Somers Point School District

Curriculum

Technology

Grade 5

June 2012

Board Approved: August 2012

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SOMERS POINT SCHOOL DISTRICT

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Somers Point Schools

This document reflects the collaboration of teachers, staff, students, parents, and the Board of Education to define our mission, vision and beliefs to guide our work.

Our Mission

Empower each student to make responsible choices, meet challenges, achieve personal success, and contribute to a global society as they apply the New Jersey Core Curriculum Standards to become autonomous, lifelong learners who are literate problem solvers across all disciplines. This is accomplished through:

- *Offering diverse, challenging, effective and progressive programs in a safe, nurturing environment*
- *Providing optimal facilities and resources*
- *Mastering the skills and tools needed for success*
- *Facilitating an educational partnership with home, school and community*

Our Beliefs

Beliefs: We believe that our empowered learners:

- Participate in educational programs that are designed to meet the needs of learners while providing challenging activities in the context of real life situations
- Are aware of community issues and take part in activities to better their community
- Acquire basic skills in obtaining information, thinking critically, solving problems and communicating effectively
- Develop intellectual curiosity and the ability to access information as needed
- Become reflective learners who have an understanding of their own strengths and weaknesses
- Develop the aptitudes and skills to adjust to a changing world and an unpredictable future
- Are lifetime learners who value and accept learning as a continuing and dynamic process affecting all aspects of life
- Value the integrity of all individuals and recognize their own ability to progress academically, socially, and emotionally

Our Vision

The students of the Somers Point School District will demonstrate personal growth over time in relation to individualized goals aligned to the New Jersey Core Content Curriculum Standards. Achievement is evident when students:
- Take academic risks
- Transfer or extend content area knowledge
- Are intrinsically motivated life-long learners
- Are global learners who collaborate beyond the confines of the classroom or school
- Demonstrate social growth
- Are meta-cognitive thinkers
- Solve real-world problems

To foster student achievement Somers Point Educators:
- Promote student-centered learning
- Explicitly communicate the purpose of the lesson and how it fits into students' broader learning
- Provide hands-on learning activities
- Encourage collaboration
- Cultivate a safe environment and a strong classroom community
- Differentiate instruction
- Know the content area, curriculum, and their students
- Integrate technology
- Uncover and capitalize on student interests
- Use assessment data to make instructional decisions
- Commit to life-long learning to improve their practice

INTRODUCTION, PHILOSOPHY OF EDUCATION, AND EDUCATIONAL GOALS

Technology is a tool to help students solve problems, create products, and build relationships. This tool can also facilitate the acquisition of grade level core curriculum standards and workplace readiness skills.

We believe that technology can:
- Improve student motivation, interest, and engagement in learning.
- Prepare students for a global workplace.
- Address the learning needs of *all* students by providing opportunity for authentic, relevant work.
- Offer new strategies for real-time student assessment and instant feedback.

Technology improves critical thinking and problem solving when:
- Students are taught to apply the process of problem solving and are then allowed opportunities to apply technology in development of solutions.

- Students work in collaborative groups while using computers to solve problems.

- Students use technology presentation and communication tools to present, publish, and share results of projects.

We ask ourselves the following questions as we build our technology curriculum and infrastructure:
-What information do teachers and students need to improve their work?
-What new relationships can improve learning?
-What authentic relationships can you imagine for students and educators?
-What technology do you want?

Technology Scope and Sequence
Pacing Guide
5th Grade

Semester 1

Big Idea	CPI's Covered	Content Area
Technology and Operations	8.1.2.A.1 8.1.4.A.1 8.1.4.A.2	Technology Networks and Files
Word Processing	8.1.2.A.5 8.1.4.A.2 8.1.4.E.2	Eco System

Semester 2

Big Idea	CPI's Covered	Content Area
Research Strategies	8.1.8.E.1	Social Studies
Digital Citizenship	8.1.4.D.1 8.1.4.D.2 8.1.4.D.3	Current Events

Semester 3

Big Idea	CPI's Covered	Content Area
Data Collection and Evaluation	8.1.4.A.3 8.1.4.A.4 8.1.4.A.3	Holocaust: Social Studies and Reading

Semester 4

Big Idea	CPI's Covered	Content Area
Multi-Media Presentation/ Global Collaboration	8.1.4.A.5 8.1.4.A.3 8.1.4.B.1 8.1.4.C.1 8.1.4.E.2	Reading PBL: Hero's

Unit Overview
Content Area: Technology
Unit Title: Technology and Operations
Target Course/Grade Level: 5th Grade
Unit Summary Students will understand the purpose of technology, and be able to access, files, folders, and District Network. **Primary interdisciplinary connections:** **21st century themes: ICT Literacy**
Unit Rationale Students will be able to manipulate the basic usage of the computer to save, input text and print.
Learning Targets
Standards **8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaboratively and to create and community knowledge- Critical Thinking, Problem Solving, and Decision Making.**
Content Statements The use of technology and digital tools requires knowledge and appropriate use of operations and related applications.

