

MASS CLEAN ENERGY CENTER

MODULE 10 · THERMOSTAT OPERATION

Customer Communication & Thermostat Settings

Contextualized ESOL Support Activities

ACTIVITIES

Oral
Communication,
Empathy,
Intercultural
Fluency

2

Activities

Instructor Note: There are two activities for this Module.

ACTIVITY 1 – CUSTOMER COMMUNICATION

ACTIVITY OVERVIEW

Objective	Students will be able to teach a customer how to adjust settings on their thermostat.
Durable Skill	Oral Communication, Empathy, Intercultural Fluency
Student Interacts With Hypothetical	Customer
When to Use	Students need to complete the Amatrol Universal Heat Pump Training Module 10 – Thermostat Operation, or equivalent training before doing this activity.
Activity Type	Role-play
Time Needed	45 minutes

STUDENT MATERIALS

- Activity 1 - Handout 1: Module 10 - Vocabulary Definitions

Instructor Preparation**Activity Location**

Classroom or location with access to wall thermostat

Pre-work

- Have a wall thermostat set up and available for use during the role-play

Material Preparation

- Review student handouts. Make one copy per student of Handout 1.
- If possible, provide students with access to a physical copy or link to the thermostat operating manual for reference. If the classroom does not have internet access, print one copy of the operating manual for those participating in the role-play to access.
- Identify any real-life examples you or others have experienced when assisting customers with programming the thermostat.
- For background information, see Video Resources below.
- **Best Practice**
 - Identify any key vocabulary terms from Handout 1: Module 10 - Vocabulary Definitions that students should be referencing as part of the role-play. Be prepared to reference these during the activity.

VIDEO RESOURCES

Video Title	Time	Description
The Basics of Thermostat Wiring and What it Looks Like	1:42 min.	Produced by Big Dog HVAC.

ACTIVITY DIRECTIONS

1. The instructor will role-play the customer who has just had a new thermostat installed by the service technician. The customer wants to learn how to adjust the settings on the thermostat.
2. Before doing the role-play, provide guidance to the students on how to speak with customers. Ask students, "In general, how would speaking with a customer differ from how you would speak to another service technician?" and record their answers. Give multilingual learners a moment to preview the key phrases on Handout 1 with a partner before performing in front of the class — rehearsing the language once under low pressure builds the confidence needed to speak clearly when it's their turn.
3. If not noted by the students, be sure to review the following:
 - Be courteous and polite.
 - Use simplified terms to explain how to program the thermostat.

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- Be patient and calm if the customer needs you to repeat the directions or does not understand the directions. Do not get mad or agitated. Remember, this is part of your job.
 - Follow this method when demonstrating how to program the thermostat:
 - Use simplified terms.
 - Remember, what seems obvious and clear to you may not be to the customer.
 - Describe how to set the thermostat step-by-step by having the customer do it themselves while you observe.
 - Ask if they have any questions or if they would like you to walk them through it again.
4. The instructor notes that while this activity provides an opportunity to help the customer program their thermostat settings, when at a job site a customer may prefer that the service technician program the settings. Depending on the thermostat, the technician can apply a full lock (no changes) or a partial lock that still lets the customer adjust the temperature within a set range. Be sure to confirm with the customer which level of access they want before locking.
 5. State that they are now ready to participate in the role-play. Ask four to five students to line up to role-play the service technician at the front of the classroom.
 6. The instructor stands by the thermostat.
 7. Explain that the service technicians will be tagging in as the scenario unfolds. Tell the service technicians that they are not to set up the thermostat themselves, but to talk to the customer enabling the customer to set the thermostat themselves.
 8. The “customer” begins by asking the first student “service technician” how to adjust one to two of the following items:
 - a. Time/date settings
 - b. Daily heating and cooling schedule
 - i. Waking, leaving, returning, sleeping
 - ii. Wake, away, home, sleep
 - c. Temperature format (F or C)
 - d. Automatic daylight savings time adjustment
 - e. System service and filter change reminders
 - f. Display color and layout
 - g. Clock format (12- or 24-hour)
 - h. Wi-Fi activation
 - i. For multi-zone homes – setting temperatures for different rooms
 9. Once the student “service technician” has been given a minute or two to describe how to set the thermostat or they help the “customer” to do it themselves, then the student “service technician” tags out and the next student “service technician” tags in.
 10. The “customer” then asks the new student “service technician” how to adjust one to two different settings.
 11. The process repeats itself until all settings have been adjusted.
 12. Debrief the activity using the following questions:
 - Which settings were most challenging to explain? Why?
 - How could they be explained more easily?
 - How did service technicians need to adjust their language when helping the customer? (For example, use fewer technical terms.)

