Faced with rapid workplace digitalisation, the energy crisis and transition, as well as the need to empower learners to manage their working and learning careers, European countries have been updating their VET systems to keep up with labour markets’ changing skill demands. With its research into the Future of VET, Cedefop seeks to understand megatrends shaping VET today to meet tomorrow’s skill needs. The Agency anticipates European companies’ new skill needs, analyses the impact of digital technologies on the way we work and investigates countries’ efforts to support adult upskilling and reskilling by adapting VET provision, guidance and financing arrangements. This briefing note presents recent findings of Cedefop’s research into how the content, profile and delivery of VET are expected to evolve.

FEWER AND BROADER IVET QUALIFICATIONS

Many countries are reducing the number of their initial VET (IVET) qualifications while broadening their profile and increasing their occupational scope and flexibility. Finland, for example, recently lowered the number of its IVET qualifications from 351 to 164, partly to save administrative costs. Czechia, Croatia and the Netherlands rationalised their VET offer by merging similar qualifications into more generic ones.

The idea is that broader initial qualification profiles that include optional elements facilitate individual pathways and flexible learning arrangements. When combined with recognition or validation of prior learning, they enable people to engage in continuing training (CVET) and further learning later in life, allowing them to obtain more specific or up-to-date credentials.

RETHINKING THE DESIGN OF VET QUALIFICATIONS

The EU has promoted individualised, flexible learning pathways for the past two decades. The 2020 VET Recommendation called for VET programmes to be ‘learner-centred, offer access to face-to-face and digital or blended learning (and) flexible and modular pathways based on the recognition of outcomes’.

These goals are being taken up in national policies. Modularised qualifications, comprising, for example, compulsory and optional units, allow people to attain partial qualifications and cumulate them to full ones. This has an impact on the organisation of VET programmes. Slovenia has introduced the ‘open curriculum’, leaving it to VET schools to shape 20% of their content in cooperation with companies and other regional partners. Dutch and Polish VET providers are free to develop their programmes based on common core curricula and to modularise their qualifications. In Slovakia, VET schools can determine up
to 42% of the content of the programmes they offer at upper secondary level. Several countries have linked this increased school autonomy with greater powers for regional authorities and VET providers, acknowledging that they are best placed to respond swiftly to emerging local skill needs.

The increasing adoption of learning outcomes has also affected the definition, description and structure of qualifications and curricula. The focus has shifted to what learners are expected to know and be able to do at the end of a learning process, rather than on input requirements such as hours spent. This could be seen as a shift from national teaching to national learning curricula. Learning outcomes help clarify students’ expectations and provide a better basis for dialogue between VET systems and the labour market. However, the quality and granularity of descriptions still differ considerably between countries.

**BLENDING SKILLS IN VET CURRICULA**

Stakeholders across Europe agree that one of the key roles of IVET is to empower students to become active citizens and to foster the development of disadvantaged learners. Hence VET curricula must not only reflect occupational skills, but impart general knowledge and transversal skills and competences to learners to help them face broader societal and labour market challenges.

All European VET systems distinguish between general and vocational content of qualifications or VET programmes, while taking different approaches in practice. General subjects such as maths, science and languages, as well as theoretical vocational subjects, are predominantly taught in classroom settings, while practical vocational learning takes place either at the workplace or in VET school workshops.

Cedefop’s analysis shows that many countries have strengthened the general education component of their VET programmes, either by giving general subjects more room or by better embedding them in curricula. This increased emphasis on general subjects has not taken place at the expense of workplace learning: on the contrary, in many cases stronger integration of general subjects into workplace learning has improved overall programme quality.

Transversal skills and competences are increasingly common in countries’ (initial) VET curricula. The Netherlands has labelled them ‘21st century skills’ and included them in learning units dealing with citizenship, presenting arguments, and motivational reflections. Estonia and Cyprus have included career management, social and entrepreneurship skills as well as learning-to-learn competence in their VET curricula. Ireland’s VET programmes include three categories of skills: occupation-specific, general (which comprise IT and ‘thinking’ skills), and transversal (separated into ‘people’ skills, such as communication and teamwork, and ‘work’ skills, including personal and professional development). Finnish VET programmes comprise ‘vocational’ and ‘common’ studies. The latter include, besides maths and sciences, ‘communication and interaction’ and ‘societal and working life’ skills. While occupational skills inevitably change over time, reflecting technological and societal developments, strong transversal skills and competences, which can be acquired in a wide range of different settings, are acquired for life, allowing people to cope with change.

