Nov. Gr. 6 Technology

Content Area: **Technology**
Course(s):
Time Period: **November**
Length: **4-5 Weeks**
Status: **Published**

Unit Overview

Students will continue to work on class projects in health and social studies and learn about coding.

Enduring Understandings

Technology helps us produce professional work.

Essential Questions

How do I use technology to enhance my learning and published work?

Instructional Strategies & Learning Activities

Objective: **First Aid WebQuest - Integrated with Health Curriculum in a Google Classroom environment**
The student will be able to use various website resources to research information about 5 topics related to understanding and responding to situations requiring first aid intervention. (Day 3 - PRINT TODAY)

Differentiation:
Paragraph writing scenarios

Assessment:
Health teacher answer key/rubric

Objective: Mesopotamia PowerPoint project with Smart Art
The student will be able to explore PowerPoint 2010 and learn about its value as a presentation tool that can be used in school and in future careers through classroom discussion, demonstration, and hands-on practice in the lab. Lesson will focus on incorporating "**Smart Art Graphics**" into their slideshows.

OBJECTIVE: Code-A-Thon Week provided by Learning.com
The student will be able to explore coding activities utilizing the Python language during a week of FREE access to Codesters online activities focused on basic programming structures, debugging, and troubleshooting.

PROCEDURES:

NOTE: One month prior to week in Nov., request free licenses for Code-A-Thon Pillars access from Learning.com, then set up ALL middle school students with unique accounts associated with Login Cards accessible from the Teacher Dashboard.

Objective: Guest Teacher - Introduction to Business Intelligence Using Dashboarding
The student will be able to explore introductory concepts related to Business Intelligence while creating a usable Dashboard to showcase Data Analytics.

Differentiation:
Color Coding

Assessment:
Rubric (printed Dashboard)

OBJECTIVE: Code-A-Thon activities by Learning.com
The student will be able to explore coding activities utilizing the Python language during a week of FREE access to Codesters online activities focused on basic programming structures, debugging, and troubleshooting.

Integration of Career Readiness, Life Literacies and Key Skills

Students will learn business skills and explore the careers that use them.

9.2.8.CAP	Career Awareness and Planning
9.2.8.CAP.1	Identify offerings such as high school and county career and technical school courses, apprenticeships, military programs, and dual enrollment courses that support career or occupational areas of interest.
9.2.8.CAP.3	Explain how career choices, educational choices, skills, economic conditions, and personal behavior affect income.
9.2.8.CAP.4	Explain how an individual's online behavior (e.g., social networking, photo exchanges, video postings) may impact opportunities for employment or advancement.
9.4.8.CT	Critical Thinking and Problem-solving
9.4.8.CT.2	Develop multiple solutions to a problem and evaluate short- and long-term effects to determine the most plausible option (e.g., MS-ETS1-4, 6.1.8.CivicsDP.1).
9.4.8.GCA	Global and Cultural Awareness
9.4.8.GCA.1	Model how to navigate cultural differences with sensitivity and respect (e.g., 1.5.8.C1a).
9.4.8.GCA.2	Demonstrate openness to diverse ideas and perspectives through active discussions to achieve a group goal.
9.4.8.IML.1	Critically curate multiple resources to assess the credibility of sources when searching for information.
9.4.8.IML.2	Identify specific examples of distortion, exaggeration, or misrepresentation of information.

9.4.8.IML.3	Create a digital visualization that effectively communicates a data set using formatting techniques such as form, position, size, color, movement, and spatial grouping (e.g., 6.SP.B.4, 7.SP.B.8b).
9.4.8.IML.4	Ask insightful questions to organize different types of data and create meaningful visualizations.
9.4.8.IML.9	Distinguish between ethical and unethical uses of information and media (e.g., 1.5.8.CR3b, 8.2.8.EC.2).
9.4.8.IML.10	Examine the consequences of the uses of media (e.g., RI.8.7).
9.4.8.IML.12	Use relevant tools to produce, publish, and deliver information supported with evidence for an authentic audience.
9.4.8.IML.13	Identify the impact of the creator on the content, production, and delivery of information (e.g., 8.2.8.ED.1).

Technology and Design Integration

See activities above and standards below.

DA	Data & Analysis
8.1.8.DA.1	Organize and transform data collected using computational tools to make it usable for a specific purpose.
8.1.8.DA.2	Explain the difference between how the computer stores data as bits and how the data is displayed.
8.1.8.DA.3	Identify the appropriate tool to access data based on its file format.
8.1.8.DA.4	Transform data to remove errors and improve the accuracy of the data for analysis.
8.1.8.DA.5	Test, analyze, and refine computational models.
8.1.8.AP.1	Design and illustrate algorithms that solve complex problems using flowcharts and/or pseudocode.

