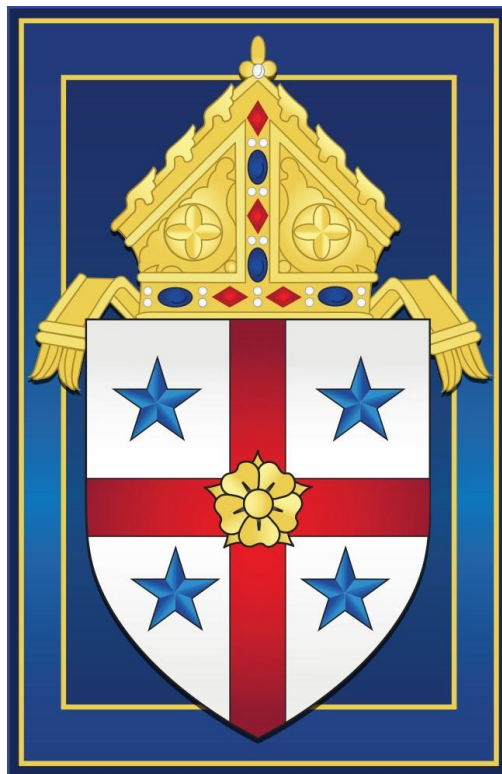


# DIOCESE OF SAVANNAH

Technology Curriculum

Kindergarten – Grade 8

2022



## Acknowledgments

The Diocese of Savannah Office of Catholic Schools thanks the members of the 2021-2022 Technology Curriculum Committee for their time, dedication and commitment to the process of developing a well-rounded rigorous curriculum steeped in Catholic knowledge and tradition.

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“The digital world can be an environment rich in humanity; a network not of wires but of people”, Pope Francis stated in his 2014 message to the 48th World Communications Day. Technology, while not only its own subject, acts as an extension to the learning environment as it is commonly used as a tool in all subjects in education.

Therefore, based on the 2016 International Society for Technology in Education (ISTE) Standards for Students the curriculum recognizes five big areas to approach the students when they are in the process of learning technology: digital citizenship, knowledge constructor, innovative designer, creative communicator, and global collaborator. In addition, the curriculum provides resources to support and help teachers to maximize the potential of their students in the classroom and provide a differentiated learning experience. This curriculum is based on teaching students from basic mouse and keyboarding skills to complex computer language, such as code and software programming. The objective is to immerse the students into the world of technology with responsibility and conscience according to their age and education level.

Technology should be a safe tool that allows students to express themselves and share with others their Catholic beliefs implicitly and explicitly

The program is divided into sections:

- Student Information – characteristics of a student in a particular grade level and skills they are expected to acquire in the current year to assure they will enter the following year’s classroom with confidence, ready for success.
- Co-Requisite Standards – essential moral and life-skills benchmarks in the education of students taught through the lens of Catholicism.
  - Catholic Identity - divided into common grade level principles based upon church documents and The Cardinal Newman Society Catholic Curriculum Standards (highlighted in purple)
  - Critical Thinking
  - Communication
  - Collaboration
  - Creativity
- Diocese of Savannah Academic Standards of Excellence – derived from national standards and the International Society for Technology in Education (ISTE) standards.
- Resources – grade level, remedial, and enrichment ideas and suggestions

## **READING THE STANDARD REFERENCES:**

### Co-Requisite Standards:

#### **K-2.TECH.CI**

K-2: Grade band  
TECH: Technology  
CI: Catholic Identity

### Diocese of Savannah Academic Standards

#### **K-2.TECH.1**

K-2: Grade band  
TECH: Technology  
1: Standard number

# KINDERGARTEN - 2<sup>ND</sup> GRADE TECHNOLOGY CURRICULUM

KINDERGARTEN – 2 <sup>ND</sup> GRADE BAND NARRATIVE	
<p>Technology curricula in kindergarten through 2<sup>nd</sup> grade is geared to introducing learners to the basics of operations and concepts, terminology, mouse and keyboarding skills, digital citizenship, programs and tools, and computer programming.</p> <p>Keeping in mind the characteristics of the learner, the curriculum concepts are designed to build a solid foundation for students to become proficient in the use of technology.</p>	
CHARACTERISTICS OF THE LEARNER	Content Area Skills/ Concepts
<ul style="list-style-type: none"> <li>❖ Developing fine motor skills</li> <li>❖ Curious</li> <li>❖ Excited to learn new things</li> <li>❖ Learn by rote, patterns, repetition, songs</li> <li>❖ Able to follow 1-2 step directions</li> <li>❖ Easily displays emotions</li> <li>❖ Learning to regulate emotions</li> <li>❖ Learning patience in a big setting</li> <li>❖ Expects immediate gratification</li> <li>❖ Love to share information (not always pertinent)</li> </ul>	<ul style="list-style-type: none"> <li>❖ Mouse skills (click &amp; drag, scrolling</li> <li>❖ Terminology (computer, mouse, monitor, keyboard, etc.)</li> <li>❖ Log-in independently</li> <li>❖ Developing keyboarding skills</li> <li>❖ Digital citizenship &amp; ethical use</li> <li>❖ Basic use of programs</li> <li>❖ Basic understanding of computer programming</li> </ul>
CO-REQUISITE STANDARDS	
CATHOLIC IDENTITY PRINCIPLE STANDARDS	
<p><b>Principle:</b> Involves the integral formation of the whole person, body, mind, and spirit, in light of his or her ultimate end and the good of society</p>	
<p><b>K-2.TECH.CI</b> SWBAT recognize Christian responsibility and respect through the care and use of materials and the environment.</p>	
<p><b>K-2.TECH.CI</b> SWBAT recognize the impact of their digital footprint.</p>	
<p><b>Principle:</b> Seeks to know and understand objective reality, including transcendent Truth, which is knowable by reason and faith and finds its origin, unity, and end in God</p>	
<p><b>K-2.TECH.CI</b> SWBAT understand that not everything online is true.</p>	
<p><b>Principle:</b> Promotes human virtues and the dignity of the human person, as created in the image and likeness of God and modeled on the person of Jesus Christ</p>	
<p><b>K-2.TECH.CI</b> SWBAT demonstrate catholic values when interacting with others when using technology.</p>	
<p><b>Principle:</b> Encourages a synthesis of faith, life, and culture</p>	
<p><b>K-2.TECH.CI</b> SWBAT recognize their productions are a reflection of their faith.</p>	
<p><b>Principle:</b> Develops a Catholic worldview and enables a deeper incorporation of the student into the heart of the Catholic Church</p>	
<p><b>K-2.TECH.CI</b> SWBAT explain how technology can develop catholic values and faith while deepening the connection to God and the community.</p>	

