#### **CHAPTER I**

#### **INTRODUCTION**

## A. Background of Study

The spread of the Coronavirus (Covid-19) which is a major humanitarian crisis forces social distancing policies to minimize casualties. The Ministry of Education and Culture has implemented a remote learning policy, encouraging students to engage in online studies from home in response to current circumstances and E-Learning (Web, 2020) which causes a lot of changes in education environments. Online learning is an education process using technological equipment that used internet connection and enhances the learning through computer hardware or software and other communication technology like smartphone or laptop (Sefiani, 2021, pp. 3-4).

Holy Al-Qur'an Surah Al-Alaq: 1

Holy Al-Qur'an Surah Ar-Rahman: 4

The above verses contain ontological messages about learning. In context of language teaching that verse refers to introducing something new or sharing the knowledges psychologically, student still need direct education from their teachers (Hasibuan, 2020). The tutor plays a crucial role in motivating students and fostering a continuous commitment to their work (Fotjik, 2018, p. 15) to interact with the students. Regrettably, the online class suffers from insufficient engagement with academic staff and classmates, resulting in a lack of in-person communication. (Hoq, 2020, p. 460).

Then, to solve this problem Virtual Reality (VR)-compatible and avatar-based social application, as a platform for learning showed that measurable learning gain is possible with this repurposing, and that student found it engaging, relevant, and it has an extreme possibility for teaching implementation. (Urueta, S.H., Ogi, T., 2020, pp. 69-74).

Virtual Reality (VR) is an interactive technology created to immerse computer users in an alternate world, one formed entirely from computer-generated data. In education, it provides distinctive learning and teaching opportunities by offering real-time three-dimensional visualization and supporting a range of interactive experiences. (Urueta, S.H., Ogi, T., 2020, p. 70) and engaging multiple senses in virtual learning environments learners receiving more attention in education. Also, virtual reality environments will involve more human senses.

For example, VR Nihonggo a community that an active on Virtual Reality Chat (VR Chat) provides the learners with a direct tutor through an avatar and virtual environments in language learning. This community provides learning materials about foreign languages such as, the Japanese class who wants to learn English, then there is also a foreign class who wants to learn Japanese. This community also provides a virtual environment to learn a language which are appropriate places to learn language by using VR technology and Cyber Experience-Oriented Learning on interactive online class due to the avatar projection from immersive VR device and give sensation of reality like social environments for interacting each other.

The important of Experience-Based learning or Cyber Experience-Oriented Learning has already explained on Al-Qur'an Surah Yusuf verse 111:

Holy Al-Qur'an Surah Yusuf: 111

"Indeed, in their stories there is a teaching for those who have reason." It can be referred to past experience where the learner should be reflect their experience in learning process to create meaningful activity. In Cyber Experience-Oriented Learning it Facilitates a participatory, learner-focused method that prioritizes direct involvement, immersive learning experiences, and the active construction of meaning by learners. Cyber EOL includes formal,

informal, non-formal, lifelong, incidental, and workplace learning, incorporating online and distance learning as well as offline learning to create realistic simulations with the assistance of Artificial Intelligence (AI) agents.

Virtual Reality Chat (VR Chat) is social game online released in February 1st, 2017 developed by VR Chat Inc., and the game designer are Graham Gaylor & Jesse Joudrey. This game provide reality like or other world environments usually use for online chat and online meeting with other people using avatar. In VR Chat sometime the player going to role-play using their avatar like imitating Goku from Dragon Ball anime series (PW, 2018), Jotaro and Kira Yoshikage from Jojo Bizzare, Kenshirou from Hokuto no Ken and etc. Also, in VR Chat there's player using full body track technology which mean the avatar going to track or record their whole body and follow the player gesture in real life. VR Chat can be accessed on desktop Windows via Steam or Oculus store using standalone VR device such as Oculus Quest 2 from facebook. In addtion, VR Chat for now is not available for some mobile platform such as android using google cardboard, Apple iOS and other mobile platform. In this research, researcher using Oculus Quest 2 for accessing VR Chat. The reason why reasercher using Oculus Quest 2 because this device has portability and versatility like easy to carry and can be used as mobile phone, entertaining, gaming, education, bussines, and etc.

In October 13<sup>th</sup>, 2020 Facebook release Oculus Quest 2 the Standalone or All-in-On VR devices which mean it can be used as mobile device (without

computer) or plug-in to computer for accessing more VR software. However, Oculus Quest 2 not supporting full body tracking but it has hand tracking which track your hand and project it into virtual avatar but the users might be able to use this feature through third party production or modifying it for themselves. The avatar will be able to imitate the users hand gesture that almost similiar to real life. This device has two variants from 64GB which cost \$ 299 USD (4.320.654 IDR) and 256GB which cost \$ 399 USD (5.765.689 IDR). The researcher using the 256GB for better file management such as for documentation, gaming, entertainment and etc.

Based on the problem discussed previously, the researcher will research "Cyber Experience-Based Learning With Virtual Reality for Foreign Learner at VR Nihonggo On Language Exchange Japanese and English Online Class." This study will aim technology of immersive VR in language learning especially on distance learning affecting Experience-Oriented Learning on Foreign Language Learner.

Besides, this study offers important insight into UIN Antasari English education professor. Firstly, an exploration into virtual reality integration in learning language would bring a better insight on UIN Antasari English Departement student competence and inform in education context not only in Indonesian context but also in EFL practices in other regions. Secondly, this study will contribute to the body of technology-related courses in teacher preparation programs in terms of providing insight into designing a new

curriculum related to the materials that should be covered in the technologyrelated course to meet the needs of today's schools and strategies to prepare education institute with better technological knowledge. Moreover, in the Indonesian context, this still new related to VR implementation on distance learning so far.

#### **B.** Research Questions

- 1. How does VR affect Experience-Based Learning for distance learning?
- 2. How does Experience-Based Learning in VR to support language learning?

## C. Objectives of Study

- 1. To investigate VR affect Experience-Based Learning for distance learning
- 2. To study Experience-Based Learning in VR to support language learning

#### **D.** Significance of Study

The researcher is anticipated to disseminate both theoretical insights and practical contributions based on the findings of this study.

1. In a theoretical sense, the researcher anticipates that this study will contribute insights on the methodology of how to create meaningful lesson and reduce the students stress on online class through virtual reality and digital game however this methode kind of distractful because of virtual environment itself looks beautiful or to much fun on it. This study is might

interest teachers or students who want to learn language through e-learning and virtual reality.

2. In practical terms, the researcher envisions that this study will assist individuals seeking to enhance their understanding of virtual reality through effective e-learning methods. Additionally, the study is anticipated to offer valuable insights for the future of education, serving as a strategy to address scenarios in which teachers and students are unable to physically convene for an extended period for teaching and learning purposes.

#### **E.** Definition of Key Terms

#### 1. Cyber Class

The online class, accessible through the internet, is typically employed for virtual learning in Japanese language (Nihonggo). This class is presented in a three-dimensional format, creating an immersive experience reminiscent of a gaming environment.

### 2. Experience-Based Learning (EBL)

Education method that provides narrative learning experience. The activities can be role-play, field study, game-based, group discussion, simulations and etc.

## 3. Virtual Reality (VR)

Virtual reality is a technology enabling individuals to engage with a computer-simulated virtual world, creating an immersive experience that gives users the sensation of being present within that environment.

# 4. Digital Game Based Language Learning (DGBLL)

Utilizing digital games as an educational tool by both teachers and students proves effective in boosting language education by enhancing learning experiences and fostering motivation.