Grade 2 Technology
Technology 2

Communication and Collaboration

Stage 1: Desired Results

Catholic Standards

DOC All Grades DOC: Catholic Standards

The Profession of Faith

Students will be able to

17. Understand that charity is the soul of holiness to which we are all called (CCC 826).

18. Respond to the call of evangelization (CCC 905).

Life in Christ

Students will be able to

1. Understand that we shape our own life as a result of free will (CCC 1731).

2. Know that we must assume responsibility for the acts we perform (CCC 1781).

3. Cultivate the theological virtues of faith, hope, and charity; and practice the cardinal virtues of prudence, justice, fortitude, and temperance (CCC 1834; 1841).

4. Sustain the Christian life through the practice of the gifts of the Holy Spirit (CCC 1831).

5. Know that sin is an offense against God (CCC 1850).

6. Seek the common good together (CCC 1905).

7. Assume personal responsibility (CCC 1914).

8. Practice solidarity and social charity (CCC 1939).

9. Understand that grace is a participation in the life of God (CCC 1997).

10. Follow God's commandments (CCC 2068).

11. Respect all human life (CCC 2318).

14. Demonstrate appropriate care of social communication and technology (CCC 2496).

Targeted Standards

OH Grade 2 OH: ELA & Literacy in History/Social Studies, Science, & Technical Subjects PreK-5

Speaking and Listening

Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.

SL.2.5. Create audio recordings of stories or poems; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings.

Writing

Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

W.2.6. With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers.

Catholic Identity

DOC All Grades Catholic Identity

Catholic Social Justice Teachings

Life and Dignity of the Human Person

Rights and Responsibilities

Call to Family, Community, and Participation

The Rights of Children

2. THE RIGHT TO A SAFE ENVIRONMENT that promotes care, protection, and security.

3. THE RIGHT TO BE RESPECTED AS INDIVIDUALS with human dignity.

4. THE RIGHT TO WORK ACTIVELY TOWARD THEIR OWN EMPOWERMENT through the development of their gifts and talents.

5. THE RIGHT TO A LEARNING ENVIRONMENT THAT VALUES COOPERATION and challenges its members to critical and reflective thinking in their search for truth.

6. THE RIGHT TO DEVELOP POSITIVE, RESPONSIBLE AND CARING ATTITUDES AND BEHAVIORS TOWARD OTHERS and to recognize the rights of others to be safe and free from harassment and abuse.

7. THE RIGHT TO LEARN THE SKILL OF SELF PROTECTION by identifying safe and unsafe situations.

8. THE RIGHT TO LEARN RESPONSIBILITY for themselves and their actions.

9. THE RIGHT TO MAKE RESPONSIBLE DECISIONS founded on religious conviction.

Content

1. digital media/environments
2. visual displays/drawings
3. Internet usage
4. productivity tools (word processing, spreadsheets, presentations)
5. distance learning/virtual field trips
6. social networking
7. cultural understanding
8. email

Skills

1. Use variety of digital media.
2. Interact and collaborate with others.
3. Produce and publish writing.
4. Create visual displays and drawings.
5. Contribute to group projects.
6. Solve problems.
7. Participate in cultural experiences through virtual field trips.
8. Develop cultural awareness via distance learning opportunities.
9. Discuss the parts of an email and its uses.

Essential Questions

1. Why do different audiences need different communication?
2. How does technology help me learn about people in other places?

Standards Vocabulary

1. digital media
2. visual displays
3. collaborate
4. global awareness
5. cultural understanding

Resources

Stage 2: Assessment Evidence

Virtual Field Trip Response

Formative: Writing Assignment

Students will write three ideas or information they learned on the virtual field trip.

Trading Card Creator

Summative: Visual Arts Project

Students will create a trading card about popular culture or any type of book or subjects they are studying while demonstrating their technology knowledge and skills.

Blogging Practice

Formative: Written Assessment

Students will reply to a teacher blog. Teacher will check for appropriateness of answer on blogging format.

Interview

Formative: Class Work

Individually students will create three interview questions to ask an expert in the assigned field, based on a curricular area of study. As a class, the best questions will be selected. Using Skype or FaceTime, the students will interview an expert in that field.

Email

Formative: Technology Project

Students will learn through lecture and demonstration from teacher the parts of an email and appropriate email etiquette. In the beginning of the year, students will produce emails to the teacher and send the teacher other fake emails to created situations (a friend, a family member, a teacher). Eventually as the year goes by, students can, as a class then as individuals, send emails to ePals.

Online Collaborative Science Project

Summative: Technology Project

Have class participate in an online science collaborative project using the CIESE K-12 educational resources ([http://ciese.org/materials/k12/)](http://ciese.org/materials/k12/). There are many individual activities within the created project for assessment purposes.

Stage 3: Learning Plan

Learning Experiences

1. **Virtual Field Trips:** Students travel to places of interest around the world ([San Diego Zoo](http://zoo.sandiegozoo.org/content/overview)) based on the curricular topic being covered in core subject areas. Students will write three sentences on what information they learned or viewed while on the field trip. Sentences will have to be typed in a word processing program or app.
2. **Creative Thinking:** Students will create a trading card about a person they are learning about in a curricular area. Trading card can be produced in a drawing or word processing program.
3. **Reflective Discussion:** With assistance from an older student or aid to classroom, students will add comments to teacher blog.
4. **Interview:** Students will Skype with experts/mystery readers. Students will first compose three interview questions each, and then as a class the group will decide which are the best questions to ask.
5. **Class Discussion:** Students will discuss the parts of an email and how to use email correctly. <http://pbskids.org/arthur/games/letterwriter/email.html>. Then students will create emails to send to the teacher given a made up situation to check that students can appropriately respond in email format.
6. **Pen Pals:** Students write to another classroom across the country or the world, individually or as a class, to learn about other cultures and to communicate effectively [http://www.epals.com/#!/main.](http://www.epals.com/#!/main)
7. **Collaborative Science Projects:** Students will participate in a global collaboration project from the CIESE Web site: [http://ciese.org/materials/k12/.](http://ciese.org/materials/k12/)

