

Post-Assessment: Useful Robots

UNIT: Travel to Seoul

TRANSCRIPT

That's what a lot of people think of when they think of robots. They think of robots as having arms and faces or even talking like humans do. And that's how our idea of a robot might have started out. But did you know that most things we call robots today don't look or act like humans at all?

That's because we don't need robots to be human. We need them to be useful.

Like, have you ever seen one of these? A robotic vacuum is one of the most popular robots in homes today and can find dirt, change directions when it runs into objects, and even keep from falling downstairs.

Notice it doesn't look anything like a human—and that's a good thing! Its thin round shape helps it go under tables and sofas and roll around corners. A robot that looked like a human wouldn't be able to do that very well.

And take a look at these huge robots. They don't talk or have faces, but they do have arms. And that's exactly what they need to help us make cars. Believe it or not, about half of all the robots in the world are in car factories.

Robotic arms lift heavy things like engines, weld parts together, and even paint the car when it's finished, and they don't need legs to walk around like C-3PO to do that.

No. They're designed to do one thing—help human workers build cars—and they do that really well. At first, a factory was only able to build one car a day, but now with robots helping, they can build 1,000.

So, robots—whether they look like the ones in the movies or not—really are useful and they can make a big difference in our lives.

When I was younger, I met a friend named Jess who's had quadriplegia since she was one year old. This means she can't move her legs or arms and do things you and I find simple, like picking up a toy or getting a drink from the fridge. She can't even scratch her face if she has an itch.

And she's not the only one. There are a lot of kids and grownups that can't do these things, so I decided to make a robot to help.

This is JEVA. JEVA is a robotic arm that can be put on the side of a wheelchair to help people like Jess pick things up. A person can control JEVA by their head movements to move and grip objects or even scratch an itch.

And that's only one way robots are making a difference. Robots are helping doctors with surgery, they're putting out fires and rescuing people. They're even helping people explore places they've never been before—on Earth and on other planets like Mars, where humans haven't been able to visit yet.

Touchdown confirmed. Perseverance safely on the surface of Mars.

The possibilities are endless.