



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

DEPARTMENT: Applied Technology

COURSE: Technology Innovations

Curriculum Development Timeline

School: Township of Ocean Intermediate School

Course: Technology Innovations, Grade 6

Department: Applied Technology

Board Approval	Supervisor	Notes
July 2015	James Maliff	Update Standards
December 2017	Patrick O'Neill	Update Standards
August 2019	Patrick O'Neill	Revisions
August 2021	Patrick O'Neill	Name change from Computer Applications, Alignment to Standards
August 2024	Erin Leahy	Updated to include New State Mandates
August 2025	Erin Leahy	Updated to include New Standards

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Township of Ocean Pacing Guide	
Week	Marking Period 1 & 3
1	District AUP
2	Google Apps for Organization
3	Google Apps for Organization
4	Internet Safety & Website Evaluation
5	Internet Safety & Website Evaluation
6	Internet Safety & Website Evaluation
7	Online Banking
8	Online Banking
9	Google Slides
10	Google Sheets
Week	Marking Period 2 & 4
11	Google Sheets
12	Google Sheets
13	Podcasting & Research
14	Podcasting & Research
15	Podcasting & Research
16	Podcasting & Research
17	Introduction to Coding
18	Introduction to Coding
19	Google Sites (Final Digital Portfolio)

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Google Sites (Final Digital Portfolio)

Core Instructional & Supplemental Materials including various levels of Texts

- Core Instructional Materials
 - Chromebooks
 - [Google Classroom](#)
 - [District Website](#)
 - [Google Drive](#)
 - [Google Calendar](#)
 - [Google Keep](#)
 - [Gmail](#)
 - [Google Applied Digital Skills](#)
 - [Google Docs](#)
 - [Google Slides](#)
 - [Google Sheets](#)
 - [Google Drawings](#)
 - [Google Sites](#)
 - [Google Forms](#)
 - [Screencastify](#)
 - [Scratch](#)
 - [Anchor](#)
 - [Flipgrid](#)
- Supplemental Materials
 - [Quizizz](#)
 - [Quizlet](#) and [Quizlet Live](#)
 - Cyber Literacy for the Digital Age text
 - [Scope & Sequence: Common Sense 6-8 Digital Citizenship Curriculum text](#)
 - Internet Search Activities Workbook No. 1 and 2 texts
 - The Google Docs Specialist text
 - Learn-by-Doing: Google Apps text
 - [Prezi](#)
 - [CodeCombat](#)
 - [TED Talks](#)
 - [Coding with Chrome](#)

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COURSE: Technology Innovations

Time Frame	1 Week
Topic	
District AUP	
Alignment to Standards	
8.1.12.CS.3: Compare the functions of application software, system software, and hardware. 9.4.12.TL.1: Assess digital tools based on features such as accessibility options, capacities and utility for accomplishing a specified task.	
Learning Objectives and Activities	
SWBAT answer the following questions: • What are the responsibilities for using technology? • What are the consequences for unethical, unsafe behavior when using the computer? • How can misuse be prevented? • How will misuse affect not only me, but others? SWBAT understand the following concepts: • Technology can have positive or negative impact on both users and those affected by their use. • Understand that there are consequences for unethical and unsafe computer use. SWBAT to “do”: • Discuss the purpose of an Acceptable Use Policy and the consequences of inappropriate use of technology. • Brainstorm and discuss ideas based upon knowledge of the proper use of the computer/network while in school. • Identify and discuss the need for an Acceptable Use Policy • Describe the consequences for misusing school computers/networks	
Assessments	
<u>Formative:</u> • Teacher Observations • Do Now • Discussions on the importance of an AUP • Exit Question(s) • Quizlet review	

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Summative:

- End of unit quiz on Google Forms

Benchmark:

- Questions will be on end of semester benchmark exam

Alternative:

- Screen checks
- Ongoing daily assessments throughout semester

Interdisciplinary Connections

English Language Arts

- RI.CI.6.2. Determine the central idea of an informational text and explain how it is supported by key details; provide a summary of the text distinct from personal opinions or judgments.
- RI.CR.6.1 Cite textual evidence and make relevant connections to support analysis of what an informational text says explicitly as well as inferences drawn from the text.
- RL.CR.6.1. Cite textual evidence and make relevant connections to support analysis of what a literary text says explicitly as well as inferences drawn from the text.

Career Readiness, Life Literacies, and Key Skills

- 9.4.12.CI.3: Investigate new challenges and opportunities for personal growth, advancement and transition.
- 9.4.12.CT.3: Collaborate with individuals to analyze a variety of potential solutions to climate change effects and determine why solutions may work better than others (e.g., political, economic, cultural).
- 9.4.12.TL.1: Assess digital tools based on features such as accessibility options, capacities and utility for accomplishing a specific task.