Resources

Images/Documents

1. Kid Pix
2. Kidspiration
3. Google Draw
4. Paint
5. Google Docs
6. Wikispaces
7. Storybird
8. Concrete Poetry
9. StoryBook Weaver

Presentation

1. PowerPoint
2. Google Slides
3. One True Media

Videos

1. Sketchcast
2. Skype
3. Google Hangout
4. FaceTime

Virtual Field Trips

1. Google Expeditions
2. <http://www.areavibes.com/library/online-field-trips-for-students/>
3. <http://www.theteachersguide.com/virtualtours.html>
4. <http://www.eschoolnews.com/2013/04/07/ten-of-the-best-virtual-field-trips/>

Blogging

1. Edublog
2. Animoto
3. Kidblog
4. Blogger

Resources

* <http://www.readwritethink.org/>

Grade 2 Technology
Technology 2

Computer Science (Critical Thinking)

Stage 1: Desired Results

Catholic Standards

DOC All Grades DOC: Catholic Standards

Life in Christ

Students will be able to

2. Know that we must assume responsibility for the acts we perform (CCC 1781).

7. Assume personal responsibility (CCC 1914).

14. Demonstrate appropriate care of social communication and technology (CCC 2496).

Targeted Standards

Catholic Identity

DOC All Grades Catholic Identity

Catholic Social Justice Teachings

Life and Dignity of the Human Person

Rights and Responsibilities

Content

1. coding
2. forms
3. computational thinking
4. digital tools
5. troubleshooting
6. network basics
7. innovative technologies
8. computer careers

Skills

**Coding**

1. Recognize that a program is a set of code.
2. Assess and analyze a situation that results in creating a list of sequential steps to complete a task. Students will work to complete a task in the fewest possible steps using programming conventions such as looping.
3. Troubleshoot, critique, and modify their own or others' code (steps).
4. Create a real world problem and effectively use modeling and simulation to solve it.
5. Apply understanding of cause/effect relationships by going back and making adjustments.

**Forms**

1. Enter information into a form (such as Google Forms or Socrative) and understand where that information goes.
2. As a group, create a form, track, and analyze the data.

**Troubleshooting**

1. Identify and analyze different types of error messages and, when appropriate, resolve the problem independently.
2. Login to an app, the network, a website, etc. and begin to troubleshoot common login errors (such as caps lock or misspelled username) without assistance.

**Networking**

1. Apply an understanding of basic network structure using proper vocabulary.
2. Choose appropriate network/Internet connections.
3. Demonstrate an understanding of the cloud by sharing and saving files.

**Computer Careers/Innovative Technologies**

1. Explore new and innovative technologies such as augmented reality, 3D printing, etc. (What are they used for? Why they were invented? What problem do they solve?)
2. Research IT professions.

Essential Questions

1. Why is coding important in the world around me?
2. What do I do if there is a problem with my computer?
3. To what extent is technology involved in our lives?

Standards Vocabulary

1. cause and effect
2. predict
3. compare
4. identify
5. observe
6. critique
7. problem/solution
8. troubleshoot
9. analyze
10. modify

Additional Vocabulary

**Emerging Vocabulary**

1. innovative technology
2. augmented reality

**Mastered Vocabulary**

1. See attached document

Resources

Stage 2: Assessment Evidence

Code Simulation

Formative: Modeling

Observe and discuss with students as they try to collaboratively complete the task.

Hour of Code

Summative: Online Learning

Set a goal for what level your students should achieve within the app/website being used. Determine which skills they should master. Focus on using the least amount of code possible.

Innovative Technology Presentation

Summative: Research Project

Using a rubric, evaluate that the students answered the questions: What is the invention used for? Why was it invented? What problem does it attempt to solve? Did it solve the problem? Will it succeed?

IT Career Ad

Summative: Visual Arts Project

Using a rubric, evaluate that the students picked an appropriate career in the technology industry and explained it accurately.

Data Collection

Formative: Cooperative Group Work

As a class discuss the type of data being collected. Find a digital format to create the form to collect the data (see form apps/programs below.) As data are collected, discuss in class and create graphs, charts, etc. as an interactive whole class assessment. Grade is based on input and understanding of data and creation of chart/graph.

Stage 3: Learning Plan

Learning Experiences

**Coding**

1. **"Unplugged" Simulation:** Students work in pairs using Legos or paper to create a maze or obstacle course with multiple turns. Students will type a list of steps needed to get through their maze. Students will present their maze to the class. The class will develop a list of steps. Compare/contrast the class's solution to that of the creator of the maze. **Class discussion:** How were the directions same/different? Was one better? See [code.org](https://code.org/) for other suggested "unplugged" activities.
2. **Self Guided Online Tutorial**: Students will participate in the Hour of Code (see [code.org](https://code.org/) for details) in December, using a lesson plan/game or app from the site. Students' goal is to use the least amount of code possible to achieve their goal.
3. **Exploratory Learning**: If possible, purchase a simple robot (Bee-Bot). As a class or in small collaborative groups, students can program the robot to move forward, backward, turn, etc.. They can create simple obstacle courses for robots to go through.

