pop-up windows, etc.)

T.1.2.B.4. Use safe and correct security procedures (such as protecting password and user ID)

T.1.2.C Ethical and Legal Issues: Demonstrate an understanding of current legal standards

> T.1.2.C.1 Explore and discuss social and ethical behaviors when using technology

T.1.2.D Ethical and Legal Issues: Understand current online safety guidelines

> T.1.2.D.1. Discuss safety issues related to use of the Internet

> T.1.2.D.2. Recognize safe practices when working online

Standard 3.0 – Research and Information Management: *Use technology to locate, evaluate, gather, and organize information and data*

T.1.3.A Use technology to locate and collect information (such as bookmarked websites, or shortcut icons).

Standard 4.0 – Technology for Learning, Collaboration, and Problem Solving: *Use a variety of technologies for learning and collaboration*

T.1.4.A Learning: Use and understand how technology enhances learning

> T.1.4.A.1. Use technology tools, including software and hardware, from a range of teacher-selected options to learn new content or reinforce skills

> T.1.4.A.2. Reflect and discuss, as part of a larger group, on the appropriateness of the selected technology for the given task

T.1.4.B Collaboration: Use and understand how technology encourages collaboration

> T.1.4.B.1. Participate in class lessons using technology for brainstorming and shared writing (e.g., Kidspiration, Inspiration, Webspiration)

> T.1.4.B.2. Participate in a class lesson using technology tools exploring, collecting, and displaying data

T.1.4.C Productivity and Problem Solving: Use and understand how technology increases productivity

> T.1.4.C.1. Describe ways the selected technology tools are being used to support learning goals

> T.1.4.C.2. Use templates provided by the teacher to complete learning assignments

> T.1.4.C.3. Edit work created using concept mapping, or word-processing software

> T.1.4.C.4. Use teacher-identified resources to collect information using print and non-print resources as a class or in a small group

> T.1.4.C.5. Construct a set of statements to be acted out to accomplish a simple task (e.g., turtle instructions).

Standard 5.0 –Technology for Communication and Creativity/Innovation: *Use technology to communicate using various media formats*

T.1.5.A Communication - Tools: Use and explain how technology is used for communication.

    T.1.5.A.1 Identify technology tools that help gather information, share ideas, and respond to questions.

T.1.5.B Communication - Media Formats: Use and explain the variety of media formats.

    T.1.5.B.1 Recognize that various media formats are used to communicate ideas, such as CD, DVD, flash/thumb drive, streaming media, etc.

T.1.A.C Creativity/Innovation – Multimedia/Idea Presentation: Use and understand how technology can be used to express ideas.

    T.K.5.C.1 Multimedia: Use multimedia tools to express original ideas with print, drawings, digital images, existing video, sounds, and/or personal recordings.

    T.K.5.C.2 Idea Presentation: Prepare writing and data for display with tools such as visual organizer, word-processing or multimedia software either individually or teacher-led group activity

SECOND GRADE

Standard 1.0 – Technology Systems: *Develop foundations in the understanding and uses of technology systems*

T.2.1.A Demonstrate knowledge of the nature and operation of technology systems

T.2.1.A.1 Identify the parts of the computer and their functions (Input; Output; Storage; Processing)

T.2.1.A.2 Demonstrate the proper care of the computer hardware and software

T.2.1.B Demonstrate proficiency in the use of technology

T.2.1.B.1 Follow instructions to use application software (such as starting/closing applications; saving/retrieving files; navigating within; and identifying and using functions represented by symbols and icons)

T.2.1.B.2 Know the keyboard layout - Use age appropriate keyboard charts; identify and use special keys (such as backspace, shift, spacebar, ctrl, and arrows)

T.2.1.B.3 Develop good mouse, trackball, touchpad and/or touchscreen skills

T.2.1.B.4 Use correct sitting and hand positions when keyboarding

Standard 2.0 – Digital Citizenship: *Demonstrate an understanding of the history of technology and its impact on society; practice ethical, legal, and responsible use of technology*

T.2.2.A Technology and Society: Explain how technology affects individuals and institutions (home, school, and community)

T.2.2.A.1 Recognize that technologies (such as computers, calculators, television, cameras, PDAs, CD-ROM, and DVD) have influenced daily life, past and present

T.2.2.A.2. Identify examples of how technology has affected the environment, past and present

T.2.2.A.3. Identify how technology tools have been and are used to meet people's needs

T.2.2.B Ethical and Legal Issues: Practice responsible and appropriate use of technology systems, software, and information

T.2.2.B.1. Understand and follow the acceptable use policy

T.2.2.B.2. Recognize the potential harm of intrusive applications (such as viruses, pop-up windows, etc.)

T.2.2.B.3. Use safe and correct security procedures (such as protecting password and user ID)

T.2.2.C Ethical and Legal Issues: Demonstrate an understanding of current legal standards

T.2.2.C.1. Discuss the importance of respecting the rights of others regarding their work (such as appropriate copying and pasting)

T.2.2.C.2. Practice strategies for avoiding plagiarism (such as copying other's work)

T.2.2.D Understand current online safety guidelines

T.2.2.D.1. Discuss safety and privacy issues related to use of the Internet

T.2.2.D.2.Use safe and correct security procedures when working online (such as not disclosing personal information and protecting passwords)

T.2.2.D.3. Describe procedures for exiting an inappropriate site (such as clicking the home, turning off monitor, notifying an adult)

Standard 3.0 – Research and Information Management: *Use technology to locate, evaluate, gather, and organize information and data*

T.2.3.A Use technology to locate and collect information for research.

T.2.3.A.1 Select relevant information from various technology resources (such as websites, online library catalogs, or electronic reference materials).

T.2.3.A.2 Use basic telecommunications terms and capabilities (website, website address, homepage, link, Internet).

