A+ Core 1 and Core 2 CertMaster Perform 15.0

4.6.5 Exercise: Create a Troubleshooting Checklist

Learning Outcomes and Exam Objective

By completing this exercise, you will:

- Identify the importance of a logical troubleshooting process.
- Identify and organize the steps necessary to diagnose and resolve common system and display issues.
- Practice creating and using troubleshooting checklists to approach technical problems systematically.
- Develop critical thinking skills by analyzing potential causes and solutions for technical issues.

This exercise supports the understanding of the following objective for the A+ Core 1 (220-1201) Exam:

- 5.3 Given a scenario, troubleshoot video, projector, and display issues.

Instructions

This exercise is designed to teach you how to approach system issues and display issues systematically by creating a structured troubleshooting checklist that can be applied to diagnose and resolve common technical problems. Through this activity, you will learn about the importance of following a logical and methodical troubleshooting process to ensure efficiency and accuracy in problem-solving.

For this activity, you will:

1. Research the following areas:

    - The importance of systematic troubleshooting.

- How a logical approach can save time, prevent unnecessary repairs, and improve problem-solving accuracy.
- The key steps of troubleshooting: Identifying the problem, isolating the cause, testing solutions, and verifying the fix.

2. Develop a detailed troubleshooting checklist for each of the scenarios provided. Your checklist needs to include clear, step-by-step actions to diagnose and resolve the issue in each scenario. For example, Step 1: Check the power source, Step 2: Verify cable connections, and Step 3: Test with a different monitor or power supply. Additionally, make sure to include a section for documenting observations and results for each step. The scenarios to address are as follows:

   - What steps would you take to identify the cause of a blank screen? Consider hardware, software, and connection issues.
   - What could cause a display to flicker or appear distorted? Think about drivers, cables, and monitor settings.
   - What are the possible reasons a system won't power on? Include steps to check power sources, hardware components, and external factors.

3. Explain your checklist to a group or partner once it is complete. Share your thought process and reasoning behind each step. Also, reflect on the importance of following a logical, step-by-step approach and how it helps prevent skipping critical steps or making incorrect assumptions.

4. Write a short summary (2 to 3 paragraphs) that explains your approach and how your checklist ensures a systematic troubleshooting process.