**Forms**

1. **Group Work:** Using Google Forms or Socrative, the teacher will create forms such as a simple quiz, survey, questionnaire, etc., that relates to an area of study for the students. After form is created, students in the class complete the form and as class look at the data results. The class can discuss the flow of data and how it can be used.
2. **Collaborative Learning:** As a class, students can design a form for others outside the class to complete (i.e.: whole school, parents.) Review and analyze the data together, raw data and charts. Students can share their results with the whole school. An example may be to have students create a survey about the lunch menu. After all data is collected, have a mystery lunch day serving the most popular lunch from survey results.

**Innovative Technologies**

1. **Small Group Research/Presentation:**  Using kidEfriendly search engines, already established by the teacher, students research a new innovation in technology (augmented reality, 3D glasses, Google Glasses, drones, robotics, Apple watch, etc.). In a  presentation application (KidPix, Sock Puppet, Shadow Puppets), students answer the following questions: What is the innovation used for? Why was it invented? What problem does it attempt to solve? Did it solve the problem? Will it succeed?

**Networking**

1. **"Unplugged" Simulation:** Students can use modeling to explain abstract networking concepts such as data moving along Ethernet cables or through air via access points.
2. **Concept Formation:** Students look around the room and spot all labels that have been placed by the teacher naming all equipment. Be sure in all discussions that students are using correct vocabulary.

**Careers**

1. **Guided & Sharing:** Students will begin to research careers in information technology by using [Virginia Career View Website](http://vacareerview.org/search/?q=computer) for printable and online games. Students will create an ad to try to persuade others to follow that career.

Resources

**Coding**

1. Daisy the Dinosaur
2. Cargo-bot App
3. Kodable <https://www.kodable.com/>
4. Lightbot <http://lightbot.com/>
5. Cato's Hike A programming and logic odyssey App
6. Scratch: <http://www.scratchjr.org/>
7. Hour of Code <https://code.org/>
8. <http://www.codecademy.com/>
9. Tynker <https://www.tynker.com/>
10. <http://www.kodugamelab.com/>
11. Symbaloo <http://edu.symbaloo.com/mix/codeprogramsites>
12. <http://www.symbaloo.com/mix/coding-coding-coding>

**Robotics/STEM**

1. <https://www.makewonder.com/>
2. Bee-Bot <https://www.bee-bot.us/>
3. <https://www.pinterest.com/plabure/coding-and-robotics/>
4. <http://www.makeymakey.com/>

**Careers in Technology:**

1. <http://vacareerview.org/search/?q=computer>

**Forms:**

1. Socrative <http://www.socrative.com/>

Grade 2 Technology
Technology 2

Creativity and Innovation

Stage 1: Desired Results

Catholic Standards

DOC All Grades DOC: Catholic Standards

Life in Christ

Students will be able to

2. Know that we must assume responsibility for the acts we perform (CCC 1781).

7. Assume personal responsibility (CCC 1914).

14. Demonstrate appropriate care of social communication and technology (CCC 2496).

15. Understand that the fine arts express the infinite beauty of God in works made by human hands (CCC 2513).

Targeted Standards

OH Grade 2 OH: ELA & Literacy in History/Social Studies, Science, & Technical Subjects PreK-5

Speaking and Listening

Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.

SL.2.5. Create audio recordings of stories or poems; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings.

Writing

Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

W.2.6. With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers.

Catholic Identity

DOC All Grades Catholic Identity

Catholic Social Justice Teachings

Rights and Responsibilities

Call to Family, Community, and Participation

The Rights of Children

3. THE RIGHT TO BE RESPECTED AS INDIVIDUALS with human dignity.

4. THE RIGHT TO WORK ACTIVELY TOWARD THEIR OWN EMPOWERMENT through the development of their gifts and talents.

5. THE RIGHT TO A LEARNING ENVIRONMENT THAT VALUES COOPERATION and challenges its members to critical and reflective thinking in their search for truth.

6. THE RIGHT TO DEVELOP POSITIVE, RESPONSIBLE AND CARING ATTITUDES AND BEHAVIORS TOWARD OTHERS and to recognize the rights of others to be safe and free from harassment and abuse.

8. THE RIGHT TO LEARN RESPONSIBILITY for themselves and their actions.

Content

1. multimedia sources
2. augmented reality
3. desktop publishing
4. video tools
5. audio tools (podcast, screencast)
6. photography tools
7. website creation
8. animation
9. avatar creation
10. QR resources
11. drawing tools
12. cartoon creation
13. visual displays
14. presentation tools

Skills

1. Analyze different media resources to differentiate learning experiences.
2. Express and communicate information using a variety of digital media.
3. Enhance understanding of learning concepts by presenting information.
4. Produce original works to allow creativity and ownership.
5. Publish individual and group work.
6. Interact with peers and adults to collaborate in learning experiences.
7. Create audio/visual components of projects to enhance learning objectives.
8. Use QR resources to learn more about a given topic.
9. Use augmented reality programs to enhance learning objectives.

Essential Questions

1. How can technology tools help me learn?
2. How can technology be used to effectively communicate information?
3. How can I select and use appropriate multimedia sources for a specific need?

Standards Vocabulary

1. digital media
2. visual displays
3. presentations
4. Internet
5. collaboration
6. digital tools
7. audio recordings

Additional Vocabulary

1. avatar
2. QR
3. augmented reality
4. podcast
5. screencast
6. animation
7. multimedia

Stage 2: Assessment Evidence

Digital Drawing

Formative: Class Work

Illustrate a math problem with drawing tools.

Vocabulary Rebus

Formative: Class Work

Students will create a rebus using a teacher-created document. The students will select a number of vocabulary words and replace each word with an image.

Vocabulary Audio

Formative: Oral Assessment

Students will use an audio creation app or program (see resources for several examples) and create audio files of their vocabulary words.