Standard 4.0 – Technology for Learning, Collaboration, and Problem Solving: *Use a variety of technologies for learning and collaboration*

T.2.4.A Learning: Use and understand how technology enhances learning

T.2.4.A.1. Use technology tools, including software and hardware, from a range of teacher-selected options to learn new content or reinforce skills

T.2.4.A.2. Reflect, as an individual or as part of a larger group, on appropriateness of selected technology for the given task

T.2.4.A.3. Reflect and discuss how technology tools are used to collect information

T.2.4.B Collaboration: Use and understand how technology encourages collaboration

T.2.4.B.1. Explain how selected technology tools are being used to enhance collaboration

T.2.2.B.2. Participate in a class lesson using technology tools to collect, display, and interpret data

T.2.4.B.3. Articulate the advantages of collaboration supported by technology tools

T.2.4.C Productivity and Problem Solving: Use and understand how technology increases productivity

T.2.4.C.1. Describe ways the selected technology tools are being used to support learning goals and accomplish tasks

T.2.4.C.2. Use templates, provided by the teacher, or create new documents to complete learning assignments

T.2.4.C.3. Edit work created using concept mapping, or word-processing software

T.2.4.C.4. Use various electronic information retrieval sources to obtain information on a topic (such as World Book, Follett Destiny, local library resources)

T.2.4.C.5. Construct a set of statements to be acted out to accomplish a simple task (e.g., turtle instructions).

Standard 5.0 –Technology for Communication and Creativity/Innovation: *Use technology to communicate using various media formats*

T.2.5.A Communication - Tools: Use and explain how technology is used for communication.

T.2.5.A.1 Identify technology tools that help gather information, share ideas, and respond to questions.

T.2.5.A.2 Use a variety of technology tools identified by the teacher to communicate with various audiences.

T.2.5.B Communication - Media Formats: Use and explain the variety of media formats.

T.2.5.B.1 Recognize that various media formats are used to communicate ideas, such as CD, DVD, flash/thumb drive, streaming media, etc.

T.2.5.C Creativity and Innovation – Multimedia/Idea Presentation/Editing: Use and understand how technology can be used to express ideas.

T.2.5.C.1 Multimedia: Use multimedia tools to express original ideas with print, drawings, digital images, existing video, sounds, and/or personal recordings.

T.K.5.C.2 Idea Presentation: Prepare writing and data for display with tools such as visual organizer, word-processing or multimedia software either individually or teacher-led group activity

T.K.5.C.3 Editing: change, edit and revise graphs, graphics, presentations and word-processing documents.

THIRD GRADE

Standard 1.0 – Technology Systems: *Develop foundations in the understanding and uses of technology systems*

T.3.1.A Demonstrate knowledge of the nature and operation of technology systems

T.3.1.A.1 Identify and understand the functions of computing (Input; Output; Storage; Processing)

T.3.1.A.2 Demonstrate the proper care of the computer hardware and software

T.3.1.B Demonstrate proficiency in the use of technology

T.3.1.B.1 Access and navigate within application software and understand basic file management functions (such as open, close, format, edit, and save)

T.3.1.B.2 Use tools, menus and dialog boxes in application software

T.3.1.B.3 Develop keyboarding skills (Identify and use navigation keys, alphabet keys, special function keys, shift, caps lock, space bar, enter, backspace, delete, arrows, and punctuation)

T.3.1.B.4 Use correct keyboarding techniques (such as proper home row position and posture)

T.3.1.B.5 Use appropriate applications to perform an assigned task (such as word-processing and graphics)

Standard 2.0 – Digital Citizenship: *Demonstrate an understanding of the history of technology and its impact on society; practice ethical, legal, and responsible use of technology*

T.3.2.A Technology and Society: Explain how technology affects people and society

T.3.2.A.1 Explain how technology (such as computers, calculators, television, cameras, PDAs, CD-ROM, and DVD) influences societies

T.3.2.A.2. Identify examples of how technology has affected the environment, past and present

T.3.2.A.3. Explain how technology tools have or can be used to meet the needs of societies

T.3.2.B Ethical and Legal Issues: Practice responsible and appropriate use of technology systems, software, and information

T.3.2.B.1. Explain the purpose of and follow the acceptable use policy

T.3.2.B.2. Recognize the potential harm of intrusive applications (such as worms, viruses, spyware, pop-up windows, etc.)

T.3.2.B.3. Use safe and correct security procedures (such as protecting passwords and user ID)

T.3.2.C Ethical and Legal Issues: Demonstrate an understanding of current legal standards

> T.3.2.C.1. Comply with copyright laws and fair use provisions (such as appropriate copying and pasting, legal downloading, intellectual property recognition, and obeying copyright laws)

> T.3.2.C.2. Practice strategies for avoiding plagiarism

> T.3.2.C.3. Cite sources of text and digital information

T.3.2.D Understand current online safety guidelines

> T.3.2.D.1. Understand that the Internet is a global community with guidelines

> T.3.2.D.2. Explain and practice safety and privacy issues related to use of the Internet

> T.3.2.D.3. Use safe and correct security procedures when working online (such as not disclosing personal information and protecting passwords)

> T.3.2.D.4. Describe procedures for exiting an inappropriate site (such as clicking the home, turning off monitor, notifying an adult)

Standard 3.0 – Research and Information Management: *Use technology to locate, evaluate, gather, and organize information and data*

T.3.3.A Use technology to locate, evaluate, and organize information from a variety of sources.

> T.3.3.A.1 Select relevant information from appropriate technology resources (such as websites, library catalogs, or electronic reference materials).

> T.3.3.A.2 Evaluate electronic resources using the same strategies as print resources (such as fact vs. fiction, author, ease of use) and use print sources to verify electronic sources.

> T.3.3.A.3 Use search strategies for age-appropriate Web search tools, library catalogs, or electronic databases.

> T.3.3.A.4 Collect and organize information using technology tools (such as word processor, graphics program).

> T.3.3.A.5 Describe telecommunications terminology and capabilities (website, website address, homepage, link, Internet, browser, etc.).

Standard 4.0 – Technology for Learning, Collaboration, and Problem Solving: *Use a variety of technologies for learning and collaboration*

T.3.4.A Learning: Use and explain how the technology enhances learning

T.3.4.A.1. Use technology tools, including software and hardware, from a range of teacher-selected options to learn new content or reinforce skills

T.3.4.A.2. Reflect as an individual on appropriateness of selected technology for the given task

T.3.4.A.3. Describe how technology tools are used to collect information

T.3.4.B Collaboration: Use and explain how technology tools encourage collaboration

T.3.4.B.1. Use technology tools to work collaboratively within the classroom (either the computer lab or other classroom)

T.3.4.B.2. Reflect and discuss the advantages of collaboration supported by technology tools

T.3.4.C Productivity and Problem Solving: Use and explain how technology tools increase productivity

T.3.4.C.1. Explain how the selected technology tools are being used to accomplish tasks efficiently (e.g., editing with word-processing software vs. rewriting by hand)

T.3.4.C.2. Use templates or create new documents to complete learning assignments

T.3.4.C.3. Use suitable electronic resources to edit final copies of texts for correctness in language usage and conventions, such as capitalization, punctuation, and spelling

T.3.4.C.4. Use various electronic information retrieval sources to obtain information on a topic

T.3.4.C.5. Construct a set of statements to be acted out to accomplish a simple task (e.g., turtle instructions).