CPI #	Cumulative Progress Indicator (CPI)
8.1.4.A.1	Demonstrate effective input of text and data using an input device.
8.1.4.A.2	Create a document with text formatting and graphics.
8.1.2.A.1	Identify the basic features of a computer and explain how to use them effectively.

Unit Essential Questions	Unit Enduring Understandings
• Does effective and efficient use of network infrastructure, development of files and folders increase productivity through organization? • In a world of constant change, what technology skills should we learn?	• Differentiation between local, network and cloud technology. • Develop an organization system to manage files and folders.

Unit Learning Targets *Students will* • Demonstrate effective input of text and data using an input device. • Be able to access local, network and cloud files. • Use basic technology terms in conversations. • Discuss the difference between local, network and cloud saving. • Create Files and Folders for content area subjects.
Evidence of Learning

Summative Assessment
Performance Based Assessment

Equipment needed: Computer, Access to Network

Teacher Resources: Instructions

Formative Assessments

- Rubric

Lesson Plans	
Lesson	**Timeframe**
Lesson 1 Networks and Problem Solving	**1 Day**
Lesson 2 File and Folders	**1 Day**
Teacher Notes:	
Student Sign In information	

Lesson Plan 1						
Content Area: Technology						
Lesson Title: Networks and Problem Solving				**Timeframe:** 1 Day		
Lesson Components						
21ˢᵗ Century Themes						
	Global Awareness		Financial, Economic, Business, and Entrepreneurial Literacy		Civic Literacy	Health Literacy
21ˢᵗ Century Skills						
	Creativity and Innovation		Critical Thinking and Problem Solving		Communication and Collaboration	Information Literacy
	Media Literacy	X	ICT Literacy		Life and Career Skills	
Interdisciplinary Connections:						
Integration of Technology: Saving files						
Equipment needed: MacBook's, Network, Network passwords, P drive						

Goals/Objectives	Learning Activities/Instructional Strategies	Formative Assessment Tasks
Students: • Be able to access local and Network • Be able to use screen name and password to log in.	**Lesson Sequence** **Day 1** 1. Introduce the pit falls of not being able to log in 2. Will re-enact using the projector to demonstrate the importance of remember or documenting your screen name and birthday. 3. Students will write their screen names and passwords in their assignment books. 4. Students attempt to log into the local domain. 5. Use peer collaboration to assist with students who are unable to log. 6. Using whole group instruction will demonstrate how to find their, network folders, home folder and my documents folder. 7. Teacher will supply instructions when needed. 8. Will provide hand out of game instructions and results.	• Will create a hide and seek files game on the network.

Differentiation- Providing step-by-step instructions, visual of projector and peer coaches.

Resources Provided
- Projector
- Step by step instructions
- Game instructions

Lesson Plan 2

Content Area: Technology

Lesson Title: File and Folders	Timeframe: 1 Day

Lesson Components

21st Century Themes

	Global Awareness		Financial, Economic, Business, and Entrepreneurial Literacy		Civic Literacy		Health Literacy

21st Century Skills

	Creativity and Innovation		Critical Thinking and Problem Solving		Communication and Collaboration		Information Literacy
	Media Literacy	X	ICT Literacy		Life and Career Skills		

Integration of Technology: Saving files
Equipment needed: MacBook's, network, Network passwords, P drive

Goals/Objectives	Learning Activities/Instructional Strategies	Formative Assessment Tasks
Students: • Will be able create files and folders based on content areas. • Will be able to save documents to files and folders • Will locate files and folders on local and the network drives	**Lesson Sequence** 1. Log into to network using screen name and password. 2. Will demonstrate creating a folder by going to start, will assign to the home folder and create new folder as a content area. 3. Will name each folder with a content area. 4. Will create a password and log in document and save in the proper folder	• Observation Check list.

Differentiation- Teacher provided step-by-step instructions, various presentation techniques.

Resources Provided
• Laptops, instructions, projector.

