



Understanding and analysing vocational education and training systems – An introduction

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Abbreviations

ALMP	Active labour market policy
BE	basic education
CVET	Continuous VET
EFQM	European Foundation for Quality Management
HE	higher education
ISO	International Organization for Standardization
LM	labour market
NQF	national qualifications frameworks
PES	public employment services
RPL	recognition of prior learning
SDC	Swiss Agency for Development and Cooperation
VET	Vocational Education and Training
VSD	Vocational Skills Development
QA	Quality Assurance Systems

Preliminary remarks and structure of this introduction paper

This introduction is made for VET (Vocational Education and Training) practitioners, donors and implementing partners in development cooperation who want to better understand and analyse how VET systems function and how their different elements interrelate. It shall therefore...

- introduce those working in VET projects and institutions into VET systems thinking and provide them with a basic understanding and analytical dimensions;
- improve the quality of SDC's VET interventions based on a better understanding of VET systems;
- provide input for SDC's position in the discussion about systemic approaches to VET systems development and reform.

Part 1 of the paper introduces the core elements and functioning of a vocational education and training system step by step. Chapter 1 presents the dual purpose of vocational education and training: It has to satisfy a social demand on the one hand and an economic demand on the other. Chapter 2 describes the results and effects of vocational education and training as a system. Chapter 3 is devoted to the governance of VET, covering the institutional and regulatory frameworks, financing, the provider landscape and accountability issues. Chapter 4 then addresses the core inputs that VET provision requires: Infrastructure, teaching and learning materials and curricula, teachers and trainers, school management and modes of delivery. Chapter 5 deals with support measures to bring learners into VET and help them to successfully complete training and find access to employment and income or any other meaningful follow-up solution. Chapter 6 deals with the issue of assessment and certification and chapter 7 presents the overall picture of a prototypical vocational training system.

Part 2 of this introduction deals with key interfaces of the VET system with other systems, namely the labour market and the system of labour market integration in Chapter 1, the other levels of education – basic education, higher education, lifelong learning – in Chapter 2 and other relevant policy areas in Chapter 3.

About terms used in this introduction: VET and VSD

The authors of this introduction paper use the term VET in this paper, as this term is more commonly used internationally and thus more appropriate for a generic thematic discussion and exchange. In this way, we focus primarily on the system of vocational education and training and its structural aspects as part of the education system and from there introduce you to other systems and areas, namely lifelong learning, the system of labour market integration, the various systems of social inclusion, and other systems which also make use of vocational education and training as a measure -rather than a system as such. In the authors understanding, the term VET also includes informal and non-formal learning, initial VET and continuing VET, as well as technical (T-VET) and vocational education and training in other occupational fields (social, health, etc.) that are traditionally not covered by the term TVET.

While we use the term VET in this introduction, the SDC as an organisation decided to use the term Vocational Skills Development (VSD) instead of VET and applies a broad definition that focuses rather on learning processes and processes of labour market integration than on systems as such:

"VSD encompasses all organised learning processes for the development of technical, social and personal competencies and qualifications that contribute to the sustainable long-term integration of trained people in decent working conditions in the formal or informal economy, either on an employed or self-employed basis. VSD usually combines theory and practice and can take place in schools or technical institutes, workshops or at the workplace in enterprises. According to the concept of lifelong learning, VSD can take place at all education levels, from lower-secondary to tertiary, and be acquired throughout an individual's economically active life. It includes formal and non-formal VSD offers." (SDC Education Strategy 2017).

This broad definition is often quite helpful and make sense in the context of SDC interventions, where oftentimes a traditional and very narrow understanding of VET systems has to be overcome and where rather short-term goals of economic inclusion for target groups are often more important than (VET) systems development aims.

Part I

1 VET demand and supply

VET – vocational education and training – serves a **double supply** purpose, and meets two sorts of demand:

- First, VET supplies the economy with the skilled labour it needs to produce wealth. In this sense it meets an **economic** demand;
- Secondly, it has to equip persons, and in particular young people, with the skills they need if they are to find and keep a job, or to start their own business. This is the most important way they can integrate themselves into society and the labour market, and develop personally. In this sense VET supplies a **social** demand.

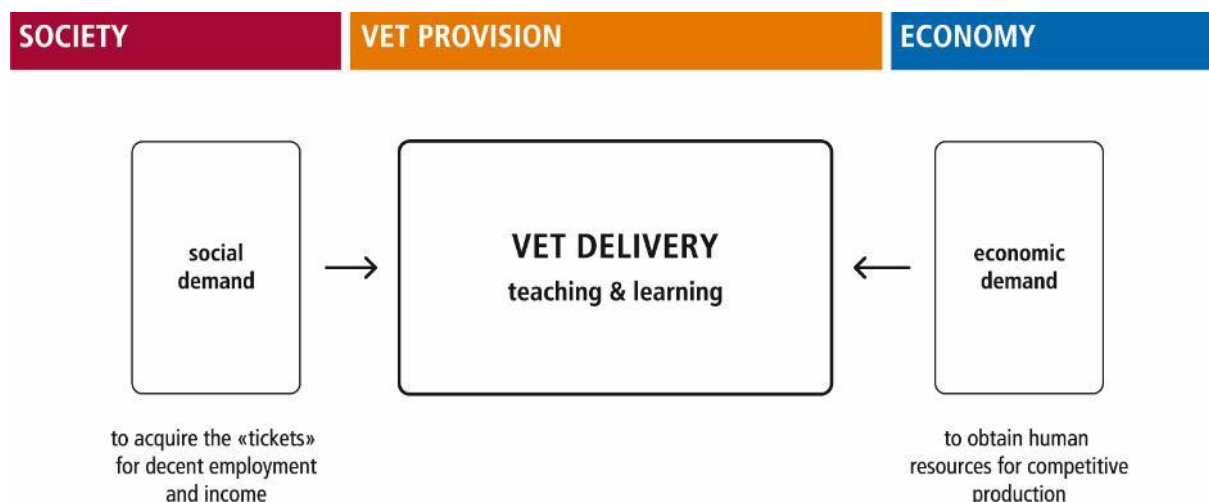


Illustration 1 - VET demand and supply

Both the social and the economic demand, however, are heterogeneous and subject to frequent changes. They consist of many different components, which vary and interrelate in complex ways.

1.1 Social demand

Let us have a look at the **social demand** first. Here we can distinguish at least the following main groups of clients for VET:

1. school leavers at different educational levels
2. early school leavers (“drop-outs”, out of school youth)
3. special needs groups, such as marginalised people, minorities, migrants, refugees or demobilised soldiers
4. unemployed people and

- under-employed and employed people who want to update their skills in order to keep their job or to get promoted (up-skilling).

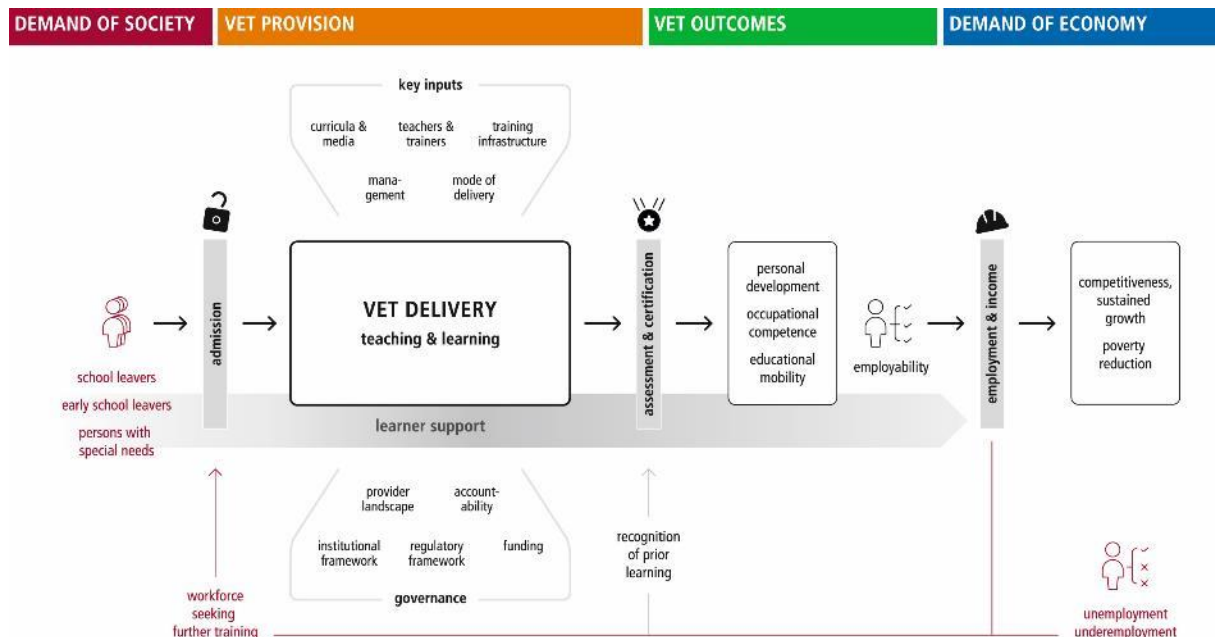


Illustration 2 - Social demand

It is obvious that these different groups have diverse expectations, aspirations, and specific needs – and VET systems have to respond to these diverse demands as much as possible. When thinking about reforming or intervening in a VET system, it is therefore decisive to clearly identify the specific groups you intend to serve, and to analyse their demands.

Consider these key analytical questions regarding social demand:

- What are the main target groups to be addressed by the VET system (or a VET reform or intervention)?
- What are their aspirations, expectations and specific needs and how is their access to information?
- What are their prerequisites and constraints – for instance in terms of educational level, gender, work experience, mobility, time horizon or financial contributions?

1.2 Admission to VET

It is important to highlight that not all VET programmes are necessarily open to all. On the contrary: in partner countries of development cooperation, the capacity of the VET systems is significantly lower than the number of people who need some kind of training in order to get a decent job or gainful self-employment. Therefore, formal and informal mechanisms exist that regulate and limit access to VET – and often exclude the majority of those in urgent need of training.

