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To all news organizations

National University Corporation Tohoku University

VRChat x Tohoku University Connecting the world with Metaverse Education Concluded an International Industry-Academia Partnership as Japan's First!

[Key Points of Announcement]

Tohoku University has, as the first Japanese educational institution, signed a partnership agreement with VRChat Inc. (hereinafter "VRChat"), one of the world's largest providers of Metaverse platform.

In blended education, which connects universities around the world and Japan with the best mix of face-to-face and online, the use of Metaverse in international collaborative learning will be further enhanced.

On Wednesday, January 31, 2024, we are planning to hold a class where many students will wear Head Mount Displays (HMDs) and in a special Metaverse world created collaboratively by overseas and domestic students across borders, they will be able to experience cultures from around the world and Japan. (*X*Interviews are available.)



[Overview]

Institute for Excellence in Higher Education at Tohoku University has, as the first Japanese educational institution, signed a partnership agreement with VRChat, one of the world's largest Metaverse platform providers. Tohoku University is implementing "Metaverse HyFlex Virtual Exchange (VE)" in collaboration with overseas partner universities.

This partnership will further enhance the use of the Metaverse in "blended education," where online students from around the world and face-to-face students in Japan learn collaboratively. In addition, it will be possible to create and utilize Metaverse worlds for presentations and discussions for cross-cultural understanding in cross-border collaborative learning. By wearing Head Mount Displays (HMDs), students will be able to obtain an even more immersive and realistic experience, and deepen their active and independent learning in a virtual space. International collaboration between universities and companies in the use of Metaverse for education and research will be further accelerated.

[Detailed description] Research Background:

Tohoku University is developing "Tohoku University Connected University Strategy" to connect dynamically with the world beyond the barriers of distance, country, culture, etc., and provides an inclusive educational environment with the best mix of face-to-face and online education. As part of this effort, we are implementing the "Metaverse HyFlex Virtual Exchange (VE)" in collaboration with overseas partner schools. The introduction of Metaverse has helped reduce the "psychological barriers" faced by students participating from overseas, and has been included as an advanced example in the "Distance Education Guidelines" provided by Japan's Ministry of Education, Culture, Sports, Science and Technology.

In order to use the Metaverse in classes, it is important that it requires less restriction on number of students participating and creation and edition of worlds is possible according to the needs of students. In addition, in HyFlex classes which allow both classroom and online participation, it is necessary to allow access from university classrooms and use of HMDs without connecting cables in the classroom. From this point of view, VRChat's Metaverse platform was judged to be ideal for an international collaborative learning environment.

This Initiative:

By signing a partnership agreement with VRChat, we will be able to further enhance the use of Metaverse in blended education, where online students from partner schools around the world and face-to-face students in classrooms in Japan learn collaboratively. Furthermore, we have started "XR Communication Research" with VRChat to incorporate nonverbal communication into education. Through this partnership, at the 2nd International Symposium on "Education and Social Contribution of XR Technology - Metaverse and International Collaborative Creation" hosted by Tohoku Forum for Creativity on December 2, 2023, Mr. Strasz of VRChat gave a lecture through the Metaverse and a workshop was held where students from Germany, Kenya, and Japan gave lectures on the Metaverse and introduced Metaverse worlds created using VRChat's Metaverse platform.

On Wednesday, January 31, 2024, a special class is scheduled to be held where many students will wear HMDs and experience world cultures in a Metaverse world created collaboratively by overseas and domestic students across borders. (*XInterviews are available.*)

[Future Developments]

The Cabinet Office of Government of Japan, in its "Initiative to Promote Study Abroad for Young People Creating the Future," has launched a policy to promote a significant increase in the number of international students, and has identified the promotion of hybrid international exchanges utilizing online such as Virtual Exchange (VE) as a specific measure. Blended face-to-face and online education using Metaverse is highly compatible with the aspirations and needs of students in recent years.

In addition, using Metaverse world and other tools to introduce culture in the students' real voices will further increase interest in other countries and Japan, leading to Japanese students studying abroad and the acceptance of talented international students. On the other hand, we can provide multicultural educational opportunities to students who have difficulty studying abroad due to institutional or financial reasons, and many ripple effects can be expected.



Figure 1. Conceptual diagram of collaborative learning



Figure 2. Student-made world

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