Unit Overview
Content Area: Technology
Unit Title: Word Processing
Target Course/Grade Level: 5th Grade
Unit Summary   The students will create a professional document reflecting a researched based content using a word processing program with text formatting and graphics.   **Primary interdisciplinary connections: L.A.L/ Science**   **21st century themes: Information Literacy, Communication and Collaboration**
Unit Rationale   **Students will use a word processing program to demonstrate mastery of text formatting, importing graphics. Students will also demonstrate the ability to navigate in virtual worlds that are age appropriate.**

Learning Targets
Standards   **8.1. Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaboratively and to create and communicate knowledge.**   **Strand A: Technology Operations and Concepts.**   **Strand E: Research and Information Literacy**
Content Statements   The use of technology and digital tools requires knowledge and appropriate use of operations and related applications.   Effective use of digital tools assists in gathering and managing information

CPI #	Cumulative Progress Indicator (CPI)
8.1.2.A.5	Demonstrate the ability to navigate in developmentally appropriate Virtual Environments.
8.1.4.A.2	Create a document with text formatting and graphics into a word processing program
8.1.4.E.2	Evaluate the accuracy of, relevance to, and appropriateness of using print and non-print electronic information sources to complete a variety of tasks.

Unit Essential Questions	Unit Enduring Understandings
• How can I effectively use the internet to gather a variety of research from reliable sources? • What word processing tools can I use to display research- based information?	• Determine reliable vs. unreliable sources • Implement word processing tools to create research based document**.**

Unit Learning Targets
Students will ...   • Evaluate reliable and un reliable sources   • Construct a word processing document with text and graphics.

Evidence of Learning

Summative Assessment (X days)

Observation

Checklist

Equipment needed: Laptop, projector,

Teacher Resources: reliable and un-reliable websites, word processing application

Formative Assessments

- Rubric

Lesson Plans

Lesson	Timeframe
Lesson 1 Web Addresses: Reliable or Not	1 Day
Lesson 2 **Word Processing**	1 Day

Teacher Notes:

Reading PBL project and researched information must implemented into project

Curriculum Development Resources

www.njccs.com

Lesson Plan 1			
Content Area: Technology			
Lesson Title: Web addresses: Reliable or Not?		**Timeframe:** 1 Day	
Lesson Components			
21ˢᵗ Century Themes			
Global Awareness	Financial, Economic, Business, and Entrepreneurial Literacy	Civic Literacy	Health Literacy
21ˢᵗ Century Skills			
Creativity and Innovation	Critical Thinking and Problem Solving	Communication and Collaboration	X Information Literacy
Media Literacy	X ICT Literacy	Life and Career Skills	
Interdisciplinary Connections: L.A.L			
Integration of Technology: Research and Information Literacy			
Equipment needed: Laptop, internet, sources			

Goals/Objectives	Learning Activities/Instructional Strategies	Formative Assessment Tasks
Students: • Identify the origins of web addresses • Evaluate the reliability of the web address	**Lesson Sequence** 1. Whole group discussion: "How can you determine if a source is inaccurate, biased, out of date, or incomplete" 2. Will evaluate a sample website for accuracy, authority of source (domain) and date. 3. Will identify multiple web addresses meanings (.com, .net, .org, .gov, .edu etc.) 4. Will show examples of reliable and unreliable and demonstrate the process of determining credibility. 5. Will practice analyzing web addresses	• Checklist • Observation
Differentiation Provide step-by-step instructions, peer coaches, vocabulary sheet.		

Lesson Plan 2						
Content Area: Technology						
Lesson Title: Introduction to Word Processing					**Timeframe:** 1 day	
Lesson Components						
21ˢᵗ Century Themes						
	Global Awareness		Financial, Economic, Business, and Entrepreneurial Literacy		Civic Literacy	Health Literacy
21ˢᵗ Century Skills						
	Creativity and Innovation		Critical Thinking and Problem Solving	X	Communication and Collaboration	Information Literacy
	Media Literacy	X	ICT Literacy		Life and Career Skills	
Interdisciplinary Connections: Reading						
Integration of Technology: Publications						
Equipment needed: Laptop , internet						

Goals/Objectives	Learning Activities/Instructional Strategies	Formative Assessment Tasks
Students: Will be able to use word processing tools to effectively communicate information. Demonstrate an understanding the complexities of an ecosystem	**Lesson Sequence** Whole Group 1 Explain the purpose of the brochure. The brochure will educate students on the various ecosystems and the animals that live within them. 2. Students will be given a criteria displaying what requirements the brochure must include (also a grading rubric) 3. The students will be given a Brochure checklist prior to creating the brochure to give them a sample of what should be included. 4. Show the class brochure template options, available from the "Popular Publication Types" screen. Have students select brochure templates, open them and scroll through the two pages to get a feel for the design. Individual 1. Students will open a word processing software and start a new Brochure template. 2. Instruct students to replace the Brochure's main headlines with the type	Observation checklist Assessment Rubric

of Ecosystem.