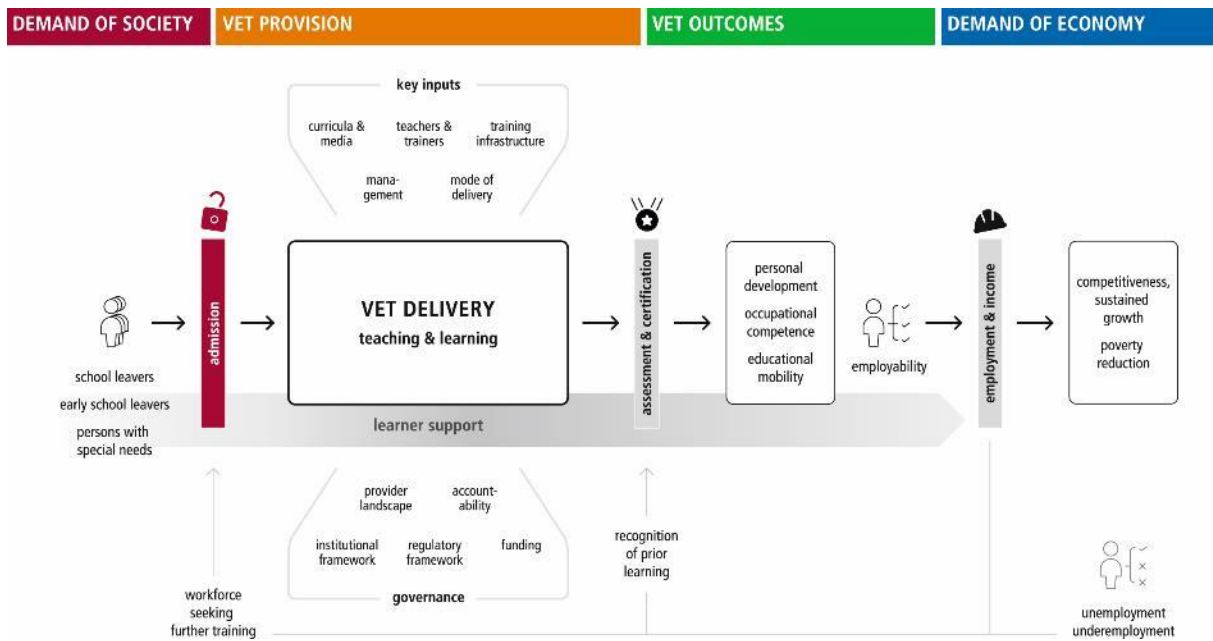


Illustration 3 - Admission to VET

There are many types of access barriers. These may take the form of educational levels and/or student fees that are often requested, in particular for high-quality or advanced training. They also include issues such as the regional distribution of training centres or their timetables and course durations. Many trainings are not affordable for disadvantaged people who have to earn their living at the same time. Moreover, gender or ethnic discrimination may play a role, as well as restricted access to information.

The following illustration depicts a typical exclusion scenario and suggests mitigation measures.

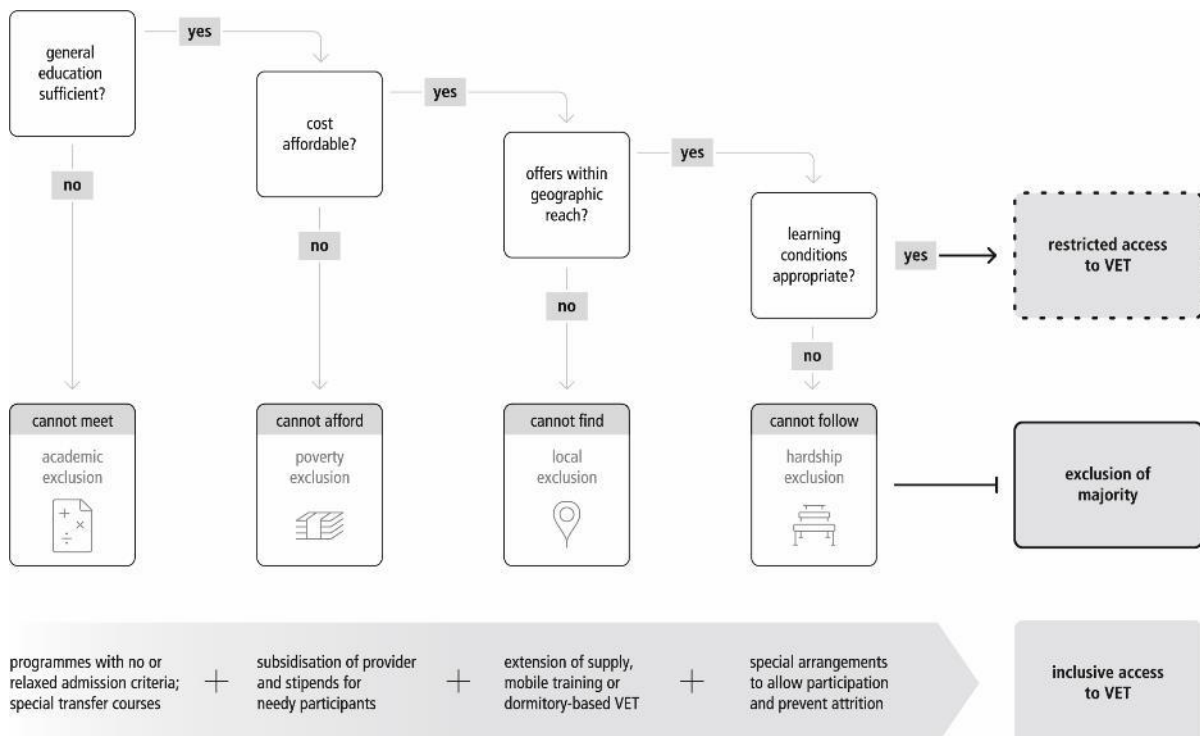


Illustration 4 - Admission to VET – typical exclusion scenarios

A careful analysis of such access barriers is therefore another important step in planning the reform of a VET system towards more inclusion.

Consider these key analytical questions regarding admission:

- What is the capacity of the existing VET system as compared to the social demand?
- Who has access to what kind of training – and who is excluded? What are the reasons for exclusion?
- What are the criteria and mechanisms that govern admission?
- Which mitigation measures can be introduced in order to improve access for specific target groups?

1.3 Economic demand

Making VET systems responsive to the demands of the economy requires a careful and systematically repeated analysis of employment opportunities, labour markets and resulting training needs. Here, we have to distinguish between:

- The growth sectors of the economy, that actually and in future are providing formal employment opportunities;
- Employment opportunities according to gender
- informal employment opportunities;
- the subsistence economy and helping family members; and
- domestic labour markets and regional and international labour markets

Although the situation differs from country to country, it is a common feature of economies in developing countries that the number of job-seekers far exceeds the number of available jobs. That is why self-employment is an important segment of the economies in most of our partner countries, which implies that VET systems should consider entrepreneurship training as an important element of their service provision. Labour migration is another phenomenon that is gaining in importance in many partner countries. Some countries may follow an intentional strategy of labour export, some countries may suffer from massive migration, independently pursued by individuals. This is why VET systems and interventions by donor agencies may include preparation measures for intended migration.

Consider these key analytical questions regarding economic demand:

- To what extent can the economy be expected to absorb current and future generations of VET graduates?
- Which sectors are the most dynamic and promising ones with regard to the provision of employment opportunities for skilled labour? What are the growth sectors and in which areas donor activities will generate added value?
- What about different employment opportunities according to gender?
- What are the priority occupations for which the economy is prepared to recruit skilled labour?
- To what extent is entrepreneurship training delivered by the current VET system?
- How supportive is the business environment with regard to self-employment? For instance are funding schemes and microcredits available? Is the regulatory framework conducive to doing business? Is the rule of law guaranteed?

2 VET systems and their expected outcomes and impact for the economy and society

2.1 VET systems and their expected outcomes

VET is often associated with imparting only technical skills. This might be an appropriate approach when upgrading the skills of employed people in very specific fields, for instance in order to cope with the requirements of new machinery. From a holistic point of view, however, this approach falls short, a fact that is also reflected in SDC's definition of vocational skills development.¹ VET as a **system** has a much broader range of outcomes, which can be summarised mainly under three main headings:

- personal development;
- occupational competence; and
- educational mobility

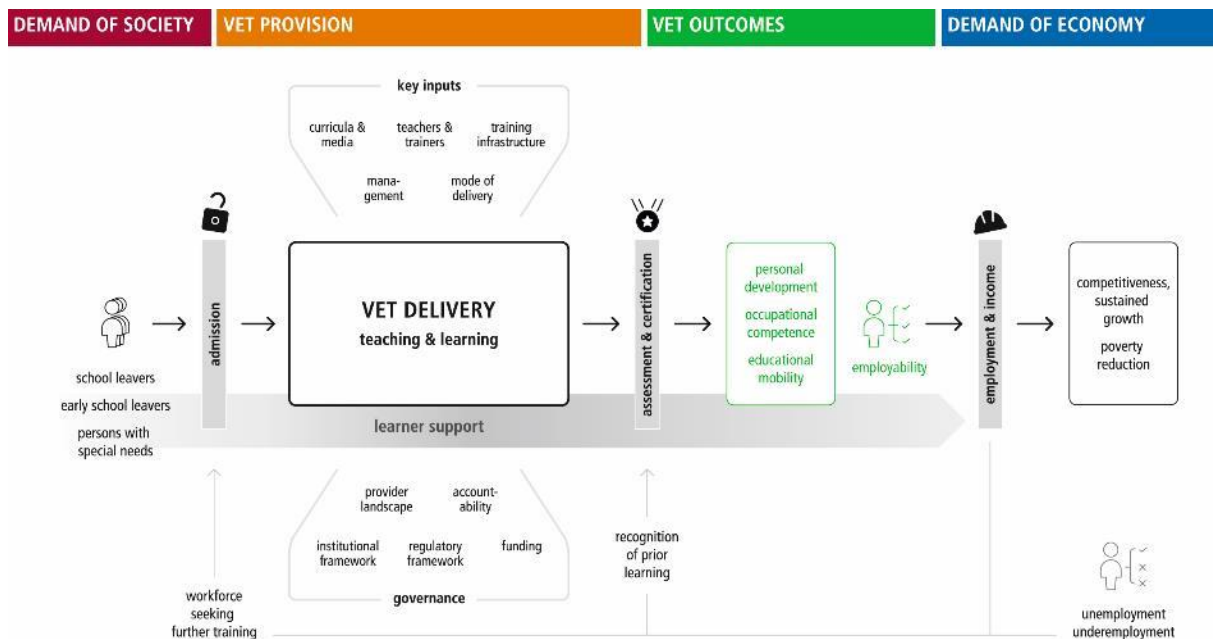


Illustration 5 - VET systems and their expected outcomes

To take these areas one by one, firstly **personal development** refers to the fact that formal VET primarily addresses young people between 15 and 25 years of age who are not only in a transition process from school to work but also in a difficult transition period from childhood to adulthood. They need orientation and have to develop values and self-esteem in order to build up their individual identity. The latter is also true for many unemployed adults and in particular

¹ The broad concept of VSD [applied by SDC] encompasses all organised learning processes for the development of technical, social and personal competencies and qualifications that contribute to the sustainable long-term integration of trained people in decent working conditions in the formal or informal economy, either on an employed or self-employed basis. VSD usually combines theory and practice and can take place in schools or technical institutes, workshops or at the workplace in enterprises. According to the concept of lifelong learning, VSD can take place at all education levels, from lower-secondary to tertiary, and be acquired throughout an individual's economically active life. It includes formal and non-formal VSD offers. See: SDC Education Strategy 2018.

for special needs groups. Society expects them to become good technicians, craftspeople, salespeople or clerks, but also to develop into good citizens and responsible fathers or mothers. Moreover, social and personal competences are increasingly needed to carry out jobs on the labour market and therefore requested by the employers. That is why VET has to impart **personal** and **social** competences, alongside the occupational competencies.

