Teacher Notes: Hello, My Name is…

Introduction to Mobile Robotics > Anytime Activities > Hello! My Name is…

Description of the Unit

Not all robots work alone. Sometimes the have to interact with a human or human operator in order to perform their task. To make it easier and more pleasant for the human to understand what the robot needs, robot designers give their robots personalities using sounds and display options. Here, students will do the same with their Personal Assistant robots.

Unit summary: students will…

- Program the robot to use sounds and images to convey a message
- Explore human-robot interaction
- Design a method for the robot to show an emotion, then conduct user testing to determine how well the emotion was constructed

Prerequisites:

- Clap On Clap Off Activity (optional) and Full Speed Ahead Activity (optional)
- Present to class the Hello, My Name Is… slideshow from Teacher's Curriculum CD and have class discussion (optional)

Approximate classroom time: 1-2 class periods (45-minute periods)

Note to the teacher

This Activity can be done with either the Taskbot model or the Robot Educator model (REM).

This Activity is designated as an "Anytime Activity," and is therefore meant to be optional. It can be completed at any point over the course of the Robotics Engineering Unit, though should be done after students have completed the Full Speed Ahead Activity.

This activity is not heavily calculation-based. It deals more with technology, design, human-robot interaction, communication and testing. Students will be using the sound and display options on the NXT to give personalities to their robots. They will also be conducting user testing on a robot emotion that they design to see how well their robot conveyed the emotion they designed.

Students will be able to:

1. Add sounds to their program
2. Utilize the NXT view screen and Display blocks to personalize the robot
3. Construct a program for the robot that displays an emotion
4. Conduct user testing and analyze the results of that testing