Troubleshooting Tech Issues

Course Name: Any course

Time Frame (in minutes): 2 - 40 minute classes

Unit/Theme: Solving Technology Issues

Grade Level: 7/8

CONTENT AND SKILLS

Learning Objectives:

• Students will be able to identify a problem related to their school issued device and use troubleshooting strategies to solve the problem.

Essential Questions (optional):

- How can we use analytical thinking to solve a technological problem?
- What is the best way to communicate a multi-step process to solve a problem?

Students I can statements . . .

- I can create a list of all the problems a student might encounter using their school-issued device.
- I can provide a multi-step process for solving a technological problem.
- I can create a document to share with my peers that will list the technological problem and a plausible solution.

How will you meet the needs of SWD and ELL/MLL students?

- Students will be able to use the immersive reader, voice to text, and images to access material and represent their ideas.
- Students can use the translator extension in Google or in Microsoft Teams.

Content Standards

List all standards (Just the indicate - not the language)

.NYS Next Generation ELA Standards

- 8SL5: Integrate digital media and/or visual displays in presentations to clarify information, strengthen claims and evidence, and add elements of interest to engage the audience.
- 8W2: : Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.

Empire State Information Fluency Standards

- Anchor Standard I Inquiry and Design Thinking: Use Inquiry and Design Thinking to Build Understanding and Create New Knowledge We are thinkers and designers.
 - Standard 1.1: Information-fluent learners use an inquiry process to connect to prior experience and background knowledge, wonder and ask questions,





investigate, construct new understanding, express learning, and reflect on the process and product of learning.

NYS Computer Science and Digital Fluency Standards

List all standards that authentically align

- **7-8.NSD.3** Identify and fix problems with computing devices and their components using a systemic troubleshooting method or guide.
- **7-8.DL.4** Select and use digital tools to create, revise, and publish digital artifacts.

NYS SEL BENCHMARKS (Just the indicator - not the language) https://www.p12.nysed.gov/sss/documents/SELBenchmarks2022.pdf

- **3B.4a** Generate possible solutions to challenges, anticipate potential consequences of decisions, and take intentional action toward desired outcomes.
- **3B.4b** Apply decision making skills to establish mutually supportive interpersonal and intergroup relationships.

INSTRUCTIONAL PLAN

List the steps of the lesson, including instructions for the students.

Add and highlight Standard Indicator next to activity that aligns

- Teacher will ask students to make a list of all the technology they use on a daily basis inside of school and the possible issues they face when using this technology.
 7-8.NSD.3
- Teacher will put the students in small groups to compare lists and come up with one comprehensive list.
- Students will generate a multi-step process for troubleshooting the issues they have identified. **7-8.NSD.3**
- Students and teacher will use Padlet to develop criteria for evaluating the poster. This
 criteria will guide them in the process of making their poster and evaluating their
 classmate's posters.
- Students will create a problem/solution poster that identifies the device, the problem, and a solution to the problem. They will do this digitally in Canva and then they will publish their artifacts in Schoology in a Media Album for the class to view. 7-8.DL.4
- Students will evaluate the posters created for the school devices and determine which
 one is the best representation of the problems students face using school technology
 They will look for the best poster that uses clear language and easily understood steps
 to solve the problems.
 - The evaluation criteria will be generated by the students and teacher (a rubric) and this will be used to determine which artifact is the best representation.
- The final poster chosen can (should) be published in a few ways:
 - o teachers in the building will have a copy to post in their classroom
 - the technology help desk post a copy outside of their office





- the librarian will post a copy in the library and on the library webpage
- the principal will send out a copy (digitally) in the e-news letter
- the poster will be published in the technology help section on the school portal page for students to access anywhere
- a copy can be posted next to all copier machines and other district office spaces 7-8.DL.4

MATERIALS / RESOURCES

Add additional resources needed for this lesson such as instructional technology templates, images, videos, etc. *Including Instructional Technology Tools*

- Students will need access to Canva.
- Students can use a collaboration tool to synthesize their problems and solutions list (i.e. Collaboration Space in OneNote, whiteboard, etc.)
- Teacher will need to create a Padlet for students to post their ideas for the criteria for evaluation. Alternatively, the teacher can create a Schoology discussion post for this as well.
- See SAMPLE of student poster below.









