



Diocese of Greensburg Curriculum Technology Grade 8

Unit	Standards	Content	Skills
<p>Digital Citizenship</p>	<p>ISTE: Educational Technology (2016) All Grades</p> <hr/> <p>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:</p> <p>a. cultivate and manage their digital identity and reputation and are aware of the permanence of their actions in the digital world.</p> <p>b. engage in positive, safe, legal and ethical behavior when using technology, including social interactions online or when using networked devices.</p> <p>c. demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property.</p> <p>d. manage their personal data to maintain digital privacy and security and are aware of data-collection technology used to track their navigation online.</p> <p>2016 ISTE Standards Students 2016 ISTE Standards for Students, ©2016, ISTE® (International Society for Technology in Education), iste.org. All rights reserved.</p>	<ul style="list-style-type: none"> • Acceptable Use Policies • Plagiarism • Cyber-bullying • Copyrighted material • Online security • Social Media 	<p>The students will be able to:</p> <ul style="list-style-type: none"> • Recognize the accessibility of digital media • Identify the value risks of social media • Distinguish between appropriate and inappropriate interactions on digital media • Explain the implications of what you choose to post online • Classify uses of social media in personal and professional life • Compare the rights of users and creators with respect to digital media • Develop a plan for proper use of social media • Evaluate your current digital media footprint

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<p>Web Accounts</p>	<p>ISTE: Educational Technology (2016) All Grades</p> <hr/> <p>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:</p> <p>a. cultivate and manage their digital identity and reputation and are aware of the permanence of their actions in the digital world.</p> <p>b. engage in positive, safe, legal and ethical behavior when using technology, including social interactions online or when using networked devices.</p> <p>d. manage their personal data to maintain digital privacy and security and are aware of data-collection technology used to track their navigation online.</p> <p>2016 ISTE Standards Students 2016 ISTE Standards for Students, ©2016, ISTE® (International Society for Technology in Education), iste.org. All rights reserved.</p>	<ul style="list-style-type: none"> • Email Accounts • Office 365 	<p>The students will be able to:</p> <ul style="list-style-type: none"> • Log in and out of email accounts. • Compose and send an email. • Add an attachment. • Use one drive for storage

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<p>Basic Computer Skills and Keyboarding</p>	<p>ISTE: Educational Technology (2016) All Grades</p> <hr/> <p>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:</p> <p>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.</p> <p>2016 ISTE Standards Students 2016 ISTE Standards for Students, ©2016, ISTE® (International Society for Technology in Education), iste.org. All rights reserved.</p>	<ul style="list-style-type: none"> • Organizing Files/ Folders • Saving files • Storage devices • Keyboarding 	<p>The students will be able to:</p> <ul style="list-style-type: none"> • Organize files in folders(add, delete, and rename) • Save files to various locations (cloud storage, flash drive, etc.) • Identify and use various storage devices • Use keyboard effectively. <ul style="list-style-type: none"> ○ Know the keyboard shortcuts and the functions of special keys on the keyboard. ○ Formulate a list of best practices for keyboard shortcuts.
<p>Word Processing</p>	<p>ISTE: Educational Technology (2016) All Grades</p> <hr/> <p>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:</p> <p>c. curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.</p> <p>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:</p>	<p>Word Processing Applications (MS Word, Google Docs, etc.)</p> <ul style="list-style-type: none"> • Utilize formatting worksheet • Take any original work and format it to teacher specifications 	<p>The students will be able to:</p> <ul style="list-style-type: none"> • Create, save, and view documents • Format text <p>Review:</p> <ul style="list-style-type: none"> • cut • copy • paste • move • Microsoft Ribbon <ul style="list-style-type: none"> ○ File, Home, Insert, Design, Layout Tabs <p>Introduce and identify appropriate uses of formatting:</p> <ul style="list-style-type: none"> • hyperlinks • line spacing • indentation • columns

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	<p>a. choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.</p> <p>b. create original works or responsibly repurpose or remix digital resources into new creations.</p> <p>c. communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.</p> <p>d. publish or present content that customizes the message and medium for their intended audiences.</p> <p>2016 ISTE Standards Students 2016 ISTE Standards for Students, ©2016, ISTE® (International Society for Technology in Education), iste.org. All rights reserved.</p>		<ul style="list-style-type: none"> • tables • headers & footers • table of contents • title/cover page • page numbers
<p>Research</p>	<p>ISTE: Educational Technology (2016) All Grades</p> <hr/> <p>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:</p> <p>a. plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuits.</p> <p>b. evaluate the accuracy, perspective, credibility and relevance of information, media, data or other resources.</p> <p>c. curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.</p>	<ul style="list-style-type: none"> • Effective Search Strategies • Website Credibility • Plagiarism • Website Citations 	<p>The students will be able to:</p> <ul style="list-style-type: none"> • Use Boolean operators • Identify the source/creator of a website. • Demonstrate understanding of domain suffixes related to research and website validity. • Review online copyright and plagiarism expectations.

