

# Virtual Ryugaku: offering cross-cultural communication opportunities to Junior High School Students through Virtual Reality



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Kaken 21K00778

# Presentation Plan

1. The projects
2. Setups and constraints
3. Questionnaire and comments
4. Improvements for the future

Q&A



# English VR Lab

For 5<sup>th</sup> 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: May-November

Stage 2: November-February

Update and news: ask David Taquet

TEAMS code **5nwe8fa**

1<sup>st</sup> meeting-guidance planned for late May 2021





函館高専

Yeah! バーチャル留学体験!

# 戸倉ヶ丘留学



 **VR (仮想現実)** の技術を使って  
 **異文化コミュニケーション** を体験しよう!

VR ヘッドセットを装着し、函館高専にしながら**仮想空間**内で**外国人**の人たちと交流します。  
素顔を合わせることなく**アバター**同士が交流するので「**恥ずかしさ**を感じずに**会話**する」ことができます。国際交流に興味がある人や英会話に興味がある人は参加してください。日本語での交流もOK ですので VR 技術に興味がある人も参加可能です。ぜひ気軽に参加してください。  
参加者には修了の証として、デジタル証明書であるオープンバッジを発行します。  
**Enjoy your virtual study abroad experience!**

**第1回： 11月26日(土) 10時～12時**

**第2回： 12月10日(土) 10時～12時**

会場： 函館高専 図書館2階

参加対象： 中学生(学年は問いません)

※参加費は無料。服装は自由です。上履きは不要です。

募集人数： 各回6名(先着順)

## Associating two projects

- ▶ JSPS Kaken 21K00778: Measuring Iconicity
- ▶ Community project: associate STEAM and global communication while in Hakodate

# Equipment, setup, and constraints

- ▶ Meta Quest 2: First steps, BigScreen beta
- ▶ iPad for casting (support and parents)
- ▶ Library 2F with Air Conditioning
- ▶ Safe space
- ▶ Registered on Network, Open IP ports



# Event objectives

- ▶ Hakodate is slightly remote, few international events
- ▶ International students = resource for the community
- ▶ Make technology language learning accessible
- ▶ Promote our school



# Event Plan

1. Staff does safety warning (heat, dizzy, hitting stuff)
2. Explain the controllers (trigger and grab button)
3. Launch 1<sup>st</sup> steps>give the headsets to students
4. First Steps for 15 minutes (staff troubleshoots)
5. Break for 5 minutes
6. Bigscreen Beta with international student for 15 min
7. End of session, questionnaire

Bigscreen: “what is your favorite food?”



Part 1 : 一般的な質問

A. なぜこのイベントに参加したのですか？

\_\_\_\_\_

B. 今日まで、どこでVRのことを知ったのですか？(例えばテレビ、友達、店など)

\_\_\_\_\_

C. バーチャルリアリティを使うのは初めてですか？ はい いいえ (\_\_\_\_回目)

D. すでにVRを使っていた学生に：何の機種でしたか？

\_\_\_\_\_

E. 今日のイベントを実施する前に、VRについてどれくらい知っていますか？

1 2 3 4 5

F. VRを利用しているとき、どの程度現実だと感じましたか？

1 2 3 4 5

G. 何か不快な感覚ありましたか？(暑い、重い、ぼやけるなど)

1 2 3 4 5

詳しく： \_\_\_\_\_

H. 全体的に今日のイベントはどの程度楽しめましたか？

# Questionnaire

- ▶ Bioethical committee
- ▶ Online forms Waiver for parents 1 week before, with sample questions
- ▶ All questions were translated to, and answered in Japanese
- ▶ End of the event



# Questionnaire part 1: general

- ▶ Why did you participate in this event ?
- ▶ Before now, where have you learned about VR?
- ▶ Is today the first time you have used VR?
- ▶ If you have already used VR, what device was it?
- ▶ Before this event, how much did you know about VR?
- ▶ While using VR, how real did it feel?
- ▶ Did you have any discomfort (hot, heavy, etc...)?
- ▶ Overall, how much fun did you have today?
- ▶ What was the most fun part?

