CASE STUDY: COLLABORATIVE SUSTAINABLE TOURISM PROJECT IN MINECRAFT – A PARTNERSHIP BETWEEN FINNISH AND ITALIAN HIGH SCHOOLS

In this educational project, high school students from Finland and Italy teamed up to create sustainable tourism environments in Minecraft. The project, titled *Sustainable Tourism Environments in Minecraft*, spanned six weeks and focused on designing and simulating eco-friendly tourism practices that could reduce the carbon footprint of the travel industry. By collaborating online, the students not only built a virtual world but also learned about sustainable practices and their real-world implications.

Phase 1: Getting to Know Each Other

The project began with ice-breaker activities to help students from both schools connect. Through video calls and online chat, the Finnish and Italian students exchanged ideas, asked ice-breaker questions, and discussed their interests. These early interactions helped create a sense of camaraderie, setting the stage for effective teamwork.

Phase 2: Research and Planning

Once the students had established rapport, the focus shifted to researching sustainable tourism practices. The Finnish students took the lead in scientific research and analysis, studying sources on energy-saving methods, geo-resource reduction, and eco-friendly tourism strategies. The Italian students, meanwhile, focused more on the creative aspect, preparing to take on active roles in building the virtual tourism environments.

The students researched topics such as:

- Renewable energy use in tourism
- Sustainable accommodations and transportation systems
- Water conservation and waste reduction strategies

The Finnish students shared their findings with their Italian counterparts, providing scientific data that would inform the building process. During this phase, both groups also learned how to identify credible sources and analyze their reliability, guided by their teachers.

Phase 3: Allocating Roles and Designing in Minecraft

With research in hand, the students divided into teams, each with specific roles:

- **Italian Students**: Focused on building the sustainable tourism environments in Minecraft. They took creative control in constructing eco-friendly hotels, transportation networks, and other key structures.

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- **Finnish Students**: Focused on ensuring the scientific accuracy of the designs. They evaluated the environmental impact of the virtual structures and suggested improvements based on their research.

Together, they created several key elements in their Minecraft world:

1. **Renewable Energy Hub**: A central area with solar panels and wind turbines to provide renewable energy to the virtual tourism sites.
2. **Eco-Friendly Accommodations**: Hotels designed with green certifications, including features such as energy-efficient lighting and water conservation systems.
3. **Smart Transportation System**: A network of electric vehicles and pedestrian-friendly pathways, reducing the need for carbon-emitting transportation.
4. **Waste Reduction Centers**: Recycling and composting stations to minimize the environmental impact within the virtual world.
5. **Sustainable Beaches and Gardens**: The Italian students designed eco-friendly parks and beaches, integrating local Italian elements like sustainable gardens and waste management systems for beachgoers.
6. **Carbon Offset Initiatives**: Tree-planting programs and conservation areas were added to the virtual world, mimicking real-world carbon offset projects.

Phase 4: Assessment and Evaluation

Throughout the project, the students participated in peer evaluations and feedback sessions. These meetings, facilitated by their teachers, provided opportunities for students to discuss what was working and what could be improved. Creativity, adherence to sustainable principles, and the effectiveness of reducing the carbon footprint were key evaluation criteria.

The project concluded with a reflection session where both Finnish and Italian students shared what they had learned about sustainable tourism. The discussions were not only about Minecraft but also about the importance of real-world sustainability and how small actions can make a big difference.

Conclusion and Future Collaboration

The project ended with a sense of accomplishment as students saw how they could collaborate across borders to create solutions for real-world problems. The teachers from both schools expressed interest in continuing the partnership, with the possibility of future projects focused on different aspects of sustainability. The Minecraft platform proved to be an effective educational tool, allowing students to apply their scientific knowledge in a creative and engaging way.

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This project was a unique blend of creativity, science, and international collaboration, helping students understand the importance of sustainable tourism and how digital tools like Minecraft can be used to model solutions to environmental challenges.

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