Secondly, **occupational competence** starts with having the technical skills and knowledge that are needed to perform a job well. But it is not limited to this dimension. It also comprises elements of what was mentioned before – personal and social skills – as well as certain more general or “meta-skills” that are becoming more and more important, like teamwork, customer orientation, and the ability to learn and organise by oneself. Moreover, entrepreneurial skills are valuable in countries where self-employment is often the most realistic option for many VET graduates.

Finally, the concept of **educational mobility** refers to the recognition of VET certificates within the overall education system in a country (or even internationally). In order to make VET more attractive, and to stimulate lifelong learning, VET graduates receive credits that provide or facilitate access to higher levels of VET, or to higher education in the general education system (so-called “permeability” within the overall education system). This means that VET has to give adequate consideration to general education subjects and international standards and regulations, in order to open up such pathways. In addition, educational mobility and the acquisition of recognized VET certificates also allow for increased mobility on the labour market.

Every VET system, and each specific training programme, has to find its own appropriate and balanced mix of these three areas – personal development, occupational competence and educational mobility – according to its objectives and priorities, and to the target groups it addresses.

In our partner countries the adequate consideration of these three dimensions of VET is of specific importance for two reasons:

- First, the general education systems are often weak, and therefore VET addresses target groups who need complementary general education in order to cope with the requirements of the training programmes. That is why the combination of basic education with VET is a common feature in many skills development programmes;
- Secondly, many VET participants live in deprived urban or remote rural areas and grow up in fragile economic, social and family contexts. Some may lack self-esteem and partially vulnerable to risky forms of deviant behaviour, such as dropping out, drug consumption, gangs, violence, crime and teenage pregnancy.

Consider these key analytical questions regarding VET outcomes:

- How does a given VET system cover the three main outcomes – personal development, occupational competence and educational mobility? Which outcomes are underdeveloped or neglected?
- What is the appropriate mix of these outcomes for specific target groups who are being addressed by a VET reform or donor intervention in VET?
- How can alliances with relevant external partners – general education schools, NGOs, civil society – be used to assure an appropriate mix?

2.2 Impact for the economy and society

The main goal of any VET system is twofold, with a societal and an economic dimension: first, it aims to contribute to the competitiveness and sustained growth of the economy, and secondly it aims at providing people a valuable education, hence it can make a relevant contribution to livelihoods, social inclusion and thus poverty reduction.

Therefore, any VET system aims to provide a qualified labour force in the sense of competent, confident and compassionate people and workers. If the system is performing adequately, VET graduates are supposed to be found employable, be it in wage- or self-employment. Under favourable economic conditions, these people will find employment and income, and they will contribute to an increase in productivity based on their occupational competence, and due to newly created jobs in self-employment.

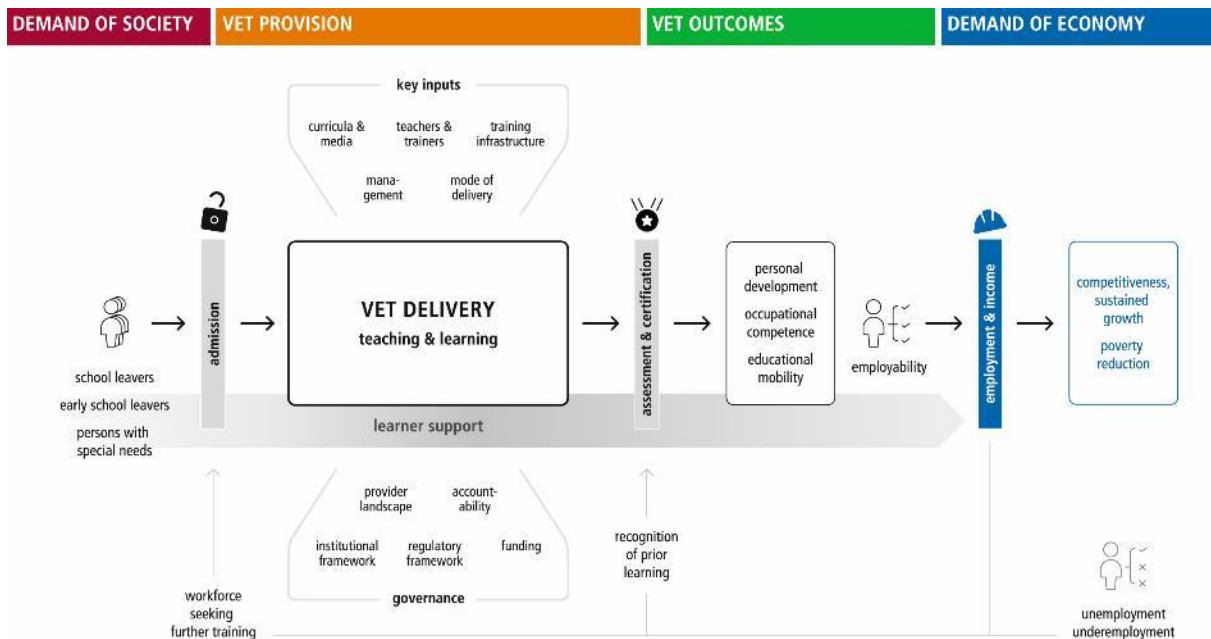


Illustration 6 - Impact for the economy and society

3 Governance of VET

We have looked at the different demands VET systems have to respond to, and we have learned about the outcomes they are expected to generate for their target groups and the impacts these may have for society and the economy. Let us now look more closely into the governance of VET delivery.

VET governance refers to the regulatory, institutional and financial frameworks of the VET system. Yet, governance means more than just the settings of these frameworks; it is about how the legal basis, rules, and regulations are interlinked and in particular how these relationships are managed. Governance includes the means and methods by which the frameworks are steered, coordinated, monitored, and held accountable. Using the concept of governance suggests that in addition to traditional regulation and control further instruments are applied to manage the VET system. These are instruments such as dialogue and negotiations with relevant stakeholders, and de-centralised self-coordination of VET providers, all deriving from mechanisms typically applied in the market system.

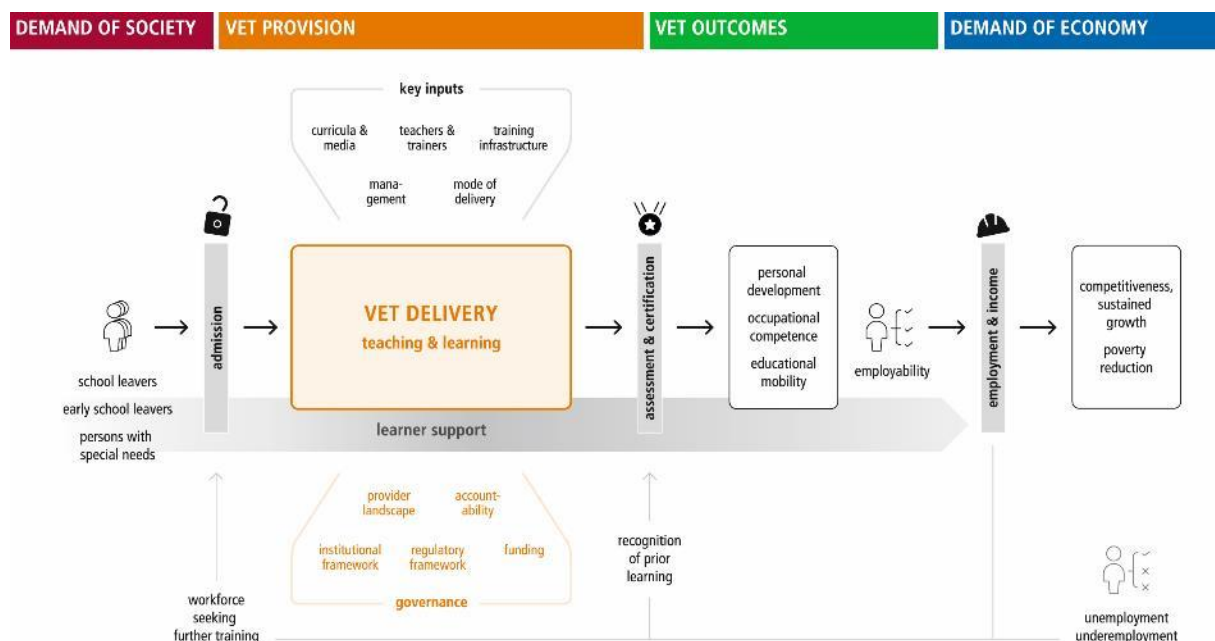


Illustration 7 - Governance of VET

In many partner countries, the governance of the VET system is vague, and both the framework and the methods of coordinating it are difficult to understand:

- The regulatory framework is usually quite general, often applying to the whole education sector and thus not addressing in detail the peculiarities of VET;
- The institutional framework is often diverse and fragmented, lacking reliable relationships, stringent coordination and a clear delineation of responsibilities;
- The allocation of financial means to the provider level often leaves little room for decision-making, self-coordination and self-responsibility for the operational units of the VET system, the providers.

In the following sections we look in a more detailed way into these challenges for the governance of VET systems.

3.1 Regulatory framework

The regulatory framework of any VET system is a decisive factor for the sustainable and favourable implementation and development of VET at all levels and for the reputation VET enjoys in society and the economy.

