Swedesboro-Woolwich School District's STEAM / Technology Curriculum Guidance Document GRADE 6 – Technology Unit 2

Mission Statement

The primary goal of the Swedesboro-Woolwich School District is to prepare each student with the real life skills needed to compete in a highly competitive global economy. This will be achieved by providing a comprehensive curriculum, the integration of technology, and the professional services of a competent and dedicated faculty, administration, and support staff.

Guiding this mission will be Federal mandates, including No Child Left Behind, the New Jersey Core Curriculum Content Standards, and local initiatives addressing the individual needs of our students as determined by the Board of Education. The diverse resources of the school district, which includes a caring PTO and active adult community, contribute to a quality school system. They serve an integral role in supporting positive learning experiences that motivate, challenge and inspire children to learn.

Unit/Module Overview

In unit 2, students will learn to:

- During the Second Trimester, students in Sixth-Grade will learn how to use data and create a document to present the data to a selected audience.
- Students will conduct research on a specific issue or topic to gather data. Students will then make a decision based on their research findings. The students will then support their decision by creating a document using a spreadsheet program. The document the students create will be presented to a target audience determined by the teacher.

Standards Covered in Current Unit/Module

Related Standards and Learning Goals

CS.6-8.8.1.8.AP.1 - Design and illustrate algorithms that solve complex problems using flowcharts and/or pseudocode.

CS.6-8.8.1.8.AP.2 - Create clearly named variables that represent different data types and perform operations on their values.

CS.6-8.8.1.8.AP.6 - Refine a solution that meets users' needs by incorporating feedback from team members and users.

CS.6-8.8.1.8.CS.1 - Recommend improvements to computing devices in order to improve the ways users interact with the devices.

CS.6-8.8.1.8.DA.3 - Identify the appropriate tool to access data based on its file format.

Unit/Module Weekly Learning Activities and Pacing Guide			
Topic & # Days	NJ Standards	Critical Knowledge & Skills	Possible Resources & Activities
Week 10	 CS.6-8.8.1.8.AP.6 CS.6-8.8.1.8.DA.3 	Obj. We are learning to: communicate information and ideas using a variety of media and formats that are appropriate for my audience. use digital media and environments to collaborate with others for learning. create original works as a means of personal or group expression. Suggested Formative Assessment(s): Project Assessment: Document Assessment using Rubric	This is the fourth of four classes dedicated to this project. Students will begin a project that requires research. The project will result in a five-paragraph essay that will be formatted in MLA Style using a word processing program. All information, directions, and rubrics will be available to students through the blended learning platform. The assignment (project) will be completed, turned in, and graded through the blended learning platform.
Week 11	 CS.6-8.8.1.8.AP.1 CS.6-8.8.1.8.AP.2 	Obj. We are learning to: use a spreadsheet program/app appropriately. Suggested Formative Assessment(s): Spreadsheet Creation: Document Assessment Using Rubric	Students will be introduced to a spreadsheet application. First of two classes.

			First, students will become familiar with the purpose of spreadsheets and the teacher will model and demonstrate some of the basic tools available in the spreadsheet app. Students will learn the vocabulary related to spreadsheets and be able to use the vocabulary appropriately. Next, students will explore using a spreadsheet application. Students will complete simple tasks in a spreadsheet they create. Naming conventions for documents will also be reviewed.
Week 12	 CS.6-8.8.1.8.AP.1 CS.6-8.8.1.8.AP.2 	Obj. We are learning to: use a spreadsheet program/app appropriately. Suggested Formative Assessment(s): Spreadsheet Creation: Document Assessment Using Rubric	Students will be introduced to a spreadsheet application. Second of two classes. First, students will become familiar with the purpose of spreadsheets and the teacher will model and demonstrate some of the basic tools available in the spreadsheet app. Students will learn the vocabulary related to spreadsheets and be able to use the vocabulary appropriately. Next, students will explore using a spreadsheet application. Students will complete simple tasks in a spreadsheet they create. Naming conventions for documents will also be reviewed.
Week 13	 CS.6-8.8.1.8.DA.3 CS.6-8.8.1.8.AP.6 CS.6-8.8.1.8.DA.3 	Obj. We are learning to: apply digital tools to gather, evaluate, and use information.	First of two classes.