3. Help students input information about the careers in the article sections/text boxes throughout the brochures under each headline. To replace text, students will need to click a text box, which will then be highlighted, then type directly over the information with their own title. Day 2/3

4. Demonstrate how to insert images and various font colors.

5. Demonstrate how to insert text and how to change the font and size to fit their information and be attractive. Students will insert required information.

6. Coach students to save their work by clicking the "File" menu and selecting "Save As," then typing a name for the Publisher brochure. Ask them to switch brochures with each other to proofread work for typographical, spelling or grammatical errors and to show off their designs and research.

Day 4:

Create a reference page at the end of the brochure using various web tools

Students and instructor will analyze rubric for assessment. Peer to Peer assessment and instructor and student assessment.

Differentiation
Typed instructions, screen cast, Enrichment: add four more athletes, and add sport to additional column

Unit Overview
Content Area: Technology
Unit Title: Research Strategies
Target Course/Grade Level: 5th Grade
Unit Summary To be an effective user of the Internet, students need skills and strategies for navigating through thousands and millions of Web pages. Students will use search strategies to find relevant sources of information. **Primary interdisciplinary connections:** Reading **21st century themes: Research and Information Literacy**
Unit Rationale **Students will use critical thinking skills to formulate their searches, identify the specifics of a topic and practice refinements.**
Learning Targets
Standards **8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaboratively and to create and communicate knowledge**
Content Statements Effective use of digital tools assists in gathering and managing information.

CPI #	Cumulative Progress Indicator (CPI)
8.1.8.E.1	Gather and analyze findings using <u>data collection technology</u> to produce a possible solution for a content-related or real-world problem

Unit Essential Questions	Unit Enduring Understandings
• **How can using search strategies eliminate unnecessary information?**	• **Students will apply search strategy techniques, to eliminate unwanted information.**

Unit Learning Targets *Students will ...* • Learn how search engines operate. • Demonstrate effective search strategies

Evidence of Learning
Assessment: Observation checklist, Quiz
Equipment needed: MacBook, Search Engine, video
Teacher Resources: Various web Browsers or search engines

Formative Assessments

- Self-Evaluation

Lesson Plans	
Lesson	**Timeframe**
Search Strategies Basic	2 Days

Lesson Plan 1						
Content Area: Technology						
Lesson Title: Search Strategies					**Timeframe:** 2 Days	
Lesson Components						
21ˢᵗ Century Themes						
	Global Awareness		Financial, Economic, Business, and Entrepreneurial Literacy		Civic Literacy	Health Literacy
21ˢᵗ Century Skills						
	Creativity and Innovation		Critical Thinking and Problem Solving		Communication and Collaboration	Information Literacy
	Media Literacy	X	ICT Literacy		Life and Career Skills	
Interdisciplinary Connections: Social Studies						
Integration of Technology: Search Strategies						
Equipment needed: MacBook, video						

Goals/Objectives	Learning Activities/Instructional Strategies	Formative Assessment Tasks

Students:
 	
• Identify and analyze search key terms and how search engines operate
• Will use query strategies to search for information on the web
• Refine search strategies
	Lesson Sequence
	1. Introduce "how search works" video by Mark Cutts.
	2. Discuss or brainstorm ways students choose key terms to find what they are looking for.
	3. Discuss with class the concept of key terms to narrow search terms.
	4. Give students tips (+,_. ") to help pinpoint search results or
	  - Think how the page you are looking for would be written
	  - Use the words that are most likely to appear on the page or you want to appear on the page
	  - Choose descriptive words
	Suggested Activity:
	Teacher or students suggest a search topic that may be used in a class assignment, (example: Why was the Proclamation of 1763 a stepping-stone to the Revolutionary War?
		• Checklist

	6. Divide the class and allow them to brainstorm keywords they would use to search the topic. 7. Share and compare results. 8. Students use key terms to conduct search and analyze the results. 9. Students repeat the process for Images. Demonstrate how to use advance tools to search for JPEG's based on size, color and layout 10. Students use advance tools to search time and reading level.	

Differentiation
Peer Mentoring
Search Strategies and shortcuts will be formulated to hard copy.

Resources Provided
    http://www.youtube.com/watch?v=BNHR6IQJGZs

Unit Overview

Content Area: Technology

Unit Title: Digital Citizenship

Target Course/Grade Level: 5th Grade

Unit Summary

Students will learn what behaviors comprise of cyberbullying and how to deal with cyberbullying situations. Students will also understand the responsibilities of digital citizenship and learn to avoid plagiarism and respect copyright laws.

Primary interdisciplinary connections:

21st century themes: Critical Thinking and Collaboration, Information Literacy and ICT Literacy

Unit Rationale

Students will be practice proper "netiquette" and become responsible digital immigrants.

Learning Targets

8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaboratively and to create and communicate knowledge.

