NTU conference treated to live holographic lecture

Nobel prize-winning physicist delivers talk from US on how technology can aid learning

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About 500 educators filed into Nanyang Technological University (NTU) yesterday morning, hoping to discover the latest use of technology in learning, and were promptly introduced to one possibility that may soon become a reality here. In the first keynote address at the two-day Singapore Technology-Enabled Learning Experience conference, which started yesterday, Nobel Prize-winning physicist Carl Wieman, a professor of physics at Stanford University, delivered his lecture on stage – as a hologram.

He greeted an enthusiastic audience, most of whom then moved to the front seats at the Lee Kong Chian Lecture Theatre to get a better view, and even "shook hands" with the master of ceremonies.

Prof Wieman, 64, spoke on how technology could support teaching methods via an interactive hologram from Stanford, about 14,000km away in the United States. The presentation was arranged by NTU, the host of the inaugural conference on technology in learning. It is believed to be the first lecture delivered via hologram by

an educational institution here.

NTU president Bertil Andersson said: "It is still early days and more technological development is needed before truly portable holograms can be used as common education tools. Nevertheless, this demonstration shows us a sneak peek at what we may expect in the future."

The holographic display took NTU three weeks to prepare and set up. It works by having a high-resolution projection on the ground reflected by a special foil placed at a 45 degree angle, giving the audience the illusion of a 3D image. Planning for the presentation took five months, including testing Internet speeds between NTU and Stanford to ensure a smooth video stream.

Prof Wieman, who stood in front of a green screen in Stanford, told The Straits Times that it was his first holographic presentation. "Too often, technology is used for its own sake, rather than thinking about how it can enhance learning," he said, adding that, if tapped properly, it can be useful for education. Professor Lee Sing Kong, NTU's vice-president for education strategies, noted that such virtual technologies may become common in classrooms here in a matter of years.

"Breaking the concepts of time and space, world-class educators can teach in many different parts of the world at the same time and reach a wider audience without the need to travel," he added.

At the conference yesterday, educators from the six local universities shared ideas and solutions on how technology can enhance learning. These include Massive Open Online Courses, smart classrooms and unconventional learning approaches such as learning via gaming.

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