# Towards a Virtual Learning Space

## The (unfinished) Global Campus Online Platform: Project Report

*Felix Schniz, Tom Tuček*

"With this project, we tried to respond to a lack of universally inclusive digital spaces for creative exchange, and the potential to utilize playfulness, rules, and mechanics for positive educational impact."

**Abstract:** *This report details the development of a virtual learning platform designed as a supplement for the project Global Campus Online (GloCo). Initiated as a research partnership between the Game Studies and Engineering master's program (GSE) and the UNESCO Chair at the University of Klagenfurt, the platform aims to provide a low-barrier, accessible space for peer groups worldwide. Developed in Unity and accessible on PC and mobile devices, the platform incorporates features that promote inclusivity and address multiple UNESCO Sustainable Development Goals (SDGs), particularly focusing on Quality Education, Sustainable Communities, and Partnership for the Goals. The project report highlights its benefits as a playful, game-like learning and community platform, how its development fostered local internship opportunities for students, and future ambitions, while also addressing challenges related to project management, legal considerations, and long-term sustainability.*

**Keywords:** *Global Citizenship Education; Virtual Learning Environment; SDGs;Video Games; Inclusivity*

### Project Members

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## Introduction & Motivation

The master's program Game Studies and Engineering (GSE) is unique in Europe. It combines technical game development skills with humanities-based game studies, offering a holistic understanding of games and their cultural role. As an interdisciplinary and heterogeneous program, it has been involved with the project GloCo from the get-go to reflect on shared ambitions and ideas for collaborations. From informal discussions, a shared interest emerged between GSE and GloCo in the need for an online platform enabling playful, creative learning environments for global peer groups. Students of GSE would benefit from this, as it would enable them to participate in research internships, and the development of the platform also offered them a practical project to apply their skills and understanding of how games and play can be ingrained into everyday virtual platforms to improve their quality of experience. GloCo would benefit from it, as it would gain a globally accessible online platform tailored to its specific needs. Thus, this project was launched to create a sustainable online platform for GloCo, support GSE students in completing their studies and developing their skills, and foster international collaboration.

A key motivation was the recognized need for platforms supporting exchange and learning, particularly those accessible to diverse users in both global and local contexts. The project responded to a lack of universally inclusive digital spaces for creative exchange and to the potential to leverage playfulness, rules, and mechanics, as long-established in video games, for positive educational impact.

## Project Description: A Virtual Learning Space

The Global Campus Online Platform is currently hosted in Klagenfurt, Austria, and developed in Unity, offering PC and mobile access. The platform allows users to create personalized avatars and design learning environments, fostering agency and self-representation. It supports both synchronous and asynchronous communication, enabling users to share thoughts, documents, and images.

The platform's most captivating and unique feature, however, is its emphasis on creativity and user-based design: In contrast to other platforms, the level structure in which users can meet and interact is not predefined. While templates exist, every user is equipped with powerful customization tools, allowing them to create their own virtual world for shared meeting, learning, and community activities. Current assets allow for the virtual world to resemble actual real-world architectures or natural environments, and users are explicitly encouraged to design them, just as their avatar, to their liking. Users can create unique learning spaces mirroring real locations, imaginative constructs, or a combination of both. These spaces can then be used to communicate, meet, and exchange with other users around the world (see Fig. 4).