Strand D: Digital Citizenship

Content Statements

Technological advancements create societal concerns regarding the practice of safe, legal, and ethical behaviors.

CPI #	Cumulative Progress Indicator (CPI)
8.1.4.D.1	Explain the need for each individual, as a member of the global community, to practice cyber safety, cyber security, and cyber ethics when using existing and emerging technologies.
8.1.4.D.2	Analyze the need for and use of copyrights.
8.1.4.D.3	Explain the purpose of an acceptable use policy and the consequences of inappropriate use of technology

Unit Essential Questions	Unit Enduring Understandings
• What are rights and responsibilities as Digital Citizens? • What does it mean to be a Digital Citizen?	• Students will practice and advocate safe, legal and responsible use of information and technology.

Unit Learning Targets
Students will ...

• Demonstrate personal responsibility as digital citizens.
• Generate Multiple solutions for dealing with a cyberbully
• Create a slogan telling what students can do when they encounter cyberbullying

Evidence of Learning

Summative Assessment
Quiz, Survey, Checklist
Equipment needed: Laptop, Projector,

Teacher Resources: video, websites, blogs

Formative Assessments

- Rubric

Lesson Plans

Lesson	Timeframe
Lesson 1 Personal Internet Information Safety	**2 Days**
Lesson 2 Cyberbullying Awareness	**2 Days**
Lesson 3 Citations/Copyright Laws	**2 Days**
Teacher Notes:	
Curriculum Development Resources **www.njcccs.com**	

Lesson Plan 1

Content Area: Technology	
Lesson Title: Personal Internet Information Safety	**Timeframe:** 2 Days

Lesson Components			
21st Century Themes			
Global Awareness	Financial, Economic, Business, and Entrepreneurial Literacy	Civic Literacy	Health Literacy
21st Century Skills			
Creativity and Innovation	Critical Thinking and Problem Solving	Communication and Collaboration	Information Literacy
Media Literacy	X ICT Literacy	Life and Career Skills	

Interdisciplinary Connections: Social Studies

Integration of Technology: Digital Citizenship

Equipment needed: Laptops, Projector, webpage

Goals/Objectives	Learning Activities/Instructional Strategies	Formative Assessment Tasks
Students: • Identify forms of Cyberbullying • Generate Solutions • Construct a Slogan	**Lesson Sequence** 1. Introduce the positive and negatives of the internet. Ask the question "what do you like to do online?" 2. Read a scenario about a cyberbullying problem. (Example problems, another student has your screen name and password) 3. Discuss what the "problem" is and what consequences can occur if someone uses your screen name and password in a negative way. 4. Partners meet and plan a solution to the various scenarios 5. Students brainstorm and create slogan to help prevent cyberbullying.	• Slogan Rubric
Differentiation Peer mentoring, limit scenarios		
Resources Provided • Scenario worksheet • Slogan Template		

Lesson Plan 2

Content Area: Technology

Lesson Title: Cyberbullying Awareness	Timeframe: 2 days

Lesson Components

21st Century Themes

	Global Awareness		Financial, Economic, Business, and Entrepreneurial Literacy		Civic Literacy		Health Literacy

21st Century Skills

	Creativity and Innovation		Critical Thinking and Problem Solving		Communication and Collaboration	Information Literacy
	Media Literacy	X	ICT Literacy		Life and Career Skills	

Interdisciplinary Connections: LAL

Integration of Technology: Digital Citizenship

Equipment needed: Laptop, internet

Goals/Objectives	Learning Activities/Instructional Strategies	Formative Assessment Tasks
Students: • Define cyberbullying terms • Increase awareness about the damaging power of the internet. • Explore ways to use the internet to promote kindness and self-esteem	**Lesson Sequence** 1. Introduce lesson with prior knowledge question "how many of you use instant message, blogs, or email?" 2. Read / watch a cyberbullying story (newspaper, book, internet, or video). Discuss with class how the victim in the media was cyberbullied, how that person felt and what could have been done to stop or resolve it. 3. Create a plan or a personal goal to either help prevent cyberbullying ore help someone who is being cyberbullied. 4. Create a flyer or multi-media tool to advocate for cyberbullying stopping suggestions to promote more kindness and acceptance on the internet.	• Rubric

Differentiation: Peer mentoring, simplified directions, pre-made template plan

Resources Provided
• www.youtube.com

Lesson Plan 3							
Content Area: Technology							
Lesson Title: Citations/Copyright Laws						**Timeframe:** 2 days	
Lesson Components							
21st Century Themes							
	Global Awareness		Financial, Economic, Business, and Entrepreneurial Literacy		Civic Literacy		Health Literacy
21st Century Skills							
	Creativity and Innovation		Critical Thinking and Problem Solving		Communication and Collaboration		Information Literacy
	Media Literacy	X	ICT Literacy		Life and Career Skills		
Interdisciplinary Connections: Social Studies							
Integration of Technology: Citations							
Equipment needed: Laptop, Projectors							