Standard 5.0 –Technology for Communication and Creativity/Innovation: *Use technology to communicate using various media formats*

T.3.5.A Communication: Use technology for communication.

T.3.5.A.1 Communication – Tools: Explain how communication tools help gather information, share ideas, and respond to questions when communicating with various audiences, including school, community, parents and experts.

T.3.5.A.2 Communication – Tools: Use technology tools identified by the teacher to communicate with various audiences (e.g., podcasting).

T.3.5.B Communication - Media Formats: Use and explain the purpose of different media formats.

T.3.5.B.1 Recognize that various media formats are used to communicate ideas, such as CD, DVD, flash/thumb drive, streaming media, etc.

T.3.5.C Creativity/Innovation – Multimedia/Idea Presentation/Editing: Use and explain how the technology can be used to express ideas.

T.3.5.C.1 Multimedia: Use multimedia and publishing tools to express original ideas with print, drawings, digital images, existing or original video, sounds, and/or personal recordings.

T.3.5.C.2 Idea Presentation: Present ideas and information in formats such as electronic presentations, web pages, or graphic organizers that are appropriate to a specific audience.

T.3.5.C.3 Editing: Change, edit, and revise graphs, graphics, presentations, and word-processing documents.

FOURTH GRADE

Standard 1.0 – Technology Systems: *Develop foundations in the understanding and uses of technology systems*

T.4.1.A Demonstrate knowledge of the nature and operation of technology systems

> T.4.1.A.1 Identify and understand the functions of computing (Input; Output; Storage; Processing)

> T.4.1.A.2 Demonstrate the proper care of the computer hardware and software

> T.4.1.A.3 Demonstrate basic understanding of computer theory (Bits and Bytes)

T.4.1.B Demonstrate proficiency in the use of technology

> T.4.1.B.1 Access and navigate within application software and understand basic file management functions (such as open, close, format, edit, and save)

> T.4.1.B.2 Use tools, menus and dialog boxes in application software

> T.4.1.B.3 Develop keyboarding skills (Identify and use navigation keys, alphabet keys, special function keys, shift, caps lock, space bar, enter, backspace, delete, arrows, and punctuation)

> T.4.1.B.4 Use correct keyboarding techniques (such as proper home row and fingering positions and posture)

> T.4.1.B.5 Use appropriate applications to perform an assigned task (such as word-processing; graphics; and presentation)

Standard 2.0 – Digital Citizenship: *Demonstrate an understanding of the history of technology and its impact on society; practice ethical, legal, and responsible use of technology*

T.4.2.A Technology and Society: Explain how technology affects people and society

> T.4.2.A.1 Explain how technology (such as computers, cameras, calculators, television, CD-ROM, and DVD) influences societies

> T.4.2.A.2. Identify examples of how technology has affected the environment, past and present

> T.4.2.A.3. Explain how technology tools have or can be used to meet the needs of societies

T.4.2.B Ethical and Legal Issues: Practice responsible and appropriate use of technology systems, software, and information

> T.4.2.B.1. Explain the purpose of and follow the acceptable use policy

T.4.2.B.2. Recognize the potential harm of intrusive applications (such as worms, viruses, spyware, pop-up windows, etc.)

T.4.2.B.3. Use safe and correct security procedures (such as protecting password and user ID)

T.4.2.C Ethical and Legal Issues: Demonstrate an understanding of current legal standards

T.4.2.C.1. Comply with copyright laws and fair use provisions (such as appropriate copying and pasting, legal downloading, intellectual property recognition, and obeying copyright laws)

T.4.2.C.2. Practice strategies for avoiding plagiarism when using digital content

T.4.2.C.3. Cite electronic sources of text and digital information

T.4.2.D Understand current online safety guidelines

T.4.2.D.1.Understand that the Internet offers access to multiple digital communities with differing guidelines

T.4.2.D.2. Explain and practice safety and privacy issues related to use of the Internet

T.4.2.D.3.Use safe and correct security procedures when working online (such as not disclosing personal information and protecting passwords)

T.4.2.D.4. Describe procedures for exiting an inappropriate site (such as clicking the home, turning off monitor, notifying an adult)

T.4.2.D.5. Understand the purpose of technology protection measures (such as virus protection and content filtering systems)

Standard 3.0 – Research and Information Management: *Use technology to locate, evaluate, gather, and organize information and data*

T.4.3.A Use technology to locate, evaluate, and organize information from a variety of sources.

T.4.3.A.1 Select relevant information from appropriate technology resources (such as websites, library catalogs, or electronic reference materials).

T.4.3.A.2 Evaluate electronic resources using the same strategies as print resources (such as fact vs. fiction, author, ease of use)and use print sources to verify electronic sources.

T.4.3.A.3 Use search strategies for age-appropriate Web search tools, library catalogs, or electronic databases.

T.4.3.A.4 Collect and organize information using technology tools (such as word processor, graphics program).

T.4.3.A.5 Describe telecommunications terminology and capabilities (website, website address, homepage, link, Internet, browser, etc.).