- 13.** Wrap-up by suggesting students practice their vocabulary and deepen their understanding of how to program a thermostat by viewing the video from the Video Resources. Students can also role-play setting up the thermostat with another student.

Below are two quick extension activities that build upon ACTIVITY 1:

Extension Activity – 1

Class discussion on how to describe typical thermostat operating modes to a customer

Lead a class discussion about the following:

How would you describe to a customer the difference between the four typical thermostat operating modes: (See Amatrol Module 10, Slide 21.)

- Heat
- Cool
- Auto
- Emergency

Tell the class not to assume the homeowner understands these modes. For example, a customer may keep the emergency switch off during a non-emergency time which is not correct.

Extension Activity – 2

Demonstrating to a customer how to connect a thermostat to a wireless device

For this activity, be sure to have a wireless device available. Ask a student to show a customer how to connect their thermostat to a wireless device such as a switch or router to enable communication. Engage the student in conversation as you play the role of the customer. (Note: If your facility has internet restrictions, have the student talk through the process with the customer.)

ESOL Strategy Note

Because Activity 1 involves an unscripted role-play with real-time customer dialogue, give multilingual learners a moment to preview the key phrases on Handout 1 with a partner before performing in front of the class – rehearsing the language once under low pressure builds the confidence needed to speak clearly when it's their turn.

For the unscripted role play in Activity 1, the instructor should choose one student to model a shortened role play activity.

ACTIVITY 2 – ADJUSTING THE DIFFERENTIAL POINT ON A THERMOSTAT

ACTIVITY OVERVIEW

Objective	Students will be able to describe in written and verbal format how a customer can adjust or override a differential point set by the manufacturer.
Durable Skill	Oral Communication, Collaboration
Student Interacts With Hypothetical	Customer
When to Use	Students need to complete the Amatrol Universal Heat Pump Training Module 10 – Thermostat Operation, or equivalent training before doing this activity.
Activity Type	Pairs work
Time Needed	30 minutes

STUDENT MATERIALS

- Activity 1 - Handout 1: Module 10 – Vocabulary Definitions
- Activity 2 - Handout 1: Scenario: Adjusting the Differential Point on a Thermostat

Instructor Preparation

Activity Location

Classroom

Material preparation

- Review student handouts and make one copy per student of Handout 2.
- **Best Practice**
 - Identify any key vocabulary terms from Handout 1: Module 10 - Vocabulary Definitions that students should be referencing during the activity. Be prepared to reference these terms during the activity.

ACTIVITY DIRECTIONS

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1. Tell students that in this activity they will learn how to adjust the differential point of a thermostat to meet a customer's request.
 2. Distribute and review the handout. Note this is a Think-Pair-Share activity.
 3. Allow students time for each part of the activity as noted below:
 - a. Think – 5-minutes
 - b. Pair – 5-minutes
 - c. Share – 10-minutes
 4. During the Share portion of the activity note other ways setting the differential point may be impacted.
 - If there is a gas furnace, but it uses a heat pump as the house's source for cooling and heating until the gas furnace is needed.
 - Manipulating the furnace settings may throw off the heat pump. Do not press too many buttons when resetting the differential point. Make customers aware why and how you have adjusted the differential setting. For example, a service technician could tell a customer, "I'll set the differential point and lock it. Remember, if I leave it and you reset it, it might not be the right setting which means your heating system may not work correctly."
 5. Wrap-up by suggesting students practice their vocabulary and deepen their understanding of how to program a thermostat by viewing the video from the Video Resources in Activity 1.