Goals/Objectives	Learning Activities/Instructional Strategies	Formative Assessment Tasks
Students: • Will demonstrate proper citations • Identify Copyright Laws	**Lesson Sequence** 1. Discuss reasons for using citations and citing sources in multi-media products and writing assignments. 2. Demonstrate standard citation for web addresses. 3. Practice researching sites and using web tools to cite sources correctly.	• Observe and checklist • Completion of Sample citations.
Differentiation Use multiple sites to help students choose the easiest site to use to cite sources.		
Resources Provided • www.easybib.com • www.sitemachine.com		

Unit Overview
Content Area: Technology
Unit Title: Data Collection and Interpretation
Target Course/Grade Level: 5th Grade
Unit Summary Students will understand and apply basic data into a spreadsheet and evaluate data to make predictions about situations.
Primary interdisciplinary connections:
21st century themes: Communication and Collaboration, Technology and Operations
Unit Rationale Students will be able to implement data into a spreadsheet and create a graph to evaluate data.
Learning Targets
Standards **8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaboratively and to create and communicate knowledge.** **Strand A: Technology Operations and Concepts**
Content Statements The Use of technology and digital tools requires knowledge and appropriate use of operations and related applications

CPI #	Cumulative Progress Indicator (CPI)
8.1.4.A.2	Demonstrate effective input of text and data using an input device.

Unit Essential Questions	Unit Enduring Understandings
• How can the collection, organization and display of data assist the development of predictions**?**	• Will be able to input data and analyze results to make a prediction.

Unit Learning Targets *Students will ...* • Will be able to explain a data table, graph and chart • Will be able to collect research data related to a historic and enhance it by creating a chart • Will be able to use software to change types of chart to better illustrate data • Will be able to use Software to change types of chart to better illustrate data
Evidence of Learning
Summative Assessment Quiz, Survey, Checklist
Equipment needed: Laptop, Projector,
Teacher Resources: video, websites, blogs

Lesson Plans	
Lesson	**Timeframe**
Lesson 1 Introduction to using Data and Charts	**1 Day**
Lesson 2 Creating Original Charts	**1 Day**
Lesson 3 Exploring Charts and Data	**1 Day**
Lesson 4 Enhancing and Publishing Charts and Graphs	**1 Day**
Teacher Notes:	
Curriculum Development Resources **www.njcccs.com**	

Lesson Plan 1

Content Area: Technology

Lesson Title: Introduction to using Data and Charts	Timeframe: 1 day

Lesson Components

21st Century Themes						
	Global Awareness	X	Financial, Economic, Business, and Entrepreneurial Literacy		Civic Literacy		Health Literacy

21st Century Skills						
	Creativity and Innovation		Critical Thinking and Problem Solving		Communication and Collaboration		Information Literacy
	Media Literacy	X	ICT Literacy		Life and Career Skills		

Interdisciplinary Connections: Reading

Integration of Technology: Graphing

Equipment needed: Laptops, Projector

Goals/Objectives	Learning Activities/Instructional Strategies	Formative Assessment Tasks
Students: • Will be able to explain a data table, graph and chart	**Lesson Sequence** 1. Demonstrate differences between data tables and charts using real world samples 2. Introduce making charts using Google spreadsheets 3. Practice inputting data using information related to Holocaust.	• Teacher Observation and checking
Differentiation: Separate Rubric		

Lesson Plan 2

Content Area: Technology

Lesson Title: Creating Original Charts	Timeframe: 1 day

Lesson Components

21st Century Themes						
	Global Awareness	X	Financial, Economic, Business, and Entrepreneurial Literacy		Civic Literacy		Health Literacy

21st Century Skills						
	Creativity and Innovation		Critical Thinking and Problem Solving		Communication and Collaboration		Information Literacy
	Media Literacy	X	ICT Literacy		Life and Career Skills		

Integration of Technology: Graphing

Equipment needed: Laptops, Projector

Goals/Objectives	Learning Activities/Instructional Strategies	Formative Assessment Tasks

Students:
• Will be able to collect research data related to the Holocaust and enhance it by creating a chart
	Lesson Sequence
	   1. Provide students with several Holocaust websites that will supply them with appropriate data.
	   2. Independently create a data table and pie chart with percentages
		• .Rubric on pie chart