# Questionnaire part 2: First Steps



- ▶ Do you think that First Step was an effective introduction to VR?
- ▶ What part of First Steps did you enjoy the most?
- ▶ What was the most difficult thing to do?



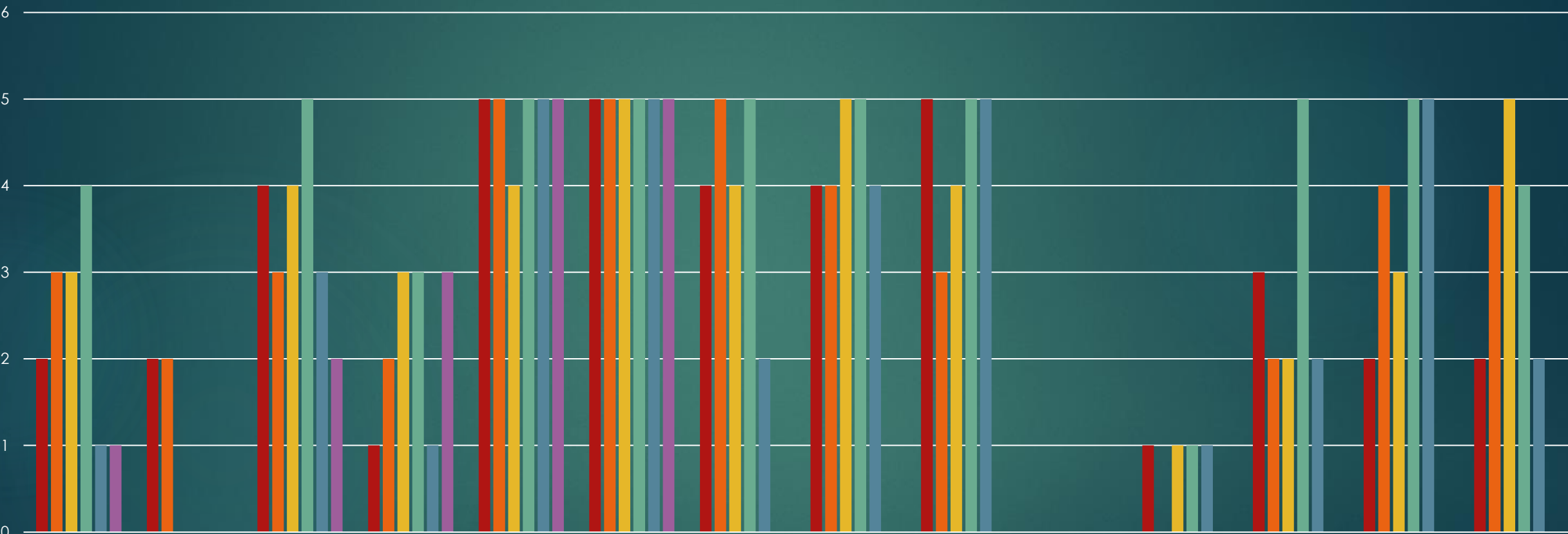
# Questionnaire part 3: Bigscreen beta

- ▶ While talking English in VR, how nervous were you?
- ▶ Do you think the sound quality was good?
- ▶ Did you easily understand what the international student was saying?
- ▶ Do you attend an English conversation school?
- ▶ In your junior high school, do you practice English conversation?
- ▶ After doing conversation in VR, do you feel more confident?
- ▶ Was virtual conversation more fun than face-to-face conversation?
- ▶ Do you think that VR conversation is easier than face-to-face conversation?



# Some highlights

Questionnaire's answers



■ S1 ■ S2 ■ S3 ■ S4 ■ S5 ■ S6

# Students' comments

Discomfort: 3 x blurry,  
3 x heavy

Most fun: 2x shooting

Most difficult: 3x  
dancing

A bit hot, but really  
fun experience.

BigScreen tool  
interface was hard  
to understand

1st time using VR and  
VR conversation.  
Thanks to the  
teachers, it was a lot  
of fun.

# 4. What is next?

- ▶ More proficient users
- ▶ More time in chat>VR Chat
- ▶ Better questionnaire and data analysis
- ▶ Full body tracking