Technology Integration

- This class uses Chromebooks daily being that it is a Computer class.
- Students will use internet-based game sites to reflect on their learning progress.

Career Education

- CRP1: Act as a responsible and contributing citizen and employee.
- CRP2: Apply appropriate academic and technical skills.
- CRP5: Consider the environmental, social and economic impacts of decisions.

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COURSE: Technology Innovations

- CRP11: Use technology to enhance productivity.

Time Frame	2 Weeks
Topic	
Google Apps for Organization	
Alignment to Standards	
8.1.12.CS.1: Describe ways in which integrated systems hide underlying implementation details to simplify user experiences. 8.1.12.CS.3: Compare the functions of application software, system software, and hardware. 8.1.12.DA.2: Describe the tradeoffs in how and where data is organized and stored. 9.4.12.TL.1: Assess digital tools based on features such as accessibility options, capacities and utility for accomplishing a specified task.	
Learning Objectives and Activities	
SWBAT answer the following questions: • What are the benefits of a learning community? • Why are applications that help organize life important? • How can using applications help organize life? • What is etiquette and why is it important to communication? • How can you send an email to a classmate or teacher? • How do you add attachments to email? • What is spam (also known as junk mail)? SWBAT understand the following concepts: • Google Drive organizes documents and files to be accessed remotely. • Google Calendar helps organize events and can notify one of appointments. • Google Keep creates notes and lists to help organize tasks. • Email is a more formal means of communication. • Proper etiquette should be used when sending an email to a recipient. SWBAT to “do”: • Navigate Classroom • Determine what assignments are due and what are coming up • Turn in assignments on Classroom • Create folders in Drive	

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COURSE: Technology Innovations

- Organize files
- Delete files no longer needed.
- Create events in Calendar
- Set up notifications
- Create notes and an online assignment pad in Keep
- Discussion of different areas of email.
- Recognize examples of email etiquette.
- Send an email to a classmate or teacher.
- Know how to log into school email.
- Compose and send an email to a classmate and/or teacher.
- Compose and send an email with an attachment.
- Recognize spam and how to prevent it.

Assessments

Formative:

- Teacher Observations
- Do Now
- Exit Question(s)

Summative:

- Google Drive folder created and shared with me
- Google Keep Note shared with me

Benchmark:

- Questions will be on end of semester benchmark exam

Alternative:

- Screen checks
- Ongoing daily assessments throughout semester
- Google Calendar and screenshots to be added to digital portfolio

Interdisciplinary Connections

English Language Arts

- RI.MF.6.6. Integrate information when presented in different media or formats (e.g. visually, quantitatively) to develop a coherent understanding of a topic or issue.
- RI.AA.6.7. Trace the development of and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not.
- W.SE.6.6 Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of

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COURSE: Technology Innovations

others while avoiding plagiarism and providing basic bibliographic information from sources.

Career Readiness, Life Literacies, and Key Skills

- 9.4.12.CI.3: Investigate new challenges and opportunities for personal growth, advancement and transition.
- 9.4.12.CT.3: Collaborate with individuals to analyze a variety of potential solutions to climate change effects and determine why solutions may work better than others (e.g., political, economic, cultural).
- 9.4.12.TL.1: Assess digital tools based on features such as accessibility options, capacities and utility for accomplishing a specific task.
- 9.4.12.TL.4: Collaborate in online learning communities or social networks or virtual worlds to analyze and propose a resolution to a real-world problem.

Technology Integration

- This class uses Chromebooks daily being that it is a Computer class.
- Gmail will be used for students to learn how to use their accounts.
- Students will use internet-based game sites to reflect on their learning progress.

Career Education

- CRP1: Act as a responsible and contributing citizen and employee.
- CRP2: Apply appropriate academic and technical skills.
- CRP4: Communicate clearly and effectively with reason.
- CRP5: Consider the environmental, social and economic impacts of decisions.
- CRP11: Use technology to enhance productivity.

Time Frame	3 Weeks
Topic	
Internet Safety / Website Evaluation	
Alignment to Standards	
8.1.12.CS.1: Describe ways in which integrated systems hide underlying implementation details to simplify user experiences. 8.1.12.DA.2: Describe the tradeoffs in how and where data is organized and stored. 9.4.12.TL.1: Assess digital tools based on features such as accessibility options, capacities and utility for accomplishing a specified task.	