Public regulation sets the legal and political framework for VET offers leading to publicly recognised VET diplomas and certificates. Any modern public VET regulation system can be distinguished using the following quality criteria:

- **Rule of law:** clear, simple and concise regulation; decisive rules for coordination and involvement of stakeholders;
- **Inclusion:** this has three aspects. First, public VET regulation should include the VET system in the whole education system, in other words it should clearly define the interfaces with basic education and higher general education. Secondly, it should be **accessible** to all, and offer options for the less qualified and for those who are not well off. Thirdly it should include the world of work and define its role and responsibility;
- **Competitiveness:** VET should always try to foster the competitiveness of the economy;
- **Permeability:** any VET system regulation should allow its graduates to continue education at other VET levels or in other VET offers at the same level **and** in general education as well;
- **Flexibility and autonomy:** regulation should leave room for development and foster innovation at all levels of the system;
- **Transparency and limitation** of VET regulation in the sense that the regulation is understandable, developed in a transparent and participatory way and therefore accepted by all actors involved, and limited to what is essential;
- **Competence based:** modern VET regulation is based on an outcome orientation (it is competence based) rather than following an input logic;
- **Accountability:** clear political objectives and assuring the availability of data on the achievement of goals (outputs and outcomes);
- **Effectiveness:** output-orientation; driven by occupational standards and qualifications; employment-linkage; quality management;
- **Efficiency:** multi-actor funding and ensuring appropriate financial autonomy of VET providers.

Public regulation can take place at national, regional and local levels, depending on the degree of decentralisation of a VET system, and the distribution of responsibilities might look as follows:

- The **national level** takes responsibility for the overall regulation and management of

VET, covering issues like involvement of key stakeholders, inclusive access and permeability between educational sectors;

- The **regional level** might ensure the provision, maintenance and renewal of infrastructure for VET provision. Preferably, this is also the level where in cooperation with the regional private sector the scope of VET programmes that are offered should be decided;
- The **local level** might support the implementation of the programmes, and ensure inclusive access and affirmative actions for individuals with specific needs.

Specific regulations for the delivery of VET typically define the following core issues:

- cooperation and coordination with key stakeholders; ways and rules for involvement and responsibilities at different levels;
- regulations for IVET (initial or pre-employment training) and CVET (tertiary VET or further training) offers,
- degree of self-regulation for VET provider organisations, defining the scope for making their own decisions;
- rules for admission of VET students, with reference to inclusiveness, and social and economic demand;
- types of diplomas, with reference to occupational standards and qualifications;
- assessment and certification;
- recognition of certificates for access to both the labour market and higher levels of general education or training;
- requirements for qualifications and training of trainers;
- quality assurance and accreditation of training providers;
- rules for financing and accountability.

In many VET systems around the globe we find VET regulations that either do not fulfil the criteria mentioned above, or do not cover all dimensions and functions of VET. In many partner countries, public regulation is outdated, and defines a highly centralised system, which caters for the better off, hinders innovation, does not provide access and pathways to the general education system, and hardly fulfils its supply function for the economy.

To improve their VET systems, more and more countries set out to establish so-called **national qualifications frameworks** (NQF). These are instruments to develop and classify qualifications – i.e. the certificates and diplomas issued in general education and VET – according to agreed levels based on generic level descriptors. The aim of NQFs is to facilitate three things:

- the **transparency** of the system of qualifications – all official diplomas, certificates and titles have their place at a specific level corresponding to their related level of competence;

- the **comparability** of qualifications – NQFs allow the value of different qualifications to be compared as regards their level of competence;
- and their **portability** – NQFs facilitate the recognition of qualifications – fully or partly – for admission to further education or training, and for employment in other occupational fields or other regions or countries.

However, the establishment of meaningful NQFs requires the close involvement of the private sector, and significant investments in terms of time, effort, finance and human resources. Often the NQFs are over-designed and bureaucratic, and the investments are made at the cost of improved or expanded VET delivery.

Consider the following key analytical questions regarding the regulatory framework:

- Does the current VET regulation address the most important elements of effective governance? Where does the regulation fall short?
- What relevant self-regulation exists in the field in which you want to intervene?
- Are there any other regulations outside core VET regulations that play a role? (for example staffing rules and regulations or labour market regulations)
- Who is responsible for what? How decentralised is the system?

3.2 Institutional framework

Modern VET systems are based on governance systems involving all relevant **stakeholders**, which are typically the following:

- Employers and employer organisations (sectoral associations, professional organisations, chambers, industrial networks), supporting economic interests and the growth of businesses;
- Employee organisations (trade unions), supporting the interests of VET students and workers;
- Government representatives from national ministries (labour, education, social policies, economy), regional and local bodies, supporting economic, educational and social interests;
- Organisations representing civil society (youth associations, parents' organisations, social welfare organisations) active in issues like equality and inclusiveness.

The **division of power and responsibilities** between the relevant stakeholders may vary from country to country. The participation of stakeholders and the definition of clear responsibilities are vital assets for meaningful dialogue between the partners, which is a basic requirement for an effective VET system.

Dialogue and negotiations can take place at **different levels**, in different forms and various

combinations of relevant stakeholders, in specially created institutions and professional networks, sector skills councils, national and regional VET platforms, assessment commissions and boards of VET schools.

It is a key challenge to involve the multitude of stakeholders with their different interests in the active design, steering and implementation of the VET system and to coordinate their cooperation. The more fragmented and undefined responsibilities in the VET system are, the more difficult is this task.

Despite some progress made in a number of partner countries, a lot needs to be done to establish institutionalised partnerships, in particular between the state and the private sector and between schools and companies. Quite often the private sector does not play an active role, and involving social partners and other stakeholders in the design and implementation of VET is still a challenge.

Consider these key analytical questions regarding the institutional framework for the governance of VET:

- Which stakeholders are involved in the development of the VET system, with which functions and responsibilities?
- At what levels, in which forms and bodies, can dialogue and negotiations take place between the main stakeholders?
- Which national ministries are involved? What are the roles of the national, regional and local levels? What are their functions in the development, delivery and financing of the VET system?
- What is the role of the private sector in VET governance?

3.3 Funding

Quality VET is rather expensive. That is why almost all countries use a mix of financial sources to cover the costs of training infrastructure and VET delivery. The most important contributors are:

- **The tax-payers** – almost everywhere the state budget contributes significantly to the financing of the VET system, in particular in countries where school-based VET, for example in technical secondary schools, prevails.
- **Companies** – here we have to distinguish three main variants, which can also co-exist:
 - First, companies pay – in addition to their general corporate taxes – a **training levy** according to their turnover or number of staff or wage bill, which is used exclusively for training purposes;
 - Secondly, companies offer **internships, work-based learning** or contribute by providing equipment or seconding trainers;
 - Thirdly, companies cover the **training fees of their employees** who undergo some kind of further training.

- The third group of funders is the **social partners** – in many countries both employers and employees contribute to public employment services which use part of their funds for active labour market policies including financing training courses for the unemployed or people who need a skills upgrade in order to avoid losing their jobs.
- Fourthly, the **trainees** or their parents may contribute – in many countries VET is not free of charge, and the participants have to pay a fee and/or cover the costs of training material, which can be significant in some occupational fields. In this context vouchers and stipends, provided by government, civil society or donor agencies, are important instruments to facilitate access by special needs groups and to improve quality by stimulating competition among providers.
- Next, **training centres** sometimes follow a “training-cum-production” approach, i.e. they combine training activities with the production of goods or services they sell on a market. The income is used to increase their budget.
- Finally, in many countries **civil society** sponsors VET, in particular for special needs groups. NGOs may make donations, provide venues, make in-kind contributions and/or provide human resources for training courses.

Which mix of these sources is applied depends very much on the relative strengths and weaknesses of state, private sector and civil society as well as on traditions.

Given that all VET systems face financial limitations, with most of them being seriously or even dramatically underfunded, **resource allocation** becomes an issue of major concern. Decisions regarding a good mix of inputs into the system are among the most difficult ones to take, and should be based on a sound analysis and understanding of the interdependencies within the VET system, and of the skills required to add value in the economy and in sectors with prospects of growth.

For our partner countries, funding a high-quality VET system is an enormous challenge. While their economic and administrative weaknesses do not allow the generation of sufficient tax revenue, they are confronted with an increasing number of young people to be prepared for entering the labour markets. The latter is partly a result of demography – high birth rates – and partly a result of their own success in the field of general education. Nowadays, many more young people successfully complete primary and secondary education, and expect some kind of training opportunity when they leave school, so as to allow longer-term prospects of revenue from their work.

None of the governments of our partner countries is in a position to cover, on their own, the costs of high-quality training which can meet the growing social demand, and neither are governments in the so-called developed world. An appropriate distribution of costs between public authorities, the economic sector, training companies, and the trainees themselves is difficult to achieve. As a rule, stakeholders should participate in VET financing according to their position and their interest in the VET system. A way forward seems to be to involve the private sector more closely in the governance system and the delivery of VET, thus creating new preconditions for their stronger participation in the financing of VET.

Consider the following key analytical questions concerning VET funding:

- How is VET funded in the current governance system for VET?
- Who contributes to what and in which ways?
- Are the available resources allocated meaningfully in terms of efficiency and effectiveness?
- Are any groups excluded from VET because of lack of funding?
- To what extent is the private sector involved in the funding and/or provision of VET?
- Which funding sources are not yet sufficiently used or explored?

3.4 The provider landscape

All over the world, VET is delivered by an array of different institutions. The most important provider of VET in almost all countries is the **state**, in particular in countries with a school-based VET system. Here, initial VET (or pre-employment VET) is offered in technical secondary schools or colleges under the auspices of the ministry of education. Sometimes the state offers two strands in the system: formal VET in secondary schools which leads to certificates that provide access to higher levels of education, and non-formal VET in training centres that prepare their students for direct access to the labour market. The latter often operate under the auspices of ministries of labour or other relevant ministries, such as industry, health or tourism.

The other big player in training provision is **companies**. In countries with apprenticeship training they account for the major part of training delivery. In other countries they play a complementary role by offering internships for trainees.

In many developing countries **NGOs** play an important role in the VET system, in particular with regard to non-formal training and often with a focus on special needs groups. Sometimes they operate under a public-private partnership agreement with the government, which, for example, stipulates that the government pays the teachers and trainers, while the NGO provides the venue and equipment.

Finally, there are **commercial providers** that offer courses in a market environment. They usually operate in the sphere of continuous or further training (CVET). Many of them limit their training offers to occupational fields that require less investment in terms of training infrastructure. Typical examples are ICT occupations, language courses, sales, marketing, office administration and bookkeeping.

Taking into consideration the growing social demand for VET in our partner countries and the limited financial resources of the public sector, it becomes obvious that a heterogeneous provider landscape is necessary – and that a further expansion would be desirable. Having a broad range of specialised providers is also an advantage in meeting the needs of diverse special needs groups. On the other hand, the **quality** of the training programmes is often as diverse as the provider landscape.

There is no simple way out of this dilemma. What governments increasingly try to do is to

establish a system of **accreditation** for VET providers that stipulates the minimum requirements a training provider has to match in order to be allowed either to operate or to issue publicly recognised certificates (see section 3.5).