<b>K-2.TECH.CI</b> SWBAT identify the use of technology as a tool to evangelize their faith. (note: prayers, apps, podcasts, etc)
<b>CRITICAL THINKING SKILLS</b>
<b>K-2.TECH.CT</b> SWBAT employ critical thinking skills to solve problems and make decisions.
<b>K-2.TECH.CT</b> SWBAT ask questions to become more productive and engaged in their learning process.
<b>K-2.TECH.CT</b> SWBAT use critical thinking skills such as analyzing, prioritizing, categorizing, evaluating, and comparing to make decisions and solve a variety of problems in real-life situations.
<b>K-2.TECH.CT</b> SWBAT synthesize information in order to capture the essence of an idea, object, or activity in the online sphere.
<b>COMMUNICATION</b>
<b>K-2.TECH.CM</b> SWBAT understand that what they say and write is a reflection upon their character.
<b>K-2.TECH.CM</b> SWBAT recognize the need for prayer and forgiveness in resolving interpersonal conflicts.
<b>K-2.TECH.CM</b> SWBAT speak appropriately to communicate ideas and information to different audiences for different purposes.
<b>K-2.TECH.CM</b> SWBAT demonstrate an understanding of Catholic principles foundational to all relationships.
<b>COLLABORATION</b>
<b>K-2.TECH.CL</b> SWBAT demonstrate that working collaboratively reflects our response to God's call to love and care for others.
<b>K-2.TECH.CL</b> SWBAT recognize the feelings and perspectives of others by following the teachings of Jesus.
<b>K-2.TECH.CL</b> SWBAT contribute to project teams to produce original works or solve problems.
<b>K-2.TECH.CL</b> SWBAT recognize that decisions should follow Catholic teachings, especially social teaching
<b>K-2.TECH.CL</b> SWBAT recognize that service is an integral part of our Catholic Faith.
<b>CREATIVITY</b>
<b>K-2.TECH.CR</b> SWBAT expand their understanding of existing knowledge by making connections with new knowledge, skills, and experiences. .
<b>K-2.TECH.CR</b> SWBAT generate, combine, categorize and develop ideas without pre-judgement.
<b>K-2.TECH.CR</b> SWBAT explore an idea from multiple points of view.
<b>K-2.TECH.CR</b> SWBAT demonstrate creative thinking, construct knowledge and develop innovative products and processes using technology.

ACADEMIC STANDARDS OR STANDARDS SOURCE	
Empowered Learners	
Students leverage technology to take an active role in choosing, achieving and demonstrating competency in their learning goals, informed by the learning sciences.	
ISTE Standards	Diocesan Standards
<p><b>K-2.TECH.EL.1</b> SWBAT articulate and set personal learning goals, develop strategies leveraging technology to achieve them and reflect on the learning process itself to improve learning outcomes.</p>	<ol style="list-style-type: none"> <li>1. Students will work with teachers to set learning goals using technology.</li> <li>2. Students will reflect on the differences in using technology and not using technology.</li> </ol>
<p><b>K-2.TECH.EL.2</b> SWBAT build networks and customize their learning environments in ways that support the learning process.</p>	<ol style="list-style-type: none"> <li>1. Students will build learning networks by sharing original stories.</li> </ol>
<p><b>K-2.TECH.EL.3</b> SWBAT use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways.</p>	<ol style="list-style-type: none"> <li>1. Students will be polite as they share with each other in group projects.</li> </ol>
<p><b>K-2.TECH.EL.4</b> SWBAT 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>	<ol style="list-style-type: none"> <li>1. Students will: <ul style="list-style-type: none"> <li>• Turn the computer on and log in.</li> <li>• Get online.</li> <li>• Take care of the technology equipment at school.</li> <li>• Click, drag, use the mouse or touchscreen, and find specific keys on the keyboard.</li> <li>• Name and save a document.</li> <li>• Adjust the volume on their computer.</li> </ul> </li> <li>2. Students will: <ul style="list-style-type: none"> <li>• Open a web browser and use a website.</li> <li>• Change a picture or font style and color.</li> <li>• Use a program or app to create a work of art.</li> <li>• Record their voices into a presentation.</li> </ul> </li> <li>3. Students will: <ul style="list-style-type: none"> <li>• Adjust the volume on their computer.</li> <li>• Plug headphones into the computer.</li> <li>• Quit and restart a program that is not working.</li> <li>• Refresh a website.</li> </ul> </li> <li>4. Students will tell differences between computers, laptops, iPads, and software programs and apps.</li> </ol>

<b>Digital Citizen</b>	
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.	
<b>ISTE Standards</b>	<b>Diocesan Objectives</b>
<b>K-2.TECH.DC.1</b> SWBAT cultivate and manage their digital identity and reputation and are aware of the permanence of their actions in the digital world.	<ol style="list-style-type: none"> <li>1. Students will be polite as they share with each other in group projects.</li> <li>2. Students will: <ul style="list-style-type: none"> <li>• Identify appropriate online manners.</li> <li>• Talk about cyber bullying.</li> <li>• Work with their teachers and class on a learning management system (LMS).</li> </ul> </li> <li>3. Students will receive permission from a parent or teacher before sharing any information online.</li> </ol>
<b>K-2.TECH.DC.2</b> SWBAT engage in positive, safe, legal and ethical behavior when using technology, including social interactions online or when using networked devices.	<ol style="list-style-type: none"> <li>1. Students will identify the types of information that should and should not be shared online.</li> <li>2. Students will notify an adult if they experience any inappropriate material online.</li> <li>3. Students will protect their passwords from others.</li> <li>4. Students will place appropriate pictures online.</li> <li>5. Students will work with others to promote being a good digital citizen.</li> </ol>
<b>K-2.TECH.DC.3</b> SWBAT demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property.	<ol style="list-style-type: none"> <li>1. Students will explain the differences between their work and the work of other people.</li> </ol>
<b>K-2.TECH.DC.4</b> SWBAT manage their personal data to maintain digital privacy and security and are aware of data-collection technology used to track their navigation online.	<ol style="list-style-type: none"> <li>1. Students will receive permission from a parent or teacher before sharing any information online.</li> </ol>
<b>Knowledge Constructor</b>	
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.	
<b>ISTE Standards</b>	<b>Diocesan Objectives</b>
<b>K-2.TECH.KC.1</b> SWBAT plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuits.	<ol style="list-style-type: none"> <li>1. Students will create a report or presentation from information found using technology.</li> <li>2. Students will identify the components of a spreadsheet.</li> <li>3. Students will locate information on the Internet using approved search engines and bookmark specific websites.</li> </ol>
<b>K-2.TECH.KC.2</b> SWBAT evaluate the accuracy, perspective, credibility and relevance of information, media, data or other resources.	<ol style="list-style-type: none"> <li>1. Students will research topics, answer web-quests, create digital stories, etc.</li> <li>2. Students will record their sources when presenting research.</li> </ol>

<p><b>K-2.TECH.KC.3</b>  SWBAT curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.</p>	<ol style="list-style-type: none"> <li>1. Students will understand not everything on the Internet is true.</li> <li>2. Students will gather multiple sources on one topic.</li> <li>3. Students will use spreadsheets, charts or graphs to analyze and present data.</li> </ol>
<p><b>K-2.TECH.KC.4</b>  SWBAT build knowledge by actively exploring real-world issues and problems, developing ideas and theories and pursuing answers and solutions.</p>	<ol style="list-style-type: none"> <li>1. Students will use technology to find multiple solutions to a problem.</li> <li>2. Students will use coding.</li> </ol>
<p><b>Innovative Designer</b></p>	
<p>Students use a variety of technologies within a design process to identify and solve problems by creating new, useful or imaginative solutions.</p>	
<p><b>ISTE Standards</b></p>	<p><b>Diocesan Objectives</b></p>
<p><b>K-2.TECH.ID.1</b>  SWBAT know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems.</p>	<ol style="list-style-type: none"> <li>1. Students will apply information on a particular topic to develop and design something new.</li> <li>2. Students will identify problems in their world or topics studied in social studies or science.</li> <li>3. Students will use online resources to locate information on a problem.</li> <li>4. Students will use presentation tools to explain a problem and potential solutions.</li> <li>5. Students will construct models or create code to solve a problem.</li> <li>6. Students will use online interactive models or simulations.</li> </ol>
<p><b>K-2.TECH.ID.2</b>  SWBAT select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.</p>	<ol style="list-style-type: none"> <li>1. Students will understand project constraints and criteria.</li> </ol>
<p><b>K-2.TECH.ID.3</b>  SWBAT develop, test and refine prototypes as part of a cyclical design process.</p>	<ol style="list-style-type: none"> <li>1. Students will use a variety of technology tools to create and develop projects.</li> <li>2. Students will use online interactive models or simulations to investigate the consequences of alternative solutions.</li> </ol>
<p><b>K-2.TECH.ID.4</b>  SWBAT exhibit a tolerance for ambiguity, perseverance and the capacity to work with open-ended problems.</p>	<ol style="list-style-type: none"> <li>1. Students will use technology and problem solving skills to find solutions to a problem.</li> </ol>