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9.4.12.IML.4: Assess and critique the appropriateness and impact of existing data visualizations for an intended audience.
9.4.12.DC.1: Explain the beneficial and harmful effects that intellectual property laws can have on the creation and sharing of content.
9.4.12.DC.2: Compare and contrast international differences in copyright laws and ethics.
9.4.12.DC.3: Evaluate the social and economic implications of privacy in the context of safety, law, or ethics.
9.4.12.DC.4: Explain the privacy concerns related to the collection of data (e.g. cookies) and generation of data through automated processes that may not be evident to users.
9.4.12.DC.6: Select information to post online that positively impacts personal image and future college and career opportunities.

Learning Objectives and Activities

SWBAT answer the following questions:

- What are the consequences for unethical, unsafe behavior when using the computer?
- What are my responsibilities for using technology?
- How can misuse be prevented?
- How will misuse affect not only me, but others?
- What are different types of searches you can perform?
- How do you know a website is reliable?
- What is a database, and how can you use it for research?

SWBAT understand the following concepts:

- Technology can have positive or negative impact on both users and those affected by their use.
- The use of appropriate online behaviors related to cyber safety, cyberbullying, cyber security, and cyber ethics is beneficial for online and offline relationships.
- What one does online can affect one's future and interpersonal relationships.
- The Internet is a vast world of information that needs to be evaluated for reliable information.
- Searches allow you to find information online, and they can be used to narrow the type of information you wish to find.
- Databases are a more reliable source to find accurate information when researching a topic.

SWBAT to "do":

- Responses to Internet safety scenarios.
- Poster or Public Service Announcement activity.
- Internet safety culminating project.

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- Understand the benefits and drawbacks of the Internet and social media.
- Understand what cyber ethics are.
- Recognize ways of avoiding cyberbullies.
- Discuss the difference between facts, statistics, and opinion.
- Discussion on the importance of giving credit where credit is due.
- Search for various websites to locate and evaluate information provided.
- Look up the same information in different databases.
- How to use different types of searches to compile information on a topic.
- Understand that different types of searches can be used, but they might offer different results.
- Evaluate various websites to see whether the information provided is relevant and accurate.
- Understand the advantage of using a database when researching.

Assessments

Formative:

- Teacher Observations
- Do Nows
- Exit Questions
- Discussion on Internet Safety and Social Media Safety

Summative:

- Unit quiz on Google Forms
- Culminating unit project on Google Slides or Google Drawings
- Presentation to class

Benchmark:

- Questions will be on end of semester benchmark exam

Alternative:

- Screen checks
- Ongoing daily assessments throughout semester
- Reflections using FlipGrid
- Project from this unit added to digital portfolio

Interdisciplinary Connections

English Language Arts

- RI.MF.6.6. Integrate information when presented in different media or formats (e.g. visually, quantitatively) to develop a coherent understanding of a topic or issue.

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COURSE: Technology Innovations

- RI.AA.6.7. Trace the development of and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not.
- W.AW.6.1 Write arguments on discipline-specific content (e.g. social studies, science, technical subjects, English/Language Arts) to support claims with clear reasons and relevant evidence. A. Introduce claim(s) about a topic or issue and organize the reasons and evidence logically.
- W.IW.6.2 Write informative/explanatory texts (including the narration of historical events, scientific procedures/experiments, or technical processes) to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content..B. Develop the topic with relevant facts, definitions, concrete details, quotations or other information and examples.
- W.WR.6.5 Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.
- W.SE.6.6 Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information from sources. CC

Career Readiness, Life Literacies, and Key Skills

- 9.4.12.CI.3: Investigate new challenges and opportunities for personal growth, advancement and transition
- 9.4.12.CT.1: Identify problem-solving strategies used in the development of an innovative product or practice.
- 9.4.12.CT.3: Collaborate with individuals to analyze a variety of potential solutions to climate change effects and determine why solutions may work better than others (e.g., political, economic, cultural).
- 9.4.12.IML.3: Analyze data using tools and models to make valid and reliable claims, or to determine optimal design solutions.
- 9.4.12.TL.1: Assess digital tools based on features such as accessibility options, capacities and utility for accomplishing a specific task
- 9.4.12.TL.4: Collaborate in online learning communities or social networks or virtual worlds to analyze and propose a resolution to a real-world problem.

Technology Integration

- This class uses Chromebooks daily being that it is a Computer class.
- Students will use internet-based game sites or Flipgrid to reflect on their learning progress.
- School databases and various websites will be used for students to research Internet

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safety topics.
Career Education
● CRP1: Act as a responsible and contributing citizen and employee. ● CRP4: Communicate clearly and effectively with reason. ● CRP5: Consider the environmental, social and economic impacts of decisions. ● CRP7: Employ valid and reliable research strategies. ● CRP8: Utilize critical thinking to make sense of problems and persevere in solving them. ● CRP11: Use technology to enhance productivity. ● CRP12: Work productively in teams while using cultural global competence.

