

Tech Gr 1 Unit 1- Educational Technology

Content Area: **Technology**
Course(s): **STEM-Technology**
Time Period: **Twelve Weeks**
Length: **1st Marking Period**
Status: **Published**

Stage 1 - Learning Outcomes

Unit Overview

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

Strand A. Technology Operations and Concepts: *Students demonstrate a sound understanding of technology concepts, systems and operations.*

Enduring Understandings

- Digital tools allow for collaboration anytime/anyplace worldwide.
- Digital tools allow me to create and share original ideas.
- Digital tools must be used responsibly.
- Lifelong learners use technology effectively.

Essential Questions

- How do I choose a digital tool to help me learn?
- How do I use digital tools responsibly?
- How do I use digital tools to communicate?
- How do I work with others using digital tools?
- How does a lifelong learner integrate technology into his/her life?

Interdisciplinary Connections

1. Common Core Literacy

LA.1.CCSS.ELA-Literacy.CCRA.R.7	Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.
LA.1.CCSS.ELA-Literacy.CCRA.W.6	Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.
CCSS.ELA-Literacy.W.1.6	With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers.
CCSS.ELA-Literacy.RF.1.4.a	Read grade-level text with purpose and understanding.
CCSS.ELA-Literacy.RI.1.5	Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text.
CCSS.ELA-Literacy.RI.1.10	With prompting and support, read informational texts appropriately complex for grade 1.
CCSS.ELA-Literacy.SL.1.1	Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.
CCSS.ELA-Literacy.SL.1.1.c	Ask questions to clear up any confusion about the topics and texts under discussion.
CCSS.ELA-Literacy.SL.1.2	Ask and answer questions about key details in a text read aloud or information presented orally or through other media.

2. Common Core Math

- CCSS.MATH.PRACTICE.MP5 Use appropriate tools strategically.
- CCSS.MATH.PRACTICE.MP6 Attend to precision.

3. Career Ready Practices

- CRP1. Act as a responsible and contributing citizen and employee.
- CRP11. Use technology to enhance productivity.
- CRP4. Communicate clearly and effectively and with reason.
- CRP6. Demonstrate creativity and innovation.

Stage 2 - Assessment

Formative Assessment

Teacher observation of students' progress logging into the Chromebook

Teacher observation of completed projects

Teacher observation of student cooperation and class discussion

Matrix of skill development

End of Unit/Benchmark Assessments

Stage 3 - Learning Plan

Suggested Activities

- Discuss basic features of a computer using laptop as the model.
- Label and identify computer parts and basic features of a digital device and explain its purpose.
- Identify keyboard components and hand placement.
- Practice keyboard fluency and accuracy.
- Introduce and review technology terms used in class..
- Identify how technology products, systems, and resources are useful at school, home and work using class discussion or teacher generated materials.
- Create a writing / ELA poem, essay or story using word processing application such as Google Docs.
- Compare and contrast content using Google Docs or other online resource.
- Independently access and use online learning tools (i.e. PebbleGo for biography research, ABCYa / BBC Dancemat Typing for typing practice, Starfall for reading comprehension).
- Use copyright video and online interactives such as [Common Sense Media](#) and/or [BrainPop](#) to develop understanding of responsible use of information and technology.

LESSON STRATEGIES:

- Interactive mini lecture/notes – Students take notes, answer questions, turn and talk, participate in class discussions, look up information in text/online.
- Do Nows – At start of class, students answer questions, reflect on learning, work on typing.com

- Video Clips- Shown to aid learning by providing a visual, engage the class
 - Demonstrations- To enhance student learning, ignite curiosity, spur discussion, provide a visual, engage the class
 - Research questions- Students are given a broad question to research. Students answer the question and provide evidence for their responses. (Independent or collaborative)
 - Journaling- Responses to various ideas, thoughts, class activities, and content.
 - Reflecting on Learning- Students self reflect on their learning and “rate” themselves on a learning scale.
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Supportive Strategies

1. Special Education

- Employ assistive technology as needed (For example, use of Dyslexie font, high contrast or screen

magnification on Chromebook, or spoken text features)

- Graphic Organizers
- Modifications on IEP
- Provide written and oral directions, utilizing visuals and exemplars. (For example, teacher models Chromebook login on the ActivBoard and provides students with Chromebook login sheet)
- Reduction in workload
- Repetition and Reinforcement of classroom material
- Strategic Grouping for all group work

2. ESL

- Employ assistive technology as needed (For example, online translation or Language text settings on Chromebook)
- For collaborative assignments, appropriate roles will be assigned. (For example, time-keeper, activity starter)
- Make content culturally relevant
- Partner English Learners with Strong English Speakers
- Provide written and oral directions for all lessons, utilizing visuals and exemplars
- Repeat classroom procedure and routines as much as possible to reinforce language learning
- Visual Aids

3. Student at risk of failure

- Employ assistive technology as needed (For example, use of Dyslexie font, high contrast or screen magnification on Chromebook, or spoken text features)
- Flexible acceptance of missing/lost/incomplete assignment
- Strategic Grouping for all group work

4. Gifted and Talented

- Higher level learners will be provided with more intellectually demanding learning activities. (For example, teacher encourages student to format a Google Doc using font choice, font size, and color instead of simply creating a document.)
- Higher Order Questioning
- Utilize different reading levels appropriate for students

Core Instructional Materials/Resources

- Chromebooks, iPads or other internet-connected devices
- Google Apps for Education accounts for each student
- Paid subscription to any online resources needed such as BrainpopJr.com or PebbleGo

- See websites listed in “Suggested Activities” section.