<b>Computational Thinker</b>	
Students develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test solutions.	
ISTE Standards	Diocesan Objectives
<b>K-2.TECH.CT.1</b> SWBAT formulate problem definitions suited for technology-assisted methods such as data analysis, abstract models and algorithmic thinking in exploring and finding solutions	<ol style="list-style-type: none"> <li>1. Students will identify school, community, and world problems or topics studied in social studies or science.</li> <li>2. Students will use online resources to locate information on the problem.</li> </ol>
<b>K-2.TECH.CT.2</b> SWBAT 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.	<ol style="list-style-type: none"> <li>1. Students will use tools such as timelines and graphs to predict future consequences of historical or present events.</li> <li>2. Students will compile the information they gather into a written, graphic, and/or oral presentation that includes identification of their sources.</li> <li>3. Students will use spreadsheets, charts, or graphs to analyze and present data and to recommend a solution.</li> </ol>
<b>K-2.TECH.CT.3</b> SWBAT break problems into component parts, extract key information, and develop descriptive models to understand complex systems or facilitate problem-solving.	<ol style="list-style-type: none"> <li>1. Students will use presentation tools to persuade others to implement a solution.</li> <li>2. Students will construct models or create code to solve a problem.</li> <li>3. Students will use online interactive models or simulations to investigate the consequences of alternative solutions.</li> </ol>
<b>K-2.TECH.CT.4</b> SWBAT understand how automation works and use algorithmic thinking to develop a sequence of steps to create and test automated solutions.	<ol style="list-style-type: none"> <li>1. Students will practice sequencing of events/steps of a process to determine the best solution.</li> </ol>
<b>Creative Communicator</b>	
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.	
ISTE Standards	Diocesan Objectives
<b>K-2.TECH.CC.1</b> SWBAT choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.	<ol style="list-style-type: none"> <li>1. Students will begin to distinguish between sources that present factual information and those that present opinions or untrue information.</li> <li>2. Students will open a web browser and use a website.</li> <li>3. Students will change a picture or font style and color.</li> <li>4. Students will write using word processing tools.</li> <li>5. Students will organize data using spreadsheets.</li> <li>6. Students will use a program to create a work of art.</li> <li>7. Students will record their voices into a presentation.</li> </ol>
<b>K-2.TECH.CC.2</b> SWBAT create original works or responsibly repurpose or remix digital resources into new creations.	<ol style="list-style-type: none"> <li>1. Students will apply information on a particular topic to develop and design something new giving credit to others' ideas.</li> </ol>

	<ol style="list-style-type: none"> <li>Students will use various digital tools and applications such as: voice and sound recording tools; word processing, publishing, and presentation tools; video recording and editing tools; image editing tools; graphics and 3D design tools; and coding software to create original works.</li> </ol>
<p><b>K-2.TECH.CC.3</b> SWBAT communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.</p>	<ol style="list-style-type: none"> <li>Students will use interactive models or simulations to explore systems and issues that they study in science, math, and social studies.</li> <li>Students will use various digital media (including live or recorded video or audio; published documents, and multimedia presentations) to communicate information and ideas.</li> </ol>
<p><b>K-2.TECH.CC.4</b> SWBAT publish or present content that customizes the message and medium for their intended audience.</p>	<ol style="list-style-type: none"> <li>Students will use digital tools, applications and video communication tools to work collaboratively to tailor the message of their presentation to the audience (for example, parents, teachers, other students).</li> <li>Students will use various digital media (including live or recorded video or audio; published documents, and multimedia presentations) to communicate information and ideas.</li> </ol>
<b>Global Collaborator</b>	
Students use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally.	
<b>ISTE Standards</b>	<b>Diocesan Objectives</b>
<p><b>K-2.TECH.GC.1</b> SWBAT 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>	<ol style="list-style-type: none"> <li>Students will use digital tools and applications to work together to write, add graphics and share stories.</li> <li>Students will use digital communication tools to connect with others around the world.</li> </ol>
<p><b>K-2.TECH.GC.2</b> SWBAT use collaborative technologies to work with others, including peers, experts or community members, to examine issues and problems from multiple viewpoints.</p>	<ol style="list-style-type: none"> <li>Students will use collaborative technologies to work with others, including peers, experts or community members, to examine issues and problems from multiple viewpoints.</li> <li>Students will use digital tools and applications to interact with other students or experts.</li> </ol>
<p><b>K-2.TECH.GC.3</b> SWBAT contribute constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal.</p>	<ol style="list-style-type: none"> <li>Students will use digital communication tools to connect with students from other cultures.</li> <li>Students will use applications such as brainstorming tools, graphic organizers, tables or timelines to plan action steps that could solve problems.</li> </ol>
<p><b>K-2.TECH.GC.4</b> SWBAT explore local and global issues and use collaborative technologies to work with others to investigate solutions.</p>	<ol style="list-style-type: none"> <li>Students will use digital tools and applications or video communication tools to work collaboratively and interact with other students or experts.</li> </ol>

	<ol style="list-style-type: none"><li>2. Students will use digital communication tools to connect with students from other cultures.</li><li>3. Student will use presentation tools to persuade others to implement a solution.</li><li>4. Students will construct models or create code to solve a problem.</li><li>5. Students will use online interactive models or simulations to investigate the consequences of alternative solutions.</li></ol>
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## 3<sup>RD</sup> – 5<sup>TH</sup> GRADE TECHNOLOGY CURRICULUM

3 <sup>RD</sup> – 5 <sup>TH</sup> GRADE BAND NARRATIVE	
<p>Technology curricula in 3rd- 5th grade builds on the skills previously taught in K-2nd grade. Learners will improve, develop, and gain knowledge in operations and concepts, mouse and keyboarding techniques, digital citizenship, programs and tools, and computer programming.</p>	
CHARACTERISTICS OF THE LEARNER	CONTENT AREA SKILLS/CONCEPTS
<ul style="list-style-type: none"> <li>● Able to follow multi-step directions</li> <li>● Excited to learn new things</li> <li>● More independence</li> <li>● Varied levels of abilities</li> <li>● Displays more specific interests</li> <li>● Eager to share</li> <li>● Inquisitive</li> <li>● Social interactions</li> <li>● Expects immediate gratification</li> <li>● Makes connections using prior knowledge</li> </ul>	<ul style="list-style-type: none"> <li>● Proficient in keyboarding skills</li> <li>● Terminology (ports, input/output, etc.)</li> <li>● Digital citizenship &amp; ethical use</li> <li>● Troubleshooting</li> <li>● Proficiently create docs, slides, sheets</li> <li>● Developing understanding of computer programming</li> <li>● File management &amp; storage types</li> </ul>
CO-REQUISITE STANDARDS	
CATHOLIC IDENTITY PRINCIPLE STANDARDS	
<p><b>Principle:</b> Involves the integral formation of the whole person, body, mind, and spirit, in light of his or her ultimate end and the good of society</p>	
<p><b>3-5.TECH.CI</b> SWBAT recognize Christian responsibility and respect through the care and use of materials and the environment.</p>	
<p><b>3-5.TECH.CI</b> SWBAT recognize the impact of their digital footprint.</p>	
<p><b>Principle:</b> Seeks to know and understand objective reality, including transcendent Truth, which is knowable by reason and faith and finds its origin, unity, and end in God</p>	
<p><b>3-5.TECH.CI</b> SWBAT understand that not everything online is true.</p>	
<p><b>Principle:</b> Promotes human virtues and the dignity of the human person, as created in the image and likeness of God and modeled on the person of Jesus Christ</p>	
<p><b>3-5.TECH.CI</b> SWBAT demonstrate catholic values when interacting with others when using technology.</p>	
<p><b>Principle:</b> Encourages a synthesis of faith, life, and culture</p>	
<p><b>3-5.TECH.CI</b> SWBAT recognize their productions are a reflection of their faith.</p>	
<p><b>Principle:</b> Develops a Catholic worldview and enables a deeper incorporation of the student into the heart of the Catholic Church</p>	
<p><b>3-5.TECH.CI</b> SWBAT explain how technology can develop catholic values and faith while deepening the connection to God and the community.</p>	