Time Frame	
Topic	
Online Banking	
Alignment to Standards	
9.1.8.CDM.2: Demonstrate an understanding of the terminology associated with different types of credit (e.g., credit cards, installment loans, mortgages, lines of credit) and compare and calculate the interest rates associated with each. 9.1.8.CDM.3: Compare and contrast loan management strategies, including interest charges and total principal repayment costs. 9.1.8.CP.1: Compare prices for the same goods or services 9.1.8.FI.4: Analyze the interest rates and fees associated with financial products. 9.2.8.CAP.20: Identify the items to consider when estimating the cost of funding a business. (with Taco Truck project only)	
Learning Objectives and Activities	
SWBAT answer the following questions: ● What are the responsibilities for using technology?	

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- What are online baking terms
- Calculate an interest rate
- Compare prices
- Estimate the cost of running a business

SWBAT understand the following concepts:

- Demonstrate an understanding of the terminology associated with different types of credit and compare and calculate the interest rates associated with each.
- Estimate the cost of running a business

SWBAT to "do":

- Research credit terminology and its real world application.
- Create a business and consider all costs associated
- Discuss credit cards, installment loans, mortgages and lines of credit through a "dream life" Project.

Assessments

Formative:

- Teacher Observations
- Do Now
- Discussions on the importance of an AUP
- Exit Question(s)
- Quizlet review

Summative:

- End of unit quiz on Google Forms

Benchmark:

- Questions will be on end of semester benchmark exam

Alternative:

- Screen checks
- Ongoing daily assessments throughout semester

Interdisciplinary Connections

English Language Arts

- RI.CI.6.2. Determine the central idea of an informational text and explain how it is supported by key details; provide a summary of the text distinct from personal

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opinions or judgments.

- RI.CR.6.1 Cite textual evidence and make relevant connections to support analysis of what an informational text says explicitly as well as inferences drawn from the text.
- RL.CR.6.1. Cite textual evidence and make relevant connections to support analysis of what a literary text says explicitly as well as inferences drawn from the text.

Career Readiness, Life Literacies, and Key Skills

- 9.4.12.CI.3: Investigate new challenges and opportunities for personal growth, advancement and transition.
- 9.4.12.CT.3: Collaborate with individuals to analyze a variety of potential solutions to climate change effects and determine why solutions may work better than others (e.g., political, economic, cultural).
- 9.4.12.TL.1: Assess digital tools based on features such as accessibility options, capacities and utility for accomplishing a specific task.

Technology Integration

- This class uses Chromebooks daily being that it is a Computer class.
- Students will use internet-based game sites to reflect on their learning progress.

Career Education

- CRP1: Act as a responsible and contributing citizen and employee.
- CRP2: Apply appropriate academic and technical skills.
- CRP5: Consider the environmental, social and economic impacts of decisions.
- CRP11: Use technology to enhance productivity.

Time Frame	3 Weeks
Topic	
Google Slides	
Alignment to Standards	
9.4.12.CI.3: Investigate new challenges and opportunities for personal growth, advancement and transition. 9.4.12.TL.1: Assess digital tools based on features such as accessibility options, capacities and utility for accomplishing a specified task. 9.4.12.TL.4: Collaborate in online learning communities or social networks or virtual worlds to	

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analyze and propose a resolution to a real-world problem.

9.4.12.CT.1: Identify problem-solving strategies used in the development of an innovative product or practice.

9.4.12.CT.3: Collaborate with individuals to analyze a variety of potential solutions to climate change effects and determine why solutions may work better than others (e.g., political, economic, cultural).

9.4.12.IML.3: Analyze data using tools and models to make valid and reliable claims, or to determine optimal design solutions.

Learning Objectives and Activities

SWBAT answer the following questions:

- How can I use Google Slides?
- How can I collaborate remotely to complete work?
- What is stop motion animation?

SWBAT understand the following concepts:

- Web-based applications, such as Google Slides, can be used to create and collaborate on presentations, but it can be used for other purposes as well.