Audio Story Creator

Formative: Project

Use a story creator app such as Story Wheel, Little Story Creator, or Imagistory to create a audio recording following the steps of a story (beginning, middle, and end).

If You Give A Girl/Boy a Bible

Summative: Visual Arts Project

Students will create a cover of their creative writing work titled "If You Give A Girl/Boy a Bible" using a word processing tool. Students will add a picture of themselves holding a bible to incorporate with their writing to help prepare them for First Communion.

Stage 3: Learning Plan

Learning Experiences

1. **Check for Understanding**: The student illustrates a math word problem using a drawing program. See resources below.
2. **Illustrator Activity**: The student will create a rebus. The teacher would have a paragraph already created in a document. The students would select a few words from the paragraph to replace with graphics.
3. **Peer Partner Learning:** The students will use a video/audio app to record their correct use of vocabulary words. (Examples: Sock Puppets, Chatterpix, etc.)
4. **Creative Thinking:** Students will use an audio/video app to record a story including all essential parts of a story. Story Wheel, Story Wheel, Little Story Creator, or Imagistory can be appropriate apps to use to complete the project.  Links are listed below.
5. **Creative Thinking:** After listening to an oral reading of the book *If you Give a Mouse a Cookie*, the students will create their own story called *If You Give a Boy/Girl a Bible*. The story should include a cover and story line of their journey to First Communion. The work can be done in a Word Processing tool, a story developer tool, or presentation tool.

Resources

**Slideshow**

1. Google Doc
2. PowerPoint
3. Slide
4. One True Media

**Video**

1. Sketchcast <http://www.sketchcasts.net/>

**Audio**

1. Garageband
2. Voicethread <https://voicethread.com/>
3. Audacit <http://audacityteam.org/>

**Displays**

1. Little Bird Tales <https://www.littlebirdtales.com/>
2. Imagistory <http://imagistory.com/>
3. Little Story Creator App
4. Story Wheel App

**Drawing**

1. YouDraw <http://www.youdraw.com/>
2. Doppelme <http://doppelme.com/>
3. You Doodle App
4. Doodle Buddy App
5. Kidspiration

**Document Creation**

1. Kidspiration

**QR Code Resources**

1. <http://www.qr-code-generator.com/>
2. <http://goqr.me/>
3. <http://qrcode.kaywa.com/>
4. webqr.com
5. Quick Scan App
6. QR Reader for iPhone/iPad/Android

**Augmented Reality**

1. Chromville <http://chromville.com/>
2. colAR Mix <http://colarapp.com/es/>
3. Zoo-AR <http://zoo-ar.com/> (there is also an app available)
4. CyberChase Shape Quest! <http://www.pbs.org/about/news/archive/2014/cyberchase-shape-quest/> (there is also an app available)
5. AR Basketball

Resources

Grade 2 Technology
Technology 2

Digital Citizenship

Stage 1: Desired Results

Catholic Standards

DOC All Grades DOC: Catholic Standards

Life in Christ

Students will be able to

1. Understand that we shape our own life as a result of free will (CCC 1731).

2. Know that we must assume responsibility for the acts we perform (CCC 1781).

6. Seek the common good together (CCC 1905).

7. Assume personal responsibility (CCC 1914).

8. Practice solidarity and social charity (CCC 1939).

10. Follow God's commandments (CCC 2068).

11. Respect all human life (CCC 2318).

12. Respect the integrity of all creation, including animals, plants, and all nature (CCC 2415).

13. Show special regard for the poor (CCC 2443).

14. Demonstrate appropriate care of social communication and technology (CCC 2496).

The Celebration of the Christian Mystery

Students will be able to

2. Understand that God blessed all living beings (CCC 1080).

Targeted Standards

OH Grade 2 OH: ELA & Literacy in History/Social Studies, Science, & Technical Subjects PreK-5

Writing

Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.

W.2.8. Recall information from experiences or gather information from provided sources to answer a question.

Catholic Identity

DOC All Grades Catholic Identity

Catholic Social Justice Teachings

Life and Dignity of the Human Person

Rights and Responsibilities

The Rights of Children

2. THE RIGHT TO A SAFE ENVIRONMENT that promotes care, protection, and security.

3. THE RIGHT TO BE RESPECTED AS INDIVIDUALS with human dignity.

5. THE RIGHT TO A LEARNING ENVIRONMENT THAT VALUES COOPERATION and challenges its members to critical and reflective thinking in their search for truth.

6. THE RIGHT TO DEVELOP POSITIVE, RESPONSIBLE AND CARING ATTITUDES AND BEHAVIORS TOWARD OTHERS and to recognize the rights of others to be safe and free from harassment and abuse.

7. THE RIGHT TO LEARN THE SKILL OF SELF PROTECTION by identifying safe and unsafe situations.

8. THE RIGHT TO LEARN RESPONSIBILITY for themselves and their actions.

9. THE RIGHT TO MAKE RESPONSIBLE DECISIONS founded on religious conviction.

Resources

Resources

Content

1. **Digital Rights and Responsibilities:**the privileges, freedoms and behavioral expectations extended to all digital technology users
2. **Digital Communication:**the exchange of electronic information
3. **Digital Etiquette:**the standards of conduct
4. **Digital Security:**precautions taken to guarantee personal safety and the security of networks
5. **Digital Literacy:** the knowledge of digital technology and knowing when and how to use it
6. **Digital Health and Wellness:**the elements of physical and psychological well-being related to digital technology use

Resources

Skills

1. Explain and follow procedures relating to Internet safety.
2. Exchange information online.
3. Participate in digital society.
4. Demonstrate digital étiquette.
5. Know precautions for personal safety.
6. Know what constitutes appropriate and inappropriate use of hardware and software.
7. Recognize legal rights and restrictions governing technology.

