## Latvia - Bulduri Horticultural Secondary (Vocational) School

Title of inspiring practice	Consolidated educational, research and business approaches at Bulduri Horticultural
	Secondary (Vocational) School ('Bulduru Dārzkopības visusskola') to address green transition
Geographical area	Horticulture, landscaping, arborist across the country, at <b>municipal level</b> in Latvia. Catering and hotel programmes mainly in the region, local government. Practical training - qualification practice for European companies under the Erasmus+ project in countries such as the Netherlands, Belgium, Austria, Italy, France, Spain.
Period of implementation	The practice started in 2016 with availability of additional investments. The school itself goes back to 1910 and has a rich history of horticulture tradition of Latvia with respect to nature and environment.
Rationale	Bulduri Horticultural Secondary (Vocational) School (Ltd Bulduru Dārzkopības viddusskola) is a unique education and training institution in horticulture with a long history. It is not solely an educational institution, but also a company where various innovative green approaches and business ideas are being implemented. Furthermore, it has strong links with higher education and research institutions. This institution can serve as an example of a VET institution with modern alternative approaches to training the modern labour force with sustainable issues and approaches in mind.
Scope of the practice	Vocational secondary education after primary education (ISCED 354 )
	Vocational education after general secondary education ISCED 453
	Further vocational training ISCED 453
	each of these forms includes training practices, proficiency practices or work-based training
	Professional improvement ISCED 451/354 after general secondary education or vocational secondary education (4LKI).
Educational level	The Latvian qualifications Framework (LKI) is a national reference system in which the qualifications granted in the Latvian education system are arranged by level. The structure and functions of THE LKI are based on the ECI, taking into account the traditions and system of education in Latvia, as well as the interests of the parties involved.
	Bulduri agrifood technical school implementation of the programmes Horticulture, Floristry, Construction, Catering and Hotel services, in which can be acquired professions of the Latvian qualifications Framework of the 3 LKI and 4 LKI (Level).
	ISCED 354 Horticulture, Construction, Catering and Hotel services.
	ISCED 351/254 Construction (Arborist).
	ISCED 451/354 Floristry.
	ISCED 453 Horticulture, Floristry, Construction.
	In the near future, the launch of 5LKI level programmes in horticulture (qualification of a horticulture specialist) and Construction (qualification of a landscape specialist) are planned.
Introduction and context	Bulduri Horticultural High School is an enterprise of the Latvian University of Biosciences and Technologies (former Latvian University of Agriculture), which gives students the chance to further develop the skills firstly acquired in Bulduri through specialised studies

in the chosen profession. The school curricula are coordinated and created successively, so that students who enrol in Bulduri follow a targeted and personalised path designed to proceed step by step towards a career in the desired field. In this way, the school guarantees permeability and flexible approaches to its students.

The school undertakes multiple activities and have invested in equipment to train its students through innovative sustainable approaches.

The activities undertaken by the Bulduri Horticultural High School are part of their Investment and Development Strategy, which was developed to ensure the implementation of the national educational policy with regard to the green approaches. The Education Development Guidelines in Latvia for 2021-2027 (GDE) was the main driver behind the introduction of Investment and Development Strategy among VET institutions. The DGE envisaged an opportunity for VET institutions to lead on a new role in addressing the green transition and digitalisation by adopting strategic planning to improve stakeholder collaboration and increase competitiveness and innovation. The GDE also encouraged the adoption of green transition and digitalisation curricula, as week as green core modules and sector or occupation-specific courses. Another main driver behind the activities undertaken by the Bulduri Horticultural High School was the European recommendation on key competences for lifelong learning. In this sense, the initiative responded to the green course and digitalisation policy promoted by the European Commission.

## Key activities and outcomes

The school has a Plant Biotechnology Centre which offers students the opportunity to develop their scientific research work. The Centre hosts molecular biology, agrochemistry, plant tissue culture and controlled environment growing laboratories, where students carry out their research and study works. The school is the only vocational education institution in Latvia having a laboratory of this type for students to undergo training.

The school is leading a unique project, the only smart garden in Latvia " i-Dārzs" ("iGarden") with collection of more than 500 varieties of annual and perennial plants, which is part of horticulture students curricula. Students get to know the diversity of ornamental plants and their cultivation skills in real garden conditions. To be familiar with new gardening tools and possibilities, students can explore autonomous watering and lighting systems and softs, as well phenotyping robot, with which iGarden is equipped. From robot and manual measurements information about plant development are collected in a special plant database, which will be used to improve knowledge of plant development in the context of climate change. This makes the school a leading example of how green and digital approaches can be combined in an optimal way.

The school building also hosts a library, which provides students with universal library services. The library's collections include both old editions from the school's foundation, as well as modern editions for learning general education subjects, as well as industry books, horticulture encyclopaedias, dictionaries and manuals. In total, the wealth of the library is about 23 000 books.

The school also adopts an exemplar model closely linking Vocational Education and Training in life sciences with higher educational institutions and employers, offering successive career opportunities. In particular, the school offers further educational opportunities for the best students in the landscape architecture study programme by guaranteeing budget places at the Latvian University of Biosciences and Technologies. Furthermore, the school offers its best students opportunities to continue studying in other European universities, including those with which Bulduru Horticultural High School has a collaboration.

Specifically, the Bulduri VET school is a leading partner in two large international projects developing new training programmes in the sector. For example, arborist training programmes are being developed at European level and one of the projects is under the leadership of the Bulduri VET school.

Other information	In the programme, horticulture practices take place in horticultural production establishments, nurseries and private farms.
	In the Construction programme, we implement practical training in the largest and most professional landscaping and greenery enterprises approved by the Construction Industry Expert Council.
	Arborists carry out practical training in enterprises recommended by the Latvian Arborist society, in the company HAD A TREE and in Riga municipality.
	In the floristry programme, we carry out practical training at wholesale flower bases and flower salons/shops.
	In the catering services programme, practical training is organised in local resort town catering establishments and * 5 star hotel restaurants.
	In the Hotel services programme, we organise practical training in local resort towns * 5 star hotels and hotels in the capital of Latvia in Radisson, Hempton bei Hiltone and SemaraH hotel chains.
Contacts and sources	Website: https://bulduri.lv/par-tehnikumu/
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