Case Study: Asynchronous Collaboration Between Finnish and Italian Schools – Building a Sustainable School in Minecraft

Over the course of two months, high school students from Finland and Italy collaborated on a project to design and construct an ecological school in Minecraft. The project aimed to promote sustainable practices within the virtual learning environment. Given the differences in schedules and overlapping school periods, the collaboration was conducted asynchronously, with students working at different times but regularly reporting progress and providing feedback.

Project Overview: Sustainable School in Minecraft

The goal of the project was to create a virtual ecological school, incorporating eco-friendly design principles, renewable energy sources, and sustainable resource management. The Italian team took the lead in constructing the school in Minecraft, while the Finnish team focused on evaluating the ecological soundness of the design and providing feedback for improvements.

Phase 1: Roles and Responsibilities

The project was divided into two main roles:

- **Italian School (Minecraft Building Team)**: Responsible for designing and building the ecological school in Minecraft. They implemented eco-friendly features such as renewable energy sources, green spaces, and sustainable building materials.
- **Finnish School (Feedback and Improvement Team)**: Tasked with reviewing the progress made by the Italian team. They analyzed the ecological aspects of the construction, offering feedback to ensure sustainability goals were met.

Phase 2: Progress Reporting and Feedback

Given the asynchronous nature of the project, regular communication was essential. The Italian students documented their progress by sharing screenshots and short videos of the school's construction. They highlighted specific features like solar panels, wind turbines, water-saving technologies, and green rooftops.

The Finnish students reviewed the materials provided by their Italian counterparts, focusing on the sustainability of the designs. They used a checklist of ecological criteria, including energy efficiency, waste reduction, and the use of renewable resources. Based on their analysis, they provided constructive feedback, suggesting areas for improvement. For instance, they recommended additional rainwater harvesting systems and more energy-efficient windows.

Phase 3: Asynchronous Collaboration

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Main author(s): Annukka Suonio

One of the project's unique aspects was its asynchronous collaboration. Instead of real-time meetings, the teams communicated through shared documents, messaging platforms, and video updates. This format allowed students to work at their own pace while still maintaining a steady flow of communication.

The Finnish students shared resources on sustainable construction practices, providing links to articles and examples of real-world green buildings. They also suggested solutions to specific challenges the Italian team encountered, such as how to integrate geothermal energy into the virtual school. The Italian team would then incorporate the feedback into their construction and update the Finnish team with new progress reports.

Phase 4: Final Review and Dissemination

At the end of the project, an online session was held where both teams came together to present the final version of the ecological school. The Italian students gave a virtual tour of the Minecraft world, showcasing the school's eco-friendly features. The Finnish team provided a final assessment, praising the innovative use of renewable energy and the thoughtful integration of sustainable practices.

The students also reflected on the project's impact. They discussed how the collaboration helped them better understand sustainability in architecture and the importance of working together to find solutions to environmental challenges. They concluded the session by discussing the potential for future collaborations, with ideas for expanding the project to include sustainable cities or transportation systems.

Conclusion

This project demonstrated how asynchronous collaboration can be an effective method for international educational projects. Despite working in different time zones and schedules, the Finnish and Italian students were able to successfully build a sustainable school in Minecraft. The project not only fostered creativity and teamwork but also deepened the students' understanding of sustainable practices in architecture and construction.

The asynchronous format, while initially challenging, provided valuable lessons in communication, self-discipline, and collaboration across borders, making it a model for future educational projects.

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