



D2.1

# Overview of existing flexibilization options of participating schools

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## Legal notice

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## List of abbreviations

<b>AF</b>	Application Form
<b>C-VET</b>	Continuous Vocational Education and Training
<b>DoA</b>	Description of Action
<b>EQF</b>	European Qualifications Framework
<b>GA</b>	Grant Agreement
<b>GDPR</b>	General Data Protection Regulation
<b>I-VET</b>	Initial vocational education and training
<b>KPIs</b>	Key Performance Indicators
<b>MA</b>	Multifunctional Agriculture
<b>QAP</b>	Quality Assurance Plan
<b>SC</b>	Steering Committee
<b>VET</b>	Vocational education and training
<b>WP</b>	Work Package

## AgriNext Consortium



BC Naklo - Biotehniški center Naklo



OnP - On Projects Advising, SL



COAG Jaén - Coordinadora de Organizaciones Agrarias



IES Galileo - Consejería de educación - Junta de Andalucía



CPI - Center RS za poklicno izobraževanje



ARCTUR - Računalniški inženiring, d.o.o.



SLOGA - Kmetijsko gozdarska zadruga sloa Kranj, z.o.o.



TUS - Technological University of the Shannon: Midlands Midwest



VUKA - Veleučilište u Karlovcu



SKINK - Skink, d.o.o.

## Executive summary

This document provides project partners with an overview of different flexibilization possibilities in countries of the AgriNext project consortium partners.

The document includes information on the planned activities, a description of the working methods and procedures, and the initial findings of the desk research data.

**The key objectives of the project activity 2 are:**

1. Flexibilization of learning environments and curriculums in I-VET and C-VET, on EQF levels 3-6, to facilitate fast responses to job market demands.
2. Teacher empowerment (continuous professional and pedagogical) for a fast response to the job market demands,
3. Established system of continuous exchange between employers, teacher/trainers/guidance service providers, to respond to the skills needed.
4. Promoting rural development & vitality by demonstrating and highlighting opportunities for Multifunctional Agriculture.
5. Increasing digital competencies among students and teachers.

The document contains information on how the desk research was planned and carried out, presents collected data and the first findings.

The desk research had three interlinked parts:

- a methodology for comparison of education systems and for review of existing flexibility options at system level,
- a review of existing flexibility options at the level of a nationally (and Spain regionally, which applies to the whole document) defined educational programme; and
- the possibilities for flexibility at the implementation level, i.e. at the level that can be defined by the individual school.

The data collected will provide the conceptual and methodological basis for the following activities in WP 2, i.e.:

- drafting the flexibility model,
- round tables discussions based on flexibility model with stakeholders,
- proposing flexibility model that will also have an impact on the development of:
  - a new guidance service model (WP1); and
  - the development of a teacher competency analysis (WP2);
  - the development of a teacher training programme (WP2).

All project partners teams participated in the desk research. The methodology was developed by our partner - CPI. The main methodological approach is desk research. The analysis design is mainly based on a qualitative approach due to the nature of the data, which was supported by data wherever possible. The methodology design was discussed at a joint meeting of the partners. This was followed by testing and refinement of the methodology and data collection.

The data can be compared across countries, many of them also by EQF level. Decision to analyse by different EQF levels was because we found significant differences in the flexibilities between educational programmes at different educational levels, even within the same country.

The first part of the desk research consists of a conceptual analysis of the education systems in relation to each other. The results are presented in chapter 2.

This is followed by a more detailed comparative data for analysis of flexibility options at the level of the national curriculum and data of the implementation processes at the level of the individual school. The results of the analysis at the level of the national education programmes are shown in chapter 3.1, the results of the flexibilities at the level of implementation/school are shown in chapter 3.2.

Initial findings show that there are significant differences between countries and even between programmes of different levels within the same country, which will be an additional challenge in proposing a flexibility model that we want to be feasible in all partner countries and beyond.

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## 1. Introduction

Nowadays agriculture is constantly changing due to various factors such as technological advancements, climate change, market demands, consumer preferences and directives (laws) which forces farmers in lifelong learning, upskilling, and diversifying their production to stay competitive in global economy. Fast changes impact educational and training system to responds to market needs which leads to search for flexibilization as the process of making vocational education more adaptable and responsive to the changing needs of learners and the labour market. This involves creating flexible pathways and programs that allow learners to tailor their learning experiences to meet their needs and goals.

Centre of excellence in education and training is ecosystem of local partners, such as VET providers, employers, research centres, development agencies, and employment services who cooperate to develop high quality curricula and qualifications focused on sectoral skill needs, and contribute to regional, economic, and social development, innovation, and smart specialisation strategies (CEDEFOP definition)

AgriNext project's goal is to create a center of excellence in the field of Multifunctional Agriculture (MA) including learning environment that responds to the skill demand on the job market in the field of MA project partners recognized the importance of flexibilization as opportunity to educate and train learners with competencies which broaden agriculture with knowledge and skills needed for competitive market.

To achieve project goal, five work packages (WP) were designed WP1-Guidance services to foster lifelong learning and development of VET skills in multifunctional agriculture, WP2-Flexibilization of school systems, WP3-Green job=dream job, WP4-Business incubator for rural excellence and WP5- AgriNext IT platform and will result in Online training for guidance service providers for the use of new guidance service model; Online training for VET teachers for flexible learning processes; Proposals of flexibilization of VET; Green job = dream job video trailers; Established Incubators (business - education partnership) and AgriNext IT Platform for Rural Excellence Activities.

With this project structure the following specific objectives will be achieved:

1. Flexibilization of learning environments and curriculums in I-VET and C-VET, on EQF levels 3-6, to facilitate fast responses to job market demands.
2. Teacher empowerment (continuous professional and pedagogical) for a fast response to the job market demands, established system of continuous exchange between employers, teacher/trainers/guidance service providers, to respond to the skills needed.
3. To develop students/learners who are highly skilled, motivated, entrepreneurial, and aware of the importance of C-VET and lifelong learning.
4. Creating physical and virtual environment that enables: -Interaction between teachers, trainers, mentors from companies, students, and researchers; -Individualization of the learning process; -Demonstration & try-outs of new technologies -Development of entrepreneurial activities.
5. Promoting rural development & vitality by demonstrating and highlighting opportunities of Multifunctional Agriculture.
6. Increasing digital competencies among students and teachers.





The conceptual analysis begins with a **National Level Analysis**. This section provides an overview of the formal vocational education and training (VET) system in each partner country. It examines various aspects, including the structure and organization of VET, the relationship between initial and continuing VET education, procedures for changing the curriculum, the relationship between educators and stakeholders, and the presence of dual systems or apprenticeships. Additionally, it covers teachers' training opportunities and the assessment of competencies. The design of flexible pathways and programmes, tailored to the individual needs of learners, ensures adaptability to the changing needs of both learners and the labour market, while maintaining a broad understanding of the subject matter.

Conceptual analysis was chosen because it is a method used to clarify and understand the underlying concepts or ideas within a particular domain of study. It involves breaking down complex concepts into their constituent elements, examining their interrelationships, and providing a definition. We defined the meaning of flexibilization in education and examined its various aspects and dimensions. In the next step of the project (D2.2), we will investigate the relationships between flexibilization options as a target concept. We will also propose a Flexibilisation model to reveal how these options are interconnected and influence one another.

To ensure comparability of data across partner countries semi structured survey was formed. Goal was as well to collect quantitative data. For this part we combined multiple-choice data gathering as a structured survey or research methodology in which respondents are presented with a set of predefined questions, each accompanied by a list of possible answer choices. Participants select the most relevant response from the provided options. On the other hand, multiple-choice questions were used to offer a structured format that simplifies data processing. Since setting Flexibilisation model (D2.2) will be challenging task in the next project task possibilities to explain choose responses were included. This approach has encouraged partners to consider flexible solutions.

The **second part** of the methodology involves researching the flexibility options at the level of nationally defined educational programs or curricula through **National Curriculum Level Analysis**.

This includes reviewing and analysing the structure and characteristics of national educational programs, such as their length in years, ECTS credits, and the extent to which the program can be implemented in a school-based, dual, or other way. The assessment of national educational programs considers their level of detail and specificity for social partners and participants. The methodology also evaluates the potential for horizontal transferability between programs and the proportion of optional curriculum. Furthermore, it examines the extent to which schools can collaborate with social partners to determine a portion of the education/study program.

The methodology evaluates the proportion of the work-based learning (WBL) component and the specificity of the objectives of the practical on-the-job training or WBL.

It also examines whether the law mandates an individual learning plan for each student.

The **third part - Implementation Level Analysis** of the methodology focuses on the options for making individual school implementations more flexible. It analyses the extent to which schools can determine their own programs and curricula in consultation with social partners.

The methodology evaluates the extent to which the implementation level permits individualisation of the learning process. This includes assessing the ability of schools to interact with teachers, trainers, mentors, students, and researchers. Additionally, it considers the opportunities for demonstrating and experimenting with new technologies, as well as developing entrepreneurial activities at the school level.

### 1.3. Data collection

The data collected is compared across countries and EQF (European Qualifications Framework) levels, allowing for the identification of differences in flexibility between educational programs at different levels.

The data were collected by partner schools. It is important to consider that these schools implement educational programmes at different levels, which may result in varying levels of detail in the presented highlights.

## 2. General data collection

The methodology in this overview is based on the mapping existing flexibility options in participating partner schools. Mapping was conducted as a part of WP2 and as starting point for further analysis for flexibilization options that will be implemented later in the project.

CPI developed questioners and guidance for data collection to ensure gathering of significant and comparable data considering holistic approach in the context of flexibilization.

This first part of the questioner is descriptive with aim to provide an understanding of VET in Croatia, Ireland, Spain, and Slovenia on different EQF levels (3-6).

### 2.1. Overview of the formal VET system in partner Countries

Croatia, Ireland, Spain, and Slovenia are all members of the European Union following directives and priorities for educational system across Europe.

EQF as EU qualification Framework provides standards for international recognition of qualifications in the point of AgriNext project serves as a comparability of education levels. And ISCED is the International Standard Classification of Education providing form for comparability of educational programmes.

#### 2.1.1. Slovenia

The education ministry deals with VET at systemic level, the Institute of the Republic of Slovenia for VET (CPI) is responsible for VET at the practical level; CPI monitors and guides the development of VET and provides in-service teacher training and VET curricula.

VET programmes are competence-based and modularised. The completion of a specific number of vocational modules leads to a vocational qualification.

Formal VET in Slovenia starts at upper secondary level (entry age 16) with acquired EQF 2 level, except for Short VET programmes (EQF3) for which obtained EQF1 level is required (finished 7<sup>th</sup> grade of basic education which in Slovenia takes 9 grades). 5 VET programmes are available on upper secondary level, which differs according to length of VET, implementation and EQF level.

- technical upper secondary programmes (ISCED 354): four-year programmes that lead to vocational matura. These programmes consist of 40% general subjects and at least eight weeks of in-company work based learning;
- vocational upper secondary programmes (ISCED 353): for the three-year labour-market-oriented programmes there are two paths:
  - school-based path: approximately 20% (at least 24 weeks) of the programme is undertaken at an employer and the rest at the school (consisting of general subjects and VET modules);
  - apprenticeship path: a minimum 50% of the programme is undertaken at an employer, while at least 40% general subjects and VET modules - is delivered in school. Changing paths midway is possible. After final exams, students from both school and apprenticeship paths can enter the labour market or enrol in **two-year vocational technical education programmes** at ISCED 354 that lead to vocational matura;

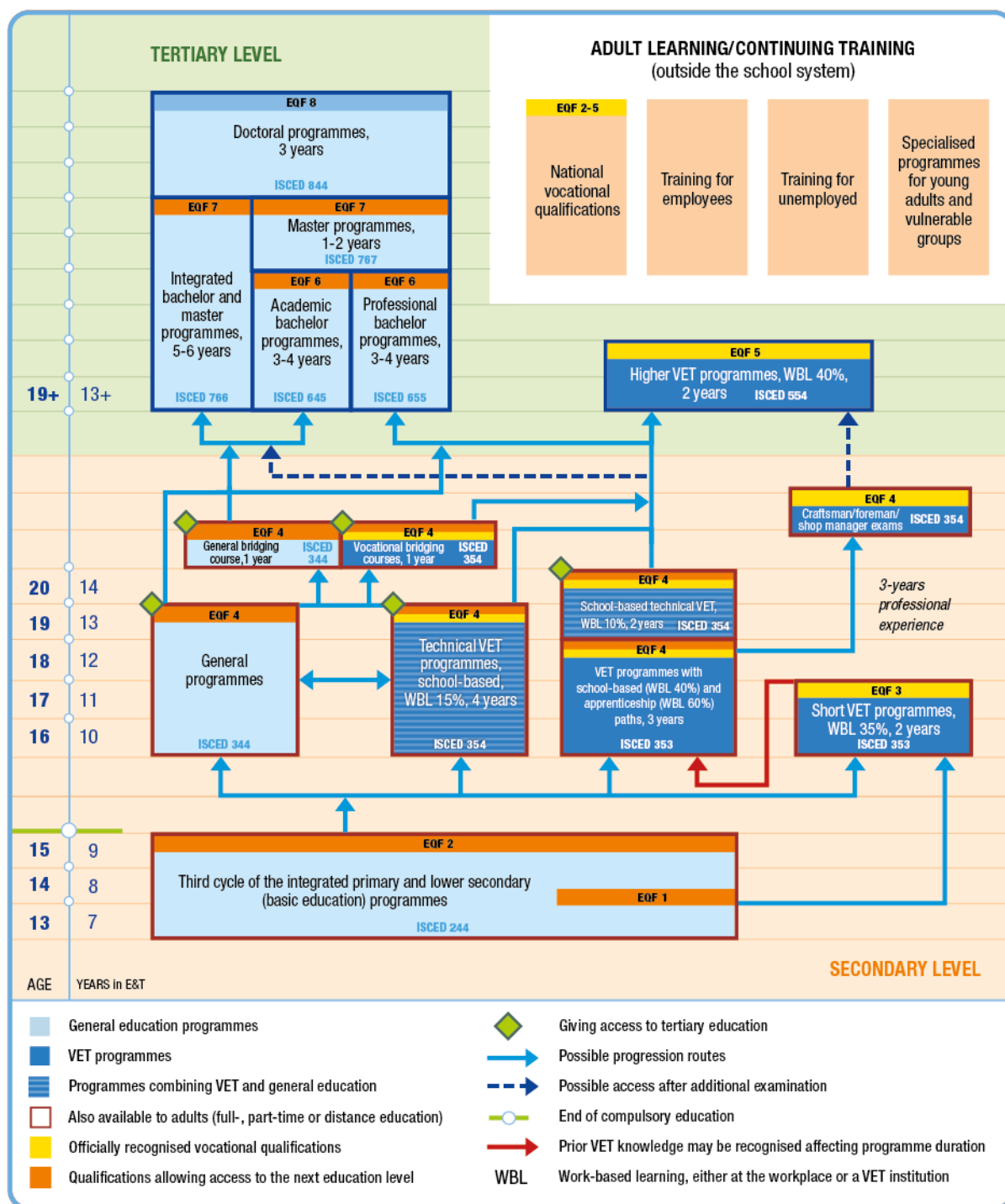
- **short vocational upper secondary programmes (ISCED 353):** two-year programmes that qualify learners for less demanding occupations (at assistant level) or continuing education in vocational programmes

**Tertiary VET programmes** focus on vocational modules and are implemented on EQF levels 5 and 6:

- higher vocational programmes (ISCED 554, EQF 5);
- professional bachelor programmes (ISCED 655, EQF 6);
- academic bachelor programmes (ISCED 645, EQF 6);

I-VET programmes are available for adults as well as C-VET. The recognition of non-formal and informal learning is possible within the national vocational qualifications (NVQ) system. National vocational qualifications enable citizens to get their vocational competences, obtained through non-formal and informal learning, verified, but cannot gain levels of education through this option.

Adults can enrol in non-formal courses in the education service market provided by private entities or public schools, to gain numerous VET or general competences.



NB: ISCED-P 2011.

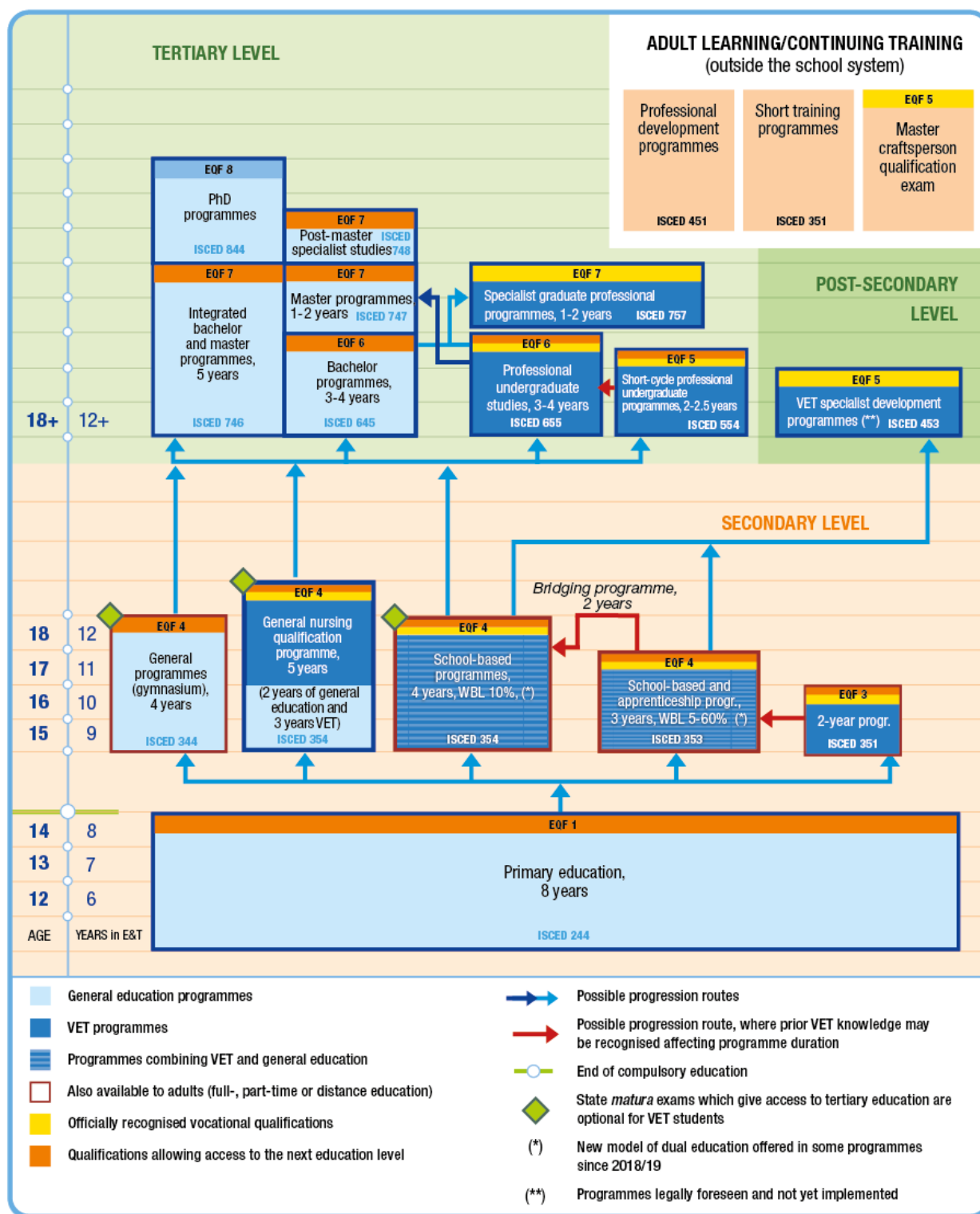
Source: Cedefop and ReferNet Slovenia, 2022.