Consider the following key analytical questions with regard to the provider landscape:

- Who are the main training providers in the current VET system?
- Which target groups do they address?
- Which training providers are the most appropriate for a specific intervention or target group?
- To what extent is the potential of companies as training providers already explored and used?
- What is done to assure quality – is there an accreditation system in place?
- How could the overall training offer be increased without worsening the quality?

3.5 Governance and accountability

In the context of VET system governance, the term accountability covers all activities which serve to provide transparency about VET delivery and results achieved. Furthermore, accountability is carried out for reasons of quality assurance and development. One can distinguish between input-oriented and output-oriented accountability measures.

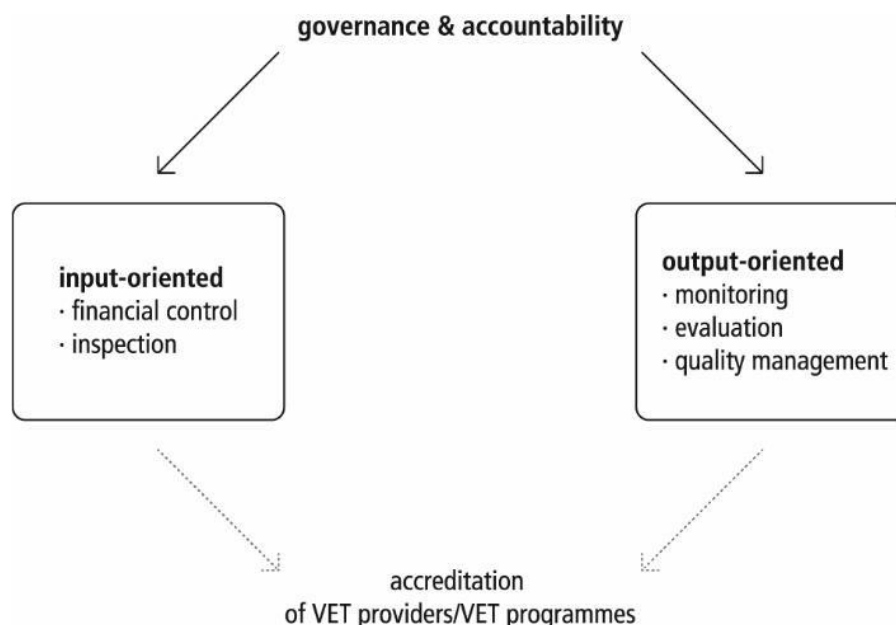


Illustration 8 - Governance and accountability

Input-oriented accountability is based on control mechanisms with a strong focus on the factual accuracy and regularity of incurred expenditures in comparison to the budget plan. As an additional part of this approach regular inspections are carried out to check compliance with rules and regulations in the daily delivery of VET.

Output-oriented governance is applied in areas where responsibility for the achievement of results is with the VET providers. Questions about the process, quality and results of VET provision are at the heart of this approach. Here, the control activities focus on the assessment of achieved results, like participation rates of specific target groups, graduation rates, employment and income situation of graduates. Altogether these data serve to evaluate the effectiveness and efficiency of VET provision.

The ultimate goal of output-oriented accountability is to learn from the results achieved and to draw conclusions for the future. The guiding principle is to establish a circle of continuous quality development; applying this so-called PDCA circle (plan, do, check, act) is a requirement shared by all internationally recognised QA systems.

Different instruments are needed to meet these requirements. Providers must implement a coherent system for internal quality assurance, consisting of monitoring, evaluation and quality development. Many countries require VET providers to establish a continuously operating internal quality assurance system as a precondition for accreditation either of the provider organisation or of certain VET programmes, thus linking together internal and external quality assurance.

Accreditation is an external quality assurance process whereby an officially recognised body confirms that a VET provider meets predetermined standards in the provision of VET, and achieves the expected results. Thus, accreditation includes both the inspection part of input-oriented accountability and output-oriented accountability.

In an increasing number of countries, the governing bodies apply the accreditation of VET providers according to **internationally recognised standards** (like ISO, EFQM or similar QA systems). Especially in our partner countries, this option is eagerly pursued by VET provider organisations, because of an expected gain in image and public reputation.

Consider these key analytical questions regarding governance and accountability in VET:

- What accountability culture – input-oriented or output-oriented? – is predominant, and how are the respective systems organised with what responsibilities?
- Does the regulatory framework state something about accountability?
- Are transparent data available about participation rates of specific groups, graduation rates, (longer-term) employment and income situation of graduates?
- Do VET providers have to establish an internal quality assurance system?
- Do VET providers have to undergo a recurrent external accreditation? Is accreditation performed by a recognised authority?

4 Key inputs for VET delivery

Let us now have a look at the key inputs for VET delivery. The following five are the most important ones in each VET system:

- curricula, training material and media
- teachers and trainers
- training infrastructure
- management
- and mode of training delivery

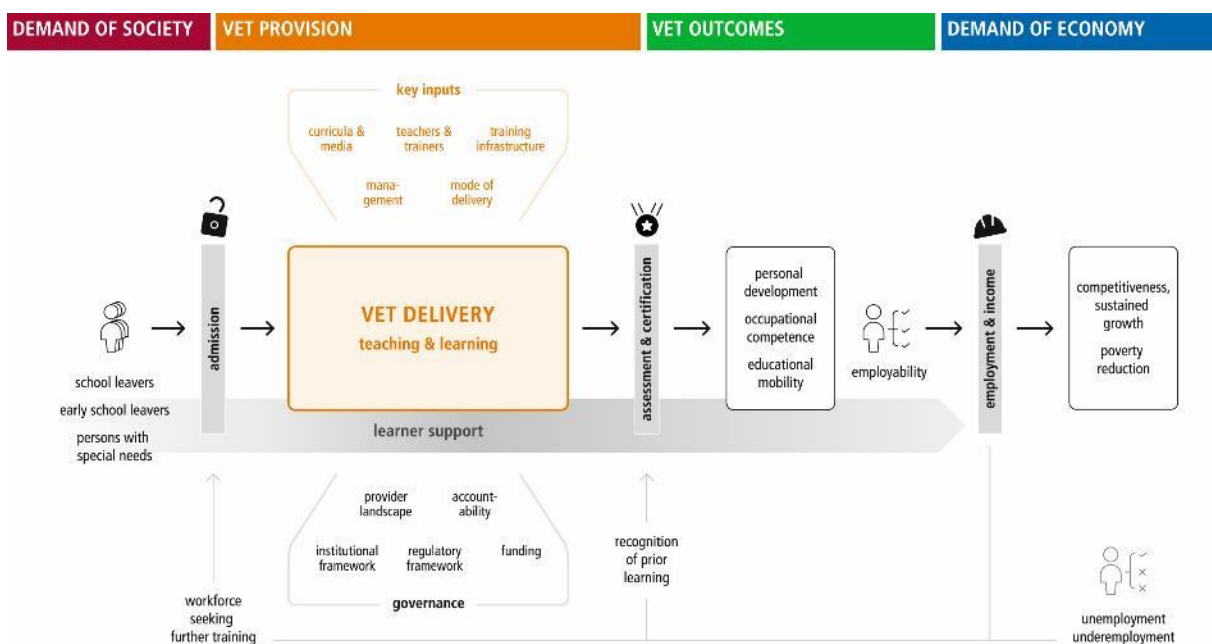


Illustration 9 - Key inputs for VET delivery

4.1 Curricula, training material and media

There is no unique and worldwide-accepted definition of “**curricula**”. But as a general rule we can say that curricula determine the objectives and contents of training programmes, and in many cases they also determine their sequence, timing, mode or format and overall duration. Some even provide methodological advice for the trainers who implement the programmes.

Traditional curricula usually list the subjects the students have to learn, whereas modern, competence-based curricula define learning outcomes that describe what the students have to be able to do at the end of the training programme (or module).

The major input for VET curricula derives from the requirements of the **labour market**. These are usually described in occupational profiles or standards that detail what a person in a specific occupation does, and how well the person should be able to do it in order to be considered competent. VET curricula may also be enriched with content related to general

education subjects or to personal development. This depends very much on the nature of the programme, the target group and the chosen mix of the three outcomes of VET delivery mentioned earlier – personal development, occupational competence, and educational mobility.

The quality of the curricula is one decisive factor for the relevance of a training programme. If the curricula do not adequately reflect the requirements of the economy, VET graduates will have difficulty in finding a job, performing well in a job or in starting their own business. Therefore, curriculum revision or development is a major area of intervention for VET reforms or donor programmes in the field of VET. Important aspects concerning such reforms are a) making processes more participatory; b) making results more relevant and broadly accepted, and c) making processes faster.

Appropriate **training material and media** are required to put the quality of curricula into practice. Both are basic requirements to enable effective learning processes. The quality of training material and media can also help to compensate skills shortages of teachers and trainers, which sometimes are prevalent. Besides, new technologies and new (social) media and the availability of interactive teaching material are increasingly supporting self-learning providing various new options for the delivery of VET.

Consider these key analytical questions concerning curricula:

- **Availability:** are curricula available for the most important training programmes offered (or to be offered) in the VET system – and are they up to date?
- **Relevance:** to what extent do the existing curricula reflect the requirements of the economy and the target group?
- Are **capacities** available in the VET system for curriculum revision or development according to modern standards, and who is in charge of this?
- Are the reforms realisable in practice? (considering training infrastructure, availability of training material and media, training of trainers, funding and so on)

4.2 Teachers and trainers

Teachers and trainers are the backbone of any VET system and any educational intervention. They are the ones who convey knowledge, skills and attitudes to the participants, according to the curricula – if there are any – and according to their own levels of competence. This is why the quality of VET programmes significantly depends on the competences of the teaching staff.

VET teachers and trainers need a balanced mix of technical, methodological and pedagogical skills, and the VET system as a whole needs teachers and trainers who are competent to cover subjects not just related to occupational competence but also personal development and educational mobility. And at least a part of the teaching staff should be prepared for working with special needs groups.

What makes teaching in VET a real challenge is the fact that, because of the speed of innovation and technological change, technical knowledge and skills become outdated much more quickly than they do in general education. For VET teachers and trainers, catching up

with technological trends and developments is crucial, and this requires a good system of pre-service and in-service teacher training, which includes exposure to the world of work.

However, the reality in most of our partner countries is far away from this. The majority of the teachers and trainers in VET have made a purely academic career and have hardly ever gained practical experience in the occupational fields they train in. In-service training is a rare exception. Moreover the status, employment conditions and remuneration of teaching staff in VET are often poor, which reduces their motivation, readiness and capability to invest time and effort in further developing their competences, since many pursue alternative income generating activities in parallel with their teaching work.

