

CHAPTER I

INTRODUCTION

This chapter covers several topics linked to the research background, problem, objective, significance, scope, limitations, and definitions of important terms in order to give readers a clear idea of how the current study is being conducted.

1.1 Background

The encounter of technology and education has grown significantly since the COVID-19 pandemic, which caused a global shift toward remote learning environments. This shift highlighted the limitations of traditional online platforms and created the need for more engaging learning digital tools. Mixed-Reality technologies such as Gather.Town provides immersive and interactive virtual spaces that stimulate real classroom interaction through spatial communication and real-time collaboration, transforming them into an innovative web-based that enhances learning experiences. Gather.Town is still growing and underutilized compared to mainstream CALL (Computer-Assisted Language Learning). Despite being a potential web-based interactive virtual space, many teachers are still unaware of this web and its capabilities and benefits for language learning. Even with all the benefits, Gather.Town can give, teachers and students must be able to use the technology properly before using it in class.

Mixed-reality technology, such as Gather.Town is transforming education by connecting the gap between physical and digital environments and creating

interactive experiences that significantly increase vocabulary learning engagement and retention. English language proficiency is essential for communication globally, and Platforms like Gather.Town showed promise in reducing students' anxiety during language learning (Lestiono & Lee, 2024). Furthermore, mixed-reality integration in education emphasizes how important it is to find a balance between technology safety and supervision in order to guarantee that students are learning in secure environments. In the end, this leads to a more successful learning process by addressing pedagogical challenges and preparing students for a technologically advanced future.

There are numerous methods for learning vocabulary. Words can either be taught to students directly or they can develop naturally through context. van den Broek et al. (2018) explored the impact of contextual assumptions on vocabulary learning, finding that retrieval contexts enhance long-term vocabulary retention, while informative contexts enhance word comprehension during practice. As a result, Tyson (2021) states that employing a mixed-reality method to teach vocabulary not only enables the direct teaching of new material but also enables students to deduce the meanings of vocabulary words by connecting their newly acquired definition to a location inside their mixed-reality environment.

A study by Lee and Kim (2025) found that Gather.Town is more flexible and easily adaptable for different design purposes than other platforms (e.g., Second Life, immersive VR platforms). Pre-service teachers (PSTs) are also able to understand learners' needs better and visualize learning in the classroom. The use of Gather.Town also helped PSTs to improve their competence, specifically in their

technological pedagogical skills. The other study conducted by Lee et al. (2023) reported that while using Gather.Town students find themselves having a heightened sense of presence because there are some items like blackboards, desks, chairs, avatars, and the entire classroom feels a great sense of special presence, thanks to Gather.Town. Further, students were able to openly communicate and share their emotions with others. and have a sense of community and involvement in class activities were enhanced by Gather.Town elements. Interactions on Gather.Town enable students to actively seek out opportunities for engagement with others.

In the Indonesian setting, Setiyadi et al. (2024) elaborated on the results of their study by explaining that Gather.Town can be used as a medium to teach vocabulary and other skills. Gather.Town is utilized as a medium to assist students in acquiring new and unknown vocabulary, enhance students' speaking skills, and increase students' interest and involvement in their studies.

Based on a previous study, educational research is often characterized by its limited focus on particular educational levels and students' skills, which can restrict the findings of relevance for PSTs. This focus on specific levels frequently ignores specific challenges and complexities faced by individuals getting ready to become teachers. Additionally, a significant number of studies are conducted within a single institution, such as higher education institutions or specific regions, which may not accurately reflect the diversity of educational environments and experiences present in other nations or areas.

Gather.Town has been in use in some countries, such as the United Kingdom and South Korea. However, the settings were at the higher education institution (HEI). McClure and Williams (2021) focused on self-paced learning, while Hwang et al. (2023) examined immersive learning through metaverse platforms. Additionally, Lee and Kim (2025) explored learning by design in the metaverse.