(Source: [https://www.cedefop.europa.eu/files/2021-10/4204\\_en.pdf](https://www.cedefop.europa.eu/files/2021-10/4204_en.pdf))



### 2.1.2. Croatia

VET in Croatia has two main roles. Alongside preparation for labour market entry, it enables progression to tertiary education; this is primarily through four-year VET programmes, where learners spend half of their time acquiring general competences. Responsibility for VET lies with the Ministry of Science and Education supported by the Agency for VET and Adult Education (ASOO). VET is provided at upper secondary and postsecondary levels; the entry point is completion of compulsory education at age 14 or 15. At upper secondary level, about 70% of learners participate in initial vocational education and training (IVET). Around two thirds of VET learners are in four-year school-based programmes, with under one third in three-year programmes. Only one upper secondary programme lasts five years, leading to a general nursing qualification. This programme has a unique structure of two years of general followed by three years of vocational education. The four-year, mostly school-based, VET programmes, with a WBL share of around 10%, lead to qualifications at CROQF level 4.2/ EQF level 4 and allow progression to tertiary education; this follows completing external matura exams, administered by the National Centre for External Evaluation of Education (NCVVO). In 2019, around 80% of four-year and five-year programme graduates took matura exams and 45% enrolled in higher education immediately on completion of secondary education. Three-year VET programmes give access to the labour market and lead to qualifications at CROQF level 4.1/ EQF level 4; WBL share ranges from 5% and more in school-based programmes to up to 60% in apprenticeships (programmes for crafts, nationally referred to as unified model of education, JMO). On completion of the three-year JMO programme, graduates take the journeyman exam. Only a few learners take part in two-year VET programmes leading to qualifications without completing upper secondary education. Graduates of two- and three-year programmes can continue their education as regular students to attain a qualification one level higher, at the discretion of their schools. VET specialist development programmes (EQF 5) are foreseen but not introduced yet at post-secondary level. Professional education and training are offered in different forms at tertiary level. Short-cycle professional undergraduate programmes last two to two-and-a-half years (120-150 ECTS points) and lead to qualifications at CROQF/EQF level 5. Three- to four-year professional undergraduate programmes lead to a professional bachelor diploma at CROQF/EQF level 6. Professional bachelors may continue their studies in university programmes subject to successful completion of additional exams and other requirements established by individual higher education institutions. Graduate professional studies last one to two years and lead to a professional master diploma at CROQF/EQF level 7. Adult education and training in Croatia lead to educational attainment at EQF levels 1 to 5 for learners older than 15. Participation in VET at upper secondary level is one of the highest in the EU (69.6% compared to the EU average of 47.8% in 2017). Croatia has the lowest rate of early school leaving in the EU (3.3% in 2018, compared to the EU average of 10.6%). Current priorities for VET development focus on increasing its labour market relevance, quality, attractiveness, and internationalisation.



NB: ISCED-P 2011.

Source: Cedefop and ReferNet Croatia, 2022.

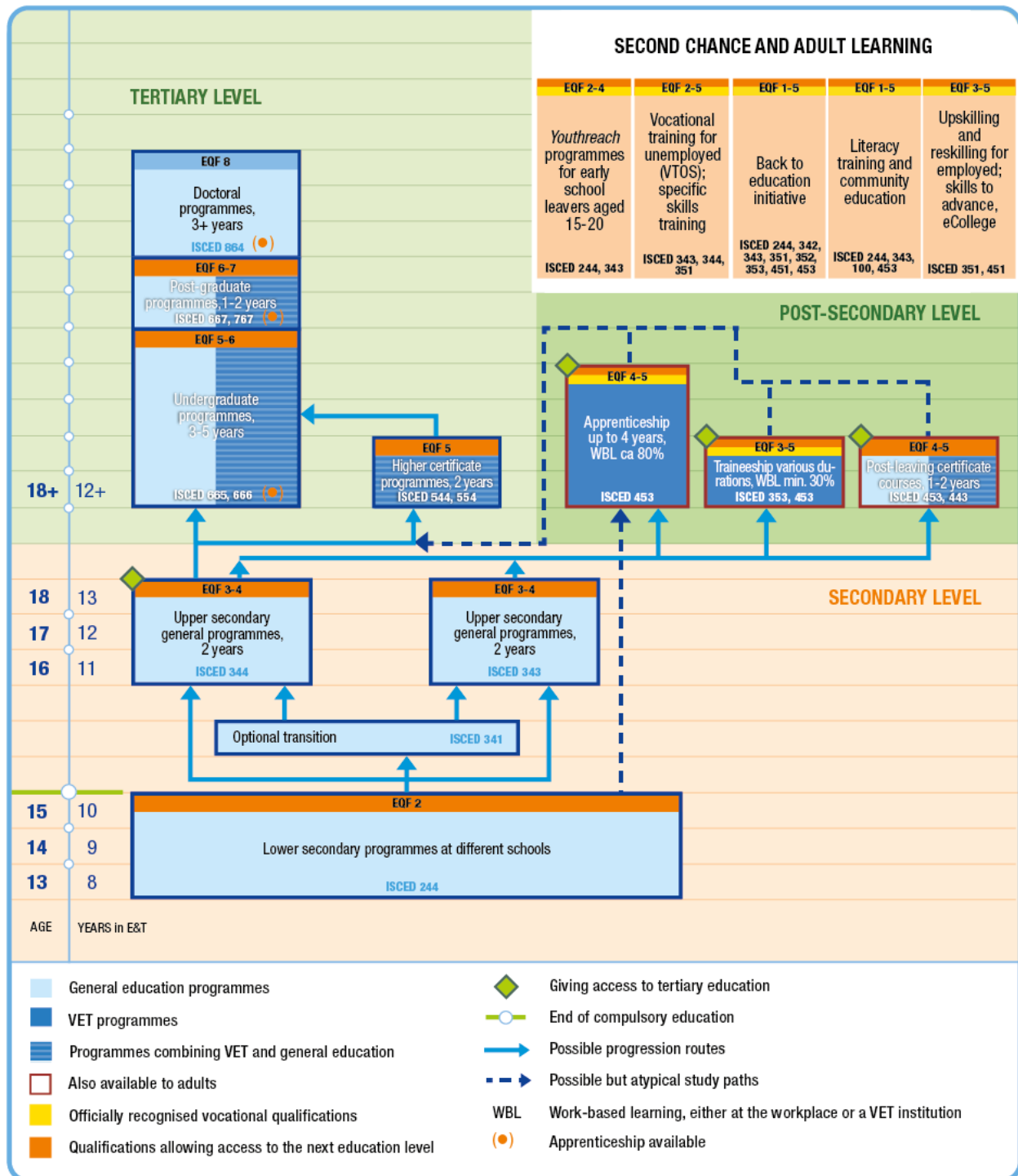
(Source: [https://www.cedefop.europa.eu/files/8136\\_en.pdf](https://www.cedefop.europa.eu/files/8136_en.pdf))

### 2.1.3. Ireland

In Ireland, Vocational Education and Training (VET) programmes are managed within the Further Education and Training (FET). The VET programmes are available for learners under the FET (EQF levels 3-6). These programmes vary from apprenticeship, traineeship, and post-leaving Certificate (PLC) courses to Back to Education Initiative (BTEI), Youthreach, Community Employment scheme (CE), Vocational Training Opportunities Schemes (VTOS), and lifelong learning options in further education training centres, colleges and community education. The major providers of VET courses are the Education and Training Boards (ETBs) and private educational institutions while the Quality and Qualifications, Ireland (QQI) is responsible for awarding certificate to deserving learners. The Further Education and Training Authority (SOLAS) is responsible for the integration, coordination, and funding of VET programmes.

The VET courses are designed and delivered within the EQF levels 3-6 to meet the needs of industry and business across a range of occupations and are provided for both initial VET and continuing VET learners. In Ireland, flexibilization in the delivery of VET courses within the further education and training encourages learners to progress into the higher education system (EQF levels 7-8) by transitioning from EQF levels 3-4 to EQF levels 5-6. For instance, the Higher Education Links Scheme (HELs) gives learners the opportunity to use their EQF level 4-5 certificate to apply for a position in the first year of a higher education programme or access a wide range of third level courses in most of Ireland's universities and institutes of technology. In 2017, SOLAS estimated that more than 20% of school leavers enrolled in VET and 16% progressed to higher education.

Furthermore, courses are designed with the flexible and workplace learning in response to the specific skills needs of individuals who require certified training to assist their return to or progression in the labour market. Majority of the course providers deliver flexible and workplace learning (part-time, full time, blended, online and evening) VET programmes for both young and adult learners. Classes are offered throughout the year in the mornings, afternoons, evenings or weekends. This provides motivated learners an opportunity to combine a return to learning with work, family and other responsibilities. Also, specific skills training allows people who have lost their job or who are changing job to learn new job-related skills. There are short- and long-day courses, online courses, blended learning and evening courses. The courses are run during the day and in the evenings. Priority on daytime courses is given to unemployed people. A day course is free to all unemployed people, even if you are not getting a social welfare payment. An evening course is not free unless you are getting a social welfare payment.



NB: ISCED-P 2011.

Source: Cedefop and ReferNet Ireland, 2022.

**Examples of the VET courses:****a) Post-leaving Certificate (PLC) programme: Full-time basis:**

The PLC programme aims to provide post-secondary level learners (EQF levels 3/4) with specific vocational skills that will enhance their employment opportunities and/or facilitate their progression to additional/higher education and training. Post leaving certificate courses are full-time and last for one to two years. They offer a mixture of practical work, academic work and work experience, and are designed for both initial VET and continual VET learners as a step towards skilled employment to meet the needs of the industry and businesses across a range of occupations. These courses adopt an integrated approach, focusing on technical knowledge, core skills and work experience. Courses are delivered in a wide range of subjects, such as agriculture, business studies, childcare, community care, computing and technology, e-commerce, horticulture, multimedia production, sport and leisure and tourism.

**b) Apprenticeships: Full-time basis:**

Apprenticeship is a work based (70-80%) structured education and training programme for up to 4 years, which formally combines and alternates learning in the workplace with learning in an education/training centre. The objectives of the apprenticeship programmes are to provide second chance vocational education for post-secondary and adult VET (EQF 3-5 levels) learners with skills outside their current job responsibilities. There are various apprenticeship opportunities available for learners in diverse profession particularly in construction and engineering with only few in the agriculture.

**c) Vocational Training Opportunities Scheme (VTOS): Full-time basis:**

The VTOS Scheme provides a range of courses to help people who are unemployed re-enter the workforce. The courses are full-time and are usually delivered over two academic years on a full-time basis of 30 hours per week. The courses aim to help participants to improve their level of education, gain certification, develop their skills and prepare for employment, self-employment and further education and training. Some examples include Business Administration, Childcare and Digital Media.

**d) Traineeships: Full-time basis:**

This is a formal and organised structured training which combines learning in an education and training setting and in the workplace. Traineeships typically take from 4-9 months full-time to complete. They provide occupation-specific training and integrate formal classroom training and workplace (20-30%) training with a host employer. Courses are full time and all year round to facilitate those entering the labour market for the first time and persons wishing to up-date or acquire new skills. All programmes lead to accreditation at EQF levels 3-5 or certification from a recognised external accredited body.

**e) Back To Education Initiative (BTEI): Part-time basis:**

The BTEI provides part-time Further Education programmes for young people and adults. It aims to give participants an opportunity to combine a return to learning with family, work and other responsibilities. Programmes are offered in partnership with several agencies throughout the country on a flexible part-time basis. Classes are offered throughout the year in the morning, afternoons, evenings or weekends. Courses lead to a range of accreditation at EQF levels 2-5. This programme is co-funded by the Irish Government and the European Social Fund as part of the ESF Programme for Employability, Inclusion and Learning 2014-2020.

**f) Community Education: Part-time basis:**

Community Education works with adults who wish to return to or continue their education, offering a learner-centred approach involving personal supports and tuition leading to positive personal, social, and economic outcomes. It focusses its work on people who have not been in employment or education for a long-time and is generally developed in local community projects and centres. Community Education offers a diversity of courses including courses leading to accreditation from EQF level 2 - 7, informal and non-formal courses which are not accredited, short introductory courses, full time year-long programmes and courses. Community Education is delivered all over Ireland by a range of providers including independently managed not for profit groups and statutory organisations. It takes place in a wide variety of community projects, resource centres, voluntary organisations, etc.

**g) Lifelong Learning & Continuous Professional Development: Part-time basis**

This programme is designed for adults and agri-food sector employees who desires and are motivated to continue to up-skill in their chosen profession or who wish to gain more knowledge by re-skilling in other sectors. This is largely an informal learning mode for continuous VET learners. They operate on the basis that adults learn better from each other with the facilitator merely guiding the discussion as opposed to the traditional classroom, student/teacher model. For further details contact any local Teagasc centre. For example, Teagasc Education Centres has a network of Discussion Groups covering all major farm enterprises - beef, sheep, dairy, tillage, equine and poultry. These groups provide a key support to the agri-food sector in building its knowledge and gaining the skills base to underpin continued growth and competitiveness. Discussion groups normally comprise of 12-20 farmers coming together on a regular basis to discuss issues of mutual interest.

One of the major policy reforms in Ireland's education and training system is the prioritization of VET programmes to address the unemployment challenge. This is well-articulated in the Government's integrated response through the 'Future Jobs Programme', 'Action Plan for Jobs' and 'Pathways to Work' policy programmes. These strategic programmes are key component in the implementation of an effective, responsive and flexible VET programmes in the 21st century towards transforming the apprenticeship and traineeship systems while providing specialised skills programmes that support learners in reskilling and upskilling in areas where sustainable employment opportunities are emerging. Several national initiative programmes have been established to promote VET programmes across a wide range of occupations and education levels. Some examples of VET initiative include the *SKILLS TO ADVANCE* provides upskilling and reskilling options to employees in jobs undergoing change and to those currently employed in vulnerable sectors; *EXPLORE PROGRAMME* delivers digital technological skills to persons who are aged 35 years or more; while *eCOLLEGE* is a leading learning platform that delivers online training courses to jobseekers and employed learners.



### 2.1.4. Spain

1- Initial VET is the responsibility of the education authorities.

Initial VET offers upper secondary (basic and intermediate) and higher VET qualifications as part of the education system. Programmes last two years (2000 hours) and include work-based learning in a company and at a VET school:

- **basic programmes** are available in the last year of compulsory education, to learners aged 15, 16 or even 17. They allow students at risk of leaving education without qualifications to develop their basic skills, prepare for an occupation (such as agro-gardening) and obtain a basic VET qualification. Students may move on to upper secondary VET and, also attain the compulsory secondary qualification opening up the general education path;
- **intermediate programmes** can begin at age 16, after compulsory education. These lead to technician qualifications at (such as cookery and gastronomy). Access to higher VET in the same field of study is possible.
- at tertiary level, **higher programmes** lead to an advanced technician qualification (such as logistics coordinator). Graduates can progress to bachelor programmes through an admission procedure.

Graduates from intermediate and higher VET programmes can enrol in short specialisation courses in the same field of studies to acquire occupation-specific and digital skills in line with the emerging needs of the economy.

In dual VET delivery (apprenticeship contracts or other alternance schemes) programme duration may be up to three years with a minimum of 33% of training spent at the company.

Specific training programmes in arts and design and in sports are offered (4% of the VET population in 2019/20).

Adults can enrol in the same VET programmes as young people.

2- **Continuing training (C-VET)** is the responsibility of education and employment authorities sharing the same consultation bodies but having their own respective governance and objectives. Employment authorities are responsible for VET programmes addressing companies' and workers' (employed and unemployed) skills needs, employment-training schemes and the regulation of apprenticeships contracts.

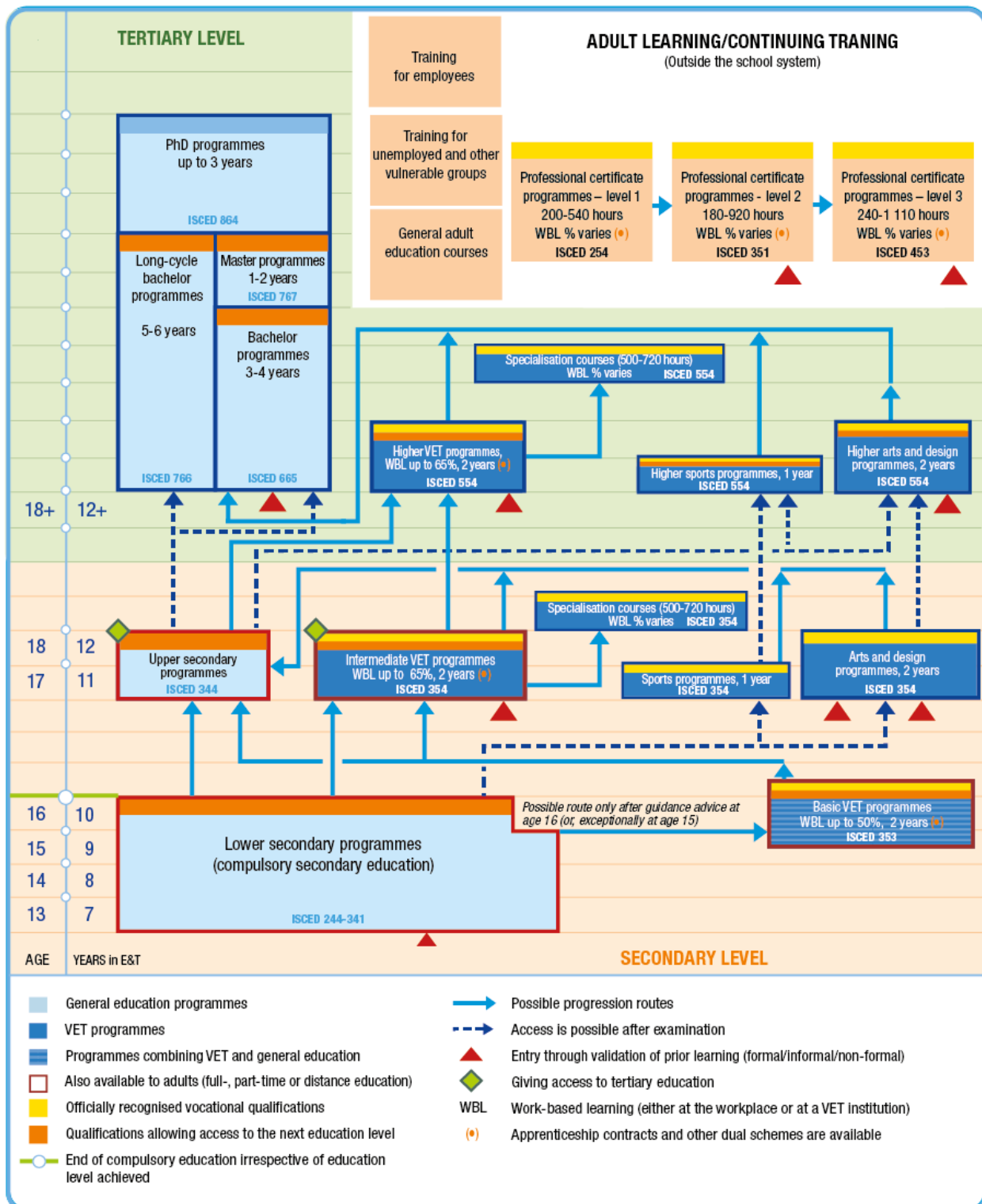
Adults can enrol in the same VET programmes as young people. Those older than 16 can also attend VET programmes leading to a professional certificate corresponding to an occupational profile. Programmes are delivered by authorised VET providers and may include an apprenticeship contract. Duration varies according to the learning outcomes at each level (from 180 to 1 110 hours); access to the next level is possible in limited professional fields. All levels comprise a compulsory on-the-job training module, of variable duration.