In-company trainers are closer to the world of work and competent to perform the technical tasks in work-based learning approaches (e.g. dual approaches, internships an alike). But they are rarely trained to gradually acquaint learners with workplace requirements. Quite often they lack pedagogical skills, especially when it comes to care for individuals with specific needs or learning difficulties. A well-institutionalised interplay between the workplace and the school that involves the in-company trainers and supports them with learning objectives and at least somewhat coordinated workplace curriculum is important for guaranteeing that the learners will be best supported in reaching their learning objectives.

All this makes the teaching staff a real bottleneck for any progress and improvement in a VET system. VET reforms or donor interventions in the field that do not adequately take this issue into consideration are bound to fail.

Consider these key analytical questions concerning teachers and trainers:

- Is the level of competence of the teaching staff (in terms of technical, methodological and pedagogical aspects) adequate for the delivery of high-quality VET?
- Is there an appropriate in-service training mechanism in place?
- Is the teaching staff able to cope with the requirements of updated or new curricula reflecting recent labour market trends?
- Do the status, employment conditions and remuneration of VET teachers and trainers allow well-qualified and motivated staff to be recruited? Can well qualified staff be kept in teaching?

4.3 Training infrastructure

Adequate **training infrastructure** and its durable financing/resources for up-keep is also very important for high-quality training – and it is often very expensive. For training centres, catching up with technological trends and developments in the world of work is a real challenge that requires frequent investments in venues (classrooms, laboratories and workshops or other simulation facilities) and equipment.

Our partners in developing countries mostly find it impossible to build, equip, and maintain training facilities to the appropriate standard and in sufficient quantity to cover the continuously growing social and economic demand for VET. This makes training infrastructure another crucial bottleneck for any ambitious VET reform or donor intervention, in particular one which

covers a large number of people. In many partner countries the plain maintenance and regular up-dating of existing infrastructure and equipment is another important challenge. In this context, work-based learning and other forms of cooperation with the world of work are possible ways out which it is worthwhile to explore.

Consider these key analytical questions concerning training infrastructure:

- Do the workshops, laboratories and equipment in the existing training centres meet the training needs of the economy?
- Are resources available within the VET system to modernise and extend training infrastructure in order to cope with growing and changing demand?
- Are work-based learning and other forms of cooperation with the world of work applied or at least explored? Could they be extended? Who are potential partners?

4.4 Professional management

VET systems operate through a network of technical schools and training centres, which have a more or less high degree of autonomy. They are local service providers that need good management in order to be efficient and effective. **Professional management** is therefore another key element of modern VET systems.

Management of a training institution comprises management of significant numbers of staff and students, management of valuable assets in terms of training infrastructure, financial administration, and communication with state authorities, with students and their parents, and and local stakeholders from the world of work.

Against this background the issue of quality management in VET has been raised both in the scientific community and in the public administrations responsible for VET. Many governments and even some economic sectors have established, or are about to establish, accreditation systems or quality marks for VET providers in order to ensure a certain level of quality in VET provision. Almost all these approaches put the spotlight on management. However, quality management remains underdeveloped on the level of implementation.

Therefore, management and its professional development are a key issue for many VET reforms.

Consider these key analytical questions concerning professional management:

- How do the decision-makers in the VET system view the importance of quality management in training institutions?
- Do the relevant training institutions enjoy the degree of autonomy that professional management requires?
- What are the recruitment mechanisms for management staff and the level of competence requested?
- What support mechanisms for managers are available, such as further training courses, handbooks or coaching? Are they adequate and sufficient?

4.5 Modes of training delivery

The final key input is **modes of training delivery**. VET systems usually distinguish between:

- **initial** VET (IVET), also called pre-employment VET, which primarily addresses school graduates and school drop-outs; and
- **continuous** VET (CVET), also called further training, which addresses people already employed or currently unemployed.

A threefold distinction is also drawn between:

- **formal** VET, which takes place within the education system and provides certificates that allow further educational mobility. Typical examples are technical secondary schools;
- secondly, **non-formal** VET, which takes place in training centres outside the traditional educational system and provides certificates which offer recognition in the world of work. Typical examples are training centres run by NGOs or their partner training providers which address unemployed or underemployed young people or adults;
- and thirdly **informal** VET, which refers to any kind of vocational learning that happens outside regulated frameworks, for instance at the workplace, in groups of peers or colleagues.

Formal and non-formal VET can be delivered in different modes. These delivery modes can be grouped and distinguished according to the following criteria:

- fragmentation;
- hands-on learning;
- distance learning;
- geographic organisation;
- customisation;

- learning progress; and
- timing

Within these criteria, delivery arrangements may again differ. The following illustration provides an overview:

crit erion	arrangements ranging from ... to		
fragmentation	stand-alone modules	module sequence (allowing exit and re-entry)	comprehensive programme
practical exposure	classroom and laboratory focus	simulation (workshop etc.), 'teaching factory'	work-based learning (experiential learning)
distance learning	online emphasis	blended learning (online courses plus contact seminars)	offline emphasis
geographic organisation	fixed location	'hub' and satellite centres	mobile units
customisation	units freely chosen by learners	pre-defined units plus optional units	learning programs with pre-defined units and sequence
learning progress	Learning duration is flexible, outcomes fixed ('competency-based')	Learning duration is fixed; content can be added (for fast learners)	Outcomes are variable (grading); duration is fixed
timing	full-time	mixed (e.g. full-time at weekends)	part-time

Table 1

Which delivery mode with what kind of arrangement is chosen depends on the overall VET approach and policy of a country but also on the given circumstances of individual training providers and of the target groups they serve. Often, training providers offer different modes and combinations in order to be able to respond flexibly to different target groups and to optimise the use of their training infrastructure.

All these delivery modes have advantages and drawbacks, and each VET system has to develop its own specific mix according to national priorities, culture, and available capacities.

Consider these key analytical questions for modes of delivery:

- What are the prevailing modes of delivery?
- To what extent do they correspond to the needs and requirements of specific target groups to be addressed by a VET reform or a donor intervention?
- Which other modes of delivery could enhance the effectiveness, efficiency, outreach and quality of the VET system significantly?
- What would be the implications in terms of financial and human resource as well as in terms of duration and challenges?

5 Learner support

Transition from school to work, with VET as its most important cornerstone, is not always and not for all young people a smooth process. There are many obstacles and problems and a certain risk of failure, in particular for special needs groups. This is why many countries have developed different support measures to prepare, accompany, and follow up the training process in the VET system.

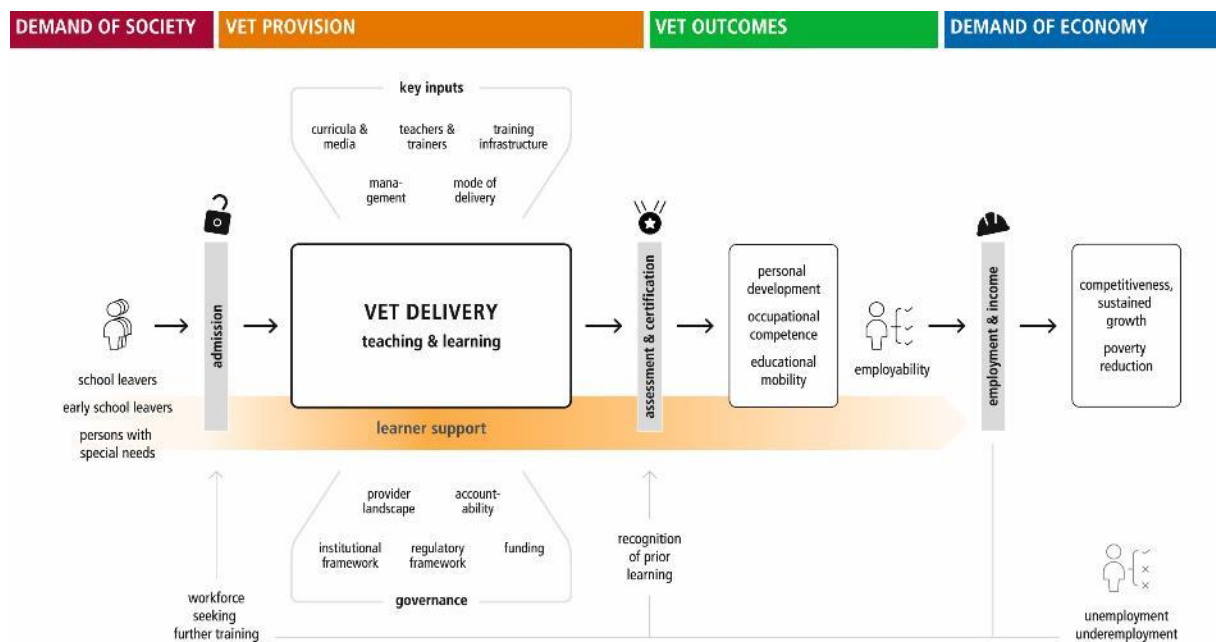


Illustration 10 - Learner support

The most important and widespread learner support measures are the following:

Vocational orientation takes place during the final years of general education and aims to make young people aware of the world of work and help them to identify the occupational areas which might be interesting for them.

Career guidance or counselling is generally offered at the interface of general education and VET and provides detailed information on specific training pathways and related jobs. It sometimes includes ability tests and advice regarding admission. It addresses job-seekers as well as employed people who want to develop their skills. It is an important instrument to help different target groups make informed choices when opting for a specific VET programme.

Different **advisory services and special supportive courses** are sometimes offered during the training process. The aim of these measures is twofold: to prevent or at least reduce or mitigate dropout – which is still a common feature of many training programmes – and to make sure that the participants perform well in the final assessment, thus increasing the number of successful graduates.

Job placement services take place at the interface of VET and employment. Although placement is a key function of the labour market system and in particular of the public employment services it is more and more widely acknowledged that training providers also

have a role to play. This covers issues like networking with local companies, internships, and preparation for job search (how to identify job opportunities and how to apply).

Coaching or mentoring for beginners in the world of work **and** their employers can also be found more and more often. It is known that the first couple of months in a job are decisive for stable employment. Support provided by coaches or mentors can reduce the risk of failure during this period. This is very important for special needs groups and in particular for those who opt for self-employment.

All these supportive measures are still underdeveloped or even non-existent in the VET systems of most of our partner countries. But there is a trend to introduce such instruments in order to make the rather expensive training programmes more efficient and effective. For donor interventions in VET, which often emphasise the inclusion of special needs groups, it is advisable to consider such complementary actions.