Standard 4.0 – Technology for Learning, Collaboration, and Problem Solving: *Use a variety of technologies for learning and collaboration*

T.4.4.A Learning: Use and explain how technology tools enhance learning

T.4.4.A.1. Use technology tools, including software and hardware, from a range of teacher-selected options to learn new content or reinforce skills

T.4.4.A.2. Explain how selected technology tools are being used to support learning

T.4.4.A.3. Reflect as an individual on appropriateness of selected technology for the given task

T.4.4.A.4, Assess the use of the selected technology for individual learning of the specific task

T.4.4.A.5. Describe how technology tools are used to collect information

T.4.4.B Collaboration: Use and explain how selected technology tools encourage collaboration

T.4.4.B.1. Use technology tools to work collaboratively within the classroom

T.4.4.B.2. Use technology tools to exchange ideas with individuals or groups outside of the classroom (e.g., use ePals to communicate with students at a Diocesan school within Virginia or other State school regarding VA history)

T.4.4.B.3. Reflect and discuss the advantages of collaboration supported by technology tools

T.4.4.C Productivity and Problem Solving: Use and explain how technology tools increase productivity

T.4.4.C.1. Explain how the selected technology tools are being used to accomplish tasks efficiently (e.g., outlining; using word-processing software to edit and revise vs. rewriting by hand)

T.4.4.C.2. Create new documents to complete learning assignments

T.4.4.C.3. Use suitable electronic resources to edit final copies of texts for correctness in language usage and conventions, such as capitalization, punctuation, and spelling (e.g., online dictionaries, spell check, grammar check)

T.4.4.C.4. Input and analyze information in a predefined spreadsheet or database

T.4.4.C.5. Use various electronic information retrieval sources to obtain information on a topic

T.4.4.C.6. Construct a program as a set of step-by-step instructions (e.g., Scratch, Hour of Code)

Standard 5.0 –Technology for Communication and Creativity/Innovation: *Use technology to communicate using various media formats*

T.4.5.A Communication – Tools: Use technology for communication.

T.4.5.A.1 Use communication tools identified by the teacher to help gather information, share ideas, and respond to questions when communicating with various audiences, including school, community, parents, and experts (i.e., podcasts, blogs, wikis)

T.4.5.A.2 Present information, independently or with assistance, to various audiences.

T.4.5.B Communication - Media Formats: Use and explain the purposes of different media formats.

T.4.5.B.1 Communicate independently with various audiences using different media formats.

T.4.5.B.2 Explain the purpose for a chosen media format.

T.4.5.C Creativity/Innovation – Multimedia/Presentation Format/Editing: Use and explain how the technology can be used to express ideas.

T.4.5.C.1 Multimedia: Use telecommunication, multimedia and publishing tools to express original ideas with print, drawings, digital images, existing or original video, sounds, and/or personal recordings.

T.4.5.C.2 Presentation Format: Present ideas and information in formats that allow individual or group participation and are appropriate to a specific audience. Examples of such formats would be wikis, blogs, graphic organizers, electronic presentations, DVD movies and web pages.

T.4.5.C.3 Editing: Change, edit, and revise graphs, graphics, presentations, and word-processing documents.

FIFTH GRADE

Standard 1.0 – Technology Systems: *Develop foundations in the understanding and uses of technology systems*

T.5.1.A Demonstrate knowledge of the nature and operation of technology systems

T.5.1.A.1 Identify and understand the functions of computing (Input; Output; Storage; Processing) and describe the advantages and disadvantages of various storage techniques

T.5.1.A.2 Demonstrate the proper care of the computer hardware and software

T.5.1.A.3 Demonstrate basic understanding of computer theory (Bits and Bytes)

T.5.1.B Demonstrate proficiency in the use of technology

T.5.1.B.1 Access and navigate within application software and understand basic file management functions

T.5.1.B.2 Use tools, menus and dialog boxes in application software

T.5.1.B.3 Develop keyboarding skills (Identify and use navigation keys, alphabet keys, special function keys, shift, caps lock, space bar, enter, backspace, delete, arrows, and punctuation)

T.5.1.B.4 Use correct keyboarding techniques (such as proper home row and fingering positions and posture)

T.5.1.B.5 Use appropriate applications to perform an assigned task (word-processing; spreadsheets; graphics; presentation)

Standard 2.0 – Digital Citizenship: *Demonstrate an understanding of the history of technology and its impact on society; practice ethical, legal, and responsible use of technology*

T.5.2.A Technology and Society: Explain how technology affects the individual and society

T.5.2.A.1 Explain technology's influence on the individual and society

T.5.2.A.2. Identify examples of technology's impact on the environment

T.5.2.A.3. Explain how technology tools have been used to meet the needs of societies

T.5.2.B Ethical and Legal Issues: Practice responsible and appropriate use of technology systems, software, and information

T.5.2.B.1. Explain the purpose of and follow the acceptable use policy

T.5.2.B.2. Recognize the potential harm of intrusive applications (such as worms, viruses, spyware, pop-up windows, etc.)

T.5.2.B.3. Use safe and correct security procedures (such as protecting password and user ID)

T.5.2.C Ethical and Legal Issues: Demonstrate an understanding of current legal standards

T.5.2.C.1. Comply with copyright laws and fair use provisions when using digital content

T.5.2.C.2. Use electronic resources appropriately (such as paraphrasing)

T.5.2.C.3. Cite electronic sources of text and digital information properly (such as MLA, APA, Chicago)

T.5.2.D Understand current online safety guidelines

T.5.2.D.1. Understand that the Internet offers access to multiple digital communities with differing guidelines

T.5.2.D.2. Explain and practice safety and privacy issues related to use of the Internet

T.5.2.D.3.Use safe and correct security procedures when working online (such as not disclosing personal information and protecting passwords)

T.5.2.D.4. Describe procedures for exiting an inappropriate site (such as clicking the home, turning off monitor, notifying an adult)

T.5.2.D.5. Understand the purpose of technology protection measures including filtering systems

Standard 3.0 – Research and Information Management: *Use technology to locate, evaluate, gather, and organize information and data*

T.5.3.A Use technology to locate, evaluate, and organize information from a variety of sources.

T.5.3.A.1 Select relevant information (content and images) from appropriate technology resources (such as websites, library catalogs, or electronic reference materials).

T.5.3.A.2 Explain and evaluate electronic resources (such as publication date, fact vs. fiction, author, ease of use)and use print sources to verify and supplement electronic sources.

T.5.3.A.3 Explain and use search strategies for age-appropriate Web search tools, library catalogs, or electronic databases

T.5.3.A.4 Collect and organize information using technology tools (such as word processor, graphics program, presentation tool, and spreadsheet).

T.5.3.A.5 Evaluate and explain why specific technology tools are selected to organize and present information for specific tasks.

T.5.3.A.6 Describe telecommunications terminology and capabilities (website, URL, homepage, link, Internet, browser, etc.).