The Spanish VET system is modular, allowing recognition and transfer of (units of) competences gained in one VET programme to another, shortening its duration. Units of competences may also be acquired through validation of prior learning.

Training is offered by accredited public and private institutions.

Non-formal VET includes a wide range of courses, designed for different needs and skill profiles, allowing upskilling or re-skilling. It may be financed through public funds (mainly from company and worker contributions to social security). Publicly funded programmes (specialties) not linked

to the national register (CNCP) are included in a catalogue of training specialties of the State Public Employment Service and providers have to be registered as such.



NB: ISCED-P 2011. The Spanish education system is not referenced to EQF levels.  
Source: Cedefop and ReferNet Spain, 2022.

(Source: <https://www.cedefop.europa.eu/en/tools/vet-in-europe/systems/spain-u2>)

## Distinctive features of VET

The national system for qualifications and vocational training is the umbrella for VET programmes in and outside the education system, leading to qualifications awarded by the education authorities. VET and professional certificate programmes take as reference the occupational standards of the national catalogue (Catálogo Nacional de Cualificaciones Profesionales, CNCP), allowing mutual recognition of some parts of the training (modules -subjects-).

VET programmes are modularised, allowing partial certification and re-engagement from a lifelong learning perspective, and include compulsory workplace learning at the end of, or during, studies. Learners need to pass all modules to obtain the relevant qualification. VET programmes using online or virtual learning environments and platforms are increasing to ease access to VET.

Adults may have their skills recognised or acquire a formal qualification through training. There are common regulations for validating skills acquired through non-formal and informal learning and work experience. These procedures empower citizens to engage in further learning and acquire full qualifications. Regional authorities can initiate public calls for validation of non-formal and informal learning depending on company needs, social partner requests or minimum qualification requirements from sectoral regulatory bodies. Key competences tests have been developed for higher VET programmes and professional certificate access.

## Challenges and policy responses

Vocational Training is at the core of policy measures in the education, labour and economic spheres. The strategic plan for the modernisation of vocational training, presented in 2020, aims to improve VET standards and make VET more attractive to young people by introducing flexible learning paths in secondary education and VET programmes and upgrading and developing new programmes to meet the demands of the future of work.

Current VET policy focuses on the modernisation and continuous updating of vocational training to ensure learning opportunities for the entire population through a unified, flexible, and easily accessible VET system; improving qualification levels and employability; driving innovation and entrepreneurship in VET; enhancing dual VET; and assessing the VET system to improve its quality and efficiency.

A new law about VET has been passed in Spain in 2022, whose main objective is to promote the flexibilization of VET and dual learning.

## 2.2. Relationship between initial and continuing VET education

EU gives a strong emphasis on the relationship between initial (I-VET) and continuing vocational education (C-VET) as a key component of lifelong learning. I-VET provides students with the foundational knowledge and skills required for employment in a specific vocational area, while C-VET enables workers to update and expand their knowledge and skills in response to changing labour market demands and technological advancements. One of the frameworks which supports relationship between I-VET and C-VET is the European Skills Agenda, launched in 2020, which sets out a range of actions aimed at strengthening skills development across Europe and promoting a culture of lifelong learning.

### 2.2.1. Slovenia

The relationship between I-VET and C-VET in Slovenia is supported by policies and programs. The Vocational Education and Training Act emphasizes the need for C-VET and requires that employers provide their employees with opportunities for professional development.

The National Lifelong Learning Strategy (2011) further reinforces the relationship between I-VET and C-VET, stressing the importance of access to C-VET for workers at all levels.

In practice, the relationship between I-VET and C-VET is supported by different programs and initiatives. For example, the National Institute for Vocational Education and Training - CPI offers a range of programs and services aimed at supporting continuing vocational education and training, including certification programs NVQ (NPK), guidance and counselling services, and support for the development of training programs. C-VET short courses are also organized by schools' inter-entrepreneurial education centres which are organized to follow development and interests on the market. Students and adults can attend this usually payable courses. Students can also acquire ECTS by attending and do not need to pay a fee.

I-VET consists of accredited, formal programmes at upper secondary level and tertiary level.

Craftsman, foremen and shop manager exams are traditionally understood as C-VET, as the applicants (at least 3-year vocational programme graduates) must have specific prior professional working experience. It is a way that an experienced employee can be promoted to a more demanding work position that does not require the next education level.

### 2.2.2. Croatia

Most programmes are VET-related, ranging from short training and professional development to programmes leading to qualifications equivalent to those in I-VET. The education ministry's approval of programmes leading to formal certificates is necessary, with prior positive opinion from ASOO. Adult learning is typically financed by learners.

### 2.2.3. Ireland

In Ireland, I-VET and C-VET are rarely used. Instead, it is the status (e.g., age) of the learner that defines whether the VET is initial (I-VET) or continuing (C-VET). Both VETs are seen as part of Further Education and Training (FET) for young and adult learners. Generally, I-VET are for learners who are age 17+ who have just completed their compulsory education (upper- or post-secondary) while C-VET are for learners 23 years and above who wish to upgrade their skills, having completed I-VET. Regardless of age, both I-VET and C-VET are accessible to persons of all ages, whether they are in employment. Within the FET system in Ireland, distinction between I-VET and C-VET is not clearly defined. The existing relationship between the IVET and CVET is that the CVET (further education) builds on previous IVET (initial/former education). Learners in the IVET and CVET can obtain accredited certifications (EQF levels 3 to 6) and progress to higher education.

Higher education institutions recognise and validate skills and knowledge acquired through work experience by means of Recognition of Prior Learning (RPL). The RPL makes it possible for an individual to build on the formal, non-formally or informally acquired knowledge they previously achieved and to be rewarded for such, e.g., in the form of access to a programme or exemption/credit on a module(s) in a programme. Furthermore, there is an ongoing project to developing a Multi-Campus Micro-Credentials system in Irish Universities, which will recognise and certify small volumes (unit module) learning experience undertaken by VET learners. This, first-of-its-kind four-year programme, funded through the Higher Education Authority's Human Capital Initiative, is establishing an innovative system of quality assured and accredited micro-credentials across seven of our member universities.

### 2.2.4. Spain

Spain has two options:

- a. Workers may have their skills recognised through work experience. There are common regulations for validating skills acquired through work experience. These procedures empower citizens to engage in further learning and acquire full qualifications. Regional authorities can initiate public calls for validation of non-formal and informal learning depending on company needs, social partner requests or minimum qualification requirements from sectoral regulatory bodies. This procedure is called "accreditation of professional competences".
- b. Adults may have as well acquire a formal qualification through training, shorter than a general initial VET qualification. Regional authorities usually organise these certificates depending on company needs, social partner requests or minimum qualification requirements from sectoral regulatory bodies. When finishing these studies, which combine learning and WBL, students get a "certificate of professionalism", similar to a micro-credential, but wider. This certification recognises different modules of an Initial VET qualification (Technician/Higher Technician). The person holding this certification can validate the modules acquired in this short programme to continue to study the programme leading to get the diploma of technician or higher technician.

## 2.3. Procedures of changing curriculum

Changing curriculum in partner countries depends on national/regional level. However, the EU encourages member states to adopt policies and practices that promote high-quality education and training, support lifelong learning, mobilities, promote the development of a skilled workforce, adopts EU competencies frameworks etc.

### 2.3.1. Slovenia

The curriculum is revised based on Occupational standards. The occupational standards are reviewed every five years with the involvement of experts, social partners, and schools. As well as initiating a new occupational standard, individuals or legal entities can apply for a revision of an occupational standard. The proposal must include an analysis of the situation and international comparability. Once the occupational standards have been revised or established, a programme of adoption begins to develop or update the curriculum of the educational programme. One or more occupational standards are the basis for an educational programme. The CPI coordinates the process of renewing or establishing an educational programme, involving experts in the field of education who prepare the curriculum for the educational programme. The process itself (curriculum development) takes about one year and the proposal for a new or renewed programme must be approved by the professional council and by the accreditation commission appointed by

the Ministry of Education. The whole process including revision of Occupational standards takes at least two years. Once the programmes are approved, they are published in the official gazette and then schools can launch a new or renewed educational programme. VET in Slovenia is currently in the process of modernization of VET which will be finalized in 2026.

### 2.3.2.Croatia

VET curriculum reform is oriented towards comprehensive redesign in line with labour market needs, focus on learning outcomes, work-based learning, contemporary teaching and close support to VET providers. Redesign of the VET system has been long in planning; roll-out is foreseen in 2022/23. The system is transforming from input- to learning-outcomes-oriented, responding to current demand and looking forward. Methodologies connecting VET curricula developments with labour market needs have been defined. In 2005 ASOO was established, and more human and financial resources were designated to VET.

The main strategic orientation was to:

- (a) establish the link between education and labour market.
- (b) replace the input-oriented system with output/learning outcomes-based approach.

According to the VET Act, implementation is based on curricula that set out the teaching process leading to achieving learning outcomes and a qualification. The new process of curriculum development foresees each curriculum as aligned with two inputs: one from the education sector and the other from labour and employment. Each curriculum is to be informed by:

- (a) national curriculum for VET and sectoral curriculum.
- (b) occupational standard and qualification standard.

The VET Act defines a hierarchy of curricula used in the Croatian system. Implementation is based on the:

- (a) national curriculum for VET.

It defines values and goals. For each qualification level, it proposes teaching time devoted to general content, vocational modules, elective modules, and work-based learning. The national curriculum for VET also defines general entry and completion requirements for different types of programmes, general horizontal and vertical permeability, and the general forms of assessment of learning outcomes.

- (b) sectoral curricula.

sectoral curricula will set out the framework for all VET curricula for qualifications at CROQF/EQF levels 2 to 5 within education sectors. ASOO is in charge of methodology for sectoral curricula development: this is foreseen for the last quarter 2019, with sectoral curricula available by 2022. These curricula will define all VET qualifications within a particular sector, the duration of education, possibilities, and conditions for permeability within the sector, and recommended models of work-based learning. It will ensure the acquisition of broader competences relevant for all occupations within a sector.

- (c) VET curricula.

the VET curriculum enables achieving a specific VET qualification and both key and professional competences. It consists of mandatory and elective modules, and describes teaching units, learning environment and assessment of learning outcomes. It can also define who can teach in these programmes. VET curricula are endorsed by the education ministry following positive



evaluation by ASOO or, in the case of JMO, by the Ministry of Economy, Entrepreneurship and Craft.

(d) VET provider curricula.

is created by the VET school that implements a programme, based on the VET curriculum and sectoral curriculum. It sets out a plan and a timeline of teaching, methods of teaching and learning, and assessment plan.

(Source: <https://www.cedefop.europa.eu/en/publications/4181>)

### 2.3.3. Ireland

In Ireland, the procedure for curriculum reform is undertaken by the Curriculum Development Unit of the Education Training Boards (ETB) in partnership with quality and qualifications (QQI) to have a common structure and characteristics such as title, EQF level, volume, profile, assessment and grading.

Curriculum assessment and revision was last undertaken during the introduction of the Common Awards System (CAS) in 2007. The implementation of the CAS represents the most significant development in the structure of VET awards from 2007 to the present. Moreover, there is clear evidence of need in the VET sector for an enhanced and enduring curriculum design, assessment, verification, validation, quality assurance coordination and management.

### 2.3.4. Spain

In Spain the curriculum is changed by law. The current law education (we call it LOMLOE, by its Spanish initials) has been passed in 2020. In 2022 a new law about VET has been passed as well, whose main objective is to increase VET flexibility and to transform all the I-VET system in dual VET.

Since the beginning of our democracy (almost forty years) eight education laws have been passed. There is a common consensus among teachers that the educational system should not be changed as easily as the different governments do.

## 2.4. Relationship between educators and stakeholders

VET system is designed in collaboration of different stakeholders with aim that learners develop competencies needed for their future carriers and to produce employable workers ready for lifelong learning. This concept requires networking of different stakeholders at all levels in the process of educational programmes (from conceptualization, implementation to evaluation). Furthermore, this close cooperation between educators and stakeholders ensures that VET programmes are designed to meet the needs of the labour market.

### 2.4.1. Slovenia

Social Partners are included in the curriculum design at several levels.

#### A. in the development of occupational standards.

In the design of Occupational Standards, it is crucial to work with representatives of stakeholders who, at least in this process, contribute the necessary competences, i.e. the knowledge, skills and attitudes required to practise a particular occupation.

#### B. In designing the curriculum.

The curricula set out the core competences and learning objectives, both informative and formative, which learners acquire during an educational programme. The catalogues of skills are drawn up by experts in the field of subject-specific education, with the involvement of social partners such as chambers of employers. This process is coordinated and managed by the CPI. Once the curriculum is agreed, it is approved by the Professional Council and the Accreditation Commission appointed by the Ministry of Education.

### **C. Designing open curricula for educational programmes.**

The open curriculum of an educational programme is defined by the educational institution - school and the social partners in the local environment. This allows adaptability or flexibility of the education system to respond to the needs of the local working environment. The open curriculum also allows for the acquisition of competences that build on the basic knowledge of the compulsory curriculum. For example, in the field of multifunctional agriculture, the open curriculum can help learners to acquire the necessary skills and competences to serve as complementary activities on farms, such as tourism, processing of numerous products, not only its production but also the marketing of products.

Employers as social partners are also involved in the educational implementation of the educational programme through direct involvement by facilitating work placements, apprenticeships, because they are, so to speak, training the learners to carry out vocational tasks.

Representatives of the social partners are also included by law in the school council where educational programmes are approved.

#### **2.4.2. Croatia**

The agency is responsible for developing VET curricula, continuous professional development of VET teachers, skills competitions, and quality assurance. Stakeholders are involved in curriculum development, sector skills councils and in the VET Council, which proposes measures for the development of VET in Croatia. To promote excellence in VET, Croatia is establishing a network of 25 regional centres of competence. These will offer state-of-the-art technologies, teaching excellence and work-based learning, training for professionals, VET teachers and workplace mentors, as well as close cooperation with local businesses. The national curriculum allows learning flexibility and specialisation through up to 30% of elective modules integrated in upper secondary VET curricula.

#### **2.4.3. Ireland**

The Educational and Training boards (educators) and private educational institutes (social stakeholders) are the major providers of VET courses while the Further Education and Training Authority (SOLAS) is responsible for the integration and coordination of VET process. And there is a close rapport and collaboration between these bodies because of the well-established structure of the Irish VET education system under the common award system. This makes the curriculum design and education process easy to understand since the modules, entry requirements and duration are the same for each course/programme.

The social partners participate in the curriculum design and delivery of VET courses, which ensures their support for the programme and develop their sense of ownership. These are strong elements of the VETs programme in Ireland. Still, the drawback of this arrangement is that the curriculum design and education process may be inflexible and difficult to amend in response to emerging demands or to the varying requirements of the job market.

#### 2.4.4. Spain

The education process is designed by The Government. The Government seek advice to Conferencia Sectorial de Educación, at the same time, this public organism asks information to schools and vocational schools of the regional governments.

### 2.5. Dual system / apprenticeship

The apprenticeship system is an important part of vocational education and training. The apprenticeship system is designed to provide young people with the opportunity to acquire practical skills and knowledge in a real work environment, while also earning a wage. This approach ensures that apprentices are well-prepared for their future careers and can make a positive contribution to the workforce.

#### 2.5.1. Slovenia

The apprenticeship system in Slovenia is regulated by the Vocational Education and Training Act. The Act defines the rights and obligations of apprentices, employers, and vocational schools, and sets out the requirements for the apprenticeship program.

It lasts 3 years, during the apprenticeship, students split their time between the school classes 40% where they learn general subjects and professional modules (theoretical and practical training) and the workplace at least 50%. The employer provides on-the-job training and supervision. They start with simple tasks and gradually take on more responsibility as their skills and knowledge develop.

At the beginning of an apprenticeship, the implementation plan for individual learners is prepared in cooperation between the school and the company under the supervision of the chamber; it is signed between the student (or legal guardian), and representatives of the company and school. It includes the objectives and set of competences for WBL, distribution and schedule of education at the school and in the company, ways and modes of communication and cooperation between the company and school, as well as information regarding the mid-term and final exam for the apprentice.

During the apprenticeship (in the second year), the apprentice is given an intermediate test of practical competence before a professional committee of the competent chamber. The content and method of the intermediate test are laid down in the examination catalogue.

The apprentice finishes his/her education when he/she passes the final exam. The final examination final examination in Slovenian (written and oral) and practical work is conducted by the Examination Board with optimal 4 members (president, mentor, teacher and representative of the Chamber of Crafts or Chamber of Commerce of Slovenia). Apprentice can change employer in case there is a need to acquire additional skills.

#### 2.5.2. Croatia

In parallel to the existing apprenticeships, JMO, the education ministry has initiated experimental implementation of dual education in 2018/19. Emphasis has been placed on improving the continuous professional development of teaches advancement opportunities and their financial status. Implementation of dual education is in cooperation with economic and crafts chambers, associations of employers and with support from partner institutions from Austria, Germany and Switzerland. Piloting is also supported by the Modernisation of VET programmes project, realised through Swiss-Croatian cooperation. In 2019/20, dual education is offered experimentally in three-

year and four-year programmes leading to EQF level 4 qualifications (three-year programmes for salesman, glazier, chimney-sweeper, and painter-decorator at CROQF level 4.1 and four-year programmes for beautician and hairdresser at CROQF 4.2). In total, 19 VET schools and 469 learners are involved. In the first year of the dual programme, learning takes place in the VET school. In the following years, most work-based learning is undertaken in companies: 161 companies employing 522 people are involved so far. Companies are required to employ and provide training and continuous professional development to mentors, as well as to ensure quality assurance of work-based learning. Learners sign a contract for work-based learning with companies during the first year and are entitled to monthly remuneration; bonus might be paid as well. Remunerations are unified per qualification and per year of education and training.

The VET Act amendments of 2018 provided for the establishment of the regional centres of competences and national and sectoral VET curricula. In 2018, the Minister for Education endorsed the first national framework curriculum for VET. Apprenticeship providers are business entities, such as craft business workshops or trade associations, institutions or cooperatives, licensed to offer practical training and exercises for apprentices. In order to get the licence, apprenticeship providers must ensure conditions for learners to acquire competences in the real work environment, including assigning a mentor with adequate qualifications and pedagogical competences. The learner in a JMO programme has the status of a regular learner and an apprentice in craft. Entry requirements include completed primary education and demonstrated medical fitness for a particular profession; a placement and apprenticeship contract with a licenced apprenticeship provider has to be ensured in the first semester. Around 10% of all IVET learners are in apprenticeships. Initial VET is publicly financed and free of charge. All VET programmes combine professional and general competences, to varying degrees; all include work-based learning (WBL), with duration and type varying.

(Source: <https://www.cedefop.europa.eu/en/publications/4181>)

### 2.5.3. Ireland

In Ireland, apprenticeships are provided at post-secondary level (EQF 4) and are available to young adults who seek occupational training after completing upper secondary education. The apprenticeship system is highly occupation-specific, with little emphasis on general competences. Majority of participants for the apprenticeship education must possess a Leaving Certificate although Junior certificate is acceptable for those in wet trades such as Bricklaying, floor and wall tiling, Painting and Decorating and Plastering. Apprenticeship programmes are mainly accessible in construction, electrical and mechanical engineering professions with only a few in agriculture, ICT, finance. Apprentices receive a EQF level 5 on successful completion of the programme. Lately, apprenticeship programmes are available in higher education (EQF levels 6-8).