Essential Questions

1. What are the ways I can use technology responsibly in an online environment?
2. How does my digital behavior affect others?
3. Which me should I be online?

Standards Vocabulary

1. digital étiquette
2. digital society
3. digital technology
4. electronic information
5. Internet safety
6. personal safety
7. plagiarism
8. standards of conduct

Additional Vocabulary

**Emerging Vocabulary**

1. cloud
2. keyword
3. technology addiction
4. texting issues
5. upload
6. worm

**Mastered Vocabulary**

1. See attached document

Resources

Stage 2: Assessment Evidence

Leaving Comments

Summative: Peer Assessment

Students practice proper commenting techniques by leaving comments on each other's stories using [StoryBird.com](http://StoryBird.com)

Digital vs. Real Life Friendships

Formative: SmartBoard/ActivBoard Interactive Activity

Create a comparison T-chart and populate it on the left side: Activities one can do with digital friends and on the right side: Activities one can do with in-person friends

Stage 3: Learning Plan

Learning Experiences

1. **Explicit Teaching:** During all activities technology students are assigned to use, they will demonstrate appropriate handling of technology equipment.
2. **Guided & Shared:** Students will create stories online in <https://www.mystorybook.com/books/new> , then practice proper commenting techniques by leaving comments on each others**'** stories.
3. **Explicit Teaching:**After teacher-led instruction and activities, students will recognize and be able to explain what a computer virus is, how it impacts the digital user, and how to prevent virus attacks.
4. **Brainstorming:** Students will be able to identify qualities of a digital friendship and qualities of a real life friendship and explain the difference between the two.
5. **Learning Activity Package:** Students can use research-based classroom tools to help them utilize technology for learning and life. <https://www.commonsensemedia.org/educators/curriculum>

Resources

* Viruses (<http://www.brainpop.com>)

Resources

**Internet Safety**

1. The Nine Elements of Digital Citizenship  <http://www.digitalcitizenship.net/Nine_Elements.html>
2. Net Smartz Kids <http://www.netsmartzkids.org/NetSmartzKids>
3. Common Sense Media for Educator <https://www.commonsensemedia.org/educators>

**Avatars (promoting digital privacy)**

1. Create a Monster Avatar <http://www.thirteen.org/artopia/play.html>
2. Lego Avatar <http://www.reasonablyclever.com/mini/kidsafe.htm>
3. Animal Avatar <http://www.buildyourwildself.com/>
4. Make Me a Hero Avatar <http://cpbherofactory.com/>

**Cyberbullying**

1. Stop Bullying Teacher Site <http://www.stopbullying.gov/cyberbullying/what-is-it/index.html>
2. Common Sense Curriculum <https://www.commonsensemedia.org/cyberbullying>
3. Bullying <http://www.pacerkidsagainstbullying.org/kab/>
4. Cyberbullying Pledge  <http://www.ikeepsafe.org/wp-content/uploads/2012/06/Faux-Paw-Pledge.pdf>
5. Cyber-bullying BrainPop (requires login) <https://www.brainpop.com/technology/communications/cyberbullying/preview.weml>

**Digital Citizenship**

1. Carnegie Cadetshttp://www.carnegiecyberacademy.com/classroomMaterials.html
2. Net Safe Videos for Parents <http://www.netsafeutah.org/parents/parent_videos.html>
3. Brain Pop Digital Citizenship <https://www.brainpop.com/spotlight/digitalcitizenship/>
4. ThinkUKnow <https://www.thinkuknow.co.uk/8_10/>
5. OnGuard Online <https://www.onguardonline.gov>
6. Digital Presence <https://www.youtube.com/watch?v=gi7EDNFI_w0>
7. Disney's Surf Swell Island <http://home.disney.com.au/activities/surfswellisland/>
8. Generation Safe-Quick Tips Videos <https://www.youtube.com/playlist?list=PLcCI70ryDObamcsmHveyCTsOcuHREC3v0>
9. INetsmartzkids <http://www.netsmartzkids.org/ClubUYNVideos/PrincessPuppetShow>
10. Planet Nutshell <http://planetnutshell.com/project/netsafe-episode-1-what-is-the-internet-grades-k-3/>
11. O2–Keeping Kids Safe <http://www.o2.co.uk/help/everything-else/digital-family>
12. CommonCraft Videos <https://www.commoncraft.com/videolist?qt-cc_video_quicktab=0#qt-cc_video_quicktab>

**Digital Communications**

1. Facebook, YouTube, Texting: Rules of the Road for Kids [https://www.youtube.com/watch?v=Gd520wZZGDE&feature=relmfu](https://www.youtube.com/watch?v=Gd520wZZGDE&amp;feature=relmfu)

**Digital Footprint**

1. <http://www.kidsmart.org.uk/digitalfootprints/>

**Digital Law**

1. Copyrights BrainPop (login required) <https://www.brainpop.com/english/writing/copyright/preview.weml>
2. Copyright and Fair Use–Common Sense Media Video [https://www.youtube.com/watch?v=suMza6Q8J08&list=TL0OM\_K6i\_7wY6V35BIjapD44wkpRCwmWl&utm\_content=buffer407a7&utm\_medium=social&utm\_source=twitter.com&utm\_campaign=buffer](https://www.youtube.com/watch?v=suMza6Q8J08&amp;list=TL0OM_K6i_7wY6V35BIjapD44wkpRCwmWl&amp;utm_content=buffer407a7&amp;utm_medium=social&amp;utm_source=twitter.com&amp;utm_campaign=buffer)
3. Copyright Law Explained <https://www.youtube.com/watch?v=tk862BbjWx4>
4. Copyright Law Curriculum <http://www.teachingcopyright.org/>
5. Videos on Licensing, Copyrights, More (from Creative Commons)  <https://creativecommons.org/videos/>