Standard 4.0 – Technology for Learning, Collaboration, and Problem Solving: *Use a variety of technologies for learning and collaboration*

T.5.4.A Learning: Select and use technology tools to enhance learning

T.5.4.A.1. Use technology tools, including software and hardware, from a range of teacher-selected options to learn new content or reinforce skills

T.5.4.A.2. Explain why specific technology tools were selected to support learning

T.5.4.A.3. Assess the use of the selected technology for individual learning of the specific task

T.5.4.B Collaboration: Select and use technology tools to encourage collaboration

T.5.4.B.1. Use technology tools to work collaboratively within the school community

T.5.4.B.2. Use technology tools to exchange ideas with individuals or groups outside of the school community (e.g., use ePals to communicate with students in another country)

T.5.4.B.3. Articulate the advantages of collaboration supported by technology tools

T.5.4.C Productivity and Problem Solving: Select and use technology tools to increase productivity

T.5.4.C.1. Explain why the selected technology tools are being used to accomplish tasks efficiently

T.5.4.C.2. Create new documents to complete learning assignments and demonstrate new understanding

T.5.4.C.3. Use word-processing technology when appropriate

T.5.4.C.4. Use suitable electronic resources to refine presentations and edit texts for effective and appropriate use of language conventions, such as capitalization, punctuation, spelling, and pronunciation

T.5.4.C.5. Collect, analyze, and display data and information using tools, such as calculators, computers, spreadsheets, graphing programs, and databases

T.5.4.C.6. Construct a program as a set of step-by-step instructions (e.g., Scratch, Hour of Code)

T.5.4.C.7 Create an algorithm (e.g., Hour of Code, Scratch, Made with Code)

Standard 5.0 –Technology for Communication and Creativity/Innovation: *Use technology to communicate using various media formats*

T.5.5.A Communication – Tools: Select and use technology for communication.

T.5.5.A.1 Use communication tools (such as email, discussion boards, online conferences, Learning Management Systems, portfolios) to gather information, share ideas, and respond to questions.

T.5.5.A.2 Present information independently to various audiences.

T.5.5.B Communication - Media Formats: Use and explain the purposes of different media formats.

T.5.5.B.1 Communicate independently with various audiences using different media formats.

T.5.5.B.2 Evaluate the appropriateness of media formats for various purposes.

T.5.5.C Creativity/Innovation – Multimedia/Idea Presentation/Editing/Evaluating: Select and use technology to express ideas.

T.5.5.C.1 Multimedia: Select and use the appropriate multimedia and publishing tools to express original ideas with print, drawings, digital images, video, sounds, and/or personal recordings.

T.5.5.C.2 Idea Presentation: Present ideas and information in formats such as electronic presentations, web pages, graphic organizers, or spreadsheets that are appropriate to a specific audience.

T.5.5.C.3 Editing: Change, edit, and revise graphs, graphics, presentations, and word-processing documents.

T.5.5.C.4 Evaluating: Evaluate student created product design based on purpose, audience, and format.

SIXTH GRADE

Standard 1.0 – Technology Systems: *Develop foundations in the understanding and uses of technology systems*

T.6.1.A Demonstrate knowledge of the nature and operation of technology systems

T.6.1.A.1 Match hardware components to their functions (Input; Output; Storage; Processing)

T.6.1.A.2 Demonstrate the proper care of the computer hardware and software

T.6.1.A.3 Demonstrate understanding of the basics of the operating system and its relationship to application software

T.6.1.A.4 Describe the evolution of the computer and its inherent obsolescence; identify the connections and time chronology in the development of computers; identify the challenges and limitations posed by early computing machines

T.6.1.B Demonstrate proficiency in the use of technology

T.6.1.B.1 Practice file management (such as creating folders and organizing files within folders)

T.6.1.B.2 Use proper keyboarding skills techniques to increase speed to a goal of 20 wpm with 90% accuracy

T.6.1.B.3 Choose and integrate appropriate multiple applications to perform an assigned task

Standard 2.0 – Digital Citizenship: *Demonstrate an understanding of the history of technology and its impact on society; practice ethical, legal, and responsible use of technology*

T.6.2.A Technology and Society: Explain how technology affects the individual and society

T.6.2.A.1 Explain technology's influence on the individual and society

T.6.2.A.2. Identify examples of technology's impact on the environment

T.6.2.A.3. Recommend ways technology can be used to meet the needs of societies

T.6.2.B Ethical and Legal Issues: Practice responsible and appropriate use of technology systems, software, and information

T.6.2.B.1. Explain the purpose of and follow the acceptable use policy

T.6.2.B.2. Explain the potential harm of intrusive applications (such as worms, viruses, spyware, pop-up windows, etc.) and safeguards for limiting exposure to these

T.6.2.B.3. Use safe and correct security procedures (such as protecting password and user ID)

T.6.2.C Ethical and Legal Issues: Demonstrate an understanding of current legal standards

> T.6.2.C.1. Comply with copyright laws and fair use provisions when using digital content

> T.6.2.C.2. Use electronic resources appropriately (such as paraphrasing)

> T.6.2.C.3. Cite electronic sources of text and digital information properly (such as MLA, APA, Chicago)

T.6.2.D Understand current online safety guidelines

> T.6.2.D.1.Understand that the Internet offers access to multiple digital communities with differing guidelines

> T.6.2.D.2. Explain and practice safety and privacy issues related to use of the Internet

> T.6.2.D.3.Use safe and correct security procedures when working online (such as not disclosing personal information and protecting passwords)

> T.6.2.D.4. Describe procedures for exiting an inappropriate site (such as clicking the home, turning off monitor, notifying an adult)

> T.6.2.D.5. Explain the importance of firewalls and filtering systems

Standard 3.0 – Research and Information Management: *Use technology to locate, evaluate, gather, and organize information and data*

T.6.3.A Use technology to locate, evaluate, and organize information from a variety of sources.

> T.6.3.A.1 Select relevant information (content and images) from appropriate technology resources.

> T.6.3.A.2 Apply evaluation strategies when using electronic resources (such as publication/copyright date, fact vs. fiction, source, credibility, ease of use)and use traditional sources to verify and supplement.

