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Virtual Reality for Second Language Acquisition and Cross Cultural Communication: setup and first results

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Measuring iconicity in VR in relation to SLA and cross-cultural communication: setup and first results.

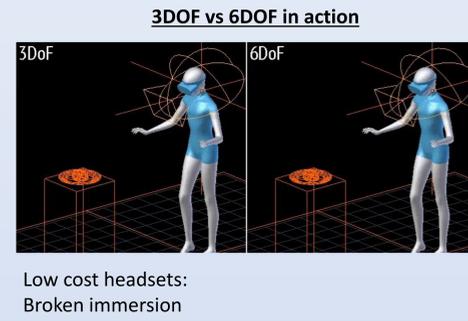
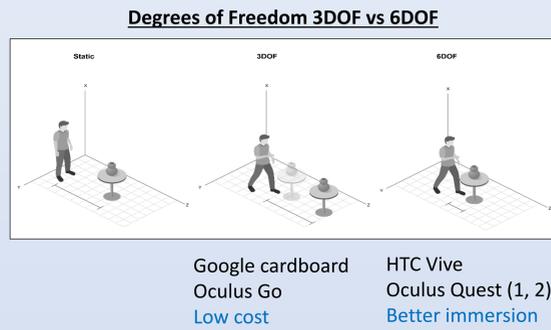
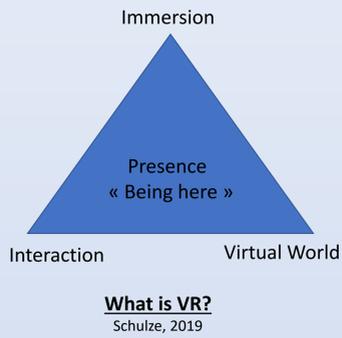
21st International Annual Conference of the Japan Second Language Association
October 23rd and 24th, 2021. Online

David Taquet and Robert Anthony Olexa

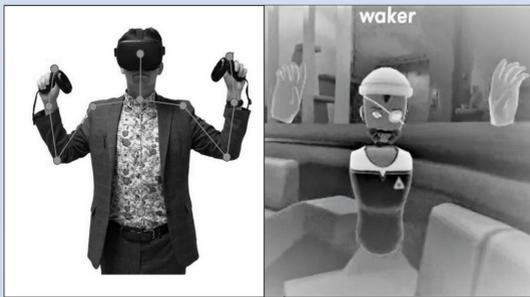
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In April of 2021, our research team from the National Institute of Technology, Hakodate obtained a national science grant (KAKEN) for a three-year study of the effectiveness of Virtual Reality (VR) for second language acquisition and cross-cultural communication. This poster session will explain our technical setup and the constraints. After five months of using the devices, we will discuss the progress so far based on the students' journals. Continuing the research, data will be collected through the compilation of a learner corpus cross-referenced with video. We hope to understand better how students use and acquire English words in a virtual context.



Why VR? Embodied Learning



Iconicity



Our equipment: Oculus Quest 2.
Stand Alone (no PC required)
6DOF, motion controllers
3hrs autonomy
571 grams
Starts at 37,180 yen (299US\$)

Traditional learning environments are situated in the classroom. In Big Screen students move around in virtual environments. How does unrestricted movement effect their communication? We will use multimodal analysis cross referenced with a compiled learners corpus to determine when and how students use embodied action to learn concepts and acquire language that may be otherwise inaccessible.

Recruiting students

English VR Lab



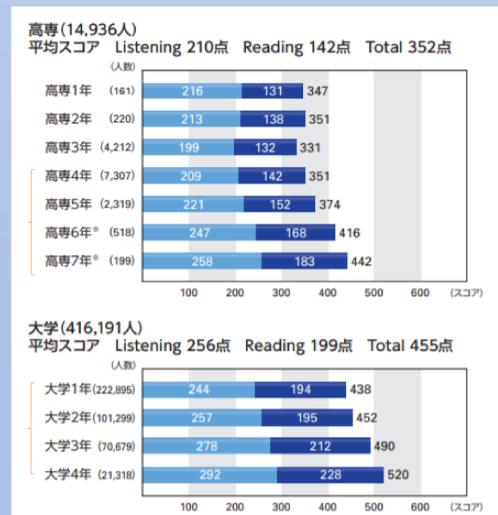
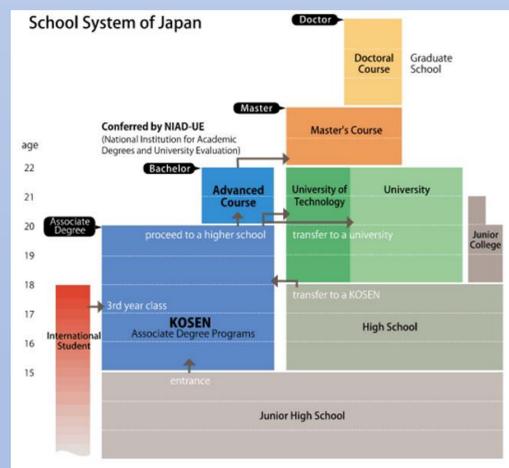
For 5th year and Advanced Course Students
Use Quest 2 for study and fun
Speak English with people from all over the world
Prepare for international internships
Stage 1: June-November
Stage 2: November-February
Update and news: ask David Taquet
TEAMS code 5nwe8fa
1st meeting-guidance planned for late June 2021



- Option 1: Register each headset to teacher
- Option 2: Log in with student ID
- Option 3: Create new facebook accounts

Why isn't the Quest 2 use more in education.
Link to facebook account is required

- 5-year program
- 15-20 years old
- Public institution
- Japan higher education systems
- Unique to Japan
- Engineering and science
 - High tech literacy
 - Lower English levels



Comparing TOEIC scores between Kosen students and University students (ETS TOEIC program data and analysis 2020)

Student/Age/TOEIC

Students' Comments (unedited)

A: 20, 450	I was able to use Bigscreen to talk to two people. When I asked them to speak slowly, they pronounced words slowly and were very kind. After a brief self-introduction, the three of us drew pictures together and played a game to guess what we had drawn.
B: 20, 480	D and I played RecRoom, Big Screen and VR Chat together. In RecRoom, we shook hands with some users to make friends and had a car chase. In the big screen, we watched a horror movie without subtitles. But I couldn't interact with other users, so we quit immediately. In the VR chat, we went to a space modeled after a Japanese shrine and talked with a user who lives in Taiwan. When I talk to a foreigner I don't know in VR, I get nervous when I talk to them because of the language barrier. However, I also felt scared when talking with Japanese people I don't know. The reason is that you cannot see their faces.
C: 21, 520	Mr. Robert and I talked with an American on the big screen. I got nervous when there were more than one of us, so I was at a loss for words. Next time, I want to be more relaxed.
D: 20, 430	With B, I did Recroom and VRchat. In Recroom, we played car chase and interacted with each other. In VRchat, we interacted with Taiwanese people in English and Japanese. I got very drunk from the VR, but it was fun. After all, I felt it was easier to talk with strangers in VR.