

Building a Smart Home for Seniors

LEARNING OBJECTIVE:

Students will learn to plan and design a smart home using popular platforms and protocols, considering **SAFETY**, convenience, affordability, and usability.

ASSESSMENTS:

Students will be shown how to plan a smart home that incorporates various devices, explaining how they will work together and addressing the criteria of safety, convenience, affordability, and usability

OPENING:

- Begin with a discussion question: "What would you want to control in your home if you could use technology?"
- Show a demonstration of a smart home in action to capture interest.
- Briefly explain what a smart home is and how it can benefit seniors.

KEY POINTS:

- Overview of smart home devices and their functionalities (e.g., cameras, smart speakers, lights and thermostats).
- Importance of safety and security in smart home configurations.
- Comparison of single vendor solutions versus multi-vendor systems.
- Introduction to voice activation technology and its advantages.
- Considerations for affordability and usability for seniors.

INTRODUCTION TO NEW MATERIAL:

- Present key points using a PowerPoint presentation with real-life examples of smart homes.
- Discuss how devices can communicate with each other (e.g., through Wi-Fi, Bluetooth).
- Use visuals to explain safety features (e.g., smoke detectors, security cameras).
- Anticipate misconceptions about the complexity of setup and clarify that many devices are user-friendly.

Student Questions and Solutions:

- Ask students what problems they want to solve using smart home devices.
- Offer suggestions of how to solve different issues in the house.
- Give examples of cost for different devices.

CLOSING:

- Conduct a quick reflection: "What is the most important feature of a smart home for seniors?"
- Invite students to share one thing they want to automate in their house.

EXTENSION ACTIVITY:

- Go over different devices (that I will bring to class) and explain how it works, how it is powered and how easy the installation process is for "do it yourselves".

HOMEWORK:

- Take a look at your home and determine how you can use smart home technology to make life safer and easier.