SWBAT to "do":

- Create a stop-motion animation cartoon in Google Slides
- Researching a topic
- Creating a presentation for a topic in Google Slides
- Discussion on the importance of giving credit where credit is due
- Working with partners remotely for research and creation of presentation
- Presentation created in Google Slides
- Sharing a presentation
- Creating your own theme
- Collaborating effectively on a presentation
- Inserting elements
- Formatting
- Arranging elements
- Hyperlinking

Assessments

Formative:

- Teacher Observations
- Do Nows
- Exit Questions
- Mini animation project

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- Stop-motion animation project
- Choose-your-own-adventure project

Summative:

- Unit quiz given using Google Forms

Benchmark:

- Questions will be on end of semester benchmark exam

Alternative:

- Screen checks
- Ongoing daily assessments throughout semester
- Project(s) from this unit will be added to digital portfolio

Interdisciplinary Connections

English Language Arts

- RI.MF.6.6. Integrate information when presented in different media or formats (e.g. visually, quantitatively) to develop a coherent understanding of a topic or issue.
- RI.AA.6.7. Trace the development of and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not.
- W.NW.6.3. Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences.

Career Readiness, Life Literacies, and Key Skills

- 9.4.12.Cl.3: Investigate new challenges and opportunities for personal growth, advancement and transition.
- 9.4.12.CT.1: Identify problem-solving strategies used in the development of an innovative product or practice.
- 9.4.12.TL.1: Assess digital tools based on features such as accessibility options, capacities and utility for accomplishing a specific task.

Technology Integration

- This class uses Chromebooks daily being that it is a Computer class.
- Students will use internet-based game sites or Flipgrid to reflect on their learning progress.
- Google Slides will be used to show that by duplicating a slide, moving an object slightly, and repeating the process will create animation.

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Career Education

- CRP2: Apply appropriate academic and technical skills.
- CRP6: Demonstrate creativity and innovation.
- CRP8: Utilize critical thinking to make sense of problems and persevere in solving them.

Time Frame	3 Weeks
Topic	
Google Sheets	
Alignment to Standards	
8.1.12.DA.5: Create data visualizations from large data sets to summarize, communicate, and support different interpretations of real-world phenomena. 9.4.12.TL.1: Assess digital tools based on features such as accessibility options, capacities and utility for accomplishing a specified task.	
Learning Objectives and Activities	
SWBAT answer the following questions: • How can I use Google Sheets? • How do I create graphs and charts to display my data? SWBAT understand the following concepts: • Web-based applications, such as Google Sheets, can be used to organize and display data. SWBAT to “do”: • Discussion on how data can be displayed effectively. • Creation of a spreadsheet using Google Sheets. • Demonstration on how formatting spreadsheets affects how data is displayed. • Display data through the use of charts and graphs. • Spreadsheet creation • Review sharing • Inserting charts and graphs • Formatting • Conditional formatting	

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- Hyperlinking

Assessments

Formative:

- Teacher Observations
- Do Nows
- Exit Question(s)
- Spreadsheet with chart or graph
- Pixel art using conditional formatting

Summative:

- Vocabulary terms assessed through Google Forms

Benchmark:

- Questions will be on end of semester benchmark exam

Alternative:

- Pixel art sheets that are pre-coded for students to create an image
- Screen checks
- Ongoing daily assessments throughout semester
- Project from this unit added to digital portfolio

Interdisciplinary Connections

English Language Arts

- RI.CR.6.1 Cite textual evidence and make relevant connections to support analysis of what an informational text says explicitly as well as inferences drawn from the text.
-
- RI.TS.6.4. Use text structures (e.g. cause-effect, problem-solution), search tools, and genre features (e.g. graphics, captions, indexes) to locate and integrate information.

Mathematics

- 6.EE.A.1-4 - Expressions and Equations
- 6.SP.B.4 - Summarize numerical data sets in relation to their context.

Career Readiness, Life Literacies, and Key Skills

- 9.4.12.CI.3: Investigate new challenges and opportunities for personal growth, advancement and transition.
- 9.4.12.TL.1: Assess digital tools based on features such as accessibility options, capacities and utility for accomplishing a specific task.

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Technology Integration

- This class uses Chromebooks daily being that it is a Computer class.
- Students will use internet-based game sites or Flipgrid to reflect on their learning progress.
- Google Sheets will be used to teach students how to add formulas, create graphs from data, and use conditional formatting.

Career Education

- CRP2: Apply appropriate academic and technical skills.
- CRP6: Demonstrate creativity and innovation.
- CRP8: Utilize critical thinking to make sense of problems and persevere in solving them.