**LEARNING SITE DIVERSIFICATION**

Workplace learning has increased across Europe, often at the expense of classroom instruction. In Italy, there is a clear shift from classroom teaching to in-company training. The workplace is no longer seen as a place to practice classroom knowledge but rather as one allowing learners to acquire specific skills that cannot be taught in school settings. Poland has required all VET schools to cooperate formally with employers for in-company training since 2018. In the Netherlands, VET schools offering healthcare training cooperate with hospitals to offer hybrid learning environments where classroom instruction is partly delivered in hospital. Such hybrid learning sites are at the heart of the country’s plans to transform VET centres into Regional VET and innovation centres (²).

Most countries have observed wider use of vendor-specific learning materials in the past decade, bringing VET closer to the world of work and boosting learners’ vocational skills. They expect the share of workplace learning in VET to increase in the coming years (³).

**IVET AND CVET: TWO WORLDS APART?**

The need to balance general subject knowledge, occupational skills and transversal competences brings focus to the relationship between initial and continuing VET. While IVET has a particular responsibility in equipping young people with a solid base of general and occupational skills for the future, its response to emerging technological and occupational develop-

²) At EU level, the Council’s 2020 VET Recommendation has called for VET programmes to be ‘delivered through an appropriate mix of open, digital and participative learning environments, including learning-conducive workplaces.

³) As reported by respondents to the VET provider survey, which was part of Cedefop’s study on the changing content and profile of VET.
ments takes time. Arguably, transversal skills cannot be acquired by chance, but need to grow through practice and experience. This points to the increasingly important role of CVET and its interaction with IVET.

In most countries, IVET and CVET are still different ‘planets’, each with its own actors, purposes, structures and funding. IVET takes place mainly in public schools and relies on public funding, CVET is mainly offered by private providers or companies and largely financed by either employers or learners or both. IVET offers full formal qualifications, CVET often complementary training only. Certificates proving successful CVET participation are very diverse and their labour market value and recognition pose challenges.

In the past 25 years, both IVET and CVET have changed. The number of IVET schools has dropped while their autonomy has grown. IVET has become more flexible in terms of duration, choice of subjects and admission of age groups. Many countries have strengthened its work-based component. At the same time, CVET provision has expanded as technological change and labour market restructuring have accelerated: it is now offered at all levels from basic training to higher education. Today, CVET is available in many formats, including a wide array of online self-learning courses, and the lines between the two are increasingly blurred.

**OPENING IVET TO ADULTS**

Modern IVET at upper secondary and post-secondary level accommodates a substantial proportion of young adults (20-24) or adults over 25 in all countries. Only in Portugal are more than 60% of IVET learners younger than 20. In contrast, in Denmark and Finland, more than 60% are at least 20 years old, while Germany and the Netherlands have a more mixed age structure.

These numbers suggest that the greater autonomy of local VET schools and authorities, and the introduction of modularised IVET qualifications, have increased the relevance of IVET for adult learners. In Finland, IVET providers have become the main players offering non-formal VET for adults, competing with private VET providers and offering courses to young people and adults in the same framework. The same applies to other countries with a large non-formal adult VET sector, such as Ireland.

The picture across Europe is uneven, however, with more than 90% of IVET in Italy, Cyprus and Hungary catering for young people. The role of IVET in facilitating lifelong learning is still evolving and requires further attention.

**TOWARDS INTEGRATING IVET AND CVET**

CVET in Europe varies even more than IVET from country to country. Previous Cedefop research seeking to define its character and delimitations has run into difficulties. Cedefop’s analysis, while acknowledging that CVET addresses mainly adults, has concluded that, in most countries, it is still an orientation rather than, strictly speaking, a system. CVET is delivered by a wide range of stakeholders and providers and across the traditional lines drawn between academic and general knowledge and vocational/occupational skills and transversal skills and competencies. Countries need CVET mainly as a tool to (re)train their workforce according to labour market needs. It is designed to help people return to the labour market, change jobs or progress in their careers. CVET provision ranges from basic to advanced skills levels and does not fit into traditional institutional boxes or hierarchical structures. It can roughly be divided into:

- formal learning leading to a full qualification (at any level);
- non-formal and informal provision of vocational and other skills (at any level) not leading to a formal qualification.