Apprenticeship is a well-structured work-based training (70-80%) with a systematic blend of on- and off-the-job elements. It combines and alternates learning in the workplace with learning in an education/training centre. The apprenticeship system is standards-based, and typically lasts for up to four years. It involves seven phases, three off-the-job (totalling 40 weeks in all) and four on-the-job. During on-the-job phases the employer pays an apprentice wage (a percentage of the agreed industry wage rate, agreed by social partners), while during off-the-job phases, the Further Education and Training Authority (SOLAS) pays an allowance equivalent to the employer wage to apprentices. The off-the-job component is relatively short (20-30%) in comparison to the total duration of the programme. Furthermore, the skills developed during the off-the-job phases may be more occupation-specific (practical skills) with less general education and cross-curricular skills compared to Austria and Germany. This is because apprenticeship is provided in post-secondary education in Ireland, while it is part of formal schooling at upper secondary level in Austria and Germany.

### 2.5.4. Spain

As mentioned before, a new law about vocational training has been passed in 2022. One of its main objectives is that all the VET system will be in dual learning from 2025. We strongly believe that it has great expectations.

In Spain we are not still applying this system. So far it is like we are going to describe:

The dual vocational training system takes place in enterprises, corporate training centres and at vocational schools. This kind of system combines practice and theory. The company and the vocational school sign a practice agreement.

Each regional government in Spain decides the number of dual learning it will introduce depending on research about employment market needs.

Student Requirements:

Age, 18 years old or from 16 to 18 years under parental permission.

Each vocational school has to present a dual system project where it will fix the criteria to select students in dual system. The selection criteria are determined by each vocational school and the companies.

Duration: from two to three years. For EQF LEVEL 4 and EQF LEVEL 5, between 530-800 hours of total duration must take place at the company.

To evaluate the student there will be two mentors, one from the company and the other one will be a teacher.

Dual system degrees have the same public recognition as the other system.

### 2.6. I-VET and C-VET for trainers and teachers

Teachers need pedagogical and technical competences to be nominated for positions. Nowadays teachers, especially in VET, besides following the technological development they must understand the impact of social development on learners.

#### 2.6.1. Slovenia

In Slovenia, the initial education of teachers and trainers in vocational education is determined by the law. The Act requires that vocational teachers hold at least a university degree in a relevant field, and have completed pedagogical and andragogical training, which includes coursework in teaching methodologies and educational psychology.

In addition to completing the required coursework, vocational teachers must also complete a one-year induction period during which they receive mentorship and support from experienced teachers. This period is designed to help new teachers gain practical experience and develop their teaching skills.

Continuous education for teachers in VET is also a requirement if they want to be promoted into higher title. Teachers have 15 days for C-VET in the three year period. Teachers can attend professional development courses and workshops, which are organized by educational institutions or private sector. On the other hand, many projects are offering C-VET for teachers to stay in line with development and recommendations and to help them improve their skills.

### 2.6.2. Croatia

Teachers must have a Bachelor in the field of the subject that they will teach. The continuing professional development (CPD) and in-service training of VET staff is mainly provided by ASOO and is based on an annually updated catalogue for in-service training. Data related to the in-service training of VET school teachers are regularly recorded in the information system where teachers register for in-service teacher training events. VET schools are also expected to provide in-house staff development activities. However, there is currently no data available on the quality or effectiveness of these activities. Apart from the State-funded training described above, in-service training of VET teachers is also provided by:

- (a) professional associations and other non-governmental organisations offering training (fee-based or free of charge);
- (b) public open universities (Pučka otvorena učilišta);
- (c) the chamber of crafts and trades.

These forms of in-service training do not require programme or provider accreditation.

For example, during April 2023. the Agency for Vocational and Adult Education and Advantage Austria - the Austrian Office for Foreign Trade, with the help of project partners - the Croatian Chamber of Commerce, the Croatian Chamber of Crafts, the German-Croatian Chamber of Industry and Commerce, the Swiss Embassy in the Republic of Croatia and the Knowledge in Action Foundation - organize the second practice cycle for vocational schoolteachers. The main goal of the entire initiative is to build better cooperation and cooperation between entrepreneurship and vocational education. Through practical work and communication with mentors, but also through cooperation with company management and the human resources department that will be at their disposal, teachers will gain insight into the real competencies required of their students as future employees. By participating in practice, teachers get an authentic insight into the daily work of a company, as well as a real picture of the economic context and operational processes in the company, and they also gain personal experiences in the business world that they will be able to pass on to their students. The internship lasts from three to five working days, depending on the complexity of the work and the organization of the company.

(Source: <https://www.cedefop.europa.eu/en/publications/4181>)

### 2.6.3. Ireland

In Ireland, the Further Education and Training Act 2013 emphasise that adequate initial teacher education knowledge, and continuous professional development for practitioners (teachers, trainers, tutors, and instructors) is critical to ensure a good mix of pedagogical skills, teaching methods, vocational competence, and industry knowledge towards high quality teaching and excellent educational results for students. The act mandates the Further Education and Training Authority (SOLAS) to provide training to teachers and trainers charged with delivering VET programmes. Its strategy is centred on training competency in subject matter areas and an appropriate pedagogical approach in the delivery of training to various cohorts, i.e., a standard professional qualification and continuing professional development requirement for those employed in the VET sector.

Also, the Further Education Support Service (FESS) plays an important role in supporting the FET sector. FESS provides national, regional and local initial and professional development workshops in areas such as self-evaluation, teaching and learning methodologies, motivating learners, learner wellbeing, quality assurance, programme development and review, assessment, internal verification/external authentication, academic writing and other programme specific areas.



Examples of Good Practices for Initial and Professional Development of VET Teachers and Trainers:

- a. Moodle Champions Group - this programme supports a coherent approach to the adoption of Moodle across the FET Service. The champions group organises and promotes the use of Moodle across all FET programmes, centres and colleges and consists of key VET practitioners who lead on the adoption and use of Moodle across the range of full-time and part-time education and training programmes. The group also acts as a very successful professional network, sharing best practice and resources. It coordinates the adoption and use of new technologies and resources by sharing experiences of pilot initiatives.
- b. Train the Trainer Programme - bridges the gap between initiation and continuing professional training for FET practitioners. Teachers and trainers (practitioners) benefits from an in-depth induction which incorporated education and training board ethos and ethics and how both impact on daily practice. The programme content includes theory of training and adult learning, the role of the trainer, training needs analysis and programme design, preparing for training delivery and assessment, and evaluation of training.

SharePoint Continuing Professional Development Cascade Training - is a continuing professional development using a train the trainers' approach to introduce StaffConnect to all VET practitioners. StaffConnect is a branded SharePoint site used as communication and collaboration platform enabling the sharing of information and collaboration. The main objective is ensuring that all practitioners could use the StaffConnect site in their day-to-day work, including accessing and submitting relevant forms, downloading key resources as well as sharing resources and collaborating on documents and presentations. Evaluations with both participants and trainers suggest that this is an effective model to deliver co related to largescale systems roll-out.

#### 2.6.4. Spain

**a. Teachers initial education:** teachers must have a Bachelor (4 years of duration) in the field of the subject that they will teach. For instance: in order to teach Technician in Gardening and Floristry, teachers have bachelor's in forestry engineering.

However, there are another kind of teachers, technical teachers who have an EQF LEVEL 5 degree like teachers of Technician in Catering Services.

Nevertheless, all of them must have the Master of Teacher Training (1 year of duration) in order to learn pedagogy, teaching techniques, methodologies, how to create a syllabus, laws related to education, etc.

With the described requirements, a person can be a teacher in private schools. In order to work in public high schools, teachers must prepare a public exam in order to show their knowledge and skills about the subject they want to teach.

**b. Continuous education:** The Ministry of Education of Spain and the regional governments have a wide range of continuous education courses related to specific subjects and to transversal subjects. Teachers attend these courses in their free time. Each "Comunidad Autónoma", the regional governments in Spain, has centres that coordinate the continuous education for teachers, which are called Centros de Profesorado (CEP) "Teachers centers".

#### 2.7. Assessment of competencies

The assessment of competencies of VET school students are an important aspect of vocational education. The assessment process is designed to evaluate whether students have achieved the

learning outcomes of the vocational education program, and to identify areas where they may need further support and development.

### 2.7.1.Slovenia

The assessment of competencies in VET is carried out using a range of methods, including written tests, practical assessments, projects, and work-based learning evaluations. The assessment process is usually carried out by VET teachers, who have a good understanding of the learning outcomes and the competencies that students are expected to acquire. The assessment on WBL is done together with trainer (mentor).

Especially the final examination in VET upper secondary programmes the assessment process is also monitored by external evaluators, who are responsible for ensuring that the assessment methods used are reliable. This helps to ensure that the assessment process is fair, transparent, and objective, and that the results are indicators of students' competencies.

### 2.7.2.Croatia

To complete an I-VET programme and receive a formal qualification, all learners have to develop and present a final practical assignment. Assessment is organised and conducted by VET schools. Upon passing it, a learner acquires a secondary school qualification and receives a certificate of completion from the VET school.

Self-assessment at VET schools is part of the quality assurance system. Support measures are in place to advance self-assessment, including school visits, upgrades to the online tool e-Kvaliteta and feedback reports with recommendations. Your proposal for flexibilization opportunities in your country, describe benefits that flexibilization could bring. The country has an average performance in skills activation (rank 18th), indicating how smooth is the transition from education to work. Despite ranking first in 'early leavers from training', indicators such as 'recent graduates in employment' and 'activity rate (25-54)' place Croatia at 23rd.

### 2.7.3.Ireland

Assessment of key competences is based on the definition by the European Commission, which differentiate between eight types, including skills such as interpersonal, intercultural and social competences, and civic competence, entrepreneurship, communication, problem solving and digital/ICT skills.

In Ireland, the Teaching Council outlines key competences under the professional values, professional skills and practices, and professional knowledge and understanding, which is expected of newly inducted and qualified teachers, trainers, tutors and instructors. In this respect, educators are expected to use these standards as a tool to support their ongoing development, including reflective practice and enquiry pedagogies.

**Assessment of competences outlined under three broad headings:**

1. Professional Values - Ethical Standards and Professional Behaviour and Professional and Ethical Teaching
2. Professional Skills and Practice - Classroom Management and Organisational Skills, Communication and Relationship-building Skills, Analytical, Critical Thinking Skills, Problem solving, Reflection and evaluation Skills, and Integration and Application of Knowledge in relation to Planning, Teaching, Learning and Assessment Skills

3. Professional Knowledge and Understanding - Subject Knowledge and Curriculum Process and Content, Key Principles of Planning, Teaching, Learning, Assessment, Reflection and Evaluation, Education and the Education System, and Communication and Relationship building.

#### 2.7.4. Spain

In Spain, the regulation of each degree establishes what is the General Skill or General Competence that students must achieve to get the degree (EQF LEVEL). At the same time each subject or professional module contributes to achieve a part of the General Skill. Students must acquire all the learning outcomes (resultados de aprendizaje) and their assessment criterion of each professional module to get the general competence of the degree.

To check whether students have achieved the learning outcomes and their assessment criterion or not, teachers design different assessment activities.

On the other hand, we have several workers that have a lot of work experience but don't have any degree to prove their work skills. In that case there are public processes by which they can get credential skills in the European Reference Framework, to get a VET degree or part of it. In that last case workers can obtain the key competences that they need if they study the subjects that contain the units of competence that they need to get the whole degree.

### 3. Comparability of VET systems

#### 3.1. National level

This second part of the questionnaire is more focused, and distinct national and implementation level of VET system. On national level methodology of multiple-choice questions were prepared as it is based on experiences in Slovenian VET curricula design and combined with experiences of other countries.

National questioner refers to national policies and frameworks targeting possibilities of flexibilization on different EQF levels (3-6).

EQF as a bridge between national qualification systems is a common European reference framework whose purpose is to make qualifications more readable and understandable across different countries and systems (CEDEFOP). Furthermore, EQF s are organized in eight levels, defining learning outcomes at specific level. Learning outcomes are defined as knowledge, skills, and attitude (responsibility and autonomy).

Researching the flexibility options at the level of nationally defined educational programs or curricula through **National Curriculum Level Analysis** is divided regarding EQF levels to demonstrate comparability among educational programmes in partner countries. As already mentioned, partners are implementing educational programmes at different levels. Collected data are for 5 programmes on EQF 3 level, for 6 programmes at EQF 4 level, 3 programmes at EQF 5 level and 4 programmes at EQF6 level. Following 9 questions were formed to explore existing flexibility:

#### **N1 Program Implementation Flexibility**

The educational system demonstrates flexibility in program implementation by offering options for delivery, including in-school, dual, and other innovative models, fostering a dynamic and adaptable learning environment. At all levels in all countries there is a little of flexibilization offered by national policies allowing also dual way of education. No other country reported any other innovative implementation option.

#### **N2 Type of Education Implemented**

Flexibility is evident in the educational system's commitment to providing diverse pathways, allowing for the implementation of programs both in school and in a dual format, and acknowledging the potential for other unique educational models. Even in the programmes that allows combined implementation, majority of programmes are implemented in school.

#### **N3 National Educational Programme**

The national educational program exhibits flexibility through its inclusive design, accommodating various levels of detail, from prescriptive to indicative, and recognizing the specific needs of social partners and participants. Majority of educational programmes are very detailed at EQF levels 3,4 and 5, where at EQF6 level in Slovenia and Croatia there is more indicative which allows more flexibility and can be a point for proposal discussion.

#### **N4 Horizontal Transferability Between Programs**

The adaptable system promotes transferability across different fields, offering various enrollment options and recognition of training achievements, demonstrating a commitment to flexibility.

The answers show different options among programmes from ability to achieve two qualifications to no transferability. Data present the possibility for further inquiry.

#### **N5 Proportion of Optional (Elective) Curriculum**

The analysis of the optional/elective curriculum provides insights into the degree of flexibility, whether set at the national level or collaboratively determined at the school level with input from social partners. Data shows that different programmes have different possibilities and furthermore suggest further discussion to determine flexible options.

#### **N6 Proportion of Work-Based Learning (WBL)**

The analysis assesses the emphasis on practical, hands-on learning experiences within the curriculum, showcasing a commitment to providing students with real-world skills. Flexibility in this case shows adaptivity to different learners. Diverse data will be further discussed to share best practices.

#### **N7 Specificity of Objectives for Practical Training/WBL**

The question explores the degree of specificity in learning outcomes for practical training, ranging from detailed prescriptions to more flexible or unspecified objectives.

#### **N8 Individual Learning Plans**

The inclusion of "Yes" or "No" options indicates whether there is a legal requirement for individual learning plans, showcasing a commitment to individualized learning pathways. There are possibilities of individual planes however they are not obliged for all students.

#### **N9 School Determination of Education/Study Program Share**

The analysis explores the extent to which schools, in collaboration with social partners, can influence the content and structure of the education or study program, indicating a decentralized and adaptable approach. It is a way to respond to local jobs demands.

Data in tables below clustered by EQF levels.

### 3.1.1.EQF 3

At level 3 learners gain knowledge of facts, principles, processes, and general concepts, in a field of work or study. A range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools, materials, and information and take responsibility for completion of tasks in work or study. Learners can adapt their own behaviour to circumstances in solving problems (CEDEFOP)

## NATIONAL LEVEL

Country	Slovenia	Spain	Ireland	Ireland	Croatia
EQF level	3	3	3	3	3
The length of educational program in years	2	2	2	1 to 2	3
ECTS	120	120	120	120	180 (not implemented)
Can the program be implemented either school based or in dual way or both A - only in school; B - in school and in dual way; C - only dual way; D - other (describe)	A	B	B	B	B
Which type of education is implemented A - only in school; B - in school and in dual way; C - only dual way; D - other (describe)	A	B	B	A	A
National educational programme: A- is very detailed; B - is indicative; C - allows the specificities of the social partners and participants D - other (please describe)	B	A	A	A	A and C
Is horizontal transferability between programmes possible: A - enrolment in the programme, decision for a programme/profession after one year; B - transfer possible if the two programmes are related; C - transfer possible if differential examinations are passed; D - possibility of training for two professions; E - transfer is not possible	C	E	B	D	C
Proportion of the curriculum that is optional (school and students choose between different modules - set at national level or set at school level in cooperation with the social partners. )	29%	0	25%	50-70%*	0

Proportion of the WBL	35%	260 hours (13%)	30%		40%
How specific are the objectives of the practical on-the-job training/WBL? A- learning outcomes are precisely prescribed; B - they are roughly prescribed; C - they are not prescribed; D - other (please describe)	B	A	A	B	A
Does the law require an individual learning plan for each student. A -Yes; B- No	A -Yes*	B- No	B- No	A -Yes	B- No
The share of the education/study programme that can be determined by the school in cooperation with the social partners.	21%	0	**	***	10%

\*Portfolio of courses where students mix and match from a range of subjects to put together their own learning package.

\*\* The share of the study programme determined by the school in cooperation with the social partners is limited, which is triggered by the identification of the job opportunities within the sector. It is mostly determined by the national regulatory authorities in consultation with school in cooperation with the social partners. Also, vocational schools are obliged to design a study/learning programme which must be submitted to the national/government regulatory authority for approval.

\*\*\* The share of the study programme determined by the school in cooperation with social partners is less prominent. It is mostly consultative and limited; the government regulatory authorities dominate the process.

### Other (flexibilization options on national level that are not included in previous questions)

Country	The length of educational program in years	Other (flexibilization options on national level that are not included in previous questions) EQF3
Slovenia	2	Special education needs adaptation of the curricula, refers to the * that majority of the students in this programme have special needs, which require individualization and different kind of support
Spain	2	
Ireland	2	Open to both unemployed and employed learners
Ireland	1 to 2	Participation in the programme has two modes: as a core or dispersed learner. A core learner participates in a group of up to 20 others in a designated centre, while dispersed learner participates with a group of learners some of whom are attending other programmes.
Croatia	3	Teacher has a high degree of authority in the selection and implementation of vocational contents.



## EQF 4

Learners outcomes are factual and theoretical knowledge in broad contexts within a field of work or study, a range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study and exercise self-management within the guidelines of work or study contexts that are usually predictable, but are subject to change; Learners responsibilities are to supervise the routine work of others, taking some responsibility for the evaluation and improvement of work or study activities (CEDEFOP).

## NATIONAL LEVEL

Country	Slovenia	Slovenia	Slovenia	Croatia	Ireland	Spain
EQF level	4	4	4	4	4	4
The length of educational program in years	3	2	4	4	1 to 2	2
ECTS	180	120	240	240 (not implemented)	120	120
Can the program be implemented either school based or in dual way or both A - only in school; B - in school and in dual way; C - only dual way; D - other (describe)	B	A	A	A	B	B
Which type of education is implemented A - only in school; B - in school and in dual way; C - only dual way; D - other (describe)	A	A	A	A	A	B
National educational programme: A- is very detailed; B - is indicative; C - allows the specificities of the social partners and participants D - other (please describe)	A and C	A and C	A and C	A and C	A	A
Is horizontal transferability between programmes possible: A - enrolment in the programme, decision for a programme/profession after one year; B - transfer possible if the two programmes are related; C - transfer possible if differential examinations are passed; D - possibility of training for two professions; E - transfer is not possible	C	B and C	C	C	D	D

Proportion of the curriculum that is optional (school and students choose between different modules - set at national level or set at school level in cooperation with the social partners.)	10%	8%	6%	0	25%	0
Proportion of the WBL	40% school based and 60% apprenticeship	10%	15%	10-20%	25%	410 hours (20,5%)
How specific are the objectives of the practical on-the-job training/WBL? A- learning outcomes are precisely prescribed; B - they are roughly prescribed; C - they are not prescribed; D - other (please describe)	B (school provides recommendations)	B	B	A	A	A
Does the law require an individual learning plan for each student. A -Yes; B- No	B- No	B- No	B- No	B- No	B- No	B- No
The share of the education/study programme that can be determined by the school in cooperation with the social partners.	15%	9%	11%	10%	*	0

\* The share of the study programme determined by the school in cooperation with social partners is less prominent. It is mostly consultative and limited; the government regulatory authorities dominate the process.

