

The Virtual Greenhouse project: positive feedback from initial pilot programs

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The Virtual Greenhouse project, a pioneering initiative aimed at modernizing horticultural education, has successfully completed its first pilot programs with promising results. Developed in collaboration with three leading horticultural schools - Räpina School of Horticulture in Estonia, Langenlois Horticultural School in Austria, and Zone College in the Netherlands. Project has garnered positive feedback from both educators and students.



The project team visiting Schoneveld Breeding in the Netherlands to explore the automated processes in seed propagation production.



An innovative approach to horticultural education

The primary objective of the Virtual Greenhouse project is to provide an innovative and interactive learning experience by integrating digital tools into the horticultural curriculum. The project focuses on overcoming the lack of knowledge and training in modern technology, which has been identified as the main obstacle to the adoption of advanced horticultural techniques.

By creating a digital platform that simulates a greenhouse environment, the project offers practical training materials designed to support teachers in integrating these tools into their teaching methodologies.



A screenshot from the Virtual Greenhouse simulator.



Positive outcomes from initial pilots

The initial pilot programs have been met with enthusiasm. Teachers have reported that the materials developed for basic-level teaching are particularly effective, providing a solid foundation for students beginning their journey in horticulture. The interactive and digital nature of these tools has significantly enhanced student engagement and learning outcomes.

Schools in Estonia and Austria have found the materials to be well-suited to their educational needs. The resources align closely with their curriculum and have been smoothly integrated into their teaching practices. These schools are already seeing the benefits, with students showing increased interest and motivation in horticultural studies.

A challenge for Dutch students

While the materials have been highly effective in Estonia and Austria, feedback from Zone College in the Netherlands has highlighted an interesting challenge. The Dutch horticultural education system is already highly advanced, with students possessing a strong background in modern horticultural technologies. As a result, the materials developed by the Virtual Greenhouse project are considered relatively simple for these students, indicating that the Dutch system is ahead of many other countries in this field.

Supported by Erasmus+ KA2 grant

This innovative project is co-funded by an Erasmus+ KA2 grant, which has been instrumental in bringing these advanced educational tools to life. The Erasmus+ program supports cooperation for innovation and the exchange of good practices, making it a vital contributor to the success of the Virtual Greenhouse project.

Looking ahead

The positive feedback from the pilot programs is a strong indication that the Virtual Greenhouse project is on the right track. The project not only enhances the employability of students by equipping them with practical, technology-based skills but also updates the knowledge of those already working in the field.



There is potential in follow-up projects to further develop advanced materials that would meet the needs of more experienced students, particularly in countries like the Netherlands, where the level of horticultural education is already very high.

Overall, the Virtual Greenhouse project represents a significant step forward in the digitalization of horticultural education, contributing to both the sustainability of the industry and the preparedness of students for the modern labor market.



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