Differentiation: Limit amount of data		

Lesson Plan 3						
Content Area: Technology						
Lesson Title: Exploring Charts and Data				**Timeframe:** 1 days		
Lesson Components						
21ˢᵗ Century Themes						
	Global Awareness	X	Financial, Economic, Business, and Entrepreneurial Literacy		Civic Literacy		Health Literacy
21ˢᵗ Century Skills						
	Creativity and Innovation		Critical Thinking and Problem Solving		Communication and Collaboration	Information Literacy
	Media Literacy	X	ICT Literacy		Life and Career Skills	
Interdisciplinary Connections: Math, LAL, Social Studies and science						
Equipment needed: Computers, Internet access and projector						

Goals/Objectives	Learning Activities/Instructional Strategies	Formative Assessment Tasks
Students: • Will be able to use Excel to change types of chart to better illustrate data	**Lesson Sequence** 1. Demonstrate changing chart types using sample data worksheet 2. Practice creating various charts 3. Discuss various uses of specific types of charts and graphs	• Rubric for Excel chart
Differentiation Extend learning by providing complex data table from which to create appropriate chart.		
Resources Provided • Sample websites • Instructions		

Lesson Plan 4			
Content Area: Technology			
Lesson Title: Enhancing and Publishing Charts and Graphs		**Timeframe:** 1 day	
Lesson Components			
21ˢᵗ Century Themes			
Global Awareness	X	Financial, Economic, Business, and Entrepreneurial Literacy		Civic Literacy		Health Literacy
21ˢᵗ Century Skills			
Creativity and Innovation		Critical Thinking and Problem Solving		Communication and Collaboration		Information Literacy
Media Literacy	X	ICT Literacy		Life and Career Skills		
Interdisciplinary Connections: Math, LAL, Social Studies and Science			
Equipment needed: Computers, internet and projector			

Goals/Objectives	Learning Activities/Instructional Strategies	Formative Assessment Tasks
Students: • Will find data related to their research topic in reading, create chart, and cite resources	**Lesson Sequence** 1. Students will find data on Holocaust children death and survival rates in various countries from 1937-end of WWII. 2. Provide students will appropriate websites. 3. Collect data and create a chart or graph using a spreadsheet 4. Cite resources used 5. Print or digitize graphic 6. Create a Statement from the data collected.	• Inclusion of chart or graph on museum display
Differentiation **Limit/increase amount of data. Chart enhancements**		
Resources Provided • Sample websites • Instructions		

Unit Overview
Content Area: Technology
Unit Title: Multi-Media
Target Course/Grade Level: 5th
Unit Summary The student will create multi-media presentations to illustrate information about Hero's in society. **Primary interdisciplinary connections:** **21ˢᵗ century themes:**
Unit Rationale The student will be give choice as of what web tool to use to present learned informative text.
Learning Targets
Standards **8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaboratively and to create and communicate knowledge.**
Content Statements The use of digital tools and media-rich resources enhances creativity and the construction of knowledge.

CPI #	Cumulative Progress Indicator (CPI)
8.1.4.B.1	Produce a media-rich digital story about a significant local event or issue based on first-person interviews.
8.1.4.C.1	Engage in online discussions with learners in the United States or from other countries to understand their perspectives on a global problem or issue.
8.1.4.D.1	Explain the need for each individual, as a member of the global community, to practice cyber safety, cyber security, and cyber ethics when using existing and emerging technologies.

Unit Essential Questions	Unit Enduring Understandings
How can digital tools be used for creating original and innovative works, ideas, and solutions?	Digital tools provide opportunities for people to have new experiences, recognize problems, design solutions, and express their ideas.

Unit Learning Targets
Students will ...

- Evaluate Multi web presentation tools.
- Construct a multi-media presentation
- Collaborate with partner school from another region
- Apply responsible digital citizen leadership.

Evidence of Learning

Summative Assessment

Equipment needed: Laptops, projector,

Teacher Resources: GNG, Reading Project

Formative Assessments

- Rubric
- Quiz
- Checklists

Marking Period 4 Lesson Plans

Lesson	Timeframe
Lesson 1 Introduction to Animoto multimedia web tool	2 days
Lesson 2 Introduction to Capzels web tool	2 days
Lesson 3 Putting it all together	Ongoing

Teacher Notes:

Will work in conjunction with 4th marking period PBL

Curriculum Development Resources

www.njccs.org

Lesson Plan 1 A			
Content Area: Technology			
Lesson Title: Introduction to Animoto			**Timeframe:** Day 1
Lesson Components			
21ˢᵗ Century Themes			
Global Awareness	Financial, Economic, Business, and Entrepreneurial Literacy	Civic Literacy	Health Literacy
21ˢᵗ Century Skills			
Creativity and Innovation	Critical Thinking and Problem Solving	Communication and Collaboration	Information Literacy
Media Literacy	X ICT Literacy	Life and Career Skills	
Interdisciplinary Connections: Social Studies			
Integration of Technology: Technology Operations			
Equipment needed: computers internet projector			