In Indonesia, studies have been conducted centered on lower education institutions. Priyantoro and Wahyuna (2022) performed research in Karawang focused on students' learning motivation in junior high school. Although there are still some issues, such as network restrictions, the study's findings show that nearly all of the students who participate in the trial class are content and feel that the new features in the virtual classroom have helped them become more motivated (Priyantoro & Wahyuna, 2022). Meanwhile, in Cimahi, two researchers conducted a study in an elementary school, Kuswendi and Setiyadi (2024) that examined students' interpersonal skills. Based on the findings of their study, students in the experimental class outperformed those in the control class in terms of interpersonal ability scores. The researchers came to the conclusion that elementary school students' interpersonal skills were impacted by the Gather.Town media. Lastly, Setiyadi et al. (2024) explored students' analysis skills, and the researcher comes to the conclusion that using Gather.Town media effectively enhances primary school students' ability to analyze folklore for moral values.

According to the previous studies, the majority of studies center around students using Gather.Town as a learning medium provided by their teacher or lecturer. This study will focus on investigating how PSTs in the English Young

Learners (EYL) programs use mixed-reality, particularly Gather.Town to teach vocabulary to elementary students in grades 1 to 6 who attend English Camp, exploring virtual and interactive environments that link digital and real worlds.

1.2 Research Question

1. What are the EYL PSTs' perspectives on using Gather.Town for teaching vocabulary?
2. How do PSTs use Mixed-Reality Gather.Town for teaching vocabulary in TEYL practicum?

1.3 Research Objectives

1. To find out the PSTs' perspectives on using Gather.Town for teaching vocabulary.
2. To investigate how PSTs use Mixed-Reality Gather.Town for teaching vocabulary in the TEYL practicum.

1.4 Scope and Limitation

The scope of this study focuses on investigating how PSTs in the EYL programs are trained to teach young learners during an English Camp for elementary students. Out of the three groups at this camp, this study will focus on four PSTs, which includes PST who teach grades 1 to 6. The study will examine the use of mixed-reality, particularly Gather.Town, to teach vocabulary to elementary students in grades 1 and 6 who attend English Camp, exploring virtual and interactive environments that link the digital and real worlds.

This study is limited to the use of Gather.Town in one meeting during the English Camp at UMM, which may restrict the level of interaction and participation between PSTs and students. Although all PSTs have received training on Gather.Town in its development, only one to two out of six will utilize it in the classroom. However, all PSTs will be interviewed in order to get a better understanding of their perspectives and experiences with the platform. These factors may have an impact on how thorough the results are about the ability to teach vocabulary using Gather.Town.

1.5 Significance of the Study

This study is anticipated to use mixed-reality in the form of Gather.Town as a medium for teaching vocabulary for EYL students because mixed-reality combines contextual learning with a familiar setting. For EYL students, using Gather.Town allows them to actively engage with the information and makes vocabulary learning fun. Gather.Town has customizable features like racetracks, meeting rooms, and more, offering an interesting and interactive learning environment where students can study terminology associated with the theme. Additionally, students can communicate with teachers or other students in real time, facilitating the development of social skills.

The advantages of using Gather.Town for teaching vocabulary are PSTs will discover new ways to teach vocabulary in interesting and engaging ways, which can enhance students' motivation in learning. Additionally, this approach will encourage PSTs to be more creative through their lesson planning and delivery to keep students interested.

1.6 Definition of Key Terms

- 1) Gather.Town: A platform for proximity-based video conferences that blends video chat capabilities with 2D gaming elements to produce a more realistic and captivating virtual engagement experience.
- 2) Mixed-Reality: A blend of physical and digital worlds, unlocking natural and intuitive 3D human, computer, and environmental interactions.
- 3) Pre-Service Teachers: Student teachers who are enrolled in a teacher education program and working toward teacher certification. These are students trained by higher education institutions to become professional teachers. who have little to no experience teaching in the classroom.
- 4) Vocabulary: The body of words used in a particular language. Vocabulary may indeed refer to the collection of words known by an individual or by a large group of people. It may also signify the body of specialized terms in a field of study or activity
- 5) Young Learners: The term young learner is interpreted differently around the world. YL defines a young learner as a child who is in their first six years of formal education, from the age of 6 to 12.