### Other (flexibilization options on national level that are not included in previous questions)

Country	The length of educational program in years	Other (flexibilization options on national level that are not included in previous questions) EQF4
Slovenia	3	The vocational modules are delivered in accordance with the Catalogue of Knowledge, Skills and Competences. Learning outcomes are roughly described, allowing the teacher a high degree of authority in the selection and implementation of vocational contents.
Slovenia	2	the students in 5 years of enrolment in school acquires two titles of 2 different educational programmes
Slovenia	4	The vocational modules are delivered in accordance with the Catalogue of Knowledge, Skills and Competences. Learning outcomes are roughly described, allowing the teacher a high degree of authority in the selection and implementation of vocational contents.
Croatia	4	Teacher has a high degree of authority in the selection and implementation of vocational contents.
Ireland	1 to 2	Adult learners without leaving certificate but with work experience can access the courses
Spain	2	What if a student, after finishing EQF 4 level studies, wants to study an EQF 5 level studies in the same field? They can do that; the transferability is possible.

## EQF 5

Learners' outcomes are comprehensive, specialised, factual and theoretical knowledge within a field of work or study and an awareness of the boundaries of that knowledge. A comprehensive range of cognitive and practical skills are required to develop creative solutions to abstract problems. Learners exercise management and supervision in contexts of work or study activities where there is unpredictable change, additionally they review and develop performance of self and others (CEDEFOP).

## NATIONAL LEVEL

Country	Slovenia	Spain	Ireland
EQF level	5	5	5
The length of educational program in years	2	2	4
ECTS	120	120	120
Can the program be implemented either school based or in dual way or both A - only in school; B - in school and in dual way; C - only dual way; D - other (describe)	D*	B	B
Which type of education is implemented A - only in school; B - in school and in dual way; C - only dual way; D - other (describe)	A	B	B
National educational programme: A- is very detailed; B - is indicative; C - allows the specificities of the social partners and participants D - other (please describe)	B and C	A	A
Is horizontal transferability between programmes possible: A - enrolment in the programme, decision for a programme/profession after one year; B - transfer possible if the two programmes are related; C - transfer possible if differential examinations are passed; D - possibility of training for two professions; E - transfer is not possible	E	D	E
Proportion of the curriculum that is optional (school and students choose between different modules - set at national level or set at school level in cooperation with the social partners)	17%	0%	
Proportion of the WBL	40%	370 hours (18,5%)	8%

How specific are the objectives of the practical on-the-job training/WBL? A - learning outcomes are precisely prescribed; B - they are roughly prescribed; C - they are not prescribed; D - other (please describe)	D**	A	A
Does the law require an individual learning plan for each student. A -Yes; B- No	B- No	B- No	B- No
The share of the education/study programme that can be determined by the school in cooperation with the social partners.	11%	0%	***

*Croatia doesn't implement EQF 5 educational programme*

*\*WBL doesn't have tripartite contract with employer, however students work 22% at the employer*

*\*\*Curricula for WBL is prepared, learning outcomes are framed but not precisely described*

*\*\*\* Representatives of schools and social partners are only consulted (as members in a working group or management board) by the national agency in determining the education/study programme. Social partners implicitly bring an understanding of work roles and activities into the design of learning outcomes.*

#### Other (flexibilization options on national level that are not included in previous questions)

Country	The length of educational program in years	Other (flexibilization options on national level that are not included in previous questions) EQF5
Slovenia	2	The professional modules are delivered in accordance with the Catalogue of Knowledge, Skills and Competences. Learning outcomes are roughly described, allowing the teacher a high degree of authority in the selection and implementation of professional contents.
Spain	2	
Ireland	4	Third level learners EQF 6-8 can access this programme

## EQF 6

Learners outcomes are advanced knowledge of a field of work or study, involving a critical understanding of theories and principles, advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or study and to manage complex technical or professional activities or projects, taking responsibility for decision-making in unpredictable work or study contexts; take responsibility for managing professional development of individuals and groups. (CEDEFOP)

## NATIONAL LEVEL

Country	Slovenia	Slovenia	Croatia	Ireland
EQF level	6	6	6	6
The length of educational program in years	3	3	3	2
ECTS	180	180	180	120
Can the program be implemented either school based or in dual way or both A - only in school; B - in school and in dual way; C - only dual way; D - other (describe)	A	A	B	B
Which type of education is implemented A - only in school; B - in school and in dual way; C - only dual way; D - other (describe)	A	A	A	B
National educational programme: A- is very detailed; B - is indicative; C - allows the specificities of the social partners and participants D - other (please describe)	B and D - university sets the training programme	B and D - university sets the training programme	A and C	A
Is horizontal transferability between programmes possible: A - enrolment in the programme, decision for a programme/profession after one year; B - transfer possible if the two programmes are related; C - transfer possible if differential examinations are passed; D - possibility of training for two professions; E - transfer is not possible	C	C	B; C; and D	E
Proportion of the curriculum that is optional (school and students choose between different modules - set at national level or set at school level in cooperation with the social partners.)	around 18 %	around 10 %	13%	
Proportion of the WBL			240 hours or 10%	8%

How specific are the objectives of the practical on-the-job training/WBL? A- learning outcomes are precisely prescribed; B - they are roughly prescribed; C - they are not prescribed; D - other (please describe)	B	B	B	A
Does the law require an individual learning plan for each student. A -Yes; B- No	B- No	B- No	B- No	B- No
The share of the education/study programme that can be determined by the school in cooperation with the social partners.	Small	Small	10%	*

*\* Representatives of schools and social partners are only consulted (as members in a working group or management board) by the national agency in determining the education programme. Social partners implicitly bring an understanding of work roles and activities into the design of learning outcomes.*

#### Other (flexibilization options on national level that are not included in previous questions)

Country	The length of educational program in years	Other (flexibilization options on national level that are not included in previous questions) EQF6
Slovenia	3	The professional modules are delivered in accordance with the Catalogue of Knowledge, Skills and Competences. Learning outcomes are roughly described, allowing the teacher a high degree of authority in the selection and implementation of professional contents.
Slovenia	3	The professional modules are delivered in accordance with the Catalogue of Knowledge, Skills and Competences. Learning outcomes are roughly described, allowing the teacher a high degree of authority in the selection and implementation of professional contents.
Croatia	3	The vocational modules are delivered in accordance with the need of the market and regulations of government institutions. Learning outcomes are roughly described.
Ireland	2	Third level learners EQF 6-8 can access this programme



### 3.2. Implementation level

Implementational phase of gathering data is focused to map the existing options of flexibilization in current educational programmes on different EQF levels. Data were collected by project partner schools. The questioner is designed to lead schools to think about flexibilization options and recognize good practices which will be considered in further steps of the project.

The questions were developed through a brainstorming session within CPI and subsequent discussions with project partners. The aim of the questionnaire is to provide a detailed and comprehensive picture of the flexibilization strategies and practices within the educational institution. This will offer insights into the autonomy, support systems, and alternative approaches available to the school to determine the extent to which the educational system is adaptable, responsive to diverse needs, and capable of accommodating a range of approaches.

#### **Q1 Planning of the study programme.**

This question aims to assess the level of autonomy that schools have in planning their study programmes. It explores who is responsible for designing, approving and revising the programme. It provides information on decision-making processes and the frequency with which programmes are updated. The ability of the system to respond to local needs, changing demands and educational innovation is indicated by the degree of autonomy in programme planning.

#### **Q2 Degree of autonomy of the teacher/trainer.**

This question evaluates the extent to which teachers or trainers have the freedom to shape the content, forms, and methods of work within the study program. It investigates whether these aspects are centrally defined at the national or regional level or if educators have the flexibility to tailor them to local needs. The degree of autonomy given to teachers and trainers indicates whether the educational system allows for local decision making, promotes adaptability to different teaching styles, and responds to individual student populations.

#### **Q3 Development of Lifelong Learning Competencies.**

This question aims to evaluate how the study program contributes to the development of participants' lifelong learning competencies, such as digital competence (DigComp), green competence (GreenComp), entrepreneurial competence (EntreComp), and life skills (LifeComp). The focus on lifelong learning competencies reflects the system's recognition of the evolving skills required in the workforce. The statement suggests a proactive approach and the ability to adapt the curriculum to meet current needs.

#### **Q4 Consideration of Participants' Preferences in Employer Choice.**

This question assesses the extent to which schools can consider the preferences of participants when selecting an employer for work-based learning. It examines the flexibility in aligning participants with employers that match their interests and career goals. The consideration of participants' preferences in employer selection demonstrates a system's responsiveness to individual needs and aspirations, enabling personalized learning pathways.

#### **Q5 Forms of Blended Learning.**

This question explores the blended learning models that can be implemented in the study program, such as FlexModel, Blended Learning, Flipped Model, and A la Carte. The aim is to identify the teaching approaches used in the learning environment. The range of blended learning models demonstrates a system's receptiveness to different teaching approaches, accommodating different learning styles and using technology to enrich the learning experience.

#### **Q6 Business Incubator.**

This question aims to determine if the educational institution has a business incubator or supports business-related activities within the study program. It covers all aspects from idea development and start-up to closure, providing insights into entrepreneurial education and practical business experiences. This question is also directly related to one of the project outputs. The existence of a business incubator demonstrates a system's willingness to incorporate practical experience and entrepreneurial education. This promotes innovation and adaptability to economic and industry changes.

#### **Q7 Organized Forms of Student Support.**

This question evaluates the different types of support available to students, such as additional professional support for those with special needs, language learning for foreign students, teacher learning support, peer support, volunteer support, and other forms of assistance. The existence of various support systems indicates a comprehensive approach to meeting the diverse needs of students, promoting inclusivity, and adapting to the unique challenges that individuals may encounter.

#### **Q8 Alternatives to Grade Retention.**

This question asks schools to explain how they promote alternatives to grade retention. By exploring alternatives to grade retention, schools demonstrate their openness to innovative approaches for student progression, recognizing that traditional grading systems may not be suitable for all students.

#### **Q9 Other Flexibilization Options at Implementation Level.**

This question allows for the identification of additional, context-specific flexibilization options. It is important to highlight aspects of flexibility that may not be covered by predefined questions.

All the data collected shows that the questions we have selected offer further discussion for flexibilisation options in different educational programmes. In each question there are good practices that should be taken into consideration if they are transferable to other countries. A proposal for flexibilisation in the form of a flexibilisation model will be designed based on this data analysis.

## 3.2.1.EQF 3

## IMPLEMENTATIONAL LEVEL

Country	Slovenia	Spain	Ireland	Ireland	Croatia
EQF level	3	3	3	3	3
Planning of the study programme that can be determined by the school (who designs it, who approves it, how often it is revised, ...)	Each year students, VET teachers, head of school and social partners fill out the questionnaire, connected to open curriculum. Based on the analysis, we decide on the structure of the open curriculum, considering the preferences of the students, the needs of the employers, and the possibilities of implementing the course in the school (provider, space).	0	The national regulatory agency is responsible for planning of the study programme in consultation with the school and other stakeholders. Also, VET schools are obliged to design a learning programme which must be submitted to the regulatory government authority for approval. The schools' contribution focused more on implementation and less on planning, evaluation and review processes.	The national regulatory agency is responsible for planning of the study programme in consultation with the school and other stakeholders. Also, VET schools are obliged to design a learning programme which must be submitted to the regulatory government authority for approval. The schools' contribution focused more on implementation and less on planning, evaluation and review processes.	Each year professional association of teachers can suggest modification of curriculum to the school board. School board has to approve the revision before school year starts
Degree of autonomy of the teacher/trainer (how detailly is the content/forms/methods of work defined on national/regional level)	Teachers have a framework of topics written in a catalogue of skills, and have a high degree of autonomy in teaching	Quite autonomy	Teachers/trainers autonomy is less prominent (low autonomy). Teachers/trainers implicitly bring an understanding of work roles and activities into the design of learning outcomes. They participate (as consultant) in developing the national approach and in making VET more responsive to labour market needs.	Teachers/trainers autonomy is less prominent (low autonomy). Teachers/trainers implicitly bring an understanding of work roles and activities into the design of learning outcomes. They participate (as consultant) in developing the national approach and in making VET more responsive to labour market needs.	High teachers' autonomy

<p>How participants lifelong learning competencies as DigComp, GreenComp, EntreComp, LifeComp, are being developed</p>	<p>Teachers receive regular education and training in lifelong competences and try to integrate them into the classroom.</p>	<p>The lifelong competencies must be integrated into the curriculum by the teachers. Furthermore, in Spain, in vocational training the curriculum has as well "personal, social and professional competences".</p>	<p>Peer-group mentoring. Peer support is seen as an important element of professional development for VET workforce. Current thinking focuses both on the traditional conception of mentoring (where a more senior member of staff mentors more junior members of staff), and on peer-group mentoring.</p>		<p>The objectives of the life long learning competencies are integrated into the curriculum</p>
<p>To what extent school can take participants' preferences into account when choosing an employer</p>	<p>The organiser of the work-based practical training considers the student's preferences, his/her abilities and the employer's requirements, thus arriving at a common agreement.</p>	<p>The preferences are considered, but it will depend on the supply and demand.</p>			<p>Students can choose employer according to their preferences. We prepare all the information about the learning outcomes etc.</p>
<p>Which forms of blended learning can be implemented (example: FlexModel, Blended Learning, Flipped Model, A la Carte...)</p>		<p>Dual learning</p>	<p>Blended</p>	<p>Blended</p>	<p>Flipped Model</p>
<p>Have you got business Incubator (Business simulation, learning enterprises, from idea development, start-up, .... to closure)</p>	<p>Students at this level of education are not included</p>	<p>No.</p>		<p>Yes, TUS in conjunction with the Thurles Chamber Enterprise Centre developed and implemented several business incubators for micro-enterprises and small and medium-sized enterprises (SMEs) startup. For examples, Start Up Clinics, Student Inc and Market Link Entrepreneur for students and young innovators</p>	<p>There is no compulsory VET module on entrepreneurship and marketing but school has voluntary interest student organization that contributes to the achievement of educational and socio-economic goals of the school. This is a form of extracurricular activity for students, through which they acquire and develop work habits, responsibility towards work, creativity, awareness of the need to preserve nature and heritage, and usefully spend their free time</p>

<p>Organised forms of student support: A- additional professional support for students with special needs; B - host country language learning for foreign students; C - teachers' learning support for students; D - peer support; E- volunteer support; F - other (please describe)</p>	<p>A- additional professional support for students with special needs; B - host country language learning for foreign students, C - teacher's learning support</p>	<p>F: A, B and C.</p>	<p>F: Free to the unemployed. Also, unemployed trainees may receive a training allowance</p>	<p>F: Learners are eligible for travel and meal allowance and social welfare payments. FLearners are eligible for travel and meal allowance and social welfare payments. Free tuition, books and materials.</p>	<p>A- additional professional support for students with special needs; C - teachers' learning support for students</p>
<p>Describe if your school promotes alternatives to grade retention and how.</p>	<p>The management, teachers and tutors, together with the students and their parents (guardians), try to contribute to a successful school leaving by considering the preferences of the students when choosing an employer, by motivating and involving them in various activities at the school - clubs, promotional events. Class teachers keep a year-round follow-up of the student and address any learning difficulties (timely redirection to a more suitable programme).</p>	<p>The high schools do not have competences in that. The only thing teachers can do is to prepare extra activities, such as activities for reinforcement, to repeat the exams and to prepare activities that motivate the students.</p>			<p>A- additional professional support for students with special needs</p>
<p>Other</p>	<p>Use of an individualised learning programme for students who need adaptation for various reasons (intense athletes, health problems, maternity, etc.)</p> <p>Students keep a career folder, supported by teachers, detailing professional and general competences and progress in personal development</p>				

## Multifunctional agriculture - what's already being done

Country	The length of educational program in years	Multifunctional agriculture - what's already being done EQF3
Slovenia	2	The Biotechnical and Care Assistant programme provides content within the implementation and open curriculum modules.
Spain	2	We don't have.
Ireland	2	General Horticulture and Ornamental Landscaping
Ireland	1 to 2	
Croatia	3	Different categories of multifunctional agriculture are presented in VET module: hydroponic cultivation of vegetable, use of robots and drones

## 3.2.2.EQF 4

## IMPLEMENTATIONAL LEVEL

Country	Slovenia	Spain	Ireland	Croatia
EQF level	4	4	4	4
Planning of the study programme that can be determined by the school (who designs it, who approves it, how often it is revised, ...)	Each year students, VET teachers, head of school and social partners fill out the questionnaire, connected to open curriculum. Based on the analysis, we decide on the structure of the open curriculum, considering the preferences of the students, the needs of the employers, and the possibilities of implementing the course in the school (provider, space).	The study programme has 3 hours (during the second year of the studies) that can be determined by each high school. The department in charge of the studies decides if those hours are devoted to languages, ICTs or to improve contents related to the department's field.	The national regulatory agency is responsible for planning of the study programme in consultation with the school and other stakeholders. Also, VET schools are obliged to design a learning programme which must be submitted to the regulatory government authority for approval. The schools' contribution focused more on implementation and less on planning, evaluation and review processes.	Each year professional association of teachers can suggest modification of curriculum to the school board. School board has to approve the revision before school year starts
Degree of autonomy of the teacher/trainer (how detailed is the content/forms/methods of work defined on national/regional level)	Teachers have a framework of topics written in a catalogue of skills, and have a high degree of autonomy in teaching	Quite autonomy	Teachers/trainers autonomy is less prominent (low autonomy). Teachers/trainers implicitly bring an understanding of work roles and activities into the design of learning outcomes. They participate (as consultant) in developing the national approach and in making VET more responsive to labour market needs.	High teachers' autonomy



How participants lifelong learning competencies as DigComp, GreenComp, EntreComp, LifeComp,... are being developed	In newer programmes, the objectives of the life long learning competencies are already integrated into the curriculum, and teachers are trained to integrate the competences into education process.	The lifelong competencies must be integrated into the curriculum by the teachers. Furthermore, in Spain, in vocational training the curriculum has as well "personal, social and professional competences".		The objectives of the life long learning competencies are integrated into the curriculum
To what extent school can take participants' preferences into account when choosing an employer	Within the agricultural sector the participants preferences are fully taken into account (Students choose a worksite according to their own preferences. Employers receive indicative recommendations, prepared by the school, about learning outcomes).	The preferences are taken into account, but it will depend on the supply and demand.		Students can choose employer according to their preferences. We prepare all the information about the learning outcomes etc.
Which forms of blended learning can be implemented (example: FlexModel, Blended Learning, Flipped Model, A la Carte...)		Blended learning. Dual learning. Distance learning.	Blended	Flipped Model
Have you got business Incubator (Business simulation, learning enterprises, from idea development, start-up, .... to closure)	At BC Naklo, students take a compulsory VET module on entrepreneurship and marketing, where they develop their business ideas and build a business plan. They are also involved in the JA Slovenia (The Chamber of Commerce and Industry of Slovenia) programme, where they can open their own student companies. Students take a compulsory VET module on entrepreneurship and marketing, where they develop their business ideas and build a simple business plan. They could be also involved in the JA project Slovenia (The Chamber of Commerce and Industry of Slovenia) programme, where they can open their own student companies.) We are part of the AGRINEXT project, which will create a business incubator	Yes. Each programme has a module called "Business and Entrepreneurial Initiative" where we create a business plan. In Andalucia we have several education programmes in order to develop the EntreComp of the students, such as "Innacia" and "Aula de emprendimiento".		There is no compulsory VET module on entrepreneurship and marketing but school has voluntary interest student organization that contributes to the achievement of educational and socio-economic goals of the school. This is a form of extracurricular activity for students, through which they acquire and develop work habits, responsibility towards work, creativity, awareness of the need to preserve nature and heritage, and usefully spend their free time
Organised forms of student support: A- additional professional support for students with special needs; B - host country language learning for foreign students; C - teachers' learning support for students; D - peer support; E- volunteer support; F - other (please describe)	A, B, C and D	F - other (please describe). A and C. B only is possible in Secondary School.	F. Fee waiver for learners in receipt of meanstested grant and those in receipt of social welfare payment	A and C

Describe if your school promotes alternatives to grade retention and how.	The management, teachers and tutors, together with the students and their parents (guardians), try to contribute to a successful school leaving by taking into account the preferences of the students when choosing an employer, by motivating and involving them in various activities at the school - clubs, promotional events. Class teachers keep a year-round follow-up of the student and address any learning difficulties (timely redirection to a more suitable programme).	The high schools do not have competences in that. The only thing teachers can do is to prepare extra activities, such as activities for reinforcement, to repeat the exams to prepare activities that motivate the students.		A- additional professional support for students with special needs;
Other	Use of an individualised learning programme for students who need adaptation for various reasons (intense athletes, health problems, maternity, etc.) Students keep a career folder, supported by teachers, detailing professional and general competences and progress in personal development			

### Multifunctional agriculture - what's already being done

Country	The length of educational program in years	Multifunctional agriculture - what's already being done EQF4
Slovenia	3	Different categories of multifunctional agriculture are presented in VET modules of the open curriculum: dairy and fruit processing, beekeeping, vegetables and fruit production. Students could also choose some courses in the field of forestry (how to use and operate a chainsaw), use of phytopharmaceutic agents, baking bread and sweets, beekeeping ...and in some parts of professional mandatory models
Slovenia	2	Different categories of multifunctional agriculture are presented in VET modules of the open curriculum: dairy and fruit processing, use of phytopharmaceutic agents and in some parts of professional mandatory models
Slovenia	4	Different categories of multifunctional agriculture are presented in VET modules of the open curriculum: dairy and fruit processing, beekeeping, vegetables and fruit production. Students could also choose some courses in the field of forestry (how to use and operate a chainsaw), use of phytopharmaceutic agents, baking bread and sweets, beekeeping ...and in some parts of professional mandatory models
Croatia	4	Different categories of multifunctional agriculture are presented in VET module: hydroponic cultivation of vegetable, use of robots and drones
Ireland	1 to 2	Permaculture, Tourism and Ecotourism (Tourism with Business), Sustainable Organic Horticulture, Green Certificate, Horticulture with Garden Design, Organic Farming Principles
Spain	2	We don't have.

