Volunteers are treasures in a second language class. They allow students to practice listening and speaking, to name a few skills. And I have been fortunate to have them as part of my LINC classes for years. But unfortunately, human volunteers are finite as a resource. Their presence is confined to the time and space when the class meets. And they are not always predictable, which adds to my workload. And eventually, they go. What's more, building new relations and trust takes time, so there is always an awkward stage before students warm up to them.

What's more, people usually react positively when interacting with avatars. For instance, when my class used our Zoom avatars, the students had fun and participated more. Even the quieter ones seemed to feel less pressure. So I believe realistic digital volunteers should be perfect for reducing the negative emotions many language learners face. It's common to feel tongue-tied for fear of making mistakes or worried about mispronouncing the words or being clueless about what has been said despite understanding each word. It can be disheartening. In this way, the students would engage more by feeling more comfortable with the digital volunteer. It would help students get good at improving. Another benefit of digital volunteers would be accessing them any time, anywhere, and on any device. So when waiting around, they could use their mobile devices to practice.

Digital human volunteers, to explain simply, are human digital twins. These extensive data sets represent an actual human and would require integrating art with science. The software was seen in 2019 that produced the first digital 3D representation of an entire human body. It was seen in Ang Lee's film, Gemini Man, where the digital twin was the de-aged character of the older Will Smith character. Yet, a realistic digital body would not be enough for digital volunteers in an ESL classroom. The digital body would need to be combined with software that could generate natural conversation in spoken and written language.

Artificial General Intelligence with emotional intelligence would provide a believable, natural conversation experience. I have found two research laboratories that exemplify its potential to self-learn the ability needed for the digital twin app.

A first-hand experience, a subsidiary of Alphabet Inc., DeepMind Technology's Wavenet capability, can be obtained by checking out the Google virtual assistant. The second company, OpenAI's GPT-3 capabilities, is more entertaining. Their system produced Lucy in Fable Studio's Wolves in the Wall. She was the first virtual character to win an Emmy Award. Windows have also purchased GPT-3 software, but an open-source written version is still available. Both systems can effectively

understand and respond to unscripted human input and produce natural-like output.

Our digital twin must go beyond just producing language. Specifically, lack of expression makes most people uncomfortable. For that reason, it must possess believable body language. Here we need to borrow software from companies such as Engineering Art, which produced the human-like robotic, Ameca. Her automated life-like facial expressions are interpreted as emotions, and her ability to track faces during conversations makes her very engaging to people.

I would need to gather these multiple applications, facial animations, and other assets on an open platform to build this meta verse application. For example, I would need to collect these numerous applications, facial animations, and other assets on an open platform to make this meta verse application. Finding an open forum would add to my financial cost for this app. Another issue, I want seamless interactive content integration on my learning management system without hosting it on another web server.

Digital human volunteers have now become autonomous and realistic with a personality. They can hold a fluid conversation in real-time with minimal latency. They also remember their conversation partner and what has been said.