

# 2019 – 2020

## Erie Catholic Technology Curriculum Map

### Philosophy Statement

Current and emerging technologies play a prominent role in the education of the whole child. Access to technologies opens the door to the world beyond the classroom and increases the students' chances for success. In our Catholic schools, students shall be instructed to utilize available technologies for education, communication, problem solving, analysis, and research in accordance with Catholic values, ethical principles, and moral decision making. Students shall have the opportunity to locate, process, and use information in order to improve their abilities to learn, communicate, reason, and work.

### Technology Curriculum Foundation

The technology curriculum of the Erie Catholic School System includes concept formation and processes expressed by performance indicators. Each level of the curriculum has cross-curricular objectives that encompass hands-on approaches to student learning. The Catholic Diocese of Erie has adopted the ISTE National Education Technology Standards (NETS) and these are correlated with the Pennsylvania State Academic Standards for Science and Technology.

The technology foundation standards for students are divided into broad categories. Standards within each category are to be introduced, reinforced, and mastered by students. These categories provide a framework for linking performance indicators within the Profiles for Technology Literate Students to the standards. Teachers can use these standards and profiles as guidelines for planning technology-based activities in which students achieve success in learning, communication, and life skills.

<b>Apps</b>	<b>Coding</b>	<b>Stem</b>	<b>Other</b>
Office 365	Code.org Courses	MakerBot 3D Printer	Network Basics
Word 2016	Scratch & Scratch Jr.	Robotics (Sphero & Code a Mouse)	Video Conferencing
Excel 2016	Khan Academy	Virtual Reality & Augmented Learning	Internet Safety (Copy Right/Digital Citizenship)
PowerPoint 2016	Spheros.edu	Stop Motion Animation	Internet Basics
Typing.com		Student Portal (Grades)	Computer Basics
OneNote		Drones	Online Resources
Kid Pix		Green Screen	TinkerCad
			Technology History

## Curriculum Overview:

	Apps	Coding	Stem	Other
<b>Kindergarten</b>				
1 <sup>st</sup> Quarter				Computer Basics/Internet Basics
2 <sup>nd</sup> Quarter		Code.org Course Desktop Icon		
3 <sup>rd</sup> Quarter		Code.org Course Desktop Icon		
4 <sup>th</sup> Quarter	Kid Pix		iPads	Keyboarding
<b>1<sup>st</sup> Grade</b>				
1 <sup>st</sup> Quarter	Word 2016			Internet Safety/Internet Basics
2 <sup>nd</sup> Quarter		Code.org Course A		
3 <sup>rd</sup> Quarter		Code.org Course A		
4 <sup>th</sup> Quarter				Keyboarding
<b>2<sup>nd</sup> Grade</b>				
1 <sup>st</sup> Quarter	Word 2016			Internet Safety
2 <sup>nd</sup> Quarter		Code.org Course B		
3 <sup>rd</sup> Quarter		Code.org Course B		
4 <sup>th</sup> Quarter				Keyboarding
<b>3<sup>rd</sup> Grade</b>				
1 <sup>st</sup> Quarter	Office 365 – Word/PowerPoint			
2 <sup>nd</sup> Quarter		Code.org Course C		
3 <sup>rd</sup> Quarter		Code.org Course C		
4 <sup>th</sup> Quarter				Keyboarding
<b>4<sup>th</sup> Grade</b>				
1 <sup>st</sup> Quarter	Office 365 – Word/PowerPoint			
2 <sup>nd</sup> Quarter		Code.org Course D		
3 <sup>rd</sup> Quarter		Code.org Course D		
4 <sup>th</sup> Quarter				

<b>5<sup>th</sup> Grade</b>				
1 <sup>st</sup> Quarter	Office 365 – Word/PowerPoint			Internet Safety (Copy Right/Digital Citizenship)
2 <sup>nd</sup> Quarter		Code.org Course E		
3 <sup>rd</sup> Quarter		Code.org Course E		
4 <sup>th</sup> Quarter				
<b>6<sup>th</sup> Grade</b>				
1 <sup>st</sup> Quarter	Office 365 – Word/PowerPoint/Excel			Internet Safety (Copy Right/Digital Citizenship)
2 <sup>nd</sup> Quarter		Code.org Course F		
3 <sup>rd</sup> Quarter		Code.org Course F		
4 <sup>th</sup> Quarter				
<b>7<sup>th</sup> Grade</b>				
1 <sup>st</sup> Quarter	Office 365 – Word/PowerPoint/Excel			Internet Safety (Copy Right/Digital Citizenship)
2 <sup>nd</sup> Quarter		Code.org Courses/Scratch		
3 <sup>rd</sup> Quarter		Code.org Courses/Scratch		
4 <sup>th</sup> Quarter				
<b>8<sup>th</sup> Grade</b>				
1 <sup>st</sup> Quarter	Office 365 – Word/PowerPoint/Excel			Internet Safety (Copy Right/Digital Citizenship)
2 <sup>nd</sup> Quarter		Code.org Courses/Scratch		
3 <sup>rd</sup> Quarter		Code.org Courses/Scratch		
4 <sup>th</sup> Quarter				