**Digital Privacy**

1. Tips for Strong Passwords <http://www.connectsafely.org/tips-to-create-and-manage-strong-passwords/>

**Digital Rights and Responsibilities**

1. Digital Passport <https://www.digitalpassport.org/educator-registration>

**Digital Search/Research**

1. BrainPop Internet Sources <https://www.brainpop.com/english/writing/onlinesources/preview.weml>
2. Internet Searches <http://www.netsmartzkids.org/LearnWithClicky>

**Fair Use/Public Domain**

1. A Fair(y) Use Tale  [https://www.youtube.com/watch?v=CJn\_jC4FNDo&feature=youtu.be](https://www.youtube.com/watch?v=CJn_jC4FNDo&amp;feature=youtu.be)

**Image Copyright (teacher tools)**

1. Google Images Reverse Image Search (drop an image onto the page and search) <https://images.google.com/?gws_rd=ssl>
2. Image Edit Exposure Tool <http://www.fourandsix.com/>
3. Image Edited? Check Here <http://imageedited.com/>
4. Is This Picture Real? <https://www.brainpop.com/english/writing/onlinesources/preview.weml>
5. Everything Is a Remix [https://www.youtube.com/watch?feature=player\_embedded&v=UP468k1u\_Mk](https://www.youtube.com/watch?feature=player_embedded&amp;v=UP468k1u_Mk)
6. Tineye—Reverse Image Search <http://www.tineye.com/>

**Images (free teacher tools)**

1. Free Photo <http://www.freefoto.com/index.jsp>
2. Open Photo <http://openphoto.net/>
3. Smithsonian Wild <http://siwild.si.edu/>
4. Wiki Images <https://commons.wikimedia.org/wiki/Main_Page>

**Internet Safety**

1. Brainpop—Online Safety BrainPop Jr. <https://jr.brainpop.com/health/besafe/internetsafety/>
2. Computer Safety <http://pbskids.org/webonauts/>
3. Digital Safety (informational guide to staying safe online, includes search engine safety, scams, and identity theft) <https://www.budgetdirect.com.au/blog/2015/01/digital_safety_staying_safe_online.html>
4. Faux Paws Internet Safety
5. Carnegie Cyber Academy <http://www.carnegiecyberacademy.com/classroomMaterials.html>
6. Webonauts <http://pbskids.org/webonauts/>
7. Garfield Internet Safety <https://learninglab.org/>
8. Internet Safety  <http://www.netsmartzkids.org/LearnWithClicky>
9. Internet Safety Dance Video  <http://www.netsmartzkids.org/ClubUYNVideos/SwirlAndTwirl>
10. Internet Safety Games <http://www.netsmartzkids.org/AdventureGames/ClickysQuest>
11. Internet Safety Quiz <http://www.safekids.com/quiz/q1.htm>
12. Internet Safety Site–Disney <http://family.disney.co.uk/internet-safety>
13. Internet Safety Undersea Adventure <http://www.netsmartzkids.org/ClubUYNVideos/WebstersUnderseaAdventure>
14. Internet Safety Video (day in digit’s life): https://www.youtube.com/watch?v=89eCHtFs0XM&feature=youtu.be
15. Internet Safety Videos <http://www.ikeepsafe.org/videos/?vid=fauxpaw_video>
16. Internet Safety (read-to-you book) <http://www.netsmartzkids.org/eBooks/DeliveryForWebster>
17. iSafe (a helpful resource completely centered around E-safety technology and education)
18. My Online Neighborhood Video by CommonSense Media  <https://www.youtube.com/watch?v=vUO7t92k4Xg>
19. Netsmart Kids Online Safety <http://www.netsmartzkids.org/>
20. Netsmart Kids–the Princess   <http://www.netsmartzkids.org/ClubUYNVideos/PrincessPuppetShow>
21. Online Safety Video <https://www.brainpop.com/technology/digitalcitizenship/onlinesafety/preview.weml>

**Netiquette**

1. Quiz Show Game on Netiquette <http://www.netsmartzkids.org/ClubUYNVideos/PrincessPuppetShow>
2. eEtiquette Quiz (iOS app) <http://eetiquette.com>

**Online Plagiarism**

1. Clicky’s Stolen Song <http://www.netsmartz.org/NetSmartzKids/ClickysStolenSong>

**Passwords**

1. Password Rap <http://www.netsmartzkids.org/LearnWithClicky/ThePasswordRap>

**Social Media**

1. Email and IM <https://www.brainpop.com/technology/computersandinternet/emailandim/preview.weml>

**Stranger Danger**

1. Clicky II http://www.netsmartzkids.org/RoutersBirthdaySurprise

**Texting**

1. Texting (Chicken Road YouTube) <https://www.youtube.com/watch?v=aWT-BDKPKsY>

Resources

Grade 2 Technology
Technology 2

Research and Information Fluency

Stage 1: Desired Results

Catholic Standards

DOC All Grades DOC: Catholic Standards

Life in Christ

Students will be able to

1. Understand that we shape our own life as a result of free will (CCC 1731).

2. Know that we must assume responsibility for the acts we perform (CCC 1781).

5. Know that sin is an offense against God (CCC 1850).

7. Assume personal responsibility (CCC 1914).

14. Demonstrate appropriate care of social communication and technology (CCC 2496).

Targeted Standards

OH Grade 2 OH: ELA & Literacy in History/Social Studies, Science, & Technical Subjects PreK-5

Writing

Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.

W.2.8. Recall information from experiences or gather information from provided sources to answer a question.

