

Title

Current Initiatives and Impact of Metaverse-Based Support for Chronic Absenteeism in Japan

Research Overview

This study evaluates municipality-led Metaverse initiatives addressing chronic absenteeism in Japan. By examining two distinct models—one gamified via Minecraft and another focused on communication—it explores how virtual environments provide psychological safety and a sense of "*ibasho*" (belonging). The research highlights the potential of digital spaces to foster resilience and social reintegration.

1. Purpose

The persistent rise in chronic absenteeism among Japanese primary and secondary students has become a critical educational crisis. Recent statistics indicate that the number of "*futoko*" (chronically absent) students has reached record highs, necessitating a paradigm shift in support strategies. In response, an increasing number of local governments and NPOs have launched diverse initiatives utilizing the Metaverse to provide virtual "*ibasho*" (places of belonging). These local-level efforts aim to ensure no child is left behind by creating flexible, accessible environments that accommodate diverse student needs.

The purpose of this research is to evaluate the current landscape of these municipality-led virtual initiatives and their impact on students' sense of "*ibasho*." Traditional physical support centers often pose high psychological hurdles for students experiencing social anxiety or withdrawal. This study investigates whether the unique technological affordances of the Metaverse—specifically anonymity and avatar-mediated interaction—can provide a sustainable "third place" that bridges the gap between isolation and social participation.

2. Methods

This study employs a multiple case study design, analyzing two representative models of virtual support:

Model A (Gamified Platform): This initiative utilizes Minecraft Education Edition to foster project-based learning and collaborative social interaction. The environment is structured around shared goals, such as virtual building projects, to encourage engagement.

Model B (Communication-Focused Platform): This initiative utilizes social Metaverse platforms (e.g., Vket) that prioritize informal peer communication and the creation of a relaxed "virtual salon."

Semi-structured interviews were conducted with program coordinators and mentors to understand the operational logic and challenges. Qualitative observations of participant behavior within the Metaverse were carried out to analyze patterns of social engagement. Furthermore, for Model A, longitudinal quantitative surveys were administered to track changes in students' psychological states, including mood, self-efficacy, and their subjective sense of "*ibasho*."

3. Results and Discussion

The qualitative analysis reveals that Metaverse-based support effectively functions as a vital "*ibasho*." A primary finding is that avatar-mediated communication plays a crucial role for students with high social anxiety. By interacting through avatars, students can distance themselves from the "physical gaze" of others, which typically triggers evaluative concerns and self-consciousness. Coordinators observed that students who were previously withdrawn were able to express themselves more fluently in the Metaverse, suggesting that these platforms function as a psychological "buffer zone."

The quantitative results from Model A (Minecraft) provided nuanced insights into the longitudinal impact. Interestingly, the data did not show a statistically significant improvement in overall mood scores through repeated participation. However, a deeper analysis suggested a different, yet vital, form of efficacy: participation remained consistent even when students reported low baseline moods. This indicates that the Metaverse provides an environment where students can engage without the pressure of "feeling well" or "performing," effectively preventing further psychological decline and maintaining social connectivity during difficult periods.

Alongside these positive outcomes, the study identified significant operational challenges regarding the knowledge and technical skills of the supporting staff. Interviews revealed that staff members unfamiliar with Metaverse platforms experienced considerable psychological anxiety and difficulty in providing effective guidance. The complexity of managing virtual environments—from technical troubleshooting to navigating the unique social dynamics of avatar-mediated spaces—presents a barrier to sustainable implementation. There is a clear necessity for training programs that help staff become not only digitally literate but also comfortable with the socio-psychological nuances of virtual interaction.

4. Conclusion

In conclusion, municipality-led Metaverse initiatives in Japan offer a promising and inclusive alternative to traditional support for chronic absenteeism. While the gamified model (Model A) and communication-focused model (Model B) foster student engagement through different psychological mechanisms, both serve as essential "buffer zones" that accommodate students even during periods of low mental well-being. However, the successful scaling of these initiatives depends on addressing the "human element" within the digital space. Future research and policy should focus on establishing comprehensive training frameworks for staff and formalizing the integration of these decentralized virtual spaces into the national educational system. By doing so, Japan can develop a more resilient and flexible educational environment that truly ensures no child is left behind.