Consider the following key analytical questions regarding supportive measures:

- Which of the above-mentioned learner support measures are applied in the current VET system, to what extent, and who is using them, at what level of education?
- What are the experiences so far: to what extent do they contribute to the effectiveness and efficiency of VET delivery?
- Which of these supportive measures are needed for the specific target groups of an envisaged VET reform or donor intervention?
- What would be the prerequisites and financial implications of introducing one or more of these supportive measures in the VET system or in a specific donor programme?
- Who could be partners and allies for the introduction of learner support in a VET system?

6 Assessment and certification

VET usually terminates with assessment. Participants have to provide evidence that they have acquired the knowledge and skills that the economy requires for the specific occupations they have been trained for, in other words that they are competent and able to perform the jobs in accordance with industry performance standards.

This is confirmed by certificates issued by the competent authorities, or the competent educational institution or private organisation. These certificates are the “driving licences” for the labour market and the economy. Their value for their holders – that is to what extent they facilitate access to employment and income – depends very much on their degree of recognition.

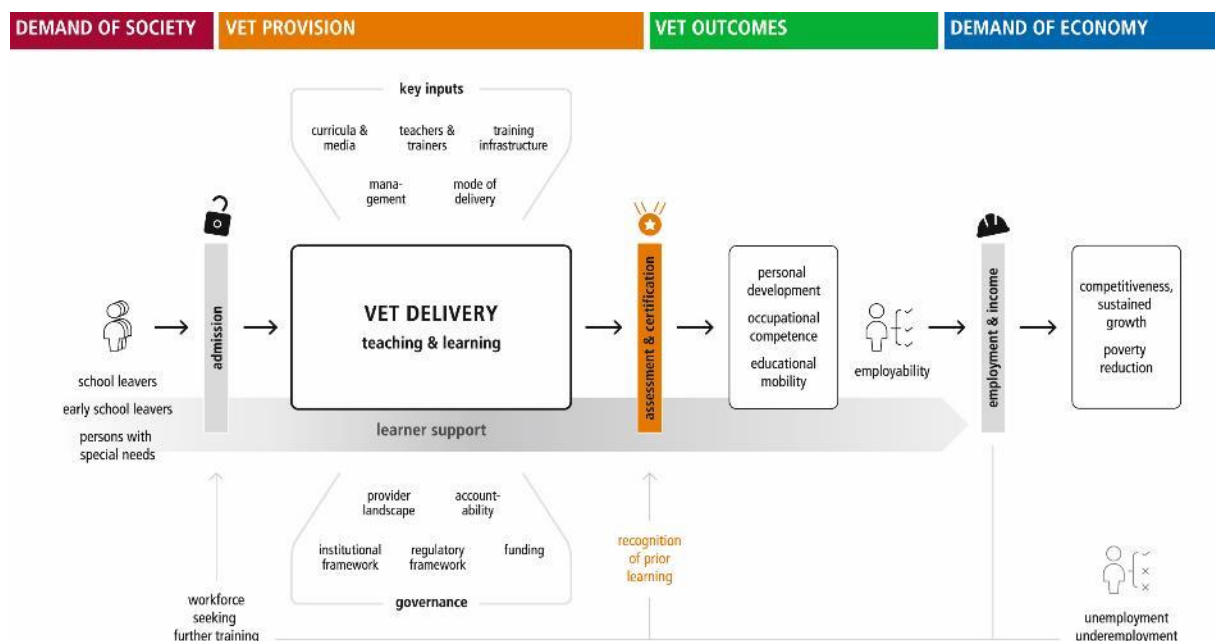


Illustration 11 - Assessment and certification

It is therefore crucial that certificates are credible, i.e. that recruiting companies can trust them. This implies that the assessment is:

- **relevant** – it assesses the knowledge and skills that are decisive for job performance;
- **reliable** – the test instruments used are appropriate to measure whether or not a person is competent;
- and **objective** – the assessment criteria and procedures used are the same for all candidates and the assessors are impartial.

Again, the reality in our partner countries is often far away from this. What we often find is assessment done by the trainers who delivered the course, and certificates issued by the training providers themselves. Very often, practical skills are not sufficiently considered in assessment. As a result, the certificates are more or less useless to the graduates when they apply for a job, and employers have to invest significant time and effort in getting the right applicants.

A relatively new trend in many countries is the opening up of assessment also to people who did not participate in a specific training course but acquired relevant competences at the workplace or through other forms of informal learning. This is usually called **recognition of prior learning** (RPL) and is a powerful tool to help unemployed people to get their occupational competences recognised and to facilitate their labour market integration. It also stimulates lifelong learning because formal certificates are often required for participation in further training.

This is why certification and assessment, including RPL, appear more and more often on VET reform agendas. For our partner countries it is of particular importance because many companies do not take the certificates issued by the VET system into consideration, while at the same time many employed and unemployed people are competent, but do not have a formal qualification.

On the other hand, the rules and procedures for RPL are anything but uniform. The quality of the recognised competences can vary considerably. From a system perspective, there is a risk that there will be two certificates on the market for the same qualification - one from RPL, one via the classical route - which are not of the same quality or which cannot guarantee the same professional competence. RPL certificates are often perceived as second-class degrees. It is therefore important that the RPL procedure meets high quality standards to guarantee the same professional qualification as the standard qualification procedure. As this is often not the case, employers have little guarantee that the attested qualifications are actually present.

Finally, consider these key analytical questions on the issue of certification and assessment:

- How is assessment and certification organised in the current VET system? Is there an opportunity for recognition of prior learning?
- How relevant, reliable, and objective is the assessment system?
- To what extent are practical skills considered in the assessment?
- To what extent and how are representatives of the world of work included in assessment?
- To what extent are certificates known and recognised in the world of work?

7 VET systems: the complete picture

The following illustration provides an overview of a typical VET system and its interfaces with general education, labour markets and the employment system.

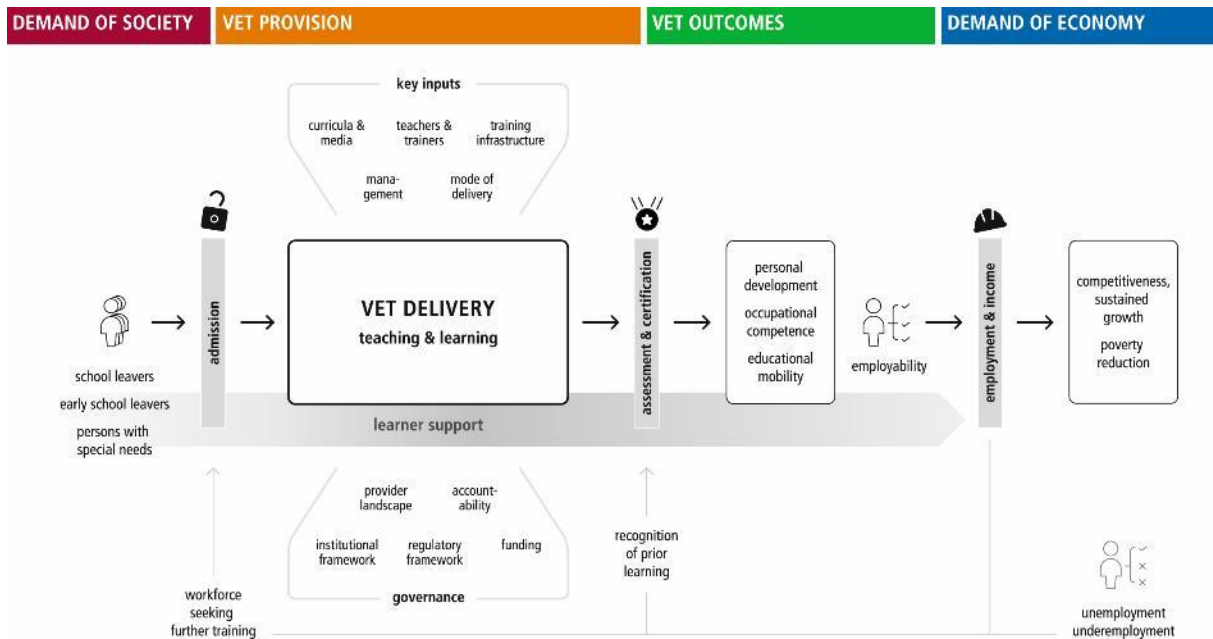


Illustration 12 - VET systems: the complete picture

It goes without saying that the different elements and factors shown in this graphic, and elaborated and explained in the text, interrelate with each other. This is what makes a system a system. The complex interdependencies and **cause-and-effect relationships** between the elements and factors have only been touched in the text and can hardly be depicted in a graphic. Typical examples of such interrelations are:

- Technological change and innovation often require the revision (or replacement) of curricula, which might imply the adaptation of training infrastructure and/or training of trainers and/or assessment and certification, or even a change in the mode of delivery.
- Opening VET up to special needs groups also requires the revision of curricula, not primarily with regard to objectives, but most probably with regard to timing and methodology. It also may imply a change or adaptation in the mode of delivery and trigger the need for specific learner support.
- The closer involvement of companies in VET delivery, for example regarding work-based learning, significantly changes the role of teachers and trainers, has an impact on curricula and training infrastructure, and requires adaptations of management and administration, and funding as well.

Each intervention that changes one of the elements of the system has knock-on effects in other elements and/or requires changes to be made to other elements. Describing and analysing the main interrelations within a VET system would go far beyond the scope of this introduction.

Part II

VET systems in a wider context

VET systems do not operate in isolation. On the contrary: they are embedded in a wider context and interact closely with the labour market and the economy on the one hand, and with other parts of the education system on the other.

Responsiveness to current and future demands in labour markets and the economy is crucial for any VET system. By providing their clientele with occupational competences to perform and keep a job in industry or to create a business, VET systems contribute to both the personal income and socio-economic inclusion of graduates and the competitiveness and growth of the economy. Therefore, interventions in VET systems always have to consider possible influences and knock-on effects to and from the economy and the labour market.

VET is also and importantly interlinked with other parts of the education system. The different sub-systems of the education system are interconnected and influence each other, and they impact on the design and implementation of VET projects and programmes. A separate chapter addresses the linkages of VET with basic education, higher education and lifelong learning as well as the challenge of creating permeability in between the different parts of the overall education system.

Moreover, there are a number of other policy areas that are relevant for VET systems and their performance. These policies, like those on social welfare, youth, and migration, and their interlinkage to VET will be presented in a separate chapter at the end of this part.