## 3.2.3.EQF 5

## IMPLEMENTATIONAL LEVEL

Country	Slovenia	Spain	Ireland
EQF level	5	5	5
Planning of the study programme that can be determined by the school (who designs it, who approves it, how often it is revised, ...)	Planning is done in cooperation with the management and the faculty, indirectly through the practical training organiser with employers and other forms of cooperation with other social partners.	The study programme has 3 hours (during the second year of the studies) that can be determined by each high school. The department in charge of the studies decides if those hours are devoted to languages, ICTs or to improve contents related to the department's field.	The national regulatory agency is responsible for planning of the study programme in consultation with the school and other stakeholders. Also, VET schools are obliged to design a learning programme which must be submitted to the regulatory government authority for approval. The schools' contribution focused more on implementation and less on planning, evaluation and review processes.
Degree of autonomy of the teacher/trainer (how detailedly is the content/forms/methods of work defined on national/regional level)	The lecturer has the framework topics written down in a catalogue of skills, and has a high degree of autonomy in teaching	Quite autonomy	Teachers/trainers autonomy is less prominent (low autonomy). Teachers/trainers implicitly bring an understanding of work roles and activities into the design of learning outcomes. They participate (as consultant) in developing the national approach and in making VET more responsive to labour market needs.
How participants lifelong learning competencies as DigComp, GreenComp, EntreComp, LifeComp,... are being developed	Competence building DigComp, GreenComp, EntreComp, LifeComp,... is part of the compulsory and optional modules.	The lifelong competencies must be integrated into the curriculum by the teachers. Furthermore, in Spain, in vocational training the curriculum have as well "personal, social and professional competences".	

<p>To what extent school can take participants' preferences into account when choosing an employer</p>	<p>Within the agricultural sector the participants preferences are fully taken into account (Students choose a worksite according to their own preferences. Employers receive indicative recommendations, prepared by the school, about learning outcomes).</p>	<p>The preferences are taken into account, but it will depend on the supply and demand.</p>	
<p>Which forms of blended learning can be implemented (example: FlexModel, Blended Learning, Flipped Model, A la Carte... )</p>	<p>Blended Learning</p>	<p>Blended learning. Dual learning. Distance learning.</p>	<p>Blended</p>
<p>Have you got business Incubator (Business simulation, learning enterprises, from idea development, start-up, .... to closure )</p>	<p>We are involved in the Green Lab project, where students improve their knowledge and skills according to their preferences, with a focus on green competences. We are also involved in the AGRINEXT project, where a business incubator will be created.</p>	<p>Yes. Each programme has a module called "Business and Entrepreneurial Initiative" where we create a business plan. In Andalucía we have several education programmes in order to develop the EntreComp of the students, such as "Innacia" and "Aula de emprendimiento".</p>	
<p>Organised forms of student support: A- additional professional support for students with special needs; B - host country language learning for foreign students; C - teachers' learning support for students; D - peer support; E- volunteer support; F - other (please describe)</p>	<p>A - additional profesis support for students with special needs</p>	<p>F - other (please describe). A and C. B only is possible in Secondary School.</p>	<p>F - other (please describe). Learners receive a salary during the duration of the programme. Course provider has a well-developed support structure to help participants with any literacy and numeracy issues.</p>
<p>Describe if your school promotes alternatives to grade retention and how.</p>	<p>BC Naklo encourages and motivates students by offering workshops on thesis production, by getting involved in the Green Lab, by providing information on scholarships...</p>	<p>The high schools do not have competences in that. The only thing teachers can do is to prepare extra activities, such as activities for reinforcement, to repeat the exams and to prepare activities that motivate the students</p>	
<p>Other</p>			

## Multifunctional agriculture - what's already being done

Country	The length of educational program in years	Multifunctional agriculture - what's already being done EQF5
Slovenia	2	Specific topics and multifunctional agriculture are covered in compulsory and optional modules, as well as in practical training.
Spain	2	We don't have.
Ireland	4	Arboriculture

## 3.2.4.EQF 6

## IMPLEMENTATION LEVEL

Country	Slovenia	Ireland	Croatia
EQF level	6	6	6
Planning of the study programme that can be determined by the school (who designs it, who approves it, how often it is revised, ...)	Planning takes place with the management and representatives of the individual Chairs. Research activities are carried out in collaboration with other faculties, research institutes and interested industry.	The national regulatory agency is responsible for planning of the study programme in consultation with the school and other stakeholders. Also, VET schools are obliged to design a learning programme which must be submitted to the regulatory government authority for approval. The schools' contribution focused more on implementation and less on planning, evaluation and review processes.	Each year lecturers can suggest modification of curriculum to the departmental committee for revision of study programmes. Based on the analysis, departmental council and institutional council of Karlovac University of Applied Sciences decide on the structure of the curriculum, taking into account the preferences of the students, teachers, employers.

<p>Degree of autonomy of the teacher/trainer (how detailly is the content/forms/methods of work defined on national/regional level)</p>	<p>The professor has a high degree of autonomy within the framework of the study programmes outlined</p>	<p>Teachers/trainers autonomy is less prominent (low autonomy). Teachers/trainers implicitly bring an understanding of work roles and activities into the design of learning outcomes. They participate (as consultant) in developing the national approach and in making VET more responsive to labour market needs.</p>	<p>High teachers' autonomy</p>
<p>How participants lifelong learning competencies as DigComp, GreenComp, EntreComp, LifeComp,... are beeing developed</p>	<p>The competences are integrated into the individual compulsory modules (Green and EntreComp), while DigoComp and LifeComp are part of the study process left to more individual study.</p>		<p>The objectives of the life long learning competencies are integrated into the curriculum, and teachers are regularly educated and trained to integrate the competences into education process.</p>
<p>To what extent school can take participants' preferences into account when choosing an employer</p>	<p>They can choose, in cooperation with the practical training provider, the specific areas of work offered, which are mainly linked to the research units, or they can do their practical training in a commercial organisation, where they must submit an application.</p>		<p>Students can choose employer according to their preferences. We prepare all the information about the learning outcomes etc.</p>
<p>Which forms of blended learning can be implemented (example: FlexModel, Blended Learning, Flipped Model, A la Carte...)</p>	<p>Blended Learning</p>	<p>Blended</p>	<p>Blended learning, FlexModel, Flipped Model</p>



<p>Have you got business Incubator (Business simulation, learning enterprises, from idea development, start-up, .... to closure)</p>	<p>EIT Food Hub - Slovenia is part of the European Institute of Innovation and Technology.</p>		<p>In a modernly equipped brewery at Karlovac University of Applied Sciences students through practical classes develop the skills of producing different styles of beer, acquire the knowledge necessary for independent control of the beer production process and train for work in the brewing industry. In addition, in the newly equipped chemical laboratory, they acquire the basic knowledge necessary for quality control of raw materials and the final product. Students have a compulsory subject on economics and marketing. The main goal of this subject is to learn basics about business environment, business plan, marketing and to develop their own business ideas. Students can take elective subjects in the field of economics and business which include business simulations. Also, students can take VET module in the field of public procurement and tourism.</p>
<p>Organised forms of student support: A- additional professional support for students with special needs; B - host country language learning for foreign students; C - teachers' learning support for students; D - peer support; E- volunteer support; F - other (please describe)</p>		<p>F - other (please describe). Learners receive a salary during the duration of the programme. Course provider has a well-developed support structure to help participants with any literacy and numeracy issues.</p>	<p>C - teachers' learning support for students</p>
<p>Describe if your school promotes alternatives to grade retention and how.</p>			<p>F - other (we have office for student support and career counseling. The main purpose of this office is to help students with the learning problems, to organize various types of training for developing competences needed on the labour market, to connect students with employers, to advice students (psychological help)</p>
<p>Other</p>			<p>Mobility options for study abroad and traineeships</p>

## Multifunctional agriculture - what's already being done

Country	The length of educational program in years	Multifunctional agriculture - what's already being done EQF6
Slovenia	3	Some higher professional education programmes cover themes in multifunctional agriculture, e.g. Agrarian Economics and Rural Development
Slovenia	3	Some of the content of multifunctional agriculture is included to a lesser extent in the optional modules
Croatia	3	Various categories of multifunctional agriculture are presented in our study programmes of beer production and dairy. Also, main goals of our projects which are connected to agriculture are rural development, development of rural tourism, environment protection, sustainability, usage of nusproducts for various purposes etc.
Ireland	2	

## 4. Conclusion

AgriNext project's goal is to create a learning environment that responds to the skill demand on the job market in the field of Multifunctional Agriculture (MA). One of the aims is to investigate an existing educational process to find patterns of VET in partner countries on different EQF levels and to identify opportunities for flexibility of education and to map gaps as basis for further improvements.

Currently all partner countries are in the process either of modernising or adopting new strategical documents regarding VET education.

In partner countries there is no formal VET educational program or occupational standard directly addressing multifunctional agriculture, however there are some initiatives and possibilities to choose modules from different biotechnical programmes, that gives learners additional competencies to succeed in today's job market.

All partner countries have variety of I-VET and C-VET programmes in the range of EQF 3 to 6, offering vertical and horizontal progressions to higher education levels or upskilling and re-skilling possibilities. Furthermore, all partner countries have options of VET programmes for adult learners. On the other hand, recognition of prior learning is in place more for adults as recognition of vocational qualifications, than for students. Furthermore, Ireland started to implement project of micro-credentials at universities, which will credit unit modules.

Social partners are in all partner countries included in design of curricula and organization of WBL in the education implementation to highlight the job market needs of competencies.

Ireland, Slovenia and Croatia have started with apprenticeship programmes and Spain is in the process of preparing implementation of dual system, since the law was passed in 2022.

VET curricula are competence based in all partner countries. The data indicates different assessment approaches, in Croatia and Ireland partners are additionally mentioning that self-assessment methods are in place.

VET teachers in partner countries have to hold teachers' certificate. There are some differences related to the needed work experience. According to Lifelong learning strategy, teachers in all countries have some national centre or hub providing C-VET (for example Ireland is outlining SharePoint StaffConnect which provide teachers with resources, forms, shared practices, policies, ...) Projects - national or international provide many teachers trainings as well. Furthermore, projects to be approved have to include new directives, priorities and follow strategies meaning they can develop and test innovative teaching approaches.

All partner countries have educational programmes on EQF levels 3 to 6; however, Croatia is not implementing EQF level 5 and Spain has not officially determined which National qualification levels are related to specific EQF levels.

First data analysis shows that the differences among partner countries on comparable EQF levels exist on national level from the detailed national curriculum, options for learners to select different educational modules, proportion of WBL to the share of educational programme determined by school in cooperation with social partners. In further phase partners will look into differences and decide what is needed for flexibility that responds to the job market needs. However, at the implementation levels similarities exist between partner countries e.g., learners' preferences exist, there are initiatives as alternatives to grade retention, key competencies are being included into curriculum, some blended learning is in place and in a yearly revision of implemented curriculum is done.

Model for flexibilization in VET for Multifunctional Agriculture in partner countries will be developed in the next phase of the project.

## 5. Analysis in local languages

The following segment has answers to all VET related questions on either national or implementational level in the national languages. We used these answers for our analysis of the situation and will use it later in the future to suggest changes with the national agency in each 4 of the consortium countries.

### 5.1. Slovenia

#### 5.1.1. Pregled poklicnega izobraževanja in usposabljanja

S poklicnim izobraževanjem in usposabljanjem se na sistemski ravni ukvarja Ministrstvo za vzgojo in izobraževanje, Center RS za poklicno izobraževanje (CPI) pa je pristojen Inštitut Republike Slovenije za usklajevanje poklicnega in strokovnega izobraževanja. CPI spremlja in usmerja razvoj poklicnega izobraževanja in usposabljanja, zagotavlja usposabljanje učiteljev na delovnem mestu in pripravlja kurikule.

Programi poklicnega izobraževanja in usposabljanja temeljijo na kompetencah in so sestavljeni modularno. Dokončanje določenega števila poklicnih modulov vodi do poklicne kvalifikacije.

Formalno poklicno izobraževanje in usposabljanje v Sloveniji se začne na višji sekundarni ravni (vstopna starost 16 let) s pridobljeno stopnjo EOK 2, razen za programe kratkega poklicnega izobraževanja (EOK3), za katere se zahteva stopnja EOK1 (dokončan 7. razred osnovnega izobraževanja, ki v Sloveniji obsega 9 razredov). Pet programov poklicnega izobraževanja in usposabljanja je na voljo na višji sekundarni ravni, ki se razlikuje glede na dolžino poklicnega izobraževanja in usposabljanja, izvajanje in raven EOK.

– srednje strokovno izobraževanje (SSI) (ISCED 354): štiriletni programi, ki vodijo do poklicnih kvalifikacij na ravni EOK 4. Ti programi zajemajo 40 % splošnih predmetov in vsaj osem tednov učenja na delovnem mestu v podjetju;

– srednje poklicno izobraževanje (SPI) (ISCED 353): triletni programi, usmerjeni na trg dela; obstajata dve poti:

- šolska pot: približno 20 % (vsaj 24 tednov) programa poteka pri delodajalcu, ostalo pa v šoli (izvajanje splošnih predmetov in strokovnih modulov)

- pot vajištva: najmanj 50 % programa se izvaja pri delodajalcu, najmanj 40 % splošnih predmetov in strokovnih modulov pa se izvaja v šoli. Med potekom izobraževanja je možno spremeniti način/pot izobraževanja. Po zaključnih izpitih dijaki lahko vstopijo na trg dela ali se vpišejo v dvoletne programe poklicno tehničnega izobraževanja (PTI) na ISCED 354, ki vodijo v poklicno maturo;

– nižje poklicno izobraževanje (NPI) (ISCED 353): dvoletni programi, ki učence usposabljujejo za manj zahtevne poklice (na ravni pomočnikov) ali nadaljnje izobraževanje v poklicnih programih.

Programi terciarnega poklicnega izobraževanja in usposabljanja se osredotočajo na poklicne module in se izvajajo na ravneh EOK 5 in 6. To so:

- visokošolski poklicni programi (ISCED 554, EOK 5);
- strokovni dodiplomski programi (ISCED 655, EOK 6);
- univerzitetni dodiplomski programi (ISCED 645, EOK 6);

Odraslim so na voljo programi poklicnega izobraževanja in usposabljanja (I-VET) tako kot tudi nadaljnje izobraževanje in usposabljanje (C-VET). Priznavanje neformalnega in priložnostnega učenja je mogoče v okviru nacionalnega sistema poklicnih kvalifikacij. Nacionalne poklicne kvalifikacije (NPK) državljanom omogočajo preverjanje poklicnih kompetenc, pridobljenih z neformalnim in priložnostnim učenjem, vendar s to možnostjo ne morejo pridobiti določene ravni izobrazbe.

Odrasli se lahko vključijo v neformalne tečaje na trgu izobraževalnih storitev, ki jih zagotavljajo zasebni izvajalci ali javne šole in tako pridobijo številne poklicne ali splošne kompetence.

Vir: CEDEFOP

### 5.1.2. Razmerje med I-VET in C-VET

Odnos med I-VET in C-VET v Sloveniji podpirajo politike in različni programi. Zakon o poklicnem izobraževanju in usposabljanju poudarja potrebo po C-VET in zahteva, da delodajalci svojim zaposlenim zagotovijo priložnosti za poklicni razvoj.

Nacionalna strategija vseživljenjskega učenja (2011) dodatno krepi odnos med I-VET in C-VET ter poudarja pomen dostopa do C-VET za delavce na vseh ravneh.

V praksi je odnos med I-VET in C-VET podprt z različnimi programi in pobudami. Na primer, CPI ponuja vrsto programov in storitev, namenjenih podpori stalnega poklicnega izobraževanja in usposabljanja, vključno s programi certificiranja NPK, storitvami usmerjanja in svetovanja ter podporo za razvoj programov usposabljanja. Kratke tečaje C-VET organizirajo tudi šolski medpodjetniški izobraževalni centri, ki so organizirani za spremljanje razvoja in interesov na trgu. Študenti in odrasli se lahko udeležijo teh, običajno plačljivih, tečajev. Študenti/dijaki lahko pridobijo kreditne točke tudi z udeležbo na tečajih, kotizacije pa jim ni potrebno plačati.

I-VET sestavljajo akreditirani, formalni programi na srednji in terciarni ravni.

Mojstrski izpiti in izpiti vodstvenih delavcev v trgovinah se tradicionalno razumejo kot C-VET, saj morajo kandidati (z vsaj zaključenim triletnim programom poklicnega izobraževanja) imeti posebne predhodne delovne izkušnje. To je način, da lahko na podlagi izkušenj, zaposleni napreduje na zahtevnejše delovno mesto, ki pa ne zahteva naslednje stopnje izobrazbe.