Catholic Identity

DOC All Grades Catholic Identity

Catholic Social Justice Teachings

Call to Family, Community, and Participation

The Rights of Children

5. THE RIGHT TO A LEARNING ENVIRONMENT THAT VALUES COOPERATION and challenges its members to critical and reflective thinking in their search for truth.

6. THE RIGHT TO DEVELOP POSITIVE, RESPONSIBLE AND CARING ATTITUDES AND BEHAVIORS TOWARD OTHERS and to recognize the rights of others to be safe and free from harassment and abuse.

9. THE RIGHT TO MAKE RESPONSIBLE DECISIONS founded on religious conviction.

Content

1. relevant information
2. multiple digital sources/tools
3. credibility and accuracy
4. plagiarism
5. data/results

Skills

1. Recall or gather information from provided sources.
2. Understand the concept of searching.
3. Evaluate credibility of sources with adult assistance.
4. Recall the definition of plagiarism.
5. Utilize understanding of plagiarism in creating original works.
6. Organize information for use.
7. Publish results using digital tools.

Essential Questions

1. How will I know what digital resources are good to use?
2. How will I know what digital resources to use for different purposes?
3. How will the research process help me become a more literate learner?

Standards Vocabulary

1. plagiarism
2. credibility
3. accuracy
4. data
5. integrate

Additional Vocabulary

**Emerging Vocabulary**

1. Search techniques see links below

Resources

* <https://www.youtube.com/watch?v=OqcRxoAnuxg>

Stage 2: Assessment Evidence

Website Exploration

Formative: Observation

The teacher will provide websites for student use. Teacher will observe their successes or difficulties in accessing the sites and offer help where needed.

Written Assignment: One Paragraph

Summative: Writing Assignment

Student will produce a one-paragraph summary of information gathered on a topic using all appropriate writing skills for presenting the information.

Website Domains

Summative: Quiz

Students will complete a matching quiz to demonstrate their understanding of website domain names:
.edu educational organization (most US universities)
.com company (usually .co in the UK)
.org any organization
.gov government agency
.net network

Stage 3: Learning Plan

Learning Experiences

1. **Website Exploration**: Students will visit websites as instructed by the teacher and discuss their credibility and accuracy as well as gather information.
2. **Concept Map:** Students will organize information gathered from websites to create a concept map on an assigned curricular topic.
3. **Digital Drawing**: Students will communicate the information learned in the form of a drawing.
4. **Poster**: Students will create an informational poster, preferably a digital poster, on an assigned curricular topic using Google Drawings, Glogster, or Paint.
5. **Written Product**: Students will create one paragraph from information gathered and publish their final product.

Resources

**Mapping/Drawing Tools**

1. Kidpix
2. Google Drawings
3. Drawing <https://www.mindmup.com>
4. Paint
5. Kidspiration
6. Glogster [www.glogster.com](http://www.glogster.com)
7. Graphic Organizer <http://www.eduplace.com/graphicorganizer/>

**Productivity Tools**

1. Microsoft Word
2. Google Docs
3. Pages

**Publishing Tools**

1. Google Docs
2. Edublog <https://edublogs.org/>
3. Blogging:

Kidblog <http://kidblog.org/home/>

Blogger

1. Weebly <http://www.weebly.com/>
2. TikaTok <https://www.tikatok.com/>

**Presentation Tools**

1. Microsoft PowerPoint
2. Google Slides
3. Keynote
4. Prezi <https://prezi.com/>

**Search Engines**

1. Student Friendly Search Engines <http://www.kidrex.org/>
2. Student Friendly Search Engines <http://kidtopia.info/>

**Information Resources**

1. [www.infohio.org](http://www.infohio.org)
2. <http://www.worldbookonline.com/kids/Home>
3. <http://www.worldbookonline.com/ewol/home;jsessionid=0E986CAD2F3164D76F18C24DE4A78CDF>
4. <http://askatechteacher.com/great-kids-websites/research/>

Grade 2 Technology
Technology 2

Technology Operations and Concepts

Stage 1: Desired Results

Catholic Standards

DOC All Grades DOC: Catholic Standards

Life in Christ

Students will be able to

6. Seek the common good together (CCC 1905).

7. Assume personal responsibility (CCC 1914).

10. Follow God's commandments (CCC 2068).

11. Respect all human life (CCC 2318).

14. Demonstrate appropriate care of social communication and technology (CCC 2496).

Targeted Standards

OH Grade 2 OH: ELA & Literacy in History/Social Studies, Science, & Technical Subjects PreK-5

Speaking and Listening

Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.

SL.2.5. Create audio recordings of stories or poems; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings.

Writing

Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

W.2.6. With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers.

Catholic Identity

DOC All Grades Catholic Identity

The Rights of Children

4. THE RIGHT TO WORK ACTIVELY TOWARD THEIR OWN EMPOWERMENT through the development of their gifts and talents.

6. THE RIGHT TO DEVELOP POSITIVE, RESPONSIBLE AND CARING ATTITUDES AND BEHAVIORS TOWARD OTHERS and to recognize the rights of others to be safe and free from harassment and abuse.

8. THE RIGHT TO LEARN RESPONSIBILITY for themselves and their actions.

9. THE RIGHT TO MAKE RESPONSIBLE DECISIONS founded on religious conviction.

Content

**History**

1. history of technology

**Hardware/Peripherals**

1. visual
2. auditory
3. tactile
4. devices

**Software/Operating System**

1. folders
2. menus
3. productivity/digital tools

word processing

spreadsheets

presentations

drawing

**Keyboarding**

**Internet**

1. browser
2. URL
3. webpage
4. search engine
5. cloud computing

Skills

**History**

1. Describe how technology has evolved over time.

**Hardware/Peripherals**

1. Recall the correct terminology when using devices.
2. Identify the hardware and peripherals of devices at the school.
3. Name other technologies used outside of schools.

