



Building a Centre of Vocational Excellence

Transforming Svilajnac Vocational Secondary School

to a Regional Training Centre

Promising Practice

Implemented by: Svilajnac Vocational Secondary School, funded by the KfW¹ - SDC² Regional Challenge Fund (RCF) together with the Serbian Office for Dual Education and the National Qualifications Framework (NQF) and Svilajnac municipality.

Where: Serbia

Status: Started in 2024

Summary: Svilajnac Vocational Secondary School is being transformed into a Regional Training Centre specializing in electrotechnics, mechanical engineering and metal processing. The school provides students with school- and workplace-based experience in collaboration with local employers at qualification levels 3 and 4. The Training Centre is being built and equipped to expand its provision, to provide short courses for adults (levels 3-5) and to potentially expand to vocational higher education (level 6).

¹ The Regional Challenge Fund was created by the German Federal Ministry for Economic Cooperation and Development (BMZ - Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung) and German Development Bank (KfW Entwicklungsbank)

² Swiss Development Cooperation

Overview

Svilajnac School is in central Serbia. The School's dual education pathway has created a model to improve the employability chances of young people studying in three programmes:

- Mechatronics Technician
- Machine Cutting operator
- Locksmith-Welder.

Recognized for its success, Svilajnac School was designated as a Regional Training Centre, allowing expansion into adult training, and potential higher education provision in these three programmes. Svilajnac municipality and the Serbian Office for Dual Education are constructing a new 1,000m² building. The KfW-SDC Regional Challenge Fund (RCF) is financing new equipment for state-of-the-art laboratories, workshops and learning facilities. To be completed in March 2026, the initiative addresses multiple challenges in vocational training provision by expanding what the school can offer to young people and adults.

Description

Since 2017, Svilajnac School has offered dual education programmes. According to the Serbian Dual Education Law, employers provide students with transport, meal costs, injury insurance coverage and provide any required protective equipment. Students receive a monthly financial allowance approximating 70% of the national minimum hourly wage.

A lack of space, equipment, staff and teaching resources has limited the extension of dual education programmes. As a Regional Training Centre, current capability will be increased to include level 5 training for both young people and adults with a new building with laboratories, makerspaces and training workshops. The building will include laboratories for pneumatics; electronics; electrical engineering and informatics; and specialized workshops for metal processing and woodworking. The building will be fully accessible and adjusted for people with disabilities. All young people enrolled in the dual education model (>200 per year) will participate in a programme including a work-based placement.

Key requirements

1. Having a strong proof of concept

The expansion of Svilajnac School is based upon the success of pilot projects whereby three enterprises⁴ introduced structured training approaches for two vocational profiles (Machine Cutting Operator and Mechatronics Technician). Partner enterprises offered work placements to trainees, some of whom were employed upon graduation. Employer feedback showed an observable improvement in students' practical skills, work discipline, and motivation compared to previous cohorts trained in traditional school-based settings. Participating students felt they were shown commitment from local companies during their workplace-based training.

The success of the pilot laid the groundwork for the RCF to expand its support, to involve additional enterprises and to support more training programmes and students.



Fig 1.1. Computer image for the new Regional Training Centre³

³ Image supplied by the author.

⁴ Three enterprises: Vossloh-Schwabe (Germany), Regent Lighting (Switzerland), Alfa Technics (Serbia)

2. Partnership and engagement

Partner	Responsibility
KfW-SDC financed Regional Challenge Fund	Funding modernized CNC and 3D equipment, training of in-company trainers.
Serbian Office for Dual Education and NQF	Funding for constructing/ equipping the Training Centre. Regulatory guidance. Financial support for students.
Svilajnac municipality	Financial support to construct the Training Centre.
Serbian Chamber of Commerce	In-company instructor training and enterprise accreditation.
Svilajnac Free Zone	Facilitate industry-education partnerships by linking companies with the Training Centre.
35 enterprises	Provision of internships, mentoring and curriculum support.

Partnership ensures all stakeholders accept their role to support young people at secondary and higher technical education levels and in local labour markets.

3. Fostering skills for industry 4.0

Partnership with industry ensures vocational courses align with labour market demand. By its transformation, Svilajnac School will support local industry to adapt their workforce to advanced manufacturing techniques particularly in automation, robotics and mechatronics. New equipment will support workforce training and provide a hub for all Serbian VET teachers/trainers to gain experience with new technology. The context for these developments is the Svilajnac Free Zone which attracts new enterprises (frequently international). Aligning the vocational training on offer and the skills demands of enterprises reduces recruitment costs for companies and increases their confidence in the training system.