> T.6.3.A.3 Refine search strategies for age-appropriate Web search tools, library catalogs, or electronic databases

> T.6.3.A.4 Collect and organize information using technology tools (such as word processor, graphics program, presentation tool, and spreadsheet)

> T.6.3.A.5 Evaluate and explain why specific technology tools are selected to organize and present information for specific tasks.

> T.6.3.A.6 Describe telecommunications and networking terminology and concepts (LAN, URL, wireless, cloud computing, website, homepage, link, Internet, browser, etc.).

T.6.3.B Create and use spreadsheets/databases to evaluate information.

T.6.3.B.1 Enter and format data (define fields, enter data, format data, format headings, worksheet tabs, etc.)

T.6.3.B.2 Organize data (cut, copy, paste, sort data, inserting/deleting rows, etc.)

T.6.3.B.3 Print data tables and graphs (print preview, setup, gridlines, etc.)

T.6.3.B.4 Calculate information (formulas, functions, etc.)

T.6.3.B.5 Graph data effectively (create, format, modify charts, etc.)

T.6.3.B.6 Integrating graphics into spreadsheets and spreadsheets into word processor, presentation, etc.

Standard 4.0 – Technology for Learning, Collaboration, and Problem Solving: *Use a variety of technologies for learning and collaboration*

T.6.4.A Learning: Select and use technology tools to enhance learning

T.6.4.A.1. Use technology tools, including software and hardware, from a range of teacher-selected options to learn new content or reinforce skills

T.6.4.A.2. Explain why specific technology tools were selected to support learning

T.6.4.A.3. Assess the use of the selected technology for individual learning of the specific task

T.6.4.B Collaboration: Select and use technology tools to encourage collaboration

T.6.4.B.1. Use technology tools to work collaboratively within the school community (for example through Google Drive, Microsoft 365)

T.6.4.B.2. Use technology tools to exchange ideas with individuals or groups outside of the school community

T.6.4.B.3. Articulate the advantages of collaboration supported by technology tools

T.6.4.C Productivity and Problem Solving: Select and use technology tools to increase productivity

T.6.4.C.1. Explain why the selected technology tools are being used to accomplish tasks efficiently

T.6.4.C.2. Create new documents to complete learning assignments and demonstrate new understanding (consider using Web 2.0 tools instead of traditional Office programs)

T.6.4.C.3. Use word-processing technology when appropriate

T.6.4.C.4. Use suitable electronic resources to refine presentations and edit texts for effective and appropriate use of language conventions, such as capitalization, punctuation, spelling, and pronunciation

T.6.4.C.5. Collect, manipulate, analyze, and display data and information using tools, such as calculators and computers

T.6.4.C.6. Input and analyze information in a spreadsheet or database (e.g., Science Fair)

T.6.4.C.7. Construct a program as a set of step-by-step instructions (e.g., Scratch, Hour of Code)

Standard 5.0 –Technology for Communication and Creativity/Innovation: *Use technology to communicate using various media formats*

T.6.5.A Communication – Tools: Select and use technology for communication.

T.6.5.A.1 Use communication tools (such as email, discussion boards, online conferences, Learning Management Systems, portfolios) to gather information, share ideas, and respond to questions.

T.6.5.A.2 Present information independently to various audiences.

T.6.5.B Communication - Media Formats: Use and explain the purposes of different media formats.

T.6.5.B.1 Communicate independently with various audiences using different media formats.

T.6.5.B.2 Evaluate the appropriateness of media formats for various purposes.

T.6.5.C Creativity/Innovation – Multimedia/Idea Presentation/Editing/Evaluating: Select and use technology to express ideas.

T.6.5.C.1 Multimedia: Select and use the appropriate multimedia and publishing tools to express original ideas with print, drawings, digital images, video, sounds, and/or personal recordings.

T.6.5.C.2 Idea Presentation: Present ideas and information in formats such as electronic presentations, web pages, graphic organizers, or spreadsheets that are appropriate to a specific audience.

T.6.5.C.3 Editing: Change, edit, and revise graphs, graphics, presentations, and word-processing documents.

T.6.5.C.4 Evaluating: Evaluate student created product design based on purpose, audience, and format.

SEVENTH GRADE

Standard 1.0 – Technology Systems: *Develop foundations in the understanding and uses of technology systems*

T.7.1.A Demonstrate knowledge of the nature and operation of technology systems

T.7.1.A.1 Match hardware components to their functions (Input; Output; Storage; Processing)

T.7.1.A.2 Demonstrate the proper care of the computer hardware and software

T.7.1.A.3 Demonstrate understanding of the basics of the operating system and its relationship to application software

T.7.1.A.4 Describe the evolution of the computer and its inherent obsolescence; identify the connections and time chronology in the development of computers; identify the challenges and limitations posed by early computing machines

T.7.1.B Demonstrate proficiency in the use of technology

T.7.1.B.1 Practice file management (such as creating folders and organizing files within folders)

T.7.1.B.2 Use proper keyboarding skills techniques to increase speed to a goal of 25 wpm with 90% accuracy

T.7.1.B.3 Choose and integrate appropriate multiple applications to perform an assigned task

Standard 2.0 – Digital Citizenship: *Demonstrate an understanding of the history of technology and its impact on society; practice ethical, legal, and responsible use of technology*

T.7.2.A Technology and Society: Evaluate how technology affects the individual and society

T.7.2.A.1 Evaluate technology's influence on the individual and society

T.7.2.A.2. Evaluate technology's impact on the environment

T.7.2.A.3. Evaluate the use of technology to solve a societal issue

T.7.2.B Ethical and Legal Issues: Practice responsible and appropriate use of technology systems, software, and information

T.7.2.B.1. Explain the purpose of and follow the acceptable use policy

T.7.2.B.2. Explain the potential harm of intrusive applications (such as worms, viruses, spyware, pop-up windows, etc.) and safeguards for limiting exposure to these

T.7.2.B.3. Use safe and correct security procedures (such as protecting password and user ID)

T.7.2.C Ethical and Legal Issues: Demonstrate an understanding of current legal standards

T.7.2.C.1. Comply with copyright laws and fair use provisions when using digital content

T.7.2.C.2. Use electronic resources appropriately (such as paraphrasing)

T.7.2.C.3. Cite electronic sources of text and digital information properly (such as MLA, APA, Chicago)

T.7.2.D Understand current online safety guidelines

T.7.2.D.1.Understand that the Internet offers access to multiple digital communities with differing guidelines

T.7.2.D2. Explain and practice safety and privacy issues related to use of the Internet

T.7.2.D.3.Use safe and correct security procedures when working online (such as not disclosing personal information and protecting passwords)

T.7.2.D.4. Describe procedures for exiting an inappropriate site (such as clicking the home, turning off monitor, notifying an adult)

T.7.2.D.5. Explain the importance of firewalls and filtering systems

Standard 3.0 – Research and Information Management: *Use technology to locate, evaluate, gather, and organize information and data*

T.7.3.A Use technology to locate, evaluate, and organize information from a variety of sources.