		Suggested Formative Assessment(s): • Vocabulary and General Knowledge: Online Assessments	Students will review how to use digital tools to search for information. The students will practice searching for specific data in response to queries provided by the teacher. Emphasis will be on understanding and evaluation of the data found through the searches and interpreting accurately.
Week 14	 CS.6-8.8.1.8.DA.3 CS.6-8.8.1.8.AP.6 CS.6-8.8.1.8.DA.3 	Obj. We are learning to: apply digital tools to gather, evaluate, and use information. Suggested Formative Assessment(s): Vocabulary and General Knowledge: Online Assessments	Second of two classes. Students will review how to use digital tools to search for information. The students will practice searching for specific data in response to queries provided by the teacher. Emphasis will be on understanding and evaluation of the data found through the searches and interpreting it accurately.
Week 15	 CS.6-8.8.1.8.AP.1 CS.6-8.8.1.8.AP.2 CS.6-8.8.1.8.CS.1 CS.6-8.8.1.8.AP.6 	Obj. We are learning to: use data and information and publish it on a given topic. Suggested Formative Assessment(s): Vocabulary and General Knowledge: Online Assessments	Today students will learn how to use additional spreadsheet tools to present their data in an appealing manner that is appropriate for their target audience. The teacher will demonstrate several tools and presentation methods such as inserting tables, graphs, charts, etc. Students will have the opportunity to practice and explore the new tools in addition to using the tools they

			learned previously.
Week 16	• CS.6-8.8.1.8.AP.1 • CS.6-8.8.1.8.AP.2 • CS.6-8.8.1.8.CS.1 • CS.6-8.8.1.8.AP.6	Obj. We are learning to: create an original work based on my research and analysis. use digital media and environments to communicate appropriately for learning. use a spreadsheet program/app appropriately. use data and information and publish it on a given topic. apply digital tools to gather, evaluate, and use information. collect and analyze data to make informed decisions. Suggested Formative Assessment(s): Project Assessment: Document Assessment using Rubric	First of five classes. Students will begin a project using the skills learned in the previous weeks. The teacher will post the details of the project in the blended learning platform. The teacher will provide all information necessary including project requirements, rubrics, timelines for due dates, and any other pertinent information. The project will require the students to conduct research on a given topic. The students will collect the data required and then present the data in a spreadsheet. The research required will be in response to a specific topic or issue and the students will need to make an informed decision using the data collected. The students will present the data in order to support their decision. The project will be worked on and turned in through the blended learning platform. The teacher will chunk and pace the specific task due dates to ensure the students will complete the project during the five classes. The project will be assessed using a rubric which students will have throughout the time they are working on the project. The students will be required to refer to the rubric throughout the process to ensure they complete all tasks successfully.

Week 17	• CS.6-8.8.1.8.AP.1	Obj. We are learning to:	
week 17	• CS.6-8.8.1.8.AP.2	create an original work based on my research and	Second of five classes.
	• CS.6-8.8.1.8.CS.1	analysis.	
	• CS.6-8.8.1.8.AP.6	 use digital media and environments to communicate appropriately for learning. use a spreadsheet program/app appropriately. use data and information and publish it on a given 	Students will begin a project using the skills learned in the previous weeks.
		topic.	The teacher will post the details of the project in the
		 apply digital tools to gather, evaluate, and use information. 	blended learning platform. The teacher will provide all information necessary including project requirements, rubrics, timelines for due dates, and any other pertinent
		• collect and analyze data to make informed decisions.	information.
		Suggested Formative Assessment(s): • Project Assessment: Document Assessment using	
		Rubric Rubric	The project will require the students to conduct research on a given topic. The students will collect the data required and then present the data in a spreadsheet. The research required will be in response to a specific topic or issue and the students will need to make an informed decision using the data collected. The students will present the data in order to support their decision. The project will be worked on and turned in through the blended learning platform. The teacher will chunk and pace the specific task due dates to ensure the students will complete the project during the five classes.
			The project will be assessed using a rubric which students will have throughout the time they are working on the project. The students will be required to refer to the rubric throughout the process to ensure they complete all tasks successfully.

