

Will, The World's First Digital Teacher, Debuts In New Zealand Classrooms



Will, the world's first digital teacher (Photo Credit: Vector -YouTube screen capture)

While the start of a new school year is always exciting, this year was even more so for some elementary school students in Auckland, New Zealand. They became the world's first kids to be "taught" by a digital teacher. Before you start imagining a human-like robot walking around the classroom, Will is just an **avatar** that pops up on the student's desktop, tablet, or smartphone screen, when **summoned**.

A collaboration between the Auckland energy company Vector and AI company Soul Machines, this brilliant animation platform has been modeled after the human brain and nervous system, allowing it to **demonstrate** human-like behavior.

The digital teacher, Will, is currently **assigned** to teach Vector's "Be **sustainable** with energy," a free program for Auckland elementary schools. Launched in 2005, the award-winning outreach program, previously taught by humans, is designed to educate kids about energy use, and the different forms of renewable energy such as solar, wind, and **geothermal**.

Just like the humans it replaced, Will is able to instantly react to the students' responses to the topic. Thanks to a webcam and microphone, the avatar not only responds to questions the kids may have, but also picks up non-verbal **cues**. For instance, if a student smiles at Will, he responds by smiling back. This two-way interaction not only helps capture the students' attention, but also allows the program's developers to monitor their engagement, and make changes if needed.



Will teaches kids about energy sustainability (Photo Credit Vector – YouTube screen capture)

Vector's Chief Digital Officer, Nikhil Ravishankar, believes that Will-like avatars could be a cool new way to grab the attention of the next **generation**. He says, "Using a digital human is a very **compelling** method to deliver new information to people, and I have a lot of hope in this technology as a means to deliver cost-effective, rich, educational experiences in the future." Greg Cross, the Chief Business Officer of Soul Machines, **asserts** that kids who have grown up in this smart device era adapt to new technology quickly, and he is eager to develop the **concept** of digital humans in the area of education further.

The program, in place since August 2018, has been a great success thus far. Nikhil says, "What was **fascinating** to me was the reaction of the children to Will. The way they look at the world is so creative and different, and Will really captured their attention." However, regardless of how popular it becomes, Will is **unlikely** to replace human educators any time soon. For one, the avatar's knowledge base is severely **restricted**. But more importantly, even the smartest digital avatars could never **anticipate** and react to all the unexpected situations that educators have to deal with on a daily basis. However, it could come in handy as a "personal tutor", providing kids with one-on-one help on specific **subjects** or even topics. Students could watch Will-like avatars teach a lesson multiple times in order to have a better understanding of a topic.