T.7.3.A.1 Select relevant information (content and images) from appropriate technology resources.

T.7.3.A.2 Apply evaluation strategies when using electronic resources (such as publication/copyright date, fact vs. fiction, source, credibility, ease of use)and use traditional sources to verify and supplement.

T.7.3.A.3 Refine search strategies for age-appropriate Web search tools, library catalogs, or electronic databases

T.7.3.A.4 Collect and organize information using technology tools (such as word processor, graphics program, presentation tool, and spreadsheet)

T.7.3.A.5 Evaluate and explain why specific technology tools are selected to organize and present information for specific tasks.

T.7.3.A.6 Describe telecommunications and networking terminology and concepts (LAN, URL, wireless, cloud computing, website, homepage, link, Internet, browser, etc.).

T.7.3.B Create and use spreadsheets/databases to evaluate information.

T.7.3.B.1 Enter and format data (define fields, enter data, format data, format headings, worksheet tabs, etc.)

T.7.3.B.2 Organize data (cut, copy, paste, sort data, inserting/deleting rows, etc.)

T.7.3.B.3 Print data tables and graphs (print preview, setup, gridlines, etc.)

T.7.3.B.4 Calculate information (formulas, functions, etc.)

T.7.3.B.5 Graph data effectively (create, format, modify charts, etc.)

T.7.3.B.6 Integrating graphics into spreadsheets and spreadsheets into word processor, presentation, etc.

Standard 4.0 – Technology for Learning, Collaboration, and Problem Solving: *Use a variety of technologies for learning and collaboration*

T.7.4.A Learning: Select and use technology tools to enhance learning

T.7.4.A.1. Use technology tools, including software and hardware, to learn new content or reinforce skills

T.7.4.A.2. Defend the selection of a specific technology tool to complete a learning task

T.7.4.B Collaboration: Select and use technology tools to encourage collaboration

T.7.4.B.1. Use technology tools to work collaboratively within the school community

T.7.4.B.2. Use technology tools to exchange ideas with individuals or groups outside of the school community

T.7.4.B.3. Articulate the advantages of collaboration supported by technology tools

T.7.4.C Productivity and Problem Solving: Select and use technology tools to increase productivity

T.7.4.C.1. Defend the selected technology tools to complete tasks efficiently (e.g., Science Fair -- why use Excel for graphs instead of Paint?)

T.7.4.C.2. Create new documents to complete learning assignments and demonstrate new understanding (consider using Web 2.0 tools instead of traditional Office programs)

T.7.4.C.3. Use word-processing technology when appropriate

T.7.4.C.4. Use suitable electronic resources to refine presentations and edit texts for effective and appropriate use of language conventions, such as capitalization, punctuation, spelling, and pronunciation

T.7.4.C.5. Collect, manipulate, analyze, and display data and information using tools, such as calculators and computers

T.7.4.C.6. Input and analyze information in a spreadsheet or database (e.g., Science Fair -- why use Excel for graphs instead of Paint?)

T.7.4.C.7. Construct a program as a set of step-by-step instructions (e.g., Scratch, Hour of Code)

T.7.4.C.8 Implement problem-solving solutions using a Programming language, incorporating one or more of the following: looping behavior, conditional statements, logic, expressions, variables, and functions

Standard 5.0 –Technology for Communication and Creativity/Innovation: *Use technology to communicate using various media formats*

T.7.5.A Communication – Tools: Select and use technology for communication.

T.7.5.A.1 Use communication tools (such as email, discussion boards, online conferences, Learning Management Systems, portfolios) to gather information, share ideas, and respond to questions.

T.7.5.A.2 Present information independently to various audiences.

T.7.5.B Communication - Media Formats: Use and explain the purposes of different media formats.

T.7.5.B.1 Communicate independently with various audiences using different media formats.

T.7.5.B.2 Evaluate the appropriateness of media formats for various purposes.

T.7.5.C Creativity/Innovation – Multimedia/Idea Presentation/Editing/Evaluating: Select and use technology to express ideas.

T.7.5.C.1 Multimedia: Select and use the appropriate multimedia and publishing tools to   express original ideas with print, drawings, digital images, video, sounds, and/or personal   recordings.

T.7.5.C.2 Idea Presentation: Present ideas and information in formats such as electronic   presentations, web pages, graphic organizers, or spreadsheets that are appropriate to a   specific audience.

T.7.5.C.3 Editing: Change, edit, and revise graphs, graphics, presentations, and word-processing documents.

T.7.5.C.4 Evaluating: Evaluate student created product design based on purpose, audience, and format.

EIGHTH GRADE

Standard 1.0 – Technology Systems: *Develop foundations in the understanding and uses of technology systems*

T.8.1.A Demonstrate knowledge of the nature and operation of technology systems

T.8.1.A.1 Match hardware components to their functions (Input; Output; Storage; Processing)

T.8.1.A.2 Demonstrate the proper care of the computer hardware and software

T.8.1.A.3 Demonstrate understanding of the basics of the operating system and its relationship to application software

T.8.1.A.4 Describe the evolution of the computer and its inherent obsolescence; identify the connections and time chronology in the development of computers; identify the challenges and limitations posed by early computing machines

T.8.1.B Demonstrate proficiency in the use of technology

T.8.1.B.1 Use file management (such as creating folders and organizing files within folders)

T.8.1.B.2 Use proper keyboarding skills techniques to increase speed to a goal of 30 wpm with 95% accuracy

T.8.1.B.3 Choose and integrate appropriate multiple applications to perform an assigned task

Standard 2.0 – Digital Citizenship: *Demonstrate an understanding of the history of technology and its impact on society; practice ethical, legal, and responsible use of technology*