<b>3-5.TECH.CI</b> SWBAT identify the use of technology as a tool to evangelize their faith. (note: prayers, apps, podcasts, etc)
<b>CRITICAL THINKING SKILLS</b>
<b>3-5.TECH.CT</b> SWBAT employ critical thinking skills to solve problems and make decisions.
<b>3-5.TECH.CT</b> SWBAT ask questions to become more productive and engaged in their learning process.
<b>3-5.TECH.CT</b> SWBAT use critical thinking skills such as analyzing, prioritizing, categorizing, evaluating, and comparing to make decisions and solve a variety of problems in real-life situations.
<b>3-5.TECH.CT</b> SWBAT synthesize information in order to capture the essence of an idea, object, or activity in the online sphere.
<b>COMMUNICATION</b>
<b>3-5.TECH.CM</b> SWBAT understand that what they say and write is a reflection upon their character.
<b>3-5.TECH.CT</b> SWBAT recognize the need for prayer and forgiveness in resolving interpersonal conflicts.
<b>3-5.TECH.CT</b> SWBAT speak appropriately to communicate ideas and information to different audiences for different purposes.
<b>3-5.TECH.CT</b> SWBAT demonstrate an understanding of Catholic principles foundational to all relationships.
<b>COLLABORATION</b>
<b>3-5.TECH.CL</b> SWBAT demonstrate that working collaboratively reflects our response to God's call to love and care for others.
<b>3-5.TECH.CL</b> SWBAT recognize the feelings and perspectives of others by following the teachings of Jesus.
<b>3-5.TECH.CL</b> SWBAT contribute to project teams to produce original works or solve problems.
<b>3-5.TECH.CL</b> SWBAT recognize that decisions should follow Catholic teachings, especially social teaching
<b>3-5.TECH.CL</b> SWBAT recognize that service is an integral part of our Catholic Faith.
<b>CREATIVITY</b>
<b>3-5.TECH.CR</b> SWBAT expand their understanding of existing knowledge by making connections with new knowledge, skills, and experiences. .
<b>3-5.TECH.CR</b> SWBAT generate, combine, categorize and develop ideas without pre-judgement.
<b>3-5.TECH.CR</b> SWBAT explore an idea from multiple points of view.
<b>3-5.TECH.CR</b> SWBAT demonstrate creative thinking, construct knowledge and develop innovative products and processes using technology.

**ACADEMIC STANDARDS OR STANDARDS SOURCE**

**Empowered Learners**

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

<b>ISTE Standards</b>	<b>Diocesan objectives</b>
<p><b>3-5.TECH.EL1</b> SWBAT articulate and set personal learning goals, develop strategies leveraging technology to achieve them and reflect on the learning process itself to improve learning outcomes.</p>	<ol style="list-style-type: none"> <li>1. Students will articulate what they would like to learn via a survey or conversation with their teacher.</li> <li>2. Students will set personal learning goals and leverage technology to meet those goals across all classes.</li> <li>3. Students will reflect on their own learning with technology tools and determine if the tools they chose for a task were the best choices.</li> </ol>
<p><b>3-5.TECH.EL2</b> SWBAT build networks and customize their learning environments in ways that support the learning process.</p>	<ol style="list-style-type: none"> <li>1. Students will use digital tools and applications or video communication tools to work collaboratively and interact with other students or experts.</li> </ol>
<p><b>3-5.TECH.EL3</b> SWBAT use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways.</p>	<ol style="list-style-type: none"> <li>1. Students will seek feedback from teachers and other students to improve their work as they select tools to demonstrate their learning (e.g. choosing video recording over audio recording; choosing a publishing tool over a word processing tool, etc. through Google Classroom, shared Google documents, electronic comments, etc.)</li> </ol>
<p><b>3-5.TECH.EL4</b> SWBAT 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>	<ol style="list-style-type: none"> <li>1. Students will: <ul style="list-style-type: none"> <li>● Handle computers and digital devices correctly and demonstrate the proper way to turn devices on and off.</li> <li>● Use mouse, touch screen, keyboard and/or audio input devices.</li> <li>● Select available printers and send files to print.</li> <li>● Use proper terminology for computer and digital device parts and operations.</li> <li>● Identify the functions of various parts of the computer.</li> <li>● Log on to and navigate to various locations on the Internet.</li> <li>● Open and save files in designated locations on the computer, network, online or external storage.</li> </ul> </li> <li>2. Students will recognize that computers and digital devices are controlled by programming code. Create computer code using visual languages (like Blockly or Scratch).</li> <li>3. Students will: <ul style="list-style-type: none"> <li>● Use correct keyboarding technique to touch type 15 wpm (by the end of 5th grade)</li> <li>● Use features of word processing and/or publishing software to type, edit, and format a document (for example manipulate font size)</li> </ul> </li> </ol>

	<p>and color of text, insert photos/clipart, use spell check, add bulleted and numbered text, cut, copy/paste text and graphics, use borders, shading and layout...)</p> <ul style="list-style-type: none"> <li>● Use features of spreadsheet software (formulas, charts, graphs, cell formatting, cell merging, cell locking, cut/copy/paste with single cells or ranges of cells, custom names for columns, rows and column groups...) to enter and organize data, calculate values, and generate graphs.</li> <li>● Use features of presentation software or online tools to create presentations.</li> <li>● Use digital cameras, graphics software, and image or video editing software to create and modify images or videos.</li> <li>● Use sound recording and editing software to capture and edit audio.</li> <li>● Use software and interactive websites to practice skills in other content areas (spelling, math, etc.)</li> <li>● Solve common problems (like a frozen application).</li> <li>● Compare and contrast any new devices or applications to those they have already used.</li> </ul>
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**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.