Goals/Objectives	Learning Activities/Instructional Strategies	Formative Assessment Tasks

Students:
 • Will be able to use Animoto to present information or tell a story.
 • Will create a Animoto based on our Political Leaders of the Revolution
	Lesson Sequence
	  1. Show 2 samples Animoto videos about a freedom fighter – one good, one bad
	  2. Discussion of Animoto video – What made this video good? Bad? What did you like? Etc.
	  3. Demonstrate step by step how to make Animoto
		• Observation Checklist

Different Provide multi-modal instructions for Animoto		

Lesson Plan 1B

Content Area: Technology

Lesson Title: Introduction to Animoto	Timeframe: Day 2

Lesson Components

21st Century Themes

	Global Awareness		Financial, Economic, Business, and Entrepreneurial Literacy		Civic Literacy			Health Literacy

21st Century Skills

	Creativity and Innovation		Critical Thinking and Problem Solving		Communication and Collaboration		Information Literacy
	Media Literacy	X	ICT Literacy		Life and Career Skills		

Goals/Objectives	Learning Activities/Instructional Strategies	Formative Assessment Tasks
Students: • Will be able to construct an Animoto using nonfiction or fictional text. • Will create a Animoto based on our Political Leaders of the Revolution	**Lesson Sequence** 1. Sign in to Animoto – birthday as password 2. Pick template that is relevant to story 3. Use research strategies to acquire informative text. 3. Insert pictures and text	• Observation
Differentiation Provide sample informative text Peer Mentoring		
Resources Provided • www.animoto.com • www.whitehouse.gov		

Lesson Plan 2			
Content Area: Technology			
Lesson Title: Introduction to Capzles			**Timeframe:** 2 days
Lesson Components			
21st Century Themes			
	Global Awareness		Financial, Economic, Business, and Entrepreneurial Literacy		Civic Literacy		Health Literacy
21st Century Skills			
	Creativity and Innovation		Critical Thinking and Problem Solving	X	Communication and Collaboration		Information Literacy
	Media Literacy	X	ICT Literacy		Life and Career Skills		
Interdisciplinary Connections:			
Integration of Technology:			
Equipment needed:			

Goals/Objectives	Learning Activities/Instructional Strategies	Formative Assessment Tasks
Students: • Will be able to create a timeline of their lives	1. Show 2 samples Capzels videos about a freedom fighter – one good, one bad 2. Discussion of Capzles video – What made this video good? Bad? What did you like? Etc. 3. Demonstrate step by step how to make Capzles	• Observation Checklist
Differentiation Peer Mentoring, Sample timeline		
Resources Provided • www.capzles.com		

Lesson Plan 3							
Content Area: Technology							
Lesson Title: Pulling it all Together					**Timeframe:** Ongoing		
Lesson Components							
21ˢᵗ Century Themes							
	Global Awareness		Financial, Economic, Business, and Entrepreneurial Literacy		Civic Literacy		Health Literacy
21ˢᵗ Century Skills							
	Creativity and Innovation	X	Critical Thinking and Problem Solving	X	Communication and Collaboration		Information Literacy
	Media Literacy	X	ICT Literacy		Life and Career Skills		

Goals/Objectives	Learning Activities/Instructional Strategies	Formative Assessment Tasks
Students: • Will complete multimedia projects using various forms of graphics, audio and video integrating the web tool of their choice	1. Review criteria for projects 2. Troubleshoot projects and assist students 3. Use rubric to grade technologies standards	• Rubric for technology standards used in multimedia project
Differentiation: Differential Grading Criteria		

LESSON REFLECTION

Reflect on the lesson you have developed and rate the degree to which the lesson *Strongly, Moderately* or *Weakly* meets the criteria below.

Lesson Activities:	Strongly	Moderately	Weakly
Are challenging and require higher order thinking and problem solving skills			
Allow for student choice			
Provide scaffolding for acquiring targeted knowledge/skills			
Integrate global perspectives			
Integrate 21st century skills			
Provide opportunities for interdisciplinary connection and transfer of knowledge and skills			
Foster student use of technology as a tool to develop critical thinking, creativity and innovation skills			
Are varied to address different student learning styles and preferences			
Are differentiated based on student needs			
Are student-centered with teacher acting as a facilitator and co-learner during the teaching and learning process			
Provide means for students to demonstrate knowledge and skills and progress in meeting learning goals and objectives			
Provide opportunities for student reflection and self-assessment			
Provide data to inform and adjust instruction to better meet the varying needs of learners			