T.8.2.A Technology and Society: Evaluate how technology affects the individual and society

T.8.2.A.1 Evaluate technology's influence on the individual and society

T.8.2.A.2. Evaluate technology's impact on the environment

T.8.2.A.3. Evaluate the use of technology to solve a societal issue

T.8.2.B Ethical and Legal Issues: Practice responsible and appropriate use of technology systems, software, and information

T.8.2.B.1. Explain the purpose of and follow the acceptable use policy

T.8.2.B.2. Explain the potential harm of intrusive applications (such as worms, viruses, spyware, pop-up windows, etc.) and safeguards for limiting exposure to these

T.8.2.B.3. Use safe and correct security procedures (such as protecting password and user ID)

T.8.2.C Ethical and Legal Issues: Demonstrate an understanding of current legal standards

T.8.2.C.1. Comply with copyright laws and fair use provisions when using digital content

T.8.2.C.2. Use electronic resources appropriately (such as paraphrasing)

T.8.2.C.3. Cite electronic sources of text and digital information properly (such as MLA, APA, Chicago)

T.8.2.D Ethical and Legal Issues: Understand current online safety guidelines

T.8.2.D.1.Understand that the Internet offers access to multiple digital communities with differing guidelines

T.8.2.D.2. Explain and practice safety and privacy issues related to use of the Internet

T.8.2.D.3.Use safe and correct security procedures when working online (such as not disclosing personal information and protecting passwords)

T.8.2.D.4. Describe procedures for exiting an inappropriate site (such as clicking the home, turning off monitor, notifying an adult)

T.8.2.D.5. Explain the importance of firewalls and filtering systems

Standard 3.0 – Research and Information Management: *Use technology to locate, evaluate, gather, and organize information and data*

T.8.3.A Use technology to locate, evaluate, and organize information from a variety of sources.

T.8.3.A.1 Select relevant information (content and images) from appropriate technology resources.

T.8.3.A.2 Apply evaluation strategies when using electronic resources (such as publication/copyright date, fact vs. fiction, source, credibility, ease of use)and use traditional sources to verify and supplement.

T.8.3.A.3 Refine search strategies for age-appropriate Web search tools, library catalogs, or electronic databases

T.8.3.A.4 Collect and organize information using technology tools (such as word processor, graphics program, presentation tool, and spreadsheet)

T.8.3.A.5 Evaluate and explain why specific technology tools are selected to organize and present information for specific tasks.

T.8.3.A.6 Describe telecommunications and networking terminology and concepts (LAN, URL, wireless, cloud computing, website, homepage, link, Internet, browser, etc.).

T.8.3.B Create and use spreadsheets/databases to evaluate information.

T.8.3.B.1 Enter and format data (define fields, enter data, format data, format headings, worksheet tabs, etc.)

T.8.3.B.2 Organize data (cut, copy, paste, sort data, inserting/deleting rows, etc.)

T.8.3.B.3 Print data tables and graphs (print preview, setup, gridlines, etc.)

T.8.3.B.4 Calculate information (formulas, functions, etc.)

T.8.3.B.5 Graph data effectively (create, format, modify charts, etc.)

T.8.3.B.6 Integrating graphics into spreadsheets and spreadsheets into word processing documents, presentations, etc.

Standard 4.0 – Technology for Learning, Collaboration, and Problem Solving: *Use a variety of technologies for learning and collaboration*

T.8.4.A Learning: Select and use technology tools to enhance learning

T.8.4.A.1. Use technology tools, including software and hardware, to learn new content or reinforce skills

T.8.4.A.2. Defend the selection of a specific technology tool to complete a learning task

T.8.4.B Collaboration: Select and use technology tools to encourage collaboration

T.8.4.B.1. Use technology tools to work collaboratively within the school community

T.8.4.B.2. Use technology tools to exchange ideas with individuals or groups outside of the school community

T.8.4.B.3. Articulate the advantages of collaboration supported by technology tools

T.8.4.C Productivity and Problem Solving: Select and use technology tools to increase productivity

T.8.4.C.1. Defend the selected technology tools to complete tasks efficiently (e.g., Science Fair)

T.8.4.C.2. Create new documents to complete learning assignments and demonstrate new understanding (consider using Web 2.0 tools instead of traditional Office programs)

T.8.4.C.3. Use word-processing technology when appropriate

T.8.4.C.4. Use suitable electronic resources to refine presentations and edit texts for effective and appropriate use of language conventions, such as capitalization, punctuation, spelling, and pronunciation

T.8.4.C.5. Collect, manipulate, analyze, and display data and information using tools such as calculators and computers

T.8.4.C.6. Input and analyze information in a spreadsheet or database (e.g., Science Fair)

T.8.4.C.7. Construct a program as a set of step-by-step instructions (e.g., Scratch, Hour of Code)

T.8.4.C.8. Implement problem solutions using a Programming language, including: looping behavior, conditional statements, logic, expressions, variables, and functions.

Standard 5.0 –Technology for Communication and Creativity/Innovation: *Use technology to communicate using various media formats*

T.8.5.A Communication – Tools: Select and use technology for communication.

T.8.5.A.1 Use communication tools (such as email, discussion boards, online conferences, Learning Management Systems, portfolios) to gather information, share ideas, and respond to questions.

T.8.5.A.2 Present information independently to various audiences.

T.8.5.B Communication - Media Formats: Use and explain the purposes of different media formats.

T.8.5.B.1 Communicate independently with various audiences using different media formats.

T.8.5.B.2 Evaluate the appropriateness of media formats for various purposes.

T.8.5.C Creativity/Innovation – Multimedia/Idea Presentation/Editing/Evaluating: Select and use technology to express ideas.

T.8.5.C.1 Multimedia: Select and use the appropriate multimedia and publishing tools to express original ideas with print, drawings, digital images, video, sounds, and/or personal recordings.

T.8.5.C.2 Idea Presentation: Present ideas and information in formats such as electronic presentations, web pages, graphic organizers, or spreadsheets that are appropriate to a specific audience.

T.8.5.C.3 Editing: Change, edit, and revise graphs, graphics, presentations, and word-processing documents.

T.8.5.C.4 Evaluating: Evaluate student created product design based on purpose, audience, and format.