### 5.1.3. Spreminjanje kurikula

Izobraževalni program je revidiran na podlagi poklicnih standardov. Poklicni standardi se vsakih pet let revidirajo v sodelovanju s strokovnjaki, socialnimi partnerji in šolami. Poleg uvedbe novega poklicnega standarda lahko posamezniki ali pravni subjekti zaprosijo za revizijo poklicnega standarda. Predlog mora vključevati analizo stanja in mednarodne primerljivosti. Ko so poklicni standardi pregledani ali vzpostavljeni, se začne razvijati ali posodablja kurikul izobraževalnega programa. Eden ali več poklicnih standardov je osnova za izobraževalni program. CPI usklajuje proces prenove ali vzpostavitve izobraževalnega programa, ki vključuje strokovnjake s področja izobraževanja, ki pripravljajo kurikul. Sam postopek traja približno eno leto, predlog za nov ali prenovljen program pa morata odobriti strokovni svet in akreditacijska komisija, ki jo imenuje Ministrstvo za vzgojo in izobraževanje. Celoten postopek, vključno z revizijo poklicnih standardov, traja vsaj dve leti. Ko so programi odobreni, so objavljeni v Uradnem listu, šole pa potem razpišejo nov ali prenovljen izobraževalni program (razpis za vpis v šolske programe). Poklicno izobraževanje in usposabljanje v Sloveniji je trenutno v postopku modernizacije, ki naj bi bil zaključen do leta 2026.

### 5.1.4. Odnos med izobraževalci in socialnimi partnerji

Socialni partnerji so vključeni v oblikovanje kurikuluma na več ravneh:

#### A. Pri razvoju poklicnih standardov.

Pri oblikovanju poklicnih standardov je ključno sodelovanje s predstavniki socialnih partnerjev, ki v tem procesu predlagajo kompetence, tj. znanje, spretnosti in odnos, ki so potrebni za opravljanje določenega poklica.

#### B. Pri oblikovanju kurikula.

Kurikul določa temeljne kompetence in učne cilje, tako informativne kot formativne, ki jih dijaki/študentje pridobijo v času izobraževanja. Kataloge znanj in spretnosti pripravijo strokovnjaki s področja določenega poklicnega in strokovnega izobraževanja, pri katerih sodelujejo socialni partnerji, kot so razne zbornice (kmetijska, gospodarska...). Ta proces usklajuje in upravlja CPI. Ko je kurikul sprejet, ga odobri strokovni svet in komisija za akreditacijo, ki ju imenuje Ministrstvo za vzgojo in izobraževanje.

#### C. Oblikovanje odprtega kurikula za izobraževalne programe

Odprti kurikul izobraževalnega programa določa izobraževalna ustanova - šola in socialni partnerji v lokalnem okolju. To omogoča prilagodljivost ali prožnost izobraževalnega sistema za odzivanje na potrebe lokalnega trga dela. Odprti kurikul omogoča tudi pridobivanje kompetenc, ki temeljijo na obveznem delu učnega načrta. Na primer, na področju večnamenskega kmetijstva lahko odprti kurikul dijakom omogoča pridobiti potrebna znanja in spretnosti ter kompetence za dopolnilne dejavnosti na kmetijah, kot so turizem, predelava številnih proizvodov, ne le njegova proizvodnja, ampak tudi trženje proizvodov.

Delodajalci kot socialni partnerji so neposredno vključeni v izvajanje izobraževalnega programa z omogočanjem praktičnega usposabljanja z delom in vajeništvom, saj tako rekoč usposablajo učence za opravljanje poklicnih nalog.

Predstavniki socialnih partnerjev so z zakonom vključeni tudi v šolski svet, ki je najvišji organ šole.

### 5.1.5. Sistem vajeništva

Sistem vajeništva v Sloveniji ureja Zakon o vajeništvu. Zakon opredeljuje pravice in obveznosti vajencev, delodajalcev in poklicnih šol ter določa zahteve za program vajeništva.

Traja tri leta. V času vajeništva dijaki obiskujejo šolo - 40 %, kjer se izobražujejo pri splošnih predmetih in strokovnih modulih (teoretično in praktično usposabljanje), vsaj 50 % izobraževanja pa poteka na delovnem mestu. Delodajalec zagotavlja usposabljanje in nadzor na delovnem mestu. Začnejo s preprostimi nalogami in postopoma napredujejo na zahtevnejša dela in večjo odgovornost pri čemer se razvijajo njihove spretnosti in znanje.

Na začetku vajeništva se pripravi izvedbeni načrt za posamezne učence v sodelovanju med šolo in podjetjem, pod nadzorom pristojne zbornice. Podpišejo ga dijaki (ali zakoniti zastopniki) ter predstavniki podjetja in šole. Načrt vključuje cilje in sklop kompetenc, razporeditev in urnik izobraževanja na šoli in v podjetju, načine komuniciranja in sodelovanja med podjetjem in šolo ter informacije o vmesnem in zaključnem izpitu vajenca.

Med vajeništvom (v drugem letu) vajenec opravi vmesni preizkus praktične usposobljenosti pred strokovnim odborom pristojne zbornice. Vsebina in metoda vmesnega preskusa sta določeni v izpitnem katalogu.

Vajenec konča izobraževanje, ko opravi zaključni izpit. Zaključni izpit je iz slovenščine (pisno in ustno) in praktičnega dela. Zaključni izpit izvaja izpitna komisija z optimalnimi 4 člani (predsednik, mentor, učitelj in predstavnik pristojne zbornice Slovenije). Vajenec lahko zamenja delodajalca, če je treba pridobiti dodatne spretnosti.



### 5.1.6. I-VET in C-VET učiteljev in vodij usposabljanj

V Sloveniji je zahtevana stopnja izobrazbe učiteljev in vodij usposabljanja v strokovno, poklicnem izobraževanju določena z zakonom. Zakon zahteva, da imajo učitelji v poklicnem izobraževanju vsaj univerzitetno diplomu/magisterij z ustreznega področja ter so zaključili pedagoško in andragoško usposabljanje, ki vključuje študij metodologije poučevanja in pedagoške psihologije.

Poleg tega morajo učitelji v poklicnem izobraževanju opraviti tudi enoletno uvajalno obdobje, v katerem prejmejo mentorstvo in podporo izkušenih učiteljev. V tem obdobju novi učitelji pridobijo praktične izkušnje in razvijejo pedagoške kompetence.

Stalno izobraževanje učiteljev v poklicnem izobraževanju in usposabljanju je tudi pogoj za napredovanje v višji naziv. Učitelji imajo v obdobju treh let 15 dni za C-VET, lahko se udeležijo tečajev strokovnega razvoja in delavnic, ki jih organizirajo izobraževalne ustanove ali zasebni sektor. Po drugi strani pa se lahko udeležijo številnih projektov, ki ponujajo C-VET za učitelje, ki tako sledijo razvoju in priporočilom stroke ter jim pomagajo izboljšati svoje spretnosti.

### 5.1.7. Ocenjevanje kompetenc

Ocenjevanje kompetenc v poklicnem izobraževanju in usposabljanju se izvaja z uporabo različnih metod, vključno s pisnimi testi, praktičnim ocenjevanjem, projekti in ocenami učenja na delovnem mestu. Postopek ocenjevanja običajno izvajajo učitelji poklicnega izobraževanja in usposabljanja, ki dobro razumejo učne rezultate in kompetence, ki naj bi jih pridobili učenci. Ocenjevanje na delu se opravi skupaj z izvajalcem usposabljanja (mentorjem).

Postopek ocenjevanja spremljajo tudi zunanji ocenjevalci, ki so odgovorni za zagotavljanje zanesljivosti uporabljenih metod ocenjevanja, zlasti pri zaključnih izpitih srednješolskega izobraževanja. To pomaga zagotoviti, da je postopek ocenjevanja pravičen, pregleden in objektivni ter da so rezultati kazalniki pridobljenih kompetenc študentov.

## 5.2. Croatia

### 5.2.1. Pregled strokovnog obrazovanja i osposobljavanja

Strukovno obrazovanje i osposobljavanje u Hrvatskoj ima dvije glavne uloge. Uz pripremu za ulazak na tržište rada, omogućuje napredovanje prema visokom obrazovanju; to je primarno kroz četverogodišnje VET programe, gdje učenici troše polovicu svog vremena na stjecanje općih kompetencija. Odgovornost za razvoj strokovnog obrazovanja i osposobljavanja pripada Ministarstvu znanosti i obrazovanja uz potporu Agencije za strokovno obrazovanje i osposobljavanje odraslih (ASOO). Strukovno obrazovanje i osposobljavanje ostvaruje se na višem sekundarnom i postsekundarnom nivou; ulazna točka je završetak obveznog obrazovanja u dobi od 14 ili 15 godina. Na višoj sekundarnoj razini, oko 70% učenika sudjeluje u početnom strokovnom obrazovanju i osposobljavanju (IVET). Otprilike dvije trećine učenika strokovnog obrazovanja i osposobljavanja pohađaju četverogodišnje školske programe, s manje od jedne trećine u trogodišnje programe. Samo jedan viši srednjoškolski program traje pet godina i vodi do opće kvalifikacije medicinske sestre. Ovaj program ima jedinstvenu strukturu od dvije godine općeg obrazovanja nakon čega slijede tri godine strokovnog obrazovanja. Četverogodišnji, uglavnom školski programi strokovnog obrazovanja i osposobljavanja, s udjelom WBL-a od oko 10%, dovode do kvalifikacija na razini 4.2 HKO-a/ razini 4 EQF-a i omogućuju napredovanje u tercijarno obrazovanje; ovo slijedi nakon završetka eksterne mature, koju provodi Nacionalni centar za eksternu Vrednovanje obrazovanja (NCVVO). U 2019. oko 80% maturanata četverogodišnjih i petogodišnjih programa polagalo je maturu, a 45% upisalo visoko obrazovanje odmah po završetku srednjeg obrazovanja. Trogodišnji programi strokovnog obrazovanja i osposobljavanja daju pristup tržištu rada i vode do kvalifikacija na razini HKO-a 4.1/ EQF-u razini 4; Udio WBL-a kreće se od 5%



i više u školskim programima do 60% u naukovanju (programi za obrtništvo, nacionalno poznati kao jedinstveni model obrazovanja, JMO). Po završetku trogodišnjeg JMO programa maturanti polažu ispit. Samo nekoliko učenika sudjeluje u dvogodišnjim programima strukovnog obrazovanja i osposobljavanja koji vode do kvalifikacija bez završetka višeg srednjeg obrazovanja. Diplomanti dvogodišnjih i trogodišnjih programa mogu nastaviti svoje obrazovanje kao redovni učenici kako bi stekli kvalifikaciju jednu višu razinu, prema odluci njihove škole. Stručni razvojni programi strukovnog obrazovanja i osposobljavanja (EQF 5) predviđeni su, ali još nisu uvedeni na razini nakon srednje škole. Stručno obrazovanje i osposobljavanje nudi se u različitim oblicima na tercijarnoj razini. Kratki ciklusi stručnih preddiplomskih programa traju dvije do dvije i pol godine (120-150 ECTS bodova) i stječu kvalifikacije na razini 5 HKO-a/EKO-a. Trogodišnji do četverogodišnji stručni preddiplomski programi vode do diplome stručnog prvostupnika na razini HKO/EKO 6. Stručni prvostupnici mogu nastaviti studij na sveučilišnim programima uz uspješno položene dopunske ispite i druge uvjete koje utvrđuju pojedina visoka učilišta. Diplomski stručni studiji traju jednu do dvije godine i vode do diplome stručnog majstora na razini 7 HKO-a/EKO-a. Obrazovanje i osposobljavanje odraslih u Hrvatskoj vodi do obrazovnih postignuća na razinama 1 do 5 EKO-a za učenike starije od 15 godina. Sudjelovanje u strukovnom obrazovanju i osposobljavanju u višem sekundarnom obrazovanju jedna je od najviših u EU (69,6% u usporedbi s prosjekom EU od 47,8% u 2017.). Hrvatska ima najnižu stopu ranog napuštanja školovanja u EU (3,3% u 2018., u usporedbi s prosjekom EU od 10,6%). Trenutačni prioriteti razvoja VET-a usredotočiti se na povećanje relevantnosti, kvalitete, atraktivnosti i internacionalizacije na tržištu rada.

(Izvor: [https://www.cedefop.europa.eu/files/8136\\_en.pdf](https://www.cedefop.europa.eu/files/8136_en.pdf))

### 5.2.2. Odnos između I-SOO-a i C-SOO-a

Većina programa povezana je sa strukovnim obrazovanjem i osposobljavanjem (SOO-em), u rasponu od kratke obuke i stručnog usavršavanja do programa koji vode do kvalifikacija ekvivalentnih onima u redovitom SOO-u. Potrebno je odobrenje Ministarstva obrazovanja za programe koji vode do formalnih svjedodžbi, uz prethodno pozitivno mišljenje ASOO-a. Učenje odraslih obično financiraju učenici.

### 5.2.3. Promjena kurikuluma

Reforma kurikuluma za strukovno obrazovanje i osposobljavanje usmjerena je na sveobuhvatno osuvremenjivanje u skladu s potrebama tržišta rada s naglaskom na ishode učenja, učenje temeljeno na radu, suvremeno poučavanje i prateću podršku pružateljima strukovnog obrazovanja. Promjene sustava strukovnog obrazovanja i osposobljavanja dugo se planiraju, a njihovo uvođenje je predviđeno 2022/2023 godine. Sustav mijenja svoju orijentaciju sa sadržaja na ishode učenja, odgovaranje na trenutnu potražnju i pogled u budućnost. Donešene su metodologije za povezivanje strukovnih kurikuluma s potrebama tržišta rada. Već više od desetljeća Hrvatska ulaže znatne napore u modernizaciju SOO-a. Osnivanje ASOO-a 2005. godine predstavlja ključni poticaj kojim su značajniji financijski i ljudski resursi usmjereni ka SOO-u.

Glavni strateški smjer bio je:

- (a) povezivanje obrazovanja i tržišta rada;
- (b) promjena orijentacije sustava sa sadržaja na rezultate / ishode učenja.

Pristup

Prema Zakonu o strukovnom obrazovanju, provedba se oslanja na kurikulume koji određuju nastavni proces koji će dovesti do stjecanja ishoda učenja i kvalifikacija. Novi proces razvoja

kurikuluma predviđa usklađenost svih kurikuluma s dvije ulazne informacije; jednom iz područja obrazovanja i drugom iz područja rada i zapošljavanja.

Svaki kurikulum treba biti usklađen sa:

- (a) Nacionalnim kurikulumom za strukovno obrazovanje i sektorskim kurikulumom;
- (b) standardom zanimanja i standardom kvalifikacije.

Zakon o strukovnom obrazovanju uspostavlja hijerarhiju kurikuluma u hrvatskom sustavu.

Provedba se temelji na:

- (a) Nacionalnom kurikulumu za strukovno obrazovanje;
- (b) sektorskim kurikulumima;
- (c) strukovnim kurikulumima;
- (d) kurikulumima ustanova za strukovno obrazovanje

Ministarstvo znanosti i obrazovanja donijelo je prvi Nacionalni kurikulum za strukovno obrazovanje 2018. godine. Nacionalni kurikulum postavlja vrijednosti i ciljeve. Za svaku razinu kvalifikacije se predlažu udjeli posvećeni općeobrazovnom dijelu, strukovnim modulima, izbornim modulima i učenju temeljenom na radu. Nacionalni kurikulum za strukovno obrazovanje također određuje opće uvjete za upis i završetak programa, općenitu horizontalnu i vertikalnu prohodnost te opće oblike vrednovanja ishoda učenja.

Izmjene i dopune Zakona o strukovnom obrazovanju iz 2018. godine predviđaju razvoj sektorskih kurikuluma koji će odrediti okvir za sve strukovne kurikulume za kvalifikacije na razinama 2 do 5 HKO-a/EKO-a jednog obrazovnog sektora. ASOO je zadužen za metodologiju razvoja sektorskih kurikuluma, predviđenu u posljednjem kvartalu 2019. godine, te razvoj sektorskih kurikuluma do 2022. godine (87). Sektorski kurikulumi će opisati sve strukovne kvalifikacije u određenom sektoru, trajanje obrazovanja, mogućnosti i uvjete za prohodnost unutar sektora te preporučene modele učenja temeljenog na radu. Sektorski kurikulumi će osigurati stjecanje širih kompetencija koje su važne za sva zanimanja unutar sektora. Strukovni kurikulumi omogućuju stjecanje određene strukovne kvalifikacije te ključnih i strukovnih kompetencija. Strukovni kurikulumi se sastoje od obaveznih i izbornih modula te opisuju nastavne jedinice, okruženje za učenje i vrednovanje ishoda učenja. Kurikulumima se također određuje tko može predavati u programima. Strukovne kurikulume donosi Ministarstvo znanosti i obrazovanja nakon pozitivnog mišljenja ASOO-a ili, u slučaju JMO programa, Ministarstva gospodarstva, poduzetništva i obrta. Kurikulum ustanove za strukovno obrazovanje izrađuje strukovna škola koja provodi program na temelju strukovnog kurikuluma i sektorskog kurikuluma. U njemu se određuje plan i vremenski okvir nastave, metode poučavanja i učenja te plan vrednovanja.

(Izvor: <https://www.cedefop.europa.eu/en/publications/4181>)

#### 5.2.4. Odnos između nastavnika i dionika

Agencija je odgovorna za razvoj nastavnih planova i programa za strukovno obrazovanje i osposobljavanje, kontinuirano stručno usavršavanje nastavnika strukovnog obrazovanja i osposobljavanja, natjecanja u vještinama i osiguranje kvalitete. Dionici su uključeni u razvoj kurikuluma, sektorska vijeća za vještine i Vijeće za strukovno obrazovanje koje predlaže mjere za razvoj strukovnog obrazovanja i osposobljavanja u Hrvatskoj. Kako bi promicala izvrsnost u strukovnom obrazovanju i osposobljavanju, Hrvatska uspostavlja mrežu od 25 regionalnih centara kompetencije. Oni će ponuditi najsuvremenije tehnologije, izvrsnost u podučavanju i učenje temeljeno na radu, obuku za profesionalce, strukovne nastavnike i mentore na radnom mjestu, kao i blisku suradnju s lokalnim poduzećima. Nacionalni kurikulum dopušta fleksibilnost učenja i specijalizaciju kroz do 30% izbornih modula integriranih u više sekundarne strukovne kurikulume.

### 5.2.5. Sustav naukovanja

Uz postojeći oblik naukovanja (programe JMO-a), Ministarstvo znanosti i obrazovanja pokrenulo je eksperimentalnu provedbu dualnog obrazovanja u 2018/2019. Naglasak je stavljen na poboljšanje trajnog profesionalnog razvoja nastavnika, mogućnosti napredovanja i njihov financijski status. Provedba se vrši u suradnji s gospodarskim i obrtničkim komorama, udruženjem poslodavaca i uz podršku partnerskih institucija iz Austrije, Njemačke i Švicarske. Pilotiranje podržava projekt Modernizacija programa strukovnog obrazovanja i osposobljavanja koji se realizira kroz Švicarsko-hrvatski program suradnje. U 2019/2020 godini dualno obrazovanje nudi se eksperimentalno kroz trogodišnje i četverogodišnje programe koji omogućuju stjecanje kvalifikacija na razini 4 EKO-a (trogodišnji programi za smjerove prodavač, staklar, dimnjačar i soboslikar-ličilac na razini 4.1 HKO-a i četverogodišnji programi za smjerove kozmetičar i frizer na razini 4.2 HKO-a). Ukupno je uključeno 19 strukovnih škola i 469 učenika. U prvoj godini dualnog programa učenje se odvija u strukovnoj školi. U sljedećim godinama većina učenja temeljenog na radu provodi se u poduzećima: do sada je uključeno 161 poduzeće koje zapošljava 522 osobe. Od poduzeća se traži da zapošljavaju i osiguravaju obuku i stalno stručno usavršavanje mentora, kao i da osiguraju kvalitetno učenje temeljeno na radu. Učenici potpisuju ugovor o učenju temeljenom na radu s poduzećima tijekom prve godine školovanja i imaju pravo na mjesečnu naknadu; bonus im se također može isplatiti. Naknade su određene prema kvalifikacijama i po godini obrazovanja i osposobljavanja.