**Software/Operating Systems**

1. Locate and open folders (on computer, iPad, cloud, etc.).
2. Access and use menus correctly.

**Productivity/Digital Tools**

Word Processing

Navigate in a document.

Format text.

Correct spelling errors.

Edit using cut, copy, and paste words and objects.

Insert, format, and move shapes.

Insert number lists and bullets.

Insert, resize and move clip art/graphics/pictures.

Save documents.

 Spreadsheets

Identify spreadsheet vocabulary: rows, columns, cells.

Presentations

Create a basic presentation:  insert slides, insert text, insert images.

Drawing

Create and edit drawing document.

Save and share document.

**​Keyboarding**

1. Review the alphabet.
2. Review the number keys.
3. Put hands in home row position.
4. Review proper posture, position, and technique.
5. Identify and understand how each of following keys are used: enter/return, shift, space bar, and backspace keys.

**Internet**

1. Use Internet terminology.
2. Access a website.
3. Navigate through a webpage.
4. Utilize multiple browser tabs.
5. Perform basic search using kid-friendly search engine.
6. Use bookmarks.

Essential Questions

1. How has technology evolved over time and how will it continue to change?
2. How do all the different parts of technology work together?
3. What skills will help me become efficient in technology?

Standards Vocabulary

1. digital media/digital tools
2. applications
3. presentation
4. technology
5. Internet
6. collaborate
7. keyboarding
8. formatting
9. chart

Additional Vocabulary

**Emerging Vocabulary**

1. save
2. save as
3. cell
4. row
5. column
6. bookmark
7. cloud computing
8. caps lock

**Master Vocabulary**

1. See attached document

Resources

Stage 2: Assessment Evidence

Identifying Technology Parts and Terminology

Formative: Observation

Students will demonstrate their knowledge of parts of technology and how to select/use applications effectively and productively by using proper terminology while using devices to complete tasks.

Computer Parts Visual Aid

Summative: Project

Students will create a visual aid of computer parts and peripherals.

Keyboarding

Formative: Observation

While students practice their keyboarding on a program, the teacher will check for finger placement and posture and provide feedback.

Word Processing Documents

Summative: Class Work

Throughout the year have students use a word processing program or app to practice their typing skills. At the beginning of the year have them type their name, then words, then sentences. As the year progresses have students add formatting skills and images to documents.

Polling Spreadsheet

Formative: Class Work

As a result of large group class discussion, with teacher assistance, students will fill out spreadsheet based on poll results.

Painting in Spreadsheet

Formative: Project

Using a spread sheet program create a picture by filling in the cells.

Presentation

Summative: Project

After research on an assigned topic, students will create a simple presentation.

Stage 3: Learning Plan

Learning Experiences

**History**

1. **Large Group Discussion:** Students will discuss the history of computing using [http://www.livescience.com/20718-computer-history.html](http://www.livescience.com/20718-computer-history.html%2C) displayed on an interactive board.
2. **Practice of Knowledge:** Students will create a booklet of different computer parts and peripherals. Students will add clip art to the booklet to complete it.

**Keyboarding**

1. **Demonstration/Drill and Practice**: Students use appropriate hand placement by using two hands while typing and using left and right side of keyboard by placing yarn down the middle of the keyboard.
2. **Drill and practice:** Students can use proper finger placement and posture by using typing software and/or games.

**Productivity/ Digital Tools**

Word Processing

**Document Creation:** Students will be able to open and create a document by using a word processing program or app. Students will type into the document. As the year progresses, students can format text with different font, font size and color, add bullets, numbering, clip art, objects or photos.

Spreadsheet

**Large Group Discussion**: Using the interactive board, students can view a spreadsheet and discuss parts of the worksheet and proper spreadsheet terminology (cell, row, column, headings).

**Skill Practice:** Using a teacher-assigned topic, students can create a poll. As a class, students can  review the sheet and take the poll. Teacher will fill in the cells with the correct number from class voting.

Presentation

**Demonstration of Skill**: Using presentation software or app, students will add text and graphics to a presentation.

Drawing

**﻿Demonstration of Skill**: Students will use a drawing program or app to create a picture illustrating a concept learned in a curricular area.

**Internet**

1. **Drill and Practice:** Students can use a kid-friendly search engine to search for a teacher-assigned topic  (i.e.: animals, flowers, holidays, sports) and explore search results to find images. They can copy and paste images into word documents and/or presentations. They should use multiple windows to have simultaneous searches.

Resources

**Productivity Tools**

1. Microsoft Word, Excel, PowerPoint
2. Google Docs, Slides, Sheets, Draw, Drive
3. Apple: Pages, Numbers, Keynote
4. KidPix
5. Wordle <http://www.wordle.net/>

**Keyboarding**

1. Kid Keys
2. Type to Learn 3
3. <http://learnenglishkids.britishcouncil.org/en/songs/my-computer-mouse>
4. <http://www.funtotype.com/>
5. <http://www.typingclub.com/>

**Internet**

1. Internet Browser (Google Chrome, Internet Explorer, Safari, Mozilla Firefox)

**Other**

1. <http://electronics.howstuffworks.com/tech>
2. <https://upfrontandcentre.wordpress.com/tag/lab-rules/>
3. <https://www.google.com/edu/training/get-trained/>
4. <http://www.microsoft.com/education/en-ca/teachers/plans/Pages/index.aspx>
5. <http://oakdome.com/k5/lesson-plans/second-grade-lesson-plans.php>