<b>ISTE Standards</b>	<b>Diocesan Objectives</b>
<p><b>3-5.TECH.DI.1</b> SWBAT cultivate and manage their digital identity and reputation and are aware of the permanence of their actions in the digital world.</p>	<ol style="list-style-type: none"> <li>1. Students will use technology as a positive representation of themselves by creating a positive online presence and digital footprint utilizing digital portfolios.</li> <li>2. Students understand the public and permanent nature of online communication and posting.</li> </ol>
<p><b>3-5.TECH.DI.2</b> SWBAT engage in positive, safe, legal and ethical behavior when using technology, including social interactions online or when using networked devices.</p>	<ol style="list-style-type: none"> <li>1. Students will identify the types of information that should and should not be shared online.</li> <li>2. Students will create safe usernames and passwords.</li> <li>3. Students will practice appropriate responses to inappropriate content or messages.</li> <li>4. Students will use digital tools to communicate rules and guidelines for safe and respectful online behavior.</li> <li>5. Students will identify examples and possible consequences of cyberbullying and demonstrate appropriate responses.</li> <li>6. Students will recognize and commit to follow the provisions of the school’s Acceptable Use Agreement.</li> </ol>

<p><b>3-5.TECH.DI.3</b> SWBAT demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property.</p>	<ol style="list-style-type: none"> <li>1. Students will explain how copyright rules apply to online content; when and how students are allowed to use words and images they find online.</li> </ol>
<p><b>3-5.TECH.DI.4</b> SWBAT manage their personal data to maintain digital privacy and security and are aware of data-collection technology used to track their navigation online.</p>	<ol style="list-style-type: none"> <li>1. Students will practice positive, legal and ethical online behaviors.</li> <li>2. Students will protect their own privacy in the course of conducting research as well as adhering to copyright protections and respecting intellectual property.</li> </ol>
<p><b>Knowledge Constructor</b></p>	
<p>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.</p>	
<p><b>ISTE Standards</b></p>	<p><b>Diocesan Objectives</b></p>
<p><b>3-5.TECH.KC.1</b> SWBAT plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuits.</p>	<ol style="list-style-type: none"> <li>1. Students will determine what information they need to answer a research question, identify the sources where they might find that information, and select appropriate keywords or search terms to locate the information.</li> <li>2. Students will locate information from digital sources (including linked websites, online library databases, web search engines, and surveys). They will select and record relevant information from their sources by tagging or taking notes. Students will record their sources to cite when presenting their results.</li> </ol>
<p><b>3-5.TECH.KC.2</b> SWBAT evaluate the accuracy, perspective, credibility and relevance of information, media, data or other resources.</p>	<ol style="list-style-type: none"> <li>1. Students will distinguish between sources that present factual information and those that present opinions or even deliberate hoaxes</li> <li>2. Students will record their sources to cite when presenting their results.</li> </ol>
<p><b>3-5.TECH.KC.3</b> SWBAT curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.</p>	<ol style="list-style-type: none"> <li>1. Students will distinguish between sources that present factual information and those that present opinions or even deliberate hoaxes.</li> <li>2. Students will synthesize information to create new meaning for themselves and others.</li> <li>3. Students will use online interviews, surveys or other digital tools to gather data. Then they will use spreadsheets, charts or graphs to analyze and present data and recommend solutions.</li> </ol>
<p><b>3-5.TECH.KC.4</b> SWBAT build knowledge by actively exploring real-world issues and problems, developing ideas and theories and pursuing answers and solutions.</p>	<ol style="list-style-type: none"> <li>1. Students will compile the information they gather into a written, graphic, and/or oral presentation that includes identification of their sources.</li> </ol>



<b>Innovative Designer</b>	
Students use a variety of technologies within a design process to identify and solve problems by creating new, useful or imaginative solutions.	
ISTE Standards	Diocesan Objectives
<p><b>3-5.TECH.ID.1</b> SWBAT know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems.</p>	<ol style="list-style-type: none"> <li>1. Students will apply information on a particular topic to develop and design something new (for example, apply information on planets in the solar system to create a description of a newly discovered planet).</li> <li>2. Students will identify school, community and world problems related to technology (e.g. disposal of e-waste) or topics studied in social studies or science.</li> <li>3. Students will use online resources to locate information on the problem.</li> <li>4. Students will use presentation tools to persuade others to implement the solution. For engineering design, programming or robotics, they may construct models or create code to solve a problem. Students may also use online interactive models or simulations to investigate the consequences of alternative solutions.</li> </ol>
<p><b>3-5.TECH.ID.2</b> SWBAT select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.</p>	<ol style="list-style-type: none"> <li>1. Students will use applications such as brainstorming tools, graphic organizers, tables or timelines to plan action steps that could solve the problem.</li> </ol>
<p><b>3-5.TECH.ID.3</b> SWBAT develop, test and refine prototypes as part of a cyclical design process.</p>	<ol style="list-style-type: none"> <li>1. Students will construct models or create code to solve a problem in engineering design, programming or robotics. Students may also use online interactive models or simulations to investigate the consequences of alternative solutions.</li> </ol>
<p><b>3-5.TECH.ID.4</b> SWBAT exhibit a tolerance for ambiguity, perseverance and the capacity to work with open-ended problems.</p>	<ol style="list-style-type: none"> <li>1. Students will understand that real world problems may have multiple solutions, each that can be addressed in multiple ways.</li> </ol>
<b>Computational Thinker</b>	
Students develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test solutions.	
ISTE Standards	Diocesan Objectives
<p><b>3-5.TECH.CT.1</b> SWBAT formulate problem definitions suited for technology-assisted methods such as data analysis, abstract models and algorithmic thinking in exploring and finding solutions</p>	<ol style="list-style-type: none"> <li>1. Students will identify school, community, and world problems related to technology (e.g. disposal of e-waste) or topics studied in social studies or science. They will use online resources to locate information on the problem. (Sweet Search, a search engine for students has many links for e-waste problems regarding schools and local and global communities.)</li> </ol>

<p><b>3-5.TECH.CT.2</b> SWBAT 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>	<ol style="list-style-type: none"> <li>1. Students will use tools such as timelines and graphs to predict future consequences of historical or present events (such as changes in climate or changes caused by new technology). (for example: Dipity, myHistro, Read Write Think Interactive Timeline, TimeToast.)</li> <li>2. Students will compile the information they gather into a written, graphic (for example Pic Collage, Label Box, Phonto, and Skitch), and/or oral presentation that includes identification of their sources.</li> <li>3. Students will use online interviews, surveys (for example Flisti, Mentimeter, Google Forms and Docs and Survey Monkey) or other digital tools to gather data. Then they will use spreadsheets, charts, or graphs to analyze and present data and to recommend a solution.</li> </ol>
<p><b>3-5.TECH.CT.3</b> SWBAT break problems into component parts, extract key information, and develop descriptive models to understand complex systems or facilitate problem-solving.</p>	<ol style="list-style-type: none"> <li>1. Students will use presentation tools to persuade others to implement the solution. For engineering design, programming or robotics, they may construct models or create code to solve a problem. Students may also use online interactive models or simulations to investigate the consequences of alternative solutions.</li> </ol>
<p><b>3-5.TECH.CT.4</b> SWBAT understand how automation works and use algorithmic thinking to develop a sequence of steps to create and test automated solutions.</p>	<ol style="list-style-type: none"> <li>1. Students will practice sequencing of events/steps of a process to determine the best “automated solution.”</li> <li>2. Students will write code that produces algorithms as step-by-step directions.</li> </ol>