Interdisciplinary Connections

LA.RST.6-8	Reading Science and Technical Subjects
LA.RST.6-8.1	Cite specific textual evidence to support analysis of science and technical texts.
LA.RST.6-8.2	Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions.
LA.RST.6-8.3	Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.
LA.RST.6-8.4	Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6-8 texts and topics.
LA.RI.6.4	Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings.
LA.RST.6-8.5	Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to an understanding of the topic.
LA.RST.6-8.6	Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text.

LA.RI.6.7	Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.
LA.RST.6-8.7	Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).
LA.RST.6-8.8	Distinguish among facts, reasoned judgment based on research findings, and speculation in a text.
LA.RST.6-8.9	Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.
LA.RST.6-8.10	By the end of grade 8, read and comprehend science/technical texts in the grades 6-8 text complexity band independently and proficiently.
LA.RI.6.10	By the end of the year read and comprehend literary nonfiction at grade level text-complexity or above, with scaffolding as needed.
LA.WHST.6-8	Writing History, Science and Technical Subjects
LA.WHST.6-8.1	Write arguments focused on discipline-specific content.
LA.WHST.6-8.2	Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.
LA.W.6.2	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.
LA.WHST.6-8.4	Produce clear and coherent writing in which the development, organization, voice, and style are appropriate to task, purpose, and audience.
LA.WHST.6-8.5	With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.
LA.WHST.6-8.6	Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently.
LA.WHST.6-8.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.
LA.WHST.6-8.8	Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.
LA.WHST.6-8.9	Draw evidence from informational texts to support analysis, reflection, and research.
LA.W.6.6	Use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of three pages in a single sitting.
LA.WHST.6-8.10	Write routinely over extended time frames (time for research, reflection, metacognition/self correction, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.
LA.W.6.7	Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.
LA.W.6.8	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 for sources.
LA.SL.6.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly.

LA.SL.6.5	Include multimedia components (e.g., graphics, images, music, sound) and visual displays in presentations to clarify information.
LA.L.6.1	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
LA.L.6.2	Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
LA.L.6.3	Use knowledge of language and its conventions when writing, speaking, reading, or listening.
LA.L.6.4	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 6 reading and content, choosing flexibly from a range of strategies.
LA.L.6.6	Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.

Differentiation

- Understand that gifted students, just like all students, come to school to learn and be challenged.
- Pre-assess your students. Find out their areas of strength as well as those areas you may need to address before students move on.
- Consider grouping gifted students together for at least part of the school day.
- Plan for differentiation. Consider pre-assessments, extension activities, and compacting the curriculum.
- Use phrases like "You've shown you don't need more practice" or "You need more practice" instead of words like "qualify" or "eligible" when referring to extension work.
- Encourage high-ability students to take on challenges. Because they're often used to getting good grades, gifted students may be risk averse.

- **Definitions of Differentiation Components**:

    - Content – the specific information that is to be taught in the lesson/unit/course of instruction.
    - Process – how the student will acquire the content information.
    - Product – how the student will demonstrate understanding of the content.
    - Learning Environment – the environment where learning is taking place including physical location and/or student grouping

Differentiation occurring in this unit:

Differentiation will be offered as listed in the above activities.

Modifications & Accommodations

Refer to QSAC EXCEL SMALL SPED ACCOMMOCATIONS spreadsheet in this discipline.

Modifications and Accommodations used in this unit:

IEP and 504 Accommodations will be utilized.

Benchmark Assessments

Benchmark Assessments are given periodically (e.g., at the end of every quarter or as frequently as once per month) throughout a school year to establish baseline achievement data and measure progress toward a standard or set of academic standards and goals.

Schoolwide Benchmark assessments:

Aimsweb benchmarks 3X a year

Linkit Benchmarks 3X a year

Additional Benchmarks used in this unit:

Teacher made assessments to measure growth.

Formative Assessments

Assessment allows both instructor and student to monitor progress towards achieving learning objectives, and can be approached in a variety of ways. **Formative assessment** refers to tools that identify misconceptions, struggles, and learning gaps along the way and assess how to close those gaps. It includes effective tools for helping to shape learning, and can even bolster students' abilities to take ownership of their learning when they understand that the goal is to improve learning, not apply final marks (Trumbull and Lash, 2013). It can include students assessing themselves, peers, or even the instructor, through writing, quizzes, conversation, and more. In short, formative assessment occurs throughout a class or course, and seeks to improve student achievement of learning objectives through approaches that can support specific student needs (Theal and Franklin, 2010, p. 151).

Formative Assessments used in this unit:

Discussion

Teacher observation

projects

Summative Assessments

Summative assessments evaluate student learning, knowledge, proficiency, or success at the conclusion of an instructional period, like a unit, course, or program. Summative assessments are almost always formally graded and often heavily weighted (though they do not need to be). Summative assessment can be used to great effect in conjunction and alignment with formative assessment, and instructors can consider a variety of ways to combine these approaches.

Summative assessments for this unit:

Projects

Assessments listed above

Instructional Materials

Materials as needed for projects

Standards

See Standards Above