## Kindergarten

### Quarter 1:

- **Computer Basics**
  - Signing in/out
  - Mouse Skills
  - Computer Parts
  - <http://abcya.com>
- **Internet Basics**
  - Recognizing Browsers
  - Address Box
  - Introduction to Favorites
  - <http://www.kidrex.org>
- **Internet Safety** <https://netsmartzkids.org/>
  - Netiquette & Cyberbullying
  - Being a good digital citizen
  - How to handle problems

Quarter 2: Code.org (desktop icon)

Quarter 3: Code.org (desktop icon)

### Quarter 4:

- Augmented Reality on iPads
- Introducing Keyboarding
- <http://www.bbc.uk/guides/z3c6tfe>

## 1<sup>st</sup> Grade

### Quarter 1:

- **KidPix (Word processing Skills)**
  - Formatting Text
  - Undo
  - Spacing
- **Network Basics**
  - Signing in/out
  - Selecting text
  - Shift/Enter/Backspace
- **Internet Basics**
  - Recognizing Browsers
  - Address Box
  - Introduction to Favorites
  - <http://www.kidrex.org>
- **Internet Safety**
  - <https://netsmartzkids.org/>
  - <http://kids.ikeepsafe.org>
  - <https://www.commonsense.org/education/digital-citizenship>
  - Netiquette & Cyberbullying
  - Being a good digital citizen
  - How to handle problems
- **Keyboarding**

Quarter 2: Code.org Course A

Quarter 3: Code.org Course A

Quarter 4:

- Augmented Reality on iPads
- Animation (KidPix)
- Code a Mouse

## 2<sup>nd</sup> Grade

### Quarter 1:

- **KidPix (Word processing Skills)**
  - Formatting Text
  - Inserting Pictures
  - Copy and Paste
- **Network Basics**
  - Signing in/out
  - Selecting Network Printer(s)
  - Printing
- **Internet Basics**
  - Review - Recognizing Browsers and Address Box
  - Working with Kid Friendly Search Engines
  - Introducing Creating Favorites/Bookmarks
  - <https://www.kiddle.co/>
  - <http://www.enchantedlearning.com/dictionary.html>
- **Internet Safety**
  - <https://netsmartzkids.org/>
  - <http://kids.ikeepsafe.org>
  - <https://www.common sense.org/education/digital-citizenship>
  - Netiquette & Cyberbullying
  - Being a good digital citizen
  - How to handle problems

Quarter 2: Code.org Course B

Quarter 3: Code.org Course B

Quarter 4:

- Keyboarding
- Scratch Jr. Coding (iPad)

## 3<sup>rd</sup> Grade

### Quarter 1:

- **Word 2016**
  - Margins
  - Page Orientation
  - Copy and Paste
  - Formatting Text
  - Aligning Paragraph
  - Inserting and Formatting Pictures
- **PowerPoint 2016**
  - Creating Slides
  - Backgrounds
  - Pictures and Text
  - Presentation Rules (5-5-5)
- **Network Basics**
  - Signing in/out
  - Saving on the Network
  - Selecting Network Printer(s) and Printing
- **Internet Safety**
  - <https://netsmartzkids.org/>
  - <http://kids.ikeepsafe.org>
  - <https://www.commonsense.org/education/digital-citizenship>
  - Netiquette & Cyberbullying
  - Safekeeping of Personal Information

Quarter 2: Code.org Course C

Quarter 3: Code.org Course C

Quarter 4:

- Excel Basics – Introduce Bar Charting
- Keyboarding
- Green Screen basics

## 4<sup>th</sup> Grade

### Quarter 1:

- **Word 2016**
  - Text Boxes
  - Tables
  - Bullets and Numbering
  - Line Spacing
  - Header and Footers
- **Office 365 – Online Apps**
  - One Drive – Naming and working with Documents
  - Excel Basics – Introduce Bar Charting
- **Plus Portals**
  - Logging on and off of Rediker (Student Portal)
- **PowerPoint 2016**
  - Custom Animations
  - Transitions
  - Looping and Timing
- **Excel Basics**
  - Formatting Charts
    - Size
    - Width
    - Height Borders
  - Formatting Cells
- **Internet Safety**
  - Safekeeping of Personal Information
  - Stress the importance of not revealing personal information by addressing they types of information that should be kept private.
  - Safety Rules to Prevent Unwanted Contact
  - Copyright and Privacy Issues
  - Cyber Bullying and Consequences

Quarter 2: Code.org Course D

Quarter 3: Code.org Course D

Quarter 4:

- Keyboarding
- TinkerCad & 3D Printing – create a simple print



## 5<sup>th</sup> Grade

### Quarter 1:

- **Word 2016**
  - Page numbering
  - Review previous skills
- **Review Plus Portals**
  - Logging on and off of Rediker (Student Portal)
- **PowerPoint 2016**
  - Clean, Simple and Consistent Formatting
- **Excel Basics**
  - Formatting Charts
    - Axis
    - Titles
    - Legends
  - Formatting Cells
- **Internet Safety**
  - Safekeeping of Personal Information
  - Stress the importance of not revealing personal information by addressing they types of information that should be kept private.
  - Safety Rules to Prevent Unwanted Contact
  - Copyright and Privacy Issues
  - Cyber Bullying and Consequences
  - [https://beinternetawesome.withgoogle.com/en\\_us/interland](https://beinternetawesome.withgoogle.com/en_us/interland)
- **Internet Research**
  - Using Search Engines
  - Citing Internet Sources
  - <http://www.easybib.com/>
  - <http://www.citationmachine.net/>

Quarter 2: Code.org Course E

Quarter 3: Code.org Course E

Quarter 4:

- **Keyboarding**
- **Sphero.edu and Sphero Robotics**

## 6<sup>th</sup> Grade

### Quarter 1:

- **Word 2016**
  - **Spell/grammar check, thesaurus, word count**
  - **View Settings**
  - **Readability statistics**
  - **Review previous Word skills**
- **Review Plus Portals**
  - **Logging on and off of Rediker (Student Portal)**
- **Excel Basics**
  - **Formulas**
  - **Auto Sum**
  - **Min**
  - **Max**
  - **Average**
  - **Formatting Cells**
- **Office 365**
  - **Creating/organizing folders in OneDrive**
- **Internet Safety**
  - **Understanding Identity Theft**
  - **Introduce students to issues of Identity Theft, the Associated Dangers and the Safety Rules to prevent it.**
  - **Copyright Issues**
  - **Cyber Bullying and Consequences**
  - [https://beinternetawesome.withgoogle.com/en\\_us/interland](https://beinternetawesome.withgoogle.com/en_us/interland)
- **Internet Research**
  - **Using Search Engines**
  - **Citing Internet Sources**
  - <http://www.easybib.com/>
  - <http://www.citationmachine.net/>

### Quarter 2: Code.org Course F

### Quarter 3:

- **Code.org Course F**
- **Excel - Office 365**

### Quarter 4:

- **Keyboarding**
- **TinkerCad & 3D Printing – create a complex print**

## 7<sup>th</sup> Grade

### Quarter 1:

- **Office 2016**
  - PowerPoint – Review inserting charts, pictures, tables, text boxes, saving & converting to a PDF
  - Word – Tabs, page breaks, columns
- **Review Plus Portals**
  - Signing in/out of Rediker (Student Portal)
- **Internet Safety**
  - Understanding Identity Theft
  - Introduce students to issues of Identity Theft, the Associated Dangers and the Safety Rules to prevent it.
  - Copyright Issues
  - Cyber Bullying and Consequences
- **Internet Research**
  - Using Advanced Search Engine Features
  - Review Citing Internet Sources
  - Evaluating Websites
  - <http://www.easybib.com/>
  - <http://www.citationmachine.net/>

### Quarter 2:

- **Office 365**
  - Sharing Documents in OneDrive
  - Uploading Documents into OneDrive
- **Keyboarding**

### Quarter 3:

- **Express Coding -Khan Academy**
- **Code.org Activities**
- **Scratch**

### Quarter 4:

- **Code.org Activities**
- **Scratch**
- **Sphero.edu and Sphero Robotics**

## 8<sup>th</sup> Grade

### Quarter 1:

- **Word 2016**
  - **Templates – brochures, resumes, etc.**
- **Excel 2016**
  - **Templates – calendars**
  - **Review formulas (ex. Creating a gradebook)**
- **Review Plus Portals**
  - **Signing in/out of Rediker (Student Portal)**
- **Internet Safety**
  - **Understanding Identity Theft**
  - **Introduce students to issues of Identity Theft, the Associated Dangers and the Safety Rules to prevent it.**
  - **Copyright Issues**
  - **Cyber Bullying and Consequences**

### Quarter 2:

- **Internet Research**
  - **Using Advanced Search Engine Features**
  - **Review Citing Internet Sources**
  - **Evaluating Websites**
  - <http://www.easybib.com/>
  - <http://www.citationmachine.net/>
- **Office 365**
  - **Downloading documents from OneDrive**

### Quarter 3:

- **Scratch**
- **Khan Academy (Python & Java)**
- **Code.org activities**

### Quarter 4:

- **Keyboarding**
- **Green Screen Career Culmination Final Project**