**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.

<b>ISTE Standards</b>	<b>Diocesan Objectives</b>
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<p><b>3-5.TECH.CC.1</b> SWBAT choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.</p>	<ol style="list-style-type: none"> <li>1. Students will distinguish between sources that present factual information and those that present opinions or even deliberate hoaxes.</li> </ol>
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<p><b>3-5.TECH.CC.2</b> SWBAT create original works or responsibly repurpose or remix digital resources into new creations.</p>	<ol style="list-style-type: none"> <li>1. Students will apply information on a particular topic to develop and design something new (for example, apply information on planets in the solar system to create a description of a newly discovered planet).</li> <li>2. Students will use various digital tools and applications such as: voice and sound recording tools; word processing, publishing, and presentation tools; video recording and editing tools; image editing tools; graphics and 3D design tools; and coding software to create original works such as: podcasts, interactive presentations, posters, brochures, videos, animations, games, or</li> </ol>
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	fabricated objects. (for example: Little Bird Easy to use for reports, journals, creative writing, podcasts, commercials, history timelines, science experiments, drawing, ebooks, independent learning, collaborative learning)
<b>3-5.TECH.CC.3</b> SWBAT communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.	<ol style="list-style-type: none"> <li>1. Students will use interactive models or simulations to explore systems and issues that they study in science, math, and social studies (such as the functions of body organs, the operation of electrical circuits, or the experiences of runaway slaves in the Underground Railroad). Example: Mission US: Flight to Freedom</li> <li>2. Students will use various digital media (including live or recorded video or audio; published documents, and multimedia presentations) to communicate information and ideas.</li> </ol>
<b>3-5.TECH.CC.4</b> SWBAT publish or present content that customizes the message and medium for their intended audience.	<ol style="list-style-type: none"> <li>1. Students will use interactive models or simulations to explore systems and issues that they study in science, math, and social studies (such as the functions of body organs, the operation of electrical circuits, or the experiences of runaway slaves in the Underground Railroad). Example: Mission US: Flight to Freedom</li> <li>2. Students will use various digital media (including live or recorded video or audio; published documents, and multimedia presentations) to communicate information and ideas.</li> </ol>
<b>Global Collaborator</b>	
Students use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally.	
<b>ISTE Standards</b>	<b>Diocesan Objectives</b>
<b>3-5.TECH.GC.1</b> SWBAT 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.	<ol style="list-style-type: none"> <li>1. Students will use digital tools and applications or video communication tools to work collaboratively and interact with other students or experts.</li> <li>2. Students will use digital communication tools to connect with students from other cultures.</li> </ol>
<b>3-5.TECH.GC.2</b> SWBAT use collaborative technologies to work with others, including peers, experts or community members, to examine issues and problems from multiple viewpoints.	<ol style="list-style-type: none"> <li>1. Students will use digital tools and applications or video communication tools to work collaboratively and interact with other students or experts.</li> </ol>

<p><b>3-5.TECH.GC.3</b> WBAT contribute constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal.</p>	<ol style="list-style-type: none"><li>1. Students will use digital communication tools to connect with students from other cultures.</li><li>2. Students will use applications such as brainstorming tools, graphic organizers, tables or timelines to plan action steps that could solve the problem.</li></ol>
<p><b>3-5.TECH.GC.4</b> SWBAT explore local and global issues and use collaborative technologies to work with others to investigate solutions.</p>	<ol style="list-style-type: none"><li>1. Students will use digital tools and applications or video communication tools to work collaboratively and interact with other students or experts.</li><li>2. Students will use digital communication tools to connect with students from other cultures.</li><li>3. Students will use presentation tools to persuade others to implement the solution. For engineering design, programming or robotics, they may construct models or create code to solve a problem. Students may also use online interactive models or simulations to investigate the consequences of alternative solutions.</li></ol>

## 6<sup>th</sup> – 8<sup>th</sup> GRADE TECHNOLOGY CURRICULUM

6 <sup>th</sup> – 8 <sup>th</sup> GRADE BAND NARRATIVE	
<p>Technology curricula in 6th- 8th grade focuses on the application of the skills previously taught in K-5th grade. Learners will deepen their understanding and knowledge of operations and concepts, keyboarding techniques, digital citizenship, programs and tools, and computer programming.</p>	
CHARACTERISTICS OF THE LEARNER	CONTENT AREA SKILLS/CONCEPTS
<ul style="list-style-type: none"> <li>● Self- conscious</li> <li>● Varied levels of maturity</li> <li>● Egocentric</li> <li>● Easily influenced by peers</li> <li>● Aware of real-world issues</li> <li>● Tech savvy</li> <li>● Expects immediate gratification</li> <li>● Lacks awareness of impact of digital footprint</li> <li>● Highly visual</li> <li>● Developing problem solving skills</li> </ul>	<ul style="list-style-type: none"> <li>● Advanced use of keyboarding skills</li> <li>● Digital citizenship &amp; ethical use (email etiquette, copyright, plagiarism, etc)</li> <li>● Terminology (software, hardware, etc)</li> <li>● Differences in operating systems</li> <li>● Apply technology programs to different area</li> <li>● Apply knowledge of computer programming</li> <li>● File management &amp; storage types</li> </ul>
CO-REQUISITE STANDARDS	
CATHOLIC IDENTITY PRINCIPLE STANDARDS	
<p><b>Principle:</b> Involves the integral formation of the whole person, body, mind, and spirit, in light of his or her ultimate end and the good of society</p>	
<p><b>6-8.TECH.CI</b> SWBAT recognize Christian responsibility and respect through the care and use of materials and the environment.</p>	
<p><b>6-8.TECH.CI</b> SWBAT recognize the impact of their digital footprint.</p>	
<p><b>Principle:</b> Seeks to know and understand objective reality, including transcendent Truth, which is knowable by reason and faith and finds its origin, unity, and end in God</p>	
<p><b>6-8.TECH.CI</b> SWBAT understand that not everything online is true.</p>	
<p><b>Principle:</b> Promotes human virtues and the dignity of the human person, as created in the image and likeness of God and modeled on the person of Jesus Christ</p>	
<p><b>6-8.TECH.CI</b> SWBAT demonstrate catholic values when interacting with others when using technology.</p>	
<p><b>Principle:</b> Encourages a synthesis of faith, life, and culture</p>	
<p><b>6-8.TECH.CI</b> SWBAT recognize their productions are a reflection of their faith.</p>	
<p><b>Principle:</b> Develops a Catholic worldview and enables a deeper incorporation of the student into the heart of the Catholic Church</p>	
<p><b>6-8.TECH.CI</b> SWBAT explain how technology can develop catholic values and faith while deepening the connection to God and the community.</p>	
<p><b>6-8.TECH.CI</b> SWBAT identify the use of technology as a tool to evangelize their faith. (note: prayers, apps, podcasts, etc)</p>	

<b>CRITICAL THINKING SKILLS</b>
<b>6-8.TECH.CT</b> SWBAT employ critical thinking skills to solve problems and make decisions.
<b>6-8.TECH.CT</b> SWBAT ask questions to become more productive and engaged in their learning process.
<b>6-8.TECH.CT</b> SWBAT use critical thinking skills such as analyzing, prioritizing, categorizing, evaluating, and comparing to make decisions and solve a variety of problems in real-life situations.
<b>6-8.TECH.CT</b> SWBAT synthesize information in order to capture the essence of an idea, object, or activity in the online sphere.
<b>COMMUNICATION</b>
<b>6-8.TECH.CM</b> SWBAT understand that what they say and write is a reflection upon their character.
<b>6-8.TECH.CM</b> SWBAT recognize the need for prayer and forgiveness in resolving interpersonal conflicts.
<b>6-8.TECH.CM</b> SWBAT speak appropriately to communicate ideas and information to different audiences for different purposes.
<b>6-8.TECH.CM</b> SWBAT demonstrate an understanding of Catholic principles foundational to all relationships.
<b>COLLABORATION</b>
<b>6-8.TECH.CL</b> SWBAT demonstrate that working collaboratively reflects our response to God's call to love and care for others.
<b>6-8.TECH.CL</b> SWBAT recognize the feelings and perspectives of others by following the teachings of Jesus.
<b>6-8.TECH.CL</b> SWBAT contribute to project teams to produce original works or solve problems.
<b>6-8.TECH.CL</b> SWBAT recognize that decisions should follow Catholic teachings, especially social teaching
<b>6-8.TECH.CL</b> SWBAT recognize that service is an integral part of our Catholic Faith.
<b>CREATIVITY</b>
<b>6-8.TECH.CR</b> SWBAT expand their understanding of existing knowledge by making connections with new knowledge, skills, and experiences. .
<b>6-8.TECH.CR</b> SWBAT generate, combine, categorize and develop ideas without pre-judgement.
<b>6-8.TECH.CR</b> SWBAT explore an idea from multiple points of view.
<b>6-8.TECH.CR</b> SWBAT demonstrate creative thinking, construct knowledge and develop innovative products and processes using technology.