Week 18 C.S.6-8.8.1.8.AP.1 C.S.6-8.8.1.8.AP.6 C.S.6-8.8.1.8.AP.6 C.S.6-8.8.1.8.AP.6 Obj. We are learning to: C.S.6-8.8.1.8.AP.6 C.S.6-8.8.1.8.AP.6 C.S.6-8.8.1.8.AP.6 Obj. We are learning to: C.S.6-8.8.1.8.AP.6 C.S.6-8.8.1.8.AP.6 C.S.6-8.8.1.8.AP.6 Obj. We are learning to: C.C.6-8.8.1.8.AP.6 Octable Media and environments to communic appropriately for learning. Use a spreadsheet program/app appropriately. Use data and information and publish it on a give topic. Use a spreadsheet program/app appropriately. Use data and information and publish it on a give topic. Obj. We are learning to: C.G.6-8.8.1.8.AP.6 Use digital media and environments to communic appropriately for learning. Use a spreadsheet program/app appropriately. Use a spreads	Third of five classes. Students will begin a project using the skills learned in the previous weeks. The teacher will post the details of the project in the blended learning platform. The teacher will provide all information necessary including project requirements, rubrics, timelines for due dates, and any other pertinent information.
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Week 19	 CS.6-8.8.1.8.AP.1 CS.6-8.8.1.8.CS.1 CS.6-8.8.1.8.AP.6 • CS.6-8.8.1.8.AP.1	Obj. We are learning to:	Fourth of five classes. Students will begin a project using the skills learned in the previous weeks. The teacher will post the details of the project in the blended learning platform. The teacher will provide all information necessary including project requirements, rubrics, timelines for due dates, and any other pertinent information. The project will require the students to conduct research on a given topic. The students will collect the data required and then present the data in a spreadsheet. The research required will be in response to a specific topic or issue and the students will need to make an informed decision using the data collected. The students will present the data in order to support their decision. The project will be worked on and turned in through the blended learning platform. The teacher will chunk and pace the specific task due dates to ensure the students will complete the project during the five classes. The project will be assessed using a rubric which students will have throughout the time they are working on the project. The students will be required to refer to the rubric throughout the process to ensure they complete all tasks successfully.
vveek 20	 CS.6-8.8.1.8.AP.2 CS.6-8.8.1.8.CS.1 CS.6-8.8.1.8.AP.6 	 create an original work based on my research and analysis. use digital media and environments to communicate 	Fifth of five classes.

appropriately for learning.

- use a spreadsheet program/app appropriately.
- use data and information and publish it on a given topic.
- apply digital tools to gather, evaluate, and use information.
- collect and analyze data to make informed decisions.
 Suggested Formative Assessment(s):
 - Project Assessment: Document Assessment using Rubric

Students will begin a project using the skills learned in the previous weeks.

The teacher will post the details of the project in the blended learning platform. The teacher will provide all information necessary including project requirements, rubrics, timelines for due dates, and any other pertinent information.

The project will require the students to conduct research on a given topic. The students will collect the data required and then present the data in a spreadsheet. The research required will be in response to a specific topic or issue and the students will need to make an informed decision using the data collected. The students will present the data in order to support their decision.

The project will be worked on and turned in through the blended learning platform. The teacher will chunk and pace the specific task due dates to ensure the students will complete the project during the five classes.

The project will be assessed using a rubric which students will have throughout the time they are working on the project. The students will be required to refer to the rubric throughout the process to ensure they complete all tasks successfully.

Link to Additional Components including Cross Curricular Connections, Accommodations, Assessments, Etc

ELA Enduring Understanding Statements