4. Creating a 21st century learning environment

Svilajnac School's expansion will include the introduction of new approaches to digital learning into courses and curriculum together with a new learning management system platform. Students are supported in other workplace skills such as teamworking, critical thinking and communication.

5. Enhancing youth employability (including for women/girls)

The dual training model provides a mutual learning and confidence-building relationship between employers and young people. Employers contribute to the training

process ensuring that students are learning not just technical skills but also workplace skills required for 'job readiness'. There is an aim to increase the numbers of women/girls enrolling in the vocational training programmes. As all students participate in a work-based placement, the aspiration is to break down labour market and occupational stereotyping.

6. Promoting lifelong learning

There is a wish to generate a virtuous circle of mutual learning between Svilajnac School and local industry. For individual workers, mechanisms to recognize prior and informally acquired skills are being developed to facilitate employee access to further training and build a sustainable pipeline of professionals. Svilajnac School can collaborate with higher education institution to provide practical training for students pursuing a level 6 qualification, such as in engineering.

Objectives

The initiative is designed to overcome skills mismatches in electrotechnics, mechatronics, mechanical engineering and metalworking. Training quality is constrained by outdated equipment and insufficient alignment with industry practice. Students with the same vocational qualification may have had training experiences working with different machines and tools, making qualifications unreliable for employers. Standardized programmes ensure all students access curricula with appropriate up-to-date equipment for consistent and industry-relevant training. Opportunities to promote women in these programmes and industries as well as support reskilling/upskilling of the existing workforce ensures a holistic approach is used to meet industry demand.

A broader goal is to support youth employment in the region and mitigate urban migration. Providing a pathway for young people to stay in their communities either in work or in further or higher education supports the local economy and community. It strengthens partnerships between the municipality, the Serbian Office for Dual Education, and companies in Svilajnac Free Zone. All partners have a stake in the success of the initiative.

Outcomes and impact

Key results include:

- Improved students' practical skills and job readiness: > 200 students annually will access work-based placements as part of their mechatronics, metalworking and welding courses. They will have access to state-of-the-art equipment and be job ready.
- Expanded industry involvement: since the pilot project, companies offering training placements has increased to fifteen. This is expected to rise.
- Updated equipment and teaching methods: students will access the technology and multimedia content to build digital skills. Curriculum have been reformed creating project-based learning approaches to build teamwork, creativity and problem-solving skills.

- iv. Promotion of gender equality and social inclusion: new campaigns and outreach to female students, ruraly located students and those from low-income families continues.

Once construction is completed and all workshops equipped, the local workforce can to access more courses at secondary and, eventually, higher education levels.

Insights and evaluation

Aligning vocational training provision with labour market need is challenging, for many reasons:

1. Securing funds to construct and equip a new Training Centre with modern laboratories, workshops and makerspaces. Building a partnership-based funding model utilizing local and international finance from multiple sources with phased implementation has underpinned funding commitments.
2. Attracting female students and disadvantaged students into programmes: challenging social norms and motivating under-represented groups requires targeted outreach, such as mentorship e.g., with the EU supported Girls Go Circular programme advocating for and supporting women in STEM to build their digital skills. Mechanisms to recognize prior/informal learning are being developed for adult learners to promote lifelong learning. Introducing higher level vocational education programmes will bring learning opportunities closer to the Svilajnac community.

3. Rapid and ongoing technological change: keeping curricula and facilities updated is not a one-off activity. It requires continuous collaboration with companies, flexible teaching methods and integration of the latest digital tools requiring high levels of investment. Partner companies cooperate with educators to provide input on industrial developments and workplace skills needs. At the same time, educational technology is being upgraded.
4. Ensuring continuous feedback loops amongst local/ central government partners and industry with Svilajnac Training Centre maintains a sustainable delivery model. All partners have an interest in achieving the project's multiple goals.

Conclusions and next steps

Svilajnac Training Centre will be completed by mid-March 2026 when the new vocational profiles will be introduced. Industry partnerships will be extended to create more work-based placements. Providing higher level vocational programmes will enable more young people in the community to pursue higher education and short cycle courses ensuring adults can keep their skills updated.

This model of holistic transformation in vocational training provision in Serbia may influence how other vocational schools operate. Sharing lessons learned and best practices will build a more robust training system aligned with industry needs enabling young people to integrate more easily into the labour market, and adults to keep their skills up to date.

Learn more

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To learn more information about this and other KfW RCF projects:

<https://wb6net4vet.net/partnerships/knowledge-and-skills-for-the-21-century/>

For a video on the Svilajnac Secondary School transformation, see: <https://www.youtube.com/watch?v=t4qKE4nNMxl>

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