**ACADEMIC STANDARDS OR STANDARDS SOURCE****Empowered Learners**

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

<b>ISTE Standards</b>	<b>Diocesan objectives</b>
<p><b>6-8.TECH.EL.1</b> SWBAT articulate and set personal learning goals, develop strategies leveraging technology to achieve them and reflect on the learning process itself to improve learning outcomes.</p>	<ol style="list-style-type: none"> <li>1. Students will use technology as a positive representation of themselves by creating a positive online presence and digital footprint utilizing digital portfolios.</li> <li>2. Students will set personal learning goals and leverage technology to meet those goals across the curriculum</li> <li>3. Students will identify areas of personal interest that will guide their own learning. With the help of an educator, students will learn how to set learning goals, how to develop strategies to achieve those goals, and how to reflect on the learning process to improve outcomes.</li> </ol>
<p><b>6-8.TECH.EL.2</b> SWBAT build networks and customize their learning environments in ways that support the learning process.</p>	<ol style="list-style-type: none"> <li>1. Students will identify and build online networks of experts within school policy, and customize their environments in ways that their learning, with the supervision and support of an educator, can grow to personal learning networks.</li> </ol>
<p><b>6-8.TECH.EL.3</b> SWBAT use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways.</p>	<ol style="list-style-type: none"> <li>1. Students will solicit feedback from an educator using technology to inform the student of the success of their practice and how to improve their practice through demonstrating their learning in a variety of ways.</li> <li>2. Students will collaborate with peers and seek feedback from peers to improve both their learning and their use of technology.</li> </ol>
<p><b>6-8.TECH.EL.4</b> SWBAT 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>	<ol style="list-style-type: none"> <li>1. Students will identify and use basic components of digital input and output devices including but not limited to personal computers, tablets, still/digital/video cameras.</li> <li>2. Students will choose appropriate software and online applications for the designed task and be able to locate, launch, and exit applications including web sites using different browsers.</li> <li>3. Students will apply strategies for identifying and solving routine frozen screens, identify warning signs of a compromised device, and perform undo/redo and boot and reboot functions.</li> <li>4. Students will operate and navigate new and different operating systems, platforms, and media devices based on prior knowledge.</li> </ol>

<b>Digital Citizen</b>	
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.	
ISTE Standards	Diocesan Objectives
<b>6-8.TECH.DC.1</b> SWBAT cultivate and manage their digital identity and reputation and are aware of the permanence of their actions in the digital world.	<ol style="list-style-type: none"> <li>1. Students will use technology as a positive representation of themselves by creating a positive online presence and digital footprint utilizing digital portfolios.</li> <li>2. Students understand the public and permanent nature of online communication and posting.</li> </ol>
<b>6-8.TECH.DC.2</b> SWBAT engage in positive, safe, legal and ethical behavior when using technology, including social interactions online or when using networked devices.	<ol style="list-style-type: none"> <li>1. Students will identify the types of information that should and should not be shared online.</li> <li>2. Students create safe, secure usernames and passwords.</li> <li>3. Students practice appropriate responses to inappropriate content or messages.</li> <li>4. Students will recognize and commit to following the provisions of the school's Acceptable Use Agreement inside and outside school.</li> <li>5. Students will identify examples and possible consequences of cyberbullying and demonstrate appropriate responses.</li> </ol>
<b>6-8.TECH.DC.3</b> SWBAT demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property.	<ol style="list-style-type: none"> <li>1. Students explain how copyright rules apply to online content; when and how students are allowed to use words and images they find online.</li> </ol>
<b>6-8.TECH.DC.4</b> SWBAT manage their personal data to maintain digital privacy and security and are aware of data-collection technology used to track their navigation online.	<ol style="list-style-type: none"> <li>1. Students will practice positive, legal and ethical online behaviors.</li> <li>2. Students will protect their own privacy in the course of conducting research as well as adhering to copyright protections and respecting intellectual property.</li> </ol>
<b>Knowledge Constructor</b>	
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.	
ISTE Standards	Diocesan Objectives
<b>6-8.TECH.KC.1</b> SWBAT plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuits.	<ol style="list-style-type: none"> <li>1. Students will determine what information they need to answer a research question, identify sources when they might find that information and select appropriate keywords or search terms to locate the information.</li> <li>2. Students will locate information from digital sources including linked web sites, online library databases, web search engines and surveys.</li> <li>3. Students will select and record relevant information from their sources by tagging or taking notes.</li> <li>4. Students will record their sources to cite when presenting their results.</li> </ol>



	<ol style="list-style-type: none"> <li>Students will use online problem solving programs and simulations to demonstrate mastery of concepts and thinking skills (Lure of the Labyrinth, Villainy, Inc., and Mission US)</li> </ol>
<p><b>6-8.TECH.KC.2</b> SWBAT evaluate the accuracy, perspective, credibility and relevance of information, media, data or other resources.</p>	<ol style="list-style-type: none"> <li>Students will select and record relevant information from their sources by tagging or taking notes.</li> <li>Students will record their sources to cite when presenting their results.</li> <li>Students will distinguish between sources that present factual information and those that present opinions or even deliberate hoaxes.</li> </ol>
<p><b>6-8.TECH.KC.3</b> SWBAT curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.</p>	<ol style="list-style-type: none"> <li>Students will distinguish between sources that present factual information and those that present opinions or even deliberate hoaxes.</li> <li>Students will synthesize information to create new meaning for themselves and others.</li> <li>Students will use online interviews, surveys or other digital tools to gather data. They will then use spreadsheets, charts or graphs to analyze and present data and recommend solutions.</li> </ol>
<p><b>6-8.TECH.KC.4</b> SWBAT build knowledge by actively exploring real-world issues and problems, developing ideas and theories and pursuing answers and solutions.</p>	<ol style="list-style-type: none"> <li>Students will use presentation tools to persuade others to implement a solution based on an engineering design, programming or robotics.</li> <li>Students will construct models or create code to solve a problem. (3D-modelling, Tynker coding, Hour of Code)</li> <li>Students will use online interactive models or simulations to investigate the consequences of alternative solutions. (Lure of the Labyrinth, Villainy, Inc., Mission US)</li> </ol>
<b>Innovative Designer</b>	
Students use a variety of technologies within a design process to identify and solve problems by creating new, useful or imaginative solutions.	
<b>ISTE Standards</b>	<b>Diocesan Objectives</b>
<p><b>6-8.TECH.ID.1</b> SWBAT know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems.</p>	<ol style="list-style-type: none"> <li>Students will identify school, community and world problems related to technology (e.g. disposal of e-waste) or topics studied in social studies or science.</li> <li>Students will use online resources to locate information on the problem.</li> </ol>
<p><b>6-8.TECH.ID.2</b> SWBAT select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.</p>	<ol style="list-style-type: none"> <li>Students will choose appropriate technologies to brainstorm ideas to create and/or design something new e. g. create a new business that provides a product or service using word processing, infographics, mind mapping, or a graphic organizer.</li> </ol>

