

# **Lesson Plan 19: Troubleshooting Basics**

**Lesson Overview:** In this lesson, students learn basic troubleshooting strategies.

## **Lesson Objectives**

#### Students will:

- turn on and off online pop-up blockers.
- apply systematic troubleshooting to common computer problems.
- get technical support when needed.

## **Materials and Setup**

## **Technology / Equipment**

- An Internet- and audio-enabled computer, projector, and screen
- Student devices (laptops, tablets, desktop computers)

### **Supplies/Teacher Materials**

Whiteboard and markers

#### **Student Handouts**

- Handout 1: Computer Problem! Scenario Discussion
- Handout 2: Basic Steps to Troubleshooting
- Handout 3: GCF Global Troubleshooting Scavenger Hunt

#### **Online Resources**

- GCF Global Basic Troubleshooting Techniques web page: https://edu.gcfglobal.org/en/computerbasics/basic-troubleshooting-techniques/1/
- YouTube Video: Unblocking a Pop-up Window

#### **Instructional Tips**

- **Key Vocabulary:** You may want to ask students to label a page in their notebooks for this lesson's key vocabulary and have them write down each of the words as you explain them as they are used in the context of the lesson. Ask students to write down the meaning of the word in their own language.
- **Keyboarding Practice:** Write the key vocabulary on the board. Ask students to identify the words that they are not familiar with. Then tell them to either text those vocabulary words to themselves or your Google Voice number OR email you those words.

#### **Standards**

#### Adult English Language Proficiency Content Standard(s)

• 2.1. Participate in level-appropriate oral and written exchanges of information

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#### CASAS Content Standard(s)

- L2.9: Comprehend specialized vocabulary (e.g., technical, academic)
- S2.9: Use specialized vocabulary (e.g., technical, academic)
- R1.1: Identify the letters of the English alphabet (upper and lower case)
- R2.1: Interpret common symbols
- W1.1: Write the letters of the English alphabet (upper and lower case)
- W4.5: Use specialized vocabulary

#### Seattle Digital Equity Initiative Skill(s)

- DO.4: Fix Technical Problems
- DO.2: Find Technical Support
- EF.5: Understand My Computer / Understanding computer and peripheral components; basic troubleshooting; using an OS

#### Northstar Digital Literacy Standards for Essential Computer Skill(s)

- Basic Computer Skills 14: Demonstrate understanding that software programs are upgraded periodically to fix bugs and increase utility, and that different versions may be installed on different computers
- Internet Basics 16: Enable a specific pop-up window

## **Key Vocabulary**

- troubleshoot / troubleshooting
- cord / cable
- checking / check for
- restart
- updates
- technical support

- error message
- pop-up blocker

Reinforced vocabulary: charge/charging, Internet connection, shut down, pop-up window, Internet search, search result

## ENGAGEMENT Notes

- Ask: What do you do when a machine will not start? For example, what do you do if your car doesn't start? What do you do if your air conditioning stops working? What do you do if your television will not turn on?
- Note their ideas, which may include things like checking the connections or asking for help.
- **Say**: Sometimes something goes wrong when we work on a computer. We need to troubleshoot the problem. Troubleshoot means to find out what is wrong and fix it, just like we do with other machines.

#### **EXPLORATION**

- Distribute **Handout 1: Computer Problem! Scenario Discussion.**
- Ask students to identify new vocabulary and review it with them.
- Go over the comprehension questions.

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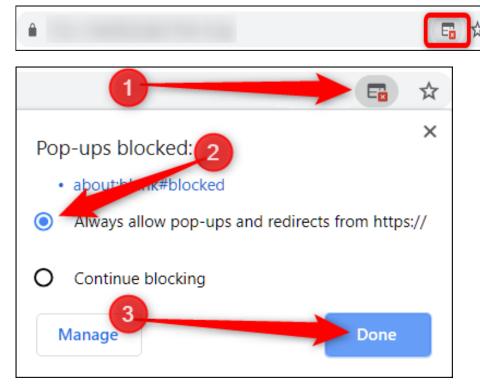
- Practice the dialog. First, practice as a group with students repeating chorally after
  you say each sentence. Then have them turn their pages over. Read a sentence and
  have them repeat relying on listening alone. Then have them practice in pairs.
- Review the discussion questions.

#### **EXPLANATION**

- Distribute Handout 2: Basic Steps for Troubleshooting
- Go through handout. Stop at each bullet to demonstrate how students can troubleshoot problems by checking the battery level, verifying the wireless network Internet connection status, restarting, checking for updates, shutting down, searching online and clicking on a search result, and asking for help.

#### **ELABORATION**

- One common problem is the pop-up blocker. Some sites will not load content until you tell the site the pop-up window is allowed.
- Ask students what a "pop-up" window is and then explain it.
- Show students the web page <a href="https://www.howtogeek.com/411439/how-to-allow-or-block-popups-in-chrome/">https://www.howtogeek.com/411439/how-to-allow-or-block-popups-in-chrome/</a>. Point out these images:



• Point out that the "x" on the address bar indicates that the pop-up blocker has stopped some content. If this is a course or video in Okta, for example, they need to allow the content by clicking the button (2) and clicking (3) "Done."

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- Play YouTube Video: <u>Unblocking a Pop-up Window</u>. (Ask students to watch closely
  as there is no narration. Alternately, you can narrate what is happening in the video
  to students.)
- Discuss why some windows are blocked. Why should they be careful when allowing pop-up windows?

#### **EVALUATION**

- Pass out Handout 3: GCF Global Troubleshooting Scavenger Hunt.
- Ask students to set up and sign in to their computers.
- Use the instructions on the handout to model how students can navigate to the web page on troubleshooting.
- Have them work alone or in pairs to find the answers to the questions in the scavenger hunt. This activity will let you know how far your students have come.
  - Can they double-click to open a desktop app?
  - Can they type in a web page address correctly?
  - Can they scroll up and down on a website?
  - Can they click on buttons and links?

#### **Differentiation Resources to Meet Diverse Learner Needs**

- For students who are less advanced, review the GFC Global Basic Troubleshooting Techniques web page together. Point out the words in bold. Ask students why they think the words are darker. Ask if they know how to translate a web page and demonstrate. Show them where they can change the content to Spanish or Portuguese if appropriate.
- For advanced students, read through the scenarios on the <u>GFC Global Basic</u> <u>Troubleshooting Techniques</u> web page. Brainstorm solutions before reading the solutions.
- Advanced students may also enjoy creating a script to narrate the YouTube Video:
   Unblocking a Pop-up Window.