*Fig. 4: Two user-designed avatars in a user-created level environment.*

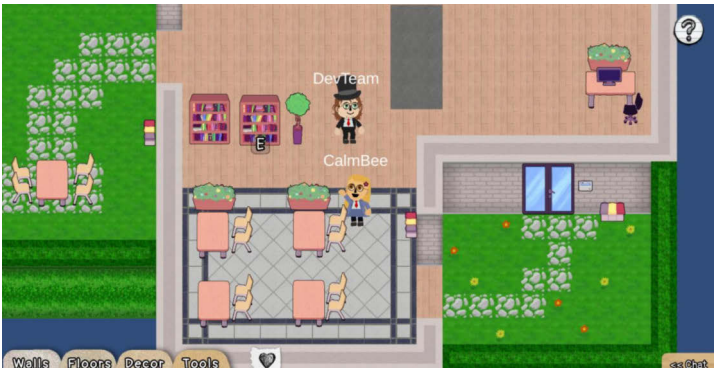


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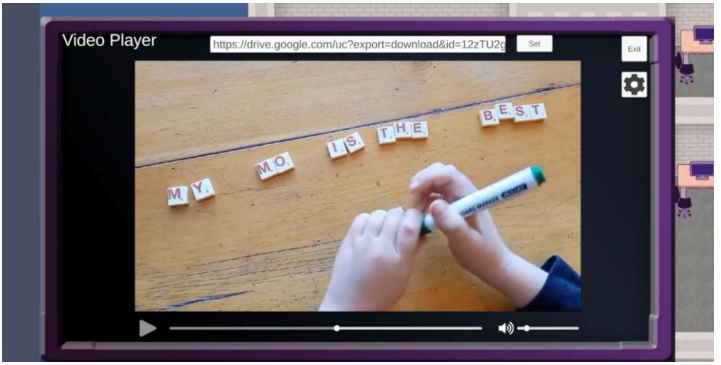
*Fig. 5: The virtual learning platform is also capable of playing and sharing videos.*

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The platform's design directly addresses UNESCO's SDGs. It's built to run on low-spec hardware, such as smartphones, supporting *No Poverty* through universal access. The platform promotes *Quality Edu-*

*cation* by fostering cyber citizenship, agency-awareness, and creative knowledge exchange. The avatar creator, designed for inclusivity, supports *Gender Equality* by allowing free, non-binary player representation. Its innovative, non-corporate development approach aligns with *Industry, Innovation, Technology, and Infrastructure*, and its low barrier to entry contributes to *Sustainable Cities and Communities* through global connectivity. The project intends to foster ***Partnership for the Goals*** through collaboration with UNESCO-aware groups. As a part of GloCo, the virtual learning platform thus inherently connects to Global Citizenship Education through its emphasis on fostering intercultural understanding, global awareness, and responsible citizenship. By creating a space for diverse users to connect and exchange ideas, the platform encourages empathy, respect, and collaboration.

## Lessons learned

As a part of the project GloCo, several important takeaways were deduced from the conception to the implementation of the virtual learning platform:

Firstly, the project's initial steps quickly highlighted the critical need for a dedicated project head or manager to oversee coordination and maintain momentum. In future iterations, this can, for example, be achieved by offering specific project lead internships, which present a welcome opportunity for students eager to improve their managerial skill sets. Secondly, internship durations required careful planning to ensure continuity, and clear communication between involved parties was essential. Especially because many students do not have the time capabilities to remain in a project overtime due to other commitments, such as their master thesis, students accompanying the virtual learning platform via GloCo as a part of their academic education ought to be sought and prepared for this specific type of internship long in advance to avoid gaps in-between internship generations, which may cause a loss of knowledge or provide challenges in documentation. Thirdly, project-internal sustainability proved to be an issue; as the platform requires

constant maintenance, a dedicated curator would be beneficial to ensure its long-term health. Finally, legal considerations also emerged, especially regarding global accessibility and user-generated content. While access to the virtual learning platform is currently restricted, it should ideally be accessible worldwide at some point, which would require upholding legal standards that have thus far not been considered. This includes, but is not limited to, data privacy and potential misuse of the platform. To anticipate these challenges and address them before they arise, we are exploring leveraging AI tools for moderation and content filtering, while also increasing accessibility and adding more features.

The project demonstrated the value of providing students with internships for the practical application of theoretical knowledge and highlighted the importance of long-term planning. From its first steps as a prototype to the functional platform it is now, it was a long journey, but seeing the first users join and share their thoughts, images, and knowledge made it all worth it.

## Conclusion

The Global Campus Online Platform serves as a successful proof of concept for a low-barrier, inclusive virtual learning space. A running prototype exists, and the project has demonstrated the benefits of gamification, user-based design, and international collaboration. Future steps include addressing sustainability concerns, bug fixing, and exploring opportunities for larger-scale release. Furthermore, a possible collaboration with the Department of Educational Sciences at the University of Oldenburg is currently being discussed. But generally, anyone interested in this project is welcome to join or try it out. We invite collaboration with educational institutions and partners interested in contributing to the platform's development and expansion. We encourage you to reach out if you are interested in collaborating with us.

### For further reading

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