Time Frame	4 Weeks
Topic	
Podcasting & Research	
Alignment to Standards	
8.1.12.CS.1: Describe ways in which integrated systems hide underlying implementation details to simplify user experiences. 8.1.12.CS.3: Compare the functions of application software, system software, and hardware. 8.1.12.DA.2: Describe the tradeoffs in how and where data is organized and stored. 8.2.12.ED.4: Design a product or system that addresses a global problem and document decisions made based on research, constraints, trade-offs, and aesthetic and ethical considerations and share this information with an appropriate audience. 9.4.12.DC.1: Explain the beneficial and harmful effects that intellectual property laws can have on the creation and sharing of content. 9.4.12.DC.2: Compare and contrast international differences in copyright laws and ethics. 9.4.12.TL.1: Assess digital tools based on features such as accessibility options, capacities and utility for accomplishing a specified task.	
Learning Objectives and Activities	
SWBAT answer the following questions • Where does the term “blog” come from? • What is the difference between a “blog” and “vlog”?	

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- What is the difference between “blogging” and “podcasts”?
- What can I do to become a better public speaker?

SWBAT understand the following concepts

- Blogging is a form of informal communication on the web.
- Podcasting is a form of audio communication that can be listened to online or downloaded.
- Podcasting is a form of performance using voice acting.

SWBAT to “do”

- Podcasts (i.e. TED Talk or other topics) created and posted on Anchor.
- Identify chronological and reverse chronological order.
- Identify and examine blogs.
- Discussion on the importance of giving credit where credit is due.
- Search for various websites to locate and evaluate information provided.
- Evaluate various websites to see whether the information provided is relevant and accurate.

Assessments

Formative:

- Teacher Observations
- Do Nows
- Exit Question(s)
- Choice of Blogs / Podcasts / TED Talk created

Summative:

- Vocabulary terms assessed through Google Forms

Benchmark:

- Questions will be on end of semester benchmark exam

Alternative:

- Screen checks
- Project from this unit added to digital portfolio

Interdisciplinary Connections

English Language Arts

- W.WP.6.4 With some guidance and support from peers and adults, develop and strengthen writing as needed by planning; flexibly making editing and revision choices; sustaining effort to fit composition needs and purposes; and attempting to address

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purpose and audience.
Career Readiness, Life Literacies, and Key Skills
9.4.12.CI.3: Investigate new challenges and opportunities for personal growth, advancement and transition. 9.4.12.CT.1: Identify problem-solving strategies used in the development of an innovative product or practice. 9.4.12.CT.3: Collaborate with individuals to analyze a variety of potential solutions to climate change effects and determine why solutions may work better than others (e.g., political, economic, cultural). 9.4.12.TL.1: Assess digital tools based on features such as accessibility options, capacities and utility for accomplishing a specific task. 9.4.12.TL.4: Collaborate in online learning communities or social networks or virtual worlds to analyze and propose a resolution to a real-world problem.
Technology Integration
- This class uses Chromebooks daily being that it is a Computer class. - Students will use internet-based game sites or Flipgrid to reflect on their learning progress. - Anchor, Screencastify, or similar applications or websites will be used to create either a blog, podcast, or vlog.
Career Education
- CRP2: Apply appropriate academic and technical skills. - CRP4: Communicate clearly and effectively with reason. - CRP6: Demonstrate creativity and innovations - CRP8: Utilize critical thinking to make sense of problems and persevere in solving them. - CRP11: Use technology to enhance productivity. - CRP12: Work productively in teams while using cultural global competence.

Time Frame	2 Weeks
Topic	
Introduction to Coding	
Alignment to Standards	

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8.1.12.CS.1: Describe ways in which integrated systems hide underlying implementation details to simplify user experiences.
8.1.12.CS.2: Model interactions between application software, system software, and hardware.
8.1.12.CS.3: Compare the functions of application software, system software, and hardware.
8.1.12.AP.1: Design algorithms to solve computational problems using a combination of original and existing algorithms.
8.1.12.DA.2: Describe the tradeoffs in how and where data is organized and stored.
8.1.12.DA.4: Explain the relationship between binary numbers and the storage and use of data in a computing device.
9.4.12.TL.1: Assess digital tools based on features such as accessibility options, capacities and utility for accomplishing a specified task.

Learning Objectives and Activities

SWBAT answer the following questions:

- What is block-based programming language?
- How are algorithms used in coding?
- What are the fundamentals of computer programming?
- How is computer programming useful in real life?

SWBAT understand the following concepts:

- Coding develops computational thinking skills to help prepare to learn to write code and solve other problems.
- Coding creates fun interactive games and drawings.

SWBAT to “do”:

- Define vocabulary related to coding.
- Design a game using a coding website or program.
- Evaluate games created by other students.
- Learn basic coding techniques.
- Identify potential bugs that can occur with coding and take corrective action to fix them.