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	<p>d. build knowledge by actively exploring real-world issues and problems, developing ideas and theories and pursuing answers and solutions.</p> <p>2016 ISTE Standards Students 2016 ISTE Standards for Students, ©2016, ISTE® (International Society for Technology in Education), iste.org. All rights reserved.</p>		
<p>Coding</p>	<p>ISTE: Educational Technology (2016) <u>All Grades</u></p> <p>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:</p> <p>a. formulate problem definitions suited for technology-assisted methods such as data analysis, abstract models and algorithmic thinking in exploring and finding solutions.</p> <p>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.</p> <p>c. break problems into component parts, extract key information, and develop descriptive models to understand complex systems or facilitate problem-solving.</p> <p>d. understand how automation works and use algorithmic thinking to develop a sequence of steps to create and test automated solutions.</p> <p>2016 ISTE Standards Students 2016 ISTE Standards for Students, ©2016, ISTE® (International Society for Technology in Education), iste.org. All rights reserved.</p>	<ul style="list-style-type: none"> • Programming motion • -up,down, left, and right movement • Algorithms • Repeats and Loops • Decisions 	<p>The students will be able:</p> <ul style="list-style-type: none"> • Construct an algorithm to complete a task. Evaluate the need for using loops, repeats, and decisions.

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<p>Spreadsheets</p>	<p>ISTE: Educational Technology (2016) All Grades</p> <hr/> <p>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:</p> <p>a. formulate problem definitions suited for technology-assisted methods such as data analysis, abstract models and algorithmic thinking in exploring and finding solutions.</p> <p>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.</p> <p>c. break problems into component parts, extract key information, and develop descriptive models to understand complex systems or facilitate problem-solving.</p> <p>d. understand how automation works and use algorithmic thinking to develop a sequence of steps to create and test automated solutions.</p> <p>2016 ISTE Standards Students 2016 ISTE Standards for Students, ©2016, ISTE® (International Society for Technology in Education), iste.org. All rights reserved.</p>	<ul style="list-style-type: none"> • Data/Spreadsheets • Charts and Graphs 	<p>The students will be able to:</p> <ul style="list-style-type: none"> • Formatting cells • Format charts and graphs • Change text alignment in a cell • Use formulas to add, subtract, multiply, and divide • Sort data appropriately • Switching rows and columns • Sorting and filtering • Freezing panes • Functions

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<p>Presentations</p>	<p>ISTE: Educational Technology (2016) All Grades</p> <hr/> <p>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:</p> <p>c. curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.</p> <p>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:</p> <p>a. choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.</p> <p>b. create original works or responsibly repurpose or remix digital resources into new creations.</p> <p>c. communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.</p> <p>d. publish or present content that customizes the message and medium for their intended audiences.</p> <p>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:</p>	<ul style="list-style-type: none"> • Story Boards • PowerPoint • Prezi/Publisher • Adobe Premiere • Green Screen 	<p>The students will be able to:</p> <ul style="list-style-type: none"> • Select media to complement a presentation • Demonstrate the use of design to enhance the message within a presentation • Present a point in a professional and knowledgeable manner • Create effective handouts to accompany a presentation

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	<p>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.</p> <p>2016 ISTE Standards Students 2016 ISTE Standards for Students, ©2016, ISTE® (International Society for Technology in Education), iste.org. All rights reserved.</p>		
<p>Digital Design</p>	<p>ISTE: Educational Technology (2016) All Grades</p> <hr/> <p>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:</p> <p>a. know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems.</p> <p>b. select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.</p> <p>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:</p> <p>a. choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.</p> <p>b. create original works or responsibly repurpose or remix digital resources into new creations.</p> <p>c. communicate complex ideas clearly and effectively by creating or using a variety of digital</p>	<ul style="list-style-type: none"> • Photography • 3D Printing • Painting/Drawing Software 	<p>The students will be able to:</p> <ul style="list-style-type: none"> • Take and edit photographs • Design a 3D Model • Use drawing and painting tools to create a graphic image

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	<p>objects such as visualizations, models or simulations.</p> <p>d. publish or present content that customizes the message and medium for their intended audiences.</p> <p>2016 ISTE Standards Students 2016 ISTE Standards for Students, ©2016, ISTE® (International Society for Technology in Education), iste.org. All rights reserved.</p>		