CVET leading to formal qualifications is offered at various levels (mainly ranging from EQF levels 2 to 5) and in various formats, including adult apprenticeships. IVET providers play an important role in CVET, leading to a formal qualification, for example in Czechia, Germany, Estonia, France, Ireland, Luxembourg, Poland, and UK-England. Programmes usually cater to adults’ specific needs and are delivered as evening classes or through other part-time arrangements. Validation of prior learning can shorten the path to a qualification, for example in Czechia, Norway and Portugal. In Norway, adults who can prove relevant work experience can shorten training leading to the final craftsman or journeyman examination and be exempted from sitting for general subjects.

In some cases, CVET courses are linked to formal VET qualifications, notably when aligned with units and modules that lead to a full qualification. Cedefop has found that the involvement of IVET providers in VET for adults is gradually blurring the lines between formal and non-formal CVET. While formal VET programmes are modularised into partial qualifications that can be taken independently, non-formal CVET is progressively formalised: this may be through officially recognised (partial) qualifications, programmes included in national qualification frameworks or the integration of public and private CVET, as in Lithuania. Alternative certifications such as microcreden-
tials and digital badges may influence the future integration of IVET and CVET.

Besides training with a clear vocational focus, CVET also offers general education tracks leading to formal qualifications. These range from second-chance education at upper secondary level to higher education programmes with a broad, not strictly occupational focus. However, IVET providers are involved in such provision only in a few countries, such as Estonia, Spain and the Netherlands.

**STRENGTHENING THE IVET/CVET LINK**

Overarching national skills strategies built on synergies between initial and continuing VET have emerged only recently. European countries are taking different routes in building bridges between their IVET and CVET systems and providers, but institutional barriers remain.

In parallel, European countries have worked towards making their VET systems more attractive, especially for adults, by reducing administrative burden and overlap, revising VET content and delivery, and fostering synergies between stakeholders. VET systems are increasingly attentive to labour market need for skilled workers and to tailoring delivery better to adults’ requirements. Finland, for instance, has developed a policy framework bringing initial and continuing VET closer together.

**WHAT CONCLUSIONS DOES THE FUTURE HOLD?**

What conclusions can be drawn from Cedefop findings, relevant to stakeholders responsible for setting the priorities for future VET developments?

- Learning outcomes form the basis for defining and continuously updating the content and profile of (national) VET programmes and qualifications. This requires a clear understanding of the different types of knowledge, skills and competences demanded by individuals, employers and society in general. These types, here broadly referred to as general, vocational and transversal, need careful balancing and should be promoted and acquired in different ways and contexts.

- It is important to rethink the relationship between the content and the delivery of VET: the need to combine and integrate general subjects with occupation-specific and transversal skills and competences will require new approaches to pedagogy and curriculum design.

- IVET and CVET will play different roles in building and promoting general, vocational and transversal skills and competences. While IVET may need to strengthen its focus on general knowledge, basic vocational skills and some transversal competences, CVET must be geared to updating and renewing specific occupational skills. It also seems clear that not all transversal skills and competences can be fully acquired in initial training; they need to be developed over years at work and in life.

- While IVET will continue to cater to the delivery of VET fundamentals to the young, it will need to take a more active stance towards adults and their specific needs and constraints. The lines between IVET and CVET are being blurred in some countries, but not in all. In the future, possible overlaps between the two, as well as conflicting priorities between young people’s need for labour market entry and social inclusion and adults’ re- and up-skilling needs, will require attention.

- Cedefop’s research into the changing VET landscape points to the need to promote more learner-centred strategies. Learners taking up VET will bring along their increasingly different expectations and capacities. It is important to design national curricula in close reference to these, allowing IVET and CVET providers to adapt their training offer to the different learners at the right level and in the right format. Supported by well-integrated guidance and validation arrangements, well-targeted training provision will help ensure the relevance and quality of VET.

- Cedefop’s work on the ‘Future of VET – looking back to look ahead’, shows that the overall conception of VET in Europe is gradually changing. While this impacts on the delivery of VET, its institutions and structures, it increasingly affects its content as well. To be prepared for the future, VET needs to re-balance general subject knowledge, occupation-specific skills and transversal competences. How this is done will determine the relevance and overall quality of VET in the coming decades.