Assessments

Formative:

- Teacher Observations
- Do Nows
- Exit Question(s)
- Choice of game designed using coding basics (Easy, Medium, Hard)

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Summative:

- Vocabulary terms assessed through Google Forms

Benchmark:

- Questions will be on end of semester benchmark exam

Alternative:

- For students struggling with coding, they can attempt a simple Pong Game or Shark Eater Game.
- Screen checks
- Project from this unit added to digital portfolio

Interdisciplinary Connections

English Language Arts

- W.WP.6.4 With some guidance and support from peers and adults, develop and strengthen writing as needed by planning; flexibly making editing and revision choices; sustaining effort to fit composition needs and purposes; and attempting to address purpose and audience.

Mathematics

- 6.EE.A.1-4 - Expressions and Equations
- 6.SP.B.4 - Summarize numerical data sets in relation to their context.

Visual & Performing Arts

- 1.4.8.Cr1c: Explore, describe and develop given circumstances of a scripted or improvised character in a theatrical work.
- 1.4.8.Cr2a: Articulate and apply critical analysis, extensive background knowledge, sociohistorical research, and cultural context related to existing or developing original theatrical work.
- 1.4.8.Cr3c: Develop effective physical and vocal traits of characters in an improvised or scripted theatrical work
- 1.4.8.Pr4a: Rehearse a variety of acting techniques to increase skills in a rehearsal or theatrical performance that assist in the development of stronger character choices.
- 1.4.8.Pr4b: Use a variety of technical elements to create a design for a rehearsal or theatre production.

Career Readiness, Life Literacies, and Key Skills

- 9.4.12.Cl.3: Investigate new challenges and opportunities for personal growth, advancement and transition.
- 9.4.12.CT.1: Identify problem-solving strategies used in the development of an

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innovative product or practice.

- 9.4.12.TL.1: Assess digital tools based on features such as accessibility options, capacities and utility for accomplishing a specific task.
- 9.4.12.TL.4: Collaborate in online learning communities or social networks or virtual worlds to analyze and propose a resolution to a real-world problem.

Technology Integration

- This class uses Chromebooks daily being that it is a Computer class.
- Students will use internet-based game sites or Flipgrid to reflect on their learning progress.
- Scratch, Coding with Chrome, or similar websites will be used for game creation.
- FlipGrid will be used for students to reflect on their work.

Career Education

- CRP2: Apply appropriate academic and technical skills.
- CRP4: Communicate clearly and effectively with reason.
- CRP6: Demonstrate creativity and innovation.
- CRP8: Utilize critical thinking to make sense of problems and persevere in solving them.

Time Frame	2 Weeks
Topic	
Google Sites	
Alignment to Standards	
8.1.12.CS.1: Describe ways in which integrated systems hide underlying implementation details to simplify user experiences. 8.1.12.DA.2: Describe the tradeoffs in how and where data is organized and stored. 9.4.12.CI.2: Identify career pathways that highlight personal talents, skills and abilities. 9.4.12.TL.1: Assess digital tools based on features such as accessibility options, capacities and utility for accomplishing a specified task. 9.2.12.CAP.5: Assess and modify a personal plan to support current interests and postsecondary plans. 9.4.12.DC.1: Explain the beneficial and harmful effects that intellectual property laws can have on the creation and sharing of content. 9.4.12.DC.2: Compare and contrast international differences in copyright laws and ethics.	

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Learning Objectives and Activities

SWBAT answer the following questions:

- What is the purpose of a website?
- What types of websites are there?

SWBAT understand the following concepts:

- Websites can be used to share information online, but putting too much information out there or putting the wrong kind of information out there can be detrimental.

SWBAT to "do":

- Discussing the advantages and disadvantages of website use.
- Designing a website to display key information in an appealing way.
- Incorporating hyperlinks to provide further information.
- Identifying designs and layouts that are appealing to viewers.
- Displaying information and data in an appealing manner.

Assessments

Formative:

- Teacher Observations
- Do Nows
- Exit Question(s)

Summative:

- Parts of a website vocabulary assessed through Google Forms

Benchmark:

- Portfolio
- Questions will be on end of semester benchmark exam

Alternative:

- No alternative for this - this will be added to throughout both semesters
- Screen checks

Interdisciplinary Connections

English Language Arts

- RI.CI.6.2. Determine the central idea of an informational text and explain how it is supported by key details; provide a summary of the text distinct from personal opinions or judgments.
- RI.CR.6.1 Cite textual evidence and make relevant connections to support analysis of

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what an informational text says explicitly as well as inferences drawn from the text.

