

Mar./Apr. Gr. 8 Technology

Content Area: **Technology**
Course(s):
Time Period: **March**
Length: **6-8 Weeks**
Status: **Published**

Unit Overview

Students will work on a variety of technology skills.

Enduring Understandings

Technology helps us to create professional work.

Essential Questions

What does Scratch, Desktop Publishing and Google sheets do?

Instructional Strategies & Learning Activities

Objective: SCRATCH - H-C-R-H-S original animation based on "User Documentation" created for Google Doodle (Day 4)

The student will be able to create an animation of the acronym "HCRHS" using Scratch.

Differentiation:

All aspects of code build - sprite, backdrops, animations, etc.

Assessment:

Rubric

Objective: Create Print Ad using Multiple Desktop Publishing Features in MS Word

The student will be able to create a print ad for a popular personal tech item while demonstrating mastery of multiple desktop publishing features.

Differentiation:

Tech item/artistic elements/facts etc.

Assessment:

Rubric

Objective: Numeric Keypad 3 using Google Sheets

The student will be able to practice keyboarding skills using the numeric keypad in a Google Sheets project.

Differentiation:

Students may write formulas to perform calculations instead of using Auto Sum.

Assessment:

Printed activity will be graded with teacher-created answer key.

Integration of Career Readiness, Life Literacies and Key Skills

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| WRK.9.2.8.CAP | Career Awareness and Planning |
| WRK.9.2.8.CAP.3 | Explain how career choices, educational choices, skills, economic conditions, and personal behavior affect income. |
| WRK.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. |
| WRK.9.2.8.CAP.10 | Evaluate how careers have evolved regionally, nationally, and globally. |
| WRK.9.2.8.CAP.11 | Analyze potential career opportunities by considering different types of resources, including occupation databases, and state and national labor market statistics. |
| WRK.9.2.8.CAP.12 | Assess personal strengths, talents, values, and interests to appropriate jobs and careers to maximize career potential. |
| WRK.9.2.8.CAP.15 | Present how the demand for certain skills, the job market, and credentials can determine an individual's earning power. |
| WRK.9.2.8.CAP.16 | Research different ways workers/employees improve their earning power through education and the acquisition of new knowledge and skills. |
| TECH.9.4.8.CT | Critical Thinking and Problem-solving |
| TECH.9.4.8.DC | Digital Citizenship |
| TECH.9.4.8.DC.3 | Describe tradeoffs between allowing information to be public (e.g., within online games) versus keeping information private and secure. |
| TECH.9.4.8.DC.4 | Explain how information shared digitally is public and can be searched, copied, and potentially seen by public audiences. |
| TECH.9.4.8.DC.5 | Manage digital identity and practice positive online behavior to avoid inappropriate forms of self-disclosure. |
| TECH.9.4.8.TL | Technology Literacy |
| TECH.9.4.8.TL.3 | Select appropriate tools to organize and present information digitally. |
| TECH.9.4.8.GCA | Global and Cultural Awareness |
| TECH.9.4.8.GCA.1 | Model how to navigate cultural differences with sensitivity and respect (e.g., 1.5.8.C1a). |
| TECH.9.4.8.GCA.2 | Demonstrate openness to diverse ideas and perspectives through active discussions to achieve a group goal. |
| TECH.9.4.8.IML | Information and Media Literacy |
| TECH.9.4.8.IML.1 | Critically curate multiple resources to assess the credibility of sources when searching for information. |
| TECH.9.4.8.IML.12 | Use relevant tools to produce, publish, and deliver information supported with evidence |

for an authentic audience.

TECH.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).

An essential aspect of problem solving is being able to self-reflect on why possible solutions for solving problems were or were not successful.

Technology and Design Integration

See activities above and standards below.

CS.6-8.8.1.8.IC.1

Compare the trade-offs associated with computing technologies that affect individual's everyday activities and career options.

CS.6-8.8.2.8.ITH.1

Explain how the development and use of technology influences economic, political, social, and cultural issues.

CS.6-8.8.2.8.ITH.2

Compare how technologies have influenced society over time.

CS.6-8.8.2.8.ITH.3

Evaluate the impact of sustainability on the development of a designed product or system.

CS.6-8.8.2.8.ITH.4

Identify technologies that have been designed to reduce the negative consequences of other technologies and explain the change in impact.

CS.6-8.IC

Impacts of Computing

CS.6-8.ITH

Interaction of Technology and Humans

Individuals design and test solutions to identify problems taking into consideration the diverse needs of the users and the community.

Interdisciplinary Connections

LA.L.8.1

Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

LA.L.8.2

Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

LA.L.8.4

Determine or clarify the meaning of unknown and multiple-meaning words or phrases based on grade 8 reading and content, choosing flexibly from a range of strategies.

LA.L.8.6

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.

LA.W.8.1

Write arguments to support claims with clear reasons and relevant evidence.

LA.W.8.6

Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas efficiently as well as to interact and collaborate with others.

LA.W.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.RI.8.1

Cite the textual evidence and make relevant connections that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.

LA.RI.8.4

Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of specific word

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| | choices on meaning and tone, including analogies or allusions to other texts. |
| LA.RI.8.7 | Evaluate the advantages and disadvantages of using different mediums (e.g., print or digital text, video, multimedia) to present a particular topic or idea. |
| LA.RI.8.10 | By the end of the year read and comprehend literary nonfiction at grade level text-complexity or above, with scaffolding as needed. |
| LA.SL.8.1 | Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly. |
| LA.SL.8.5 | Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest. |

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 ACCOMMODATIONS 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:

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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

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| VA.6-8.1.5.8.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. |
| VA.6-8.1.5.8.Cr2a | Demonstrate persistence and willingness to experiment and take risks during the artistic process. |