Izmjenama i dopunama Zakona o strukovnom obrazovanju iz 2018. godine predviđeno je uspostavljanje regionalnih centara kompetentnosti te uvođenje nacionalnog i sektorskih kurikuluma za strukovno obrazovanje. Godine 2018. ministar obrazovanja donio je odluku o prvom Nacionalnom kurikulumu za strukovno obrazovanje. Pružatelji naukovanja su poslovni subjekti, kao npr. obrtničke radionice ili trgovačka društva, ustanove ili zadruga, koji su licencirani za praktičnu nastavu i vježbe naukovanja. Kako bi dobili licencu, pružatelji naukovanja moraju učenicima osigurati uvjete za stjecanje kompetencija u stvarnom okruženju, uključujući dodjeljivanje mentora s odgovarajućim kvalifikacijama i pedagoškim kompetencijama. Učenici upisani u JMO program imaju status redovitih učenika i naučnika. Uvjeti za upis uključuju završeno osnovno obrazovanje i dokazanu zdravstvenu sposobnost za određeno zanimanje; pronalazak i sklapanje ugovora o naukovanju s licenciranim pružateljem naukovanja mora biti osiguran u prvom polugodištu. Otprilike 10% svih učenika obavlja praksu. Redovito strukovno obrazovanje i osposobljavanje financira se iz javnih izvora i besplatno je. Svi programi strukovnog obrazovanja i osposobljavanja kombiniraju profesionalne i opće kompetencije, u različitim stupnjevima; svi uključuju učenje temeljeno na radu, s različitim trajanjem i vrstom.

(Izvor: <https://www.cedefop.europa.eu/en/publications/4181>)

### 5.2.6. I-SOO i C-SOO nastavnika i trenera

Učitelji moraju imati diplomu prvostupnika iz područja predmeta koji će predavati.

Učitelji i nastavnici u redovitom SOO-u i formalnom obrazovanju odraslih:

- nastavnici stručno-teorijskih sadržaja moraju imati stečeno visoko obrazovanje (180 ECTS bodova ili više), završenu dodatnu pedagoško-psihološku naobrazbu (60 ECTS bodova) i ispunjavati ostale uvjete u skladu sa strukovnim kurikulumom;
- nastavnici praktične nastave i vježbi moraju imati završen preddiplomski sveučilišni ili stručni studij (180 ECTS bodova ili više), pedagoške kompetencije (60 ECTS bodova) i stečenu kvalifikaciju odgovarajućeg profila;

- strukovni učitelji moraju imati razinu obrazovanja propisanu strukovnim kurikulumom (najmanje srednjoškolsko strukovno obrazovanje odgovarajućeg profila), pedagoške kompetencije i najmanje pet godina radnog staža u odgovarajućoj struci;
- suradnici u nastavi moraju imati završeno srednjoškolsko obrazovanje, pedagoške kompetencije i najmanje pet godina radnog staža, osim ako nije drugačije propisano strukovnim kurikulumom. Suradnici u nastavi asistiraju strukovnim učiteljima

Kontinuirano stručno usavršavanje (CPD) i stručno usavršavanje osoblja za strukovno obrazovanje i osposobljavanje uglavnom pruža ASOO i temelji se na godišnjem ažuriranom katalogu za stručno usavršavanje. Podaci vezani uz stručno usavršavanje nastavnika u strukovnim školama redovito se evidentiraju u informacijskom sustavu u koji se nastavnici prijavljuju za stručna usavršavanja. Od strukovnih škola također se očekuje da osiguraju interne aktivnosti za razvoj osoblja. Međutim, trenutno nema dostupnih podataka o kvaliteti ili učinkovitosti ovih aktivnosti. Osim gore opisanog osposobljavanja koje financira država, stručno osposobljavanje za strukovne nastavnike također pružaju:

- (a) strukovna udruženja i druge nevladine organizacije nuđenje obuke (uz naknadu ili besplatno);
- (b) pučka otvorena učilišta;
- (c) obrtnička komora. Ovi oblici stručnog usavršavanja ne zahtijevaju programe ili akreditaciju pružatelja usluga.

Također postoje usavršavanja kroz projekte. Primjerice, tijekom travnja 2023. Agencija za strukovno obrazovanje i obrazovanje odraslih i Advantage Austria - Austrijska kancelarija za vanjsku trgovinu, uz pomoć projektnih partnera - Hrvatske gospodarske komore, Hrvatske obrtničke komore, Njemačko-hrvatske industrijske komore i trgovine, Veleposlanstva Švicarske u Republici Hrvatskoj i Zaklade Znanje na djelu - organiziraju drugi ciklus prakse za nastavnike strukovnih škola. Glavni cilj cijele inicijative je izgradnja bolje suradnje i suradnje poduzetništva i strukovnog obrazovanja. Kroz praktičan rad i komunikaciju s mentorima, ali i kroz suradnju s upravom tvrtke i kadrovskom službom koja će im biti na raspolaganju, nastavnici će steći uvid u stvarne kompetencije koje se traže od njihovih učenika kao budućih zaposlenika. Sudjelovanjem u praksi nastavnici dobivaju autentičan uvid u svakodnevni rad tvrtke, kao i stvarnu sliku ekonomskog konteksta i operativnih procesa u tvrtki, a stječu i osobna iskustva u poslovnom svijetu koja će moći prenijeti svojim učenicima. Praksa traje od tri do pet radnih dana, ovisno o složenosti posla i organizaciji poduzeća.

(Izvor: <https://www.cedefop.europa.eu/en/publications/4181>; [www.asoo.hr](http://www.asoo.hr))

### 5.2.7. Procjena kompetencija

Kako bi završili IVET program i dobili formalnu kvalifikaciju, svi učenici moraju izraditi i predstaviti završni praktični zadatak. Ocjenjivanje organiziraju i provode strukovne škole. Njegovim polaganjem učenik stječe srednju stručnu spremu i dobiva potvrdu o završenoj strukovnoj školi. Samovrednovanje u strukovnim školama dio je sustava osiguranja kvalitete. Uvedene su mjere potpore za unapređenje samoprocjene, uključujući posjete školama, nadogradnje online alata e-Kvaliteta i povratna izvješća s preporukama. Vaš prijedlog mogućnosti fleksibilizacije u vašoj zemlji, opišite koristi koje bi fleksibilizacija mogla donijeti. Zemlja ima prosječan učinak u aktivaciji vještina (rang 18.), što ukazuje na to koliko je gladak prijelaz s obrazovanja na posao. Unatoč prvom poretku u kategoriji 'rano napuštanje obuke', pokazatelji kao što su 'zaposleni nedavno diplomirani studenti' i 'stopa aktivnosti (25-54)' svrstavaju Hrvatsku na 23. mjesto.

### 5.3. Spain

#### 5.3.1. Panorama de la EFP

Resumen de la educación y formación profesional formal (EFP) en España:

1- La FP inicial es responsabilidad de las administraciones educativas.

La FP inicial ofrece títulos de FP básica, títulos de grado medio y de grado superior como parte del sistema educativo.

Los programas tienen una duración de dos años (2000 horas) e incluyen aprendizaje en centros de trabajo y en un instituto de FP:

- Los programas básicos están disponibles en el último año de la educación obligatoria, para estudiantes de 15, 16 o incluso 17 años. Permiten a los estudiantes en riesgo de abandonar la educación sin cualificación o título, desarrollar sus habilidades básicas, prepararse para una ocupación (como la agrojardinería) y obtener una cualificación básica de EFP. Los estudiantes pueden pasar a la FP secundaria superior y, también, obtener la calificación de secundaria obligatoria que le facilita seguir formándose.

- Los programas intermedios pueden comenzar a los 16 años, después de la educación obligatoria. Estos conducen a cualificaciones técnicas (como cocina y gastronomía). Es posible acceder a una FP superior en el mismo campo de estudio.

- En el tercer nivel, los programas superiores conducen a una cualificación de técnico superior (como coordinador de logística). Los graduados pueden acceder a educación universitaria a través de un procedimiento de admisión.

Los graduados de programas de FP intermedios y superiores pueden inscribirse en cursos cortos de especialización en el mismo campo de estudios para adquirir habilidades específicas de la ocupación y habilidades digitales, en línea con las necesidades emergentes de la economía.

En formación de FP (contratos de aprendizaje u otros programas de alternancia), la duración del programa puede ser de hasta tres años, con un mínimo del 33% de la formación en la empresa.

Se ofrecen programas de formación específicos en artes y diseño y en deportes (4% de la población de FP en 2019/20).

Los adultos pueden inscribirse en los mismos programas de EFP que los jóvenes.

2- La formación continua es responsabilidad de las autoridades educativas y de empleo que comparten órganos consultivos, pero tienen sus propios órganos de dirección y objetivos. Las autoridades de empleo son responsables de los programas de EFP que abordan las necesidades de cualificación de las empresas y los trabajadores (empleados y desempleados), los planes de formación para el empleo y la regulación de los contratos de aprendizaje.

Los adultos pueden inscribirse en los mismos programas de EFP que los jóvenes. Los mayores de 16 años también pueden asistir a programas de FP que conducen a un certificado profesional correspondiente a un perfil profesional. Los programas son impartidos por entidades autorizadas de EFP y pueden incluir un contrato de aprendizaje. La duración varía según los resultados de aprendizaje en cada nivel (de 180 a 1 110 horas). El acceso al siguiente nivel es posible en campos profesionales limitados. Todos los niveles comprenden un módulo obligatorio de formación en centros de trabajo, de duración variable.

El sistema español de EFP es modular, permitiendo el reconocimiento y la transferencia de unidades competencia adquiridas en un programa de EFP a otro, acortando su duración. Las



unidades de competencia también pueden adquirirse mediante la validación del aprendizaje previo.

La capacitación es ofrecida por instituciones públicas y privadas acreditadas.

La FP no formal incluye una amplia gama de cursos, diseñados para diferentes necesidades y perfiles de habilidades, que permiten mejorar o volver a capacitar. Puede financiarse con fondos públicos (principalmente de las cotizaciones de las empresas y de los trabajadores a la seguridad social). Los programas financiados con fondos públicos (especialidades) no vinculados al registro nacional (CNCP) se incluyen en un catálogo de especialidades de formación del Servicio Público de Empleo del Estado y los proveedores deben registrarse como tales.

#### *Características distintivas de la EFP*

El sistema nacional de cualificaciones y formación profesional es el paraguas de los programas de EFP dentro y fuera del sistema educativo, que conduce a las cualificaciones expedidas por las autoridades educativas. Los programas de FP y de titulación profesional toman como referencia el Catálogo Nacional de Cualificaciones Profesionales (CNCP), permitiendo el reconocimiento mutuo de algunas partes de la formación (módulos -asignaturas-).

Los programas de EFP están compuestos por módulos, lo que permite la certificación parcial y la reincorporación desde una perspectiva de aprendizaje permanente, e incluyen el aprendizaje obligatorio en el lugar de trabajo al final o durante los estudios. Los estudiantes deben aprobar todos los módulos para obtener la calificación positiva. Los programas de EFP que utilizan entornos y plataformas de aprendizaje en línea o virtuales están aumentando para facilitar el acceso a la EFP.

Los adultos pueden tener sus habilidades reconocidas o adquirir una cualificación formal a través de la formación. Existen regulaciones comunes para validar las habilidades adquiridas a través del aprendizaje no formal e informal y la experiencia laboral. Estos procedimientos permiten a los ciudadanos seguir aprendiendo y adquirir cualificaciones completas. Las autoridades regionales pueden iniciar convocatorias públicas para la validación del aprendizaje no formal e informal en función de las necesidades de la empresa, las solicitudes de los interlocutores sociales o los requisitos mínimos de cualificación de los organismos reguladores sectoriales. Se han desarrollado pruebas de competencias clave para programas superiores de FP y acceso a certificados profesionales.

#### *Desafíos y respuestas normativas.*

La formación profesional ocupa un lugar central en las medidas políticas en las esferas educativa, laboral y económica. El plan estratégico para la modernización de la formación profesional, presentado en 2020, tiene como objetivo mejorar los estándares de EFP y hacer que la EFP sea más atractiva para los jóvenes mediante la introducción de itinerarios de aprendizaje flexibles en la educación secundaria y los programas de EFP y la actualización y el desarrollo de nuevos programas para satisfacer las demandas del futuro del trabajo.

La política actual de EFP se centra en la modernización y actualización continua de la formación profesional para garantizar oportunidades de aprendizaje para toda la población a través de un sistema de EFP unificado, flexible y de fácil acceso; mejorar los niveles de cualificación y empleabilidad; impulsar la innovación y el espíritu empresarial en la EFP; mejorar la EFP dual; y evaluar el sistema de EFP para mejorar su calidad y eficiencia.

En 2022 se ha aprobado en España una nueva ley sobre EFP cuyo objetivo principal es promover la flexibilización de la EFP y la formación dual.

### 5.3.2. Relación entre la EFP-I y la EFP-C

En España tenemos dos opciones:

- a. Los trabajadores pueden ver sus habilidades reconocidas a través de la experiencia laboral. Existen regulaciones comunes para validar las habilidades adquiridas a través de la experiencia laboral. Estos procedimientos permiten a los ciudadanos seguir aprendiendo y adquirir cualificaciones completas. Las autoridades regionales pueden iniciar convocatorias públicas para la validación del aprendizaje no formal e informal en función de las necesidades de la empresa, las solicitudes de los interlocutores sociales o los requisitos mínimos de cualificación de los organismos reguladores sectoriales. Este procedimiento se denomina "acreditación de competencias profesionales".
- b. Los adultos también pueden adquirir una cualificación formal a través de la formación, más corta que una cualificación general inicial de EFP. Las autoridades regionales suelen organizar estos certificados en función de las necesidades de la empresa, las solicitudes de los interlocutores sociales o los requisitos mínimos de cualificación de los organismos reguladores sectoriales. Al terminar estos estudios, que combinan aprendizaje y WBL, los estudiantes obtienen un "certificado de profesionalismo", similar a una microcredencial, pero más amplio. Esta certificación reconoce diferentes módulos de una cualificación Inicial de FP (Técnico/Técnico Superior). La persona titular de esta certificación puede convalidar los módulos adquiridos en este programa corto para continuar estudiando el programa conducente a la obtención del diploma de técnico o técnico superior.

### 5.3.3. Cambio de planes de currículo

En resumen, describa el procedimiento para cambiar el currículo y con qué frecuencia se revisa o cambia el currículo.

En España el currículo educativo se modifica por ley. La ley de educación actual (la LOMLOE) se aprobó en 2020. En 2022 también se ha aprobado una nueva ley sobre EFP, cuyo objetivo principal es aumentar la flexibilidad de la FP y transformar todo el sistema de FP inicial en FP dual.

Desde el comienzo de nuestra democracia (casi cuarenta años) se han aprobado ocho leyes de educación. Existe un consenso común entre los docentes de que el sistema educativo no debe cambiarse tan fácilmente como lo hacen los diferentes gobiernos.

### 5.3.4. Relación entre educadores y partes interesadas

El proceso educativo está diseñado por el Gobierno. El Gobierno busca asesoramiento a la Conferencia Sectorial de Educación, al mismo tiempo, este organismo público pide información a los centros educativos y escuelas de formación profesional de los gobiernos regionales.

### 5.3.5. Sistema de aprendizaje

Como se mencionó anteriormente, en 2022 se aprobó una nueva ley sobre formación profesional. Uno de sus principales objetivos es que todo el sistema de FP esté en aprendizaje dual a partir de 2025. Creemos firmemente que tiene grandes expectativas.

En España todavía no estamos aplicando este sistema al completo. Hasta el momento el sistema de formación profesional dual tiene lugar en empresas, centros de formación empresarial y escuelas de formación profesional. Este tipo de sistema combina práctica y teoría. La empresa y la escuela vocacional firman un acuerdo de prácticas.



Cada gobierno regional en España decide el número cursos de aprendizaje dual que introducirá en función de la investigación sobre las necesidades del mercado laboral.

Requisitos del estudiante:

Edad, 18 años o de 16 a 18 años con permiso de los padres.

Cada centro educativo tiene que presentar un proyecto de sistema dual donde fijará los criterios para seleccionar a los estudiantes en este sistema.

Duración: de dos a tres años. Para EQF LEVEL 4 y EQF LEVEL 5, entre 530-800 horas de duración total tienen que tener lugar en la empresa.

Para evaluar al alumno habrá dos mentores, uno de la empresa y el otro será un profesor.

Los títulos de sistema dual tienen el mismo reconocimiento público que el otro sistema.

### 5.3.6.I-VET y C-VET de profesores y formadores

a. Formación inicial del profesorado: los profesores deben tener un Grado (4 años de duración) en el ámbito de la asignatura que impartirán. Por ejemplo: para enseñar Técnico en Jardinería y Floristería, los profesores tienen Licenciatura en Ingeniería Forestal.

Sin embargo, hay otro tipo de profesorado, profesores técnicos, que tienen un título EQF NIVEL 5, como por ejemplo los maestros de Técnico en Servicios de Catering.

Sin embargo, todos ellos deben tener el Máster de Formación del Profesorado (1 año de duración) para aprender pedagogía, técnicas de enseñanza, metodologías, cómo crear un plan de estudios, leyes relacionadas con la educación, etc.

Con los requisitos descritos, una persona puede ser docente en escuelas privadas. Para trabajar en las escuelas secundarias públicas, los maestros deben preparar un examen público para mostrar sus conocimientos y habilidades sobre el tema que quieren enseñar.

b. Formación continua: El Ministerio de Educación de España y las Comunidades Autónomas disponen de una amplia oferta de cursos de formación continua relacionados con materias específicas y con materias transversales. Los profesores asisten a estos cursos en su tiempo libre. Cada Comunidad Autónoma, los gobiernos regionales en España, tiene centros que coordinan la educación continua para los maestros, que se llaman Centros de Profesorado (CEP).

### 5.3.7. Evaluación de las competencias

En España, la normativa de cada titulación establece cuál es la Competencia General que los estudiantes tienen que alcanzar para obtener el título (NIVEL MEC). Al mismo tiempo, cada asignatura o módulo profesional contribuye a lograr una parte de la Competencia General. Los estudiantes deben adquirir todos los resultados de aprendizaje y criterios de evaluación de cada módulo profesional para obtener la competencia general del título.

Con el fin de comprobar si los estudiantes han alcanzado los resultados de aprendizaje y sus criterios de evaluación o no, los profesores diseñan diferentes actividades de evaluación.

Por otro lado, tenemos varios trabajadores que tienen mucha experiencia laboral pero no tienen ningún título para demostrar sus habilidades laborales. En ese caso, existen procesos públicos mediante los cuales pueden obtener habilidades credenciales en el Marco de Referencia Europeo, para obtener un título de FP o parte de él. En este último caso, los trabajadores pueden obtener

las competencias clave que necesitan si cursan las asignaturas que contienen las unidades de competencia que necesitan para obtener la titulación completa.

#### 5.4. Analysis of EQF level 3-6

*Analysis was done on a national and implementational level (in AgriNext consortium local languages).*

We've conducted analysis of EQF levels 3-6 in national languages to ensure the highest possible quality and accuracy of results. To keep this document shorter, we have included external links to these EQF analyses below:

- [Slovenia](#)
- [Croatia](#)
- [Spain](#)
- [Ireland](#)