- RL.CR.6.1. Cite textual evidence and make relevant connections to support analysis of what a literary text says explicitly as well as inferences drawn from the text.

Visual & Performing Arts

- 1.2.8.Pr6a: Analyze and design various presentation formats and tasks in the presentation and/or distribution of media artworks.
- 1.2.8.Pr6b: Analyze benefits and impacts from presenting media artworks.
- 1.2.8.Pr4a: Experiment with and integrate multiple forms, approaches and content to coordinate, produce and implement media artworks that convey purpose and meaning (e.g., narratives, video games, interdisciplinary projects, multimedia theatre).
- 1.5.8.Cr1a: Conceptualize early stages of the creative process, including applying methods to overcome creative blocks or take creative risks, and document the processes in traditional or new media.
- 1.5.8.Cr2a: Demonstrate persistence and willingness to experiment and take risks during the artistic process.
- 1.5.8.Cr2b: Demonstrate an awareness of ethical responsibility as applied to artmaking including environmental implications, responsibility in sharing images online, appropriation, and intellectual property ethics.
- 1.5.8.Cr2c: Apply, organize and strategize methods for design and redesign of objects, places, systems, images and words to clearly communicate information to a diverse audience.
- 1.5.8.Pr4a: Investigate and analyze ways artwork is presented, preserved and experienced, including use of evolving technology. Evaluate a collection or presentation based on this criterion.
- 1.5.8.Re7a: Explain how a person's aesthetic choices are influenced by culture and environment, and how they impact the way in which visual messages are perceived and conveyed.

Career Readiness, Life Literacies, and Key Skills

- 9.4.12.Cl.2: Identify career pathways that highlight personal talents, skills and abilities.
- 9.4.12.Cl.3: Investigate new challenges and opportunities for personal growth, advancement and transition.
- 9.4.12.CT.1: Identify problem-solving strategies used in the development of an innovative product or practice.
- "9.4.12.DC.2: Compare and contrast international differences in copyright laws and ethics.
- 9.4.12.DC.3: Evaluate the social and economic implications of privacy in the context of safety, law, or ethics."
- 9.4.12.TL.1: Assess digital tools based on features such as accessibility options, capacities and utility for accomplishing a specific task.

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- 9.4.12.TL.4: Collaborate in online learning communities or social networks or virtual worlds to analyze and propose a resolution to a real-world problem.

Technology Integration

- This class uses Chromebooks daily being that it is a Computer class.
- Students will use internet-based game sites.
- Google Sites will be used to create their own digital portfolio.
- FlipGrid will be used for students to reflect on their work and the school year.

Career Education

- CRP1: Act as a responsible and contributing citizen and employee.
- CRP2: Apply appropriate academic and technical skills.
- CRP4: Communicate clearly and effectively with reason.
- CRP6: Demonstrate creativity and innovation.
- CRP8: Utilize critical thinking to make sense of problems and persevere in solving them.
- CRP9: Model integrity, ethical leadership and effective management.
- CRP10: Plan education and career paths aligned to personal goals.
- CRP11: Use technology to enhance productivity.

Modifications (ELL, Special Education, At-Risk Students, Gifted & Talented, & 504 Plans)

ELL:

- Use visuals
- Introduce key vocabulary before lesson
- Teacher models reading aloud daily
- Provide peer tutoring
- Use of Google Translate to assist with understanding assignments.
- Guided notes and/or scaffold outline for written assignments
- Accept demonstration and verbal assessments in lieu of written tests

Supports for Students With IEPs:

- Allow extra time to complete assignments or tests
- Guided notes and/or scaffold outline for written assignments
- Work in a small group
- Allow answers to be given orally or dictated
- Follow all IEP modifications

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At-Risk Students:

- Guided notes and/or scaffold outline for written assignments
- Introduce key vocabulary before lesson
- Work in a small group
- Lesson taught again using a differentiated approach
- Allow answers to be given orally or dictated
- Use visuals / Anchor Charts
- Leveled texts according to ability

Gifted and Talented:

- Create an enhanced set of introductory activities (e.g. advance organizers, concept maps, concept puzzles)
- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Organize and offer flexible small group learning activities
- Provide whole group enrichment explorations
- Teach cognitive and methodological skills
- Use center, stations, or contracts
- Organize integrated problem-solving simulations
- Propose interest-based extension activities
- Expose students to beyond level texts

Supports for Students With 504 Plans:

- Follow all the 504 plan modifications
- Text to speech/audio recorded selections
- Amplification system as needed
- Leveled texts according to ability
- Fine motor skill stations embedded in rotation as needed

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