<p><b>6-8.TECH.ID.3</b> SWBAT develop, test and refine prototypes as part of a cyclical design process.</p>	<p>1. Students will with the supervision and advice of an educator, practice a process to develop, test and refine prototypes for engineering designs, programming and robotics that models the recursive nature of problem solving.</p>
<p><b>6-8.TECH.ID.4</b> SWBAT exhibit a tolerance for ambiguity, perseverance and the capacity to work with open-ended problems.</p>	<p>1. Students will understand that real world problems may have multiple solutions, each that can be addressed in multiple ways.</p>
<p><b>Computational Thinker</b></p>	
<p>Students develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test solutions.</p>	
<p><b>ISTE Standards</b></p>	<p><b>Diocesan Objectives</b></p>
<p><b>6-8.TECH.CT.1</b> SWBAT formulate problem definitions suited for technology-assisted methods such as data analysis, abstract models and algorithmic thinking in exploring and finding solutions</p>	<p>1. Students will identify school, community, and world problems related to technology or topics studied in social studies or science.</p>
<p><b>6-8.TECH.CT.2</b> SWBAT 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>1. Students will use timelines and graphs to forecast and predict possible outcomes (e.g. forecast possible sales using spreadsheet, graph, infographic or survey). 2. Students will compile information they gather into a written, graphic, and/or oral presentation that includes identification of their sources. 3. Students will use online interviews, surveys or other digital tools to gather data. 4. Students will use spreadsheets, charts, or graphs to analyze and present data to recommend a solution.</p>
<p><b>6-8.TECH.CT.3</b> SWBAT break problems into component parts, extract key information, and develop descriptive models to understand complex systems or facilitate problem-solving.</p>	<p>1. Students will use presentation tools to persuade others to implement the solution determined by using engineering design, programming, robotics, constructing a model, or creating code to solve a problem. 2. Students will use online interactive models or simulations to investigate the consequences of alternative solutions.</p>
<p><b>6-8.TECH.CT.4</b> SWBAT understand how automation works and use algorithmic thinking to develop a sequence of steps to create and test automated solutions.</p>	<p>1. Students will practice sequencing of events/steps of a process to determine the best “automated solution.”</p>

<b>Creative Communicator</b>	
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.	
<b>ISTE Standards</b>	<b>Diocesan Objectives</b>
<b>6-8.TECH.CC.1</b> SWBAT choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.	<ol style="list-style-type: none"> <li>1. Students will distinguish between sources that present factual information and those that present opinions or even deliberate hoaxes.</li> <li>2. Students will choose appropriate technologies to address desired objectives in the creation and communication of ideas and products</li> </ol>
<b>6-8.TECH.CC.2</b> SWBAT create original works or responsibly repurpose or remix digital resources into new creations.	<ol style="list-style-type: none"> <li>1. Students will choose appropriate technologies to brainstorm ideas to create and/or design something new.</li> <li>2. Students will use various digital tools to create a recording or actual product (e.g. create and infomercial, public service announcement, video, voice or sound recording, 3-D object, or code).</li> <li>3.</li> </ol>
<b>6-8.TECH.CC.3</b> SWBAT communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.	<ol style="list-style-type: none"> <li>1. Students will design models and use simulations to explore systems (e.g. create a business model incorporating marketing , finance, sales, production; publication design software to design business cards, letterhead and brochures).</li> <li>2. Students will use learning networks and various digital media tools (e.g. live or recorded music, audio, published documents, multimedia presentations, blogs, personal web sites and online portfolios) to communicate information and ideas.</li> </ol>
<b>6-8.TECH.CC.4</b> SWBAT publish or present content that customizes the message and medium for their intended audience.	<ol style="list-style-type: none"> <li>1. Students will use various digital media (including live or recorded video or audio; published documents, and multimedia presentations) to communicate information and ideas.</li> <li>2.</li> </ol>
<b>Global Collaborator</b>	
Students use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally.	
<b>ISTE Standards</b>	<b>Diocesan Objectives</b>
<b>6-8.TECH.GC.1</b> SWBAT 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.	<ol style="list-style-type: none"> <li>1. Students will use digital tools, applications and other virtual field trip resources to work collaboratively and interact with other students around the world to encourage extending the learning in a curricular area as well as becoming familiar with cultural norms other than their own.</li> <li>2. Students will use digital communication tools for both synchronous and asynchronous communication with students from other cultures.</li> </ol>

<p><b>6-8.TECH.GC.2</b> SWBAT use collaborative technologies to work with others, including peers, experts or community members, to examine issues and problems from multiple viewpoints.</p>	<ol style="list-style-type: none"><li>1. Students will use tools, applications and other virtual field trip resources to work collaboratively and interact with experts around the world to encourage extending the learning in a curricular area as well as become familiar with cultural norms other than their own.</li></ol>
<p><b>6-8.TECH.GC.3</b> SWBAT contribute constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal.</p>	<ol style="list-style-type: none"><li>1. Students will work with other members of a group using digital tools, applications and cloud computing to create a joint product or develop a solution to a problem.</li><li>2. Students will use applications such as brainstorming tools, graphic organizers, tables or timelines to plan action steps that could solve a problem.</li></ol>
<p><b>6-8.TECH.GC.4</b> SWBAT explore local and global issues and use collaborative technologies to work with others to investigate solutions.</p>	<ol style="list-style-type: none"><li>1. Students will use digital communication tools to connect with students from other cultures in order to solve predetermined problems and investigate solutions.</li></ol>

## RESOURCES

### **Curriculum Resources:**

Archdiocese of Louisville Technology Curriculum 2016:  
ISTE Standards for Students :

### **Keyboarding:**

<https://www.k5technologycurriculum.com/>  
<https://www.typing.com/>  
<https://www.typingclub.com/>  
<https://www.kidztype.com/typing-web/>  
<https://abcya.com>  
[https://www.ducksters.com/games/typing\\_games.php](https://www.ducksters.com/games/typing_games.php)  
<https://www.roomrecess.com/pages/TypingGamesForKids.html>

### **Mouse: (K-1)**

<https://www.k5technologycurriculum.com/>  
<https://www.roomrecess.com/pages/TypingGamesForKids.html>  
<https://www.abcya.com/search/?term=mouse%20practice&type=all>

### **Digital Citizenship:**

[https://beinternetawesome.withgoogle.com/en\\_us/educators](https://beinternetawesome.withgoogle.com/en_us/educators)  
<https://www.commonsense.org/education/>  
<https://neptunenavigate.com>  
<https://csfirst.withgoogle.com/s/en/home>  
<https://www.netsmartkids.org/>  
<https://www.classroomauthors.com>

### **Programming:**

<https://scratch.mit.edu/>  
<https://csfirst.withgoogle.com/s/en/home>  
<https://code.org/>  
<https://www.birdbraintechnologies.com/>

### **Word Processing:**

Microsoft Word  
Google Docs  
macOS Pages

### **Presentations:**

Microsoft PowerPoint  
Google Slides  
macOS Keynote  
Haiku Deck <https://www.haikudeck.com/>  
Thinglink <https://www.thinglink.com/en-us/>  
PowToon <https://powtoon.com>  
Animoto <https://animoto.com/>  
Prezi <https://prezi.com/>

### **Spreadsheets:**

Microsoft Excel  
Google Sheets  
macOS Numbers

**Digital Collaborative Spaces:**

Microsoft Teams  
Google Classrooms

**Picture/Movie:**

Windows Live Movie Maker  
iMovie  
<http://www.pixlr.com>  
<http://screencastify.com>

**Computer Basics:**

GCF Learn Free <https://edu.gcfglobal.org/en/>

**Kid Safe Search Engines:**

Kids Click <http://kidsclick.org>  
Sweet Search <https://www.sweetsearch.com/>  
Kiddle <https://www.kiddle.co/>