8 VET and the economy

As we have seen in part I of this introduction paper, VET systems have to serve a double purpose. They have to provide their target groups with the skills they need if they are to find and keep a job, or to start their own business. At the same time VET systems claim to supply the economy with the labour force it needs to grow and remain competitive. In both cases, to accomplish these goals VET system actors must be aware of and respond to what the economy demands in terms of labour and skills. In other words it is a characteristic and challenge of VET systems to be **labour market-oriented**. The following section briefly describes the interrelation of VET systems with labour markets and employment systems.

8.1 VET and the labour market and employment systems

For a VET offer to be labour market-oriented, it requires, as a first step, the identification of occupations (and their respective levels) that have priority for the economy and offer sufficient employment opportunities for VET system graduates. These occupations must be analysed and described in detail, including performance indicators, in so-called occupational standards. These standards are the key information the economy provides for curriculum development and course design in the VET system. Based on these standards the necessary resources –

equipment, learning materials and trainers – can be developed and provided for the training process in schools, training centres or companies. At the end of the training process assessment takes place that measures the competencies gained by the trainees against the performance indicators laid down in the respective occupational standard. Successful candidates receive a certificate that signals to a potential employer that its holder is able to perform the occupation according to the agreed industry standards. (See also part I, section 3.)

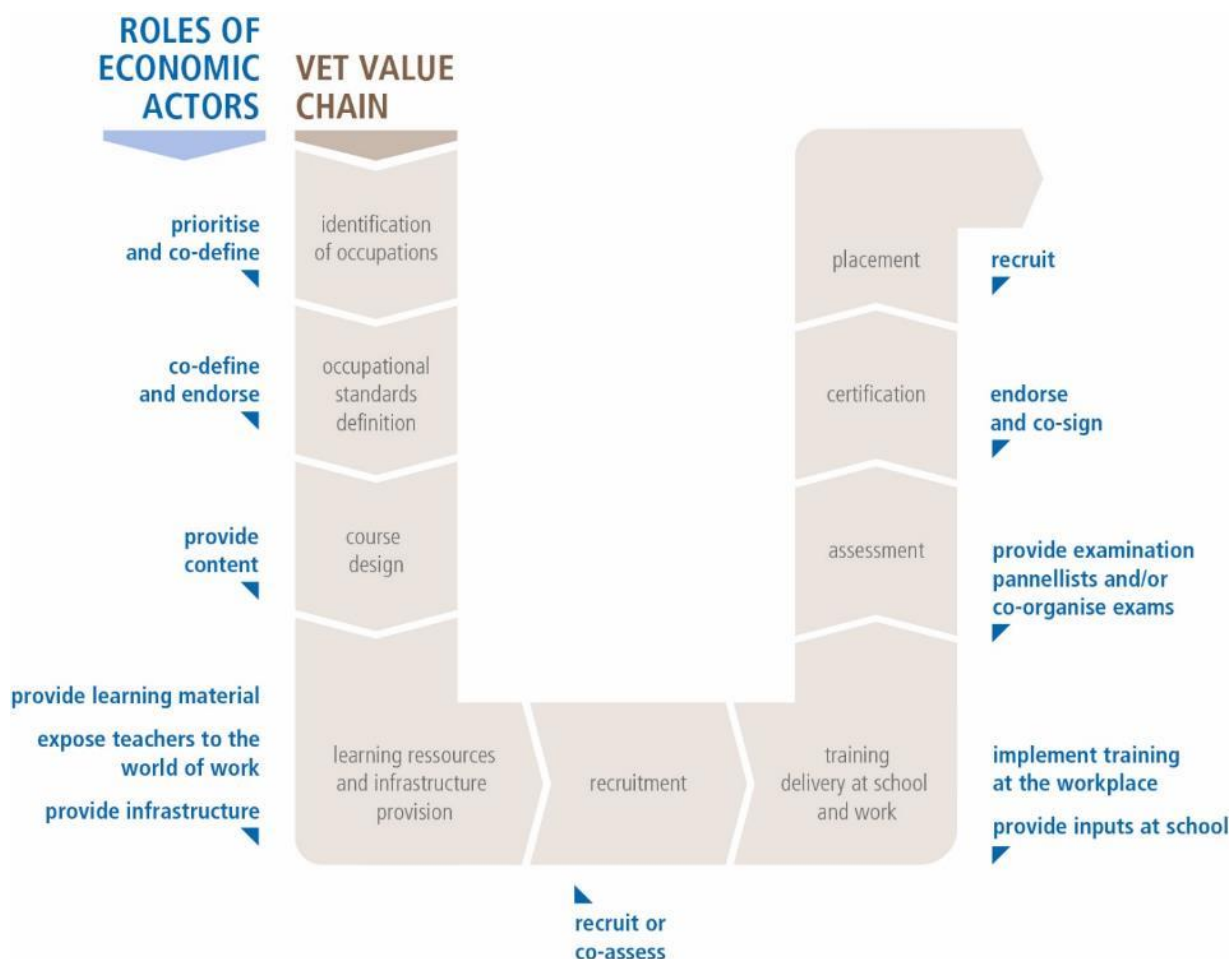


Illustration 13 - roles of economic actors in the VET value chain

All the above-mentioned steps of defining, designing, and implementing training, and of assessing and certifying graduates constitute the **VET value chain**. These steps require the close involvement of actors from the world of work (economic actors) in order to assure the **relevance** of the VET system and its offers for the labour market and the economy. The graphic above illustrates the interweaving of the VET value chain (or: system) and the actors from the world of work (or: labour market system) and the different **roles the economic actors** typically play in the process. These roles are of course different in each system and are shown here in a generalised way.

A VET system that applies such a labour market-oriented approach significantly strengthens the **employability** of its graduates. However, this does not automatically entail their smooth transition to stable employment. Many graduates are not aware of employment opportunities accessible to them and/or do not know how to search and apply for a job. And even if they find a job there is a certain risk that they drop out relatively soon because they find it difficult to get

used to the new environment at the workplace. This is particularly true for young people from disadvantaged backgrounds.

In order to bridge this gap and to facilitate the labour market integration of VET graduates as well as of unemployed people in general, most countries apply **active labour market policies** (ALMPs) and/or follow a dedicated **youth employment policy**. These policies, which are usually implemented by public employment services (PESs) in collaboration with ministries of labour and in some cases also with ministries of education, comprise **three main pillars**:

The focus of the **first pillar** is on **matching**. The provision of relevant and up-to-date labour market information for the VET system actors to orient their offers, **career counselling** for young people and their parents to help them make informed choices, **placement services** for graduates to facilitate the job-seeking process, and **job coaching** for new employees to mitigate the risks of failing during the probation period are typical instruments, which in many countries are offered by **employment services**. In some cases, and in particular in countries with still underdeveloped public employment services, such support is offered directly in training centres. (See also part I, section 5, Learner Support.)

The **second pillar** of ALMP or youth employment policies relates to **training**. PESs offer specific training programmes for graduates of the (initial) VET system who have difficulty finding a job, upskilling for people at work who run the risk of losing their job because they lack specific skills, and reskilling of those who have already become unemployed and whose qualifications are no longer required. In all these cases PESs collaborate closely with VET providers, in particular with providers in the continuous VET sub-system, which conduct the training courses with PES funding.

But even the best counselling, placement and coaching services cannot assure a smooth transition to work for VET graduates if the labour markets do not offer enough jobs, which is the case in many developing countries with weak economies and high numbers of job-seekers graduating from the education system. Therefore, a **third pillar** of ALMP and youth employment policies focuses on **job creation**.

A common approach is the promotion of **self-employment**, i.e. helping VET graduates to set up their own business. This is usually done by integrating **entrepreneurship training** and **financial literacy** in the curricula of training programmes or offering it as an additional module in parallel to or after the training course for those who want to follow this option. However, experience shows that entrepreneurship training is useful but usually not sufficient to make business start-ups by VET graduates a success. In addition to technical and business skills the young entrepreneurs need **access to (micro-)finance and insurance**, as well as ongoing **coaching** by experienced advisers or **mentoring** by other entrepreneurs during the start-up phase. Furthermore, there is a risk of market saturation if too many VET graduates try to set up micro-businesses in the same occupational and geographical area. Therefore, measures with a focus on self-employment are often embedded in broader **economic development policies** and are combined with **private sector** and – where relevant – with **financial sector development** approaches.

Other instruments applied in ALMP or youth employment policy are temporary employment schemes, for example in the framework of public infrastructure programmes or in dedicated social enterprises. Furthermore, many countries try to facilitate labour market integration,

particularly for vulnerable groups, by granting direct or indirect financial incentives to employers who offer additional job opportunities for specific target groups. Typical direct incentives are wage subsidies or reduced social insurance contributions. Indirect incentives can be tax benefits or certain privileges in the context of public procurements.

8.2 VET and economic development

The chapter above describes the close and partly institutionalised relationship between VET systems and labour market and employment systems. Although less institutionalised and less obvious, there is another strong link between VET systems and the economy. **Economic developments** can have a major impact on VET systems, and at the same time, to be successful and unfold their full potential, they often depend to a certain extent on supporting measures provided by the VET systems.

Economic developments in a country can be result of economic and/or development policies, like for example small-scale local development or private sector development projects, large infrastructure projects like road construction, industrial policies boosting promising sectors etc. But they can also be triggered by new technologies and related changes like digitalisation, artificial intelligence, industry 4.0 etc. or by a global phenomenon like climate change. In any case, such initiatives and changes require the provision of an adequately qualified labour force by the VET system, i.e. VET providers are expected to align their supply according to the emerging new economic policies and technological trends and the demands they entail. If they are successful in providing the required skills, their graduates are absorbed by the local economy and contribute to accelerated growth and competitiveness of their companies, which in return are enabled to generate additional employment opportunities.

Therefore, economic and technological changes and development initiatives have to be observed and their potential impact on the labour markets analysed and communicated to the relevant actors of the VET systems through a **labour market information system**. Corresponding training programmes can then be designed and implemented in due time. However, in many of our partner countries this is often hampered by lack of communication between the systems and the time-consuming administrative procedures that the introduction of new training offers in the initial VET delivery system requires.

The latter point – time-consuming administrative procedures for the design and introduction of new training programmes in initial VET – applies to VET systems almost everywhere. But developed and well-functioning VET systems usually comprise a network of mainly private training providers in the **continuous VET sub-system** that is able to respond quickly, flexibly and efficiently to specific requirements of the economy, thus complementing the training offers of the public mainstream systems, which usually focus on initial vocational training. In partner countries of development cooperation such a continuous VET sub-system with specialised training providers often does not perform very well, making the lack of skilled labour force a bottleneck for investments, economic development and competitiveness.

8.3 The role of the economy in financing of VET

Finally, there is one more link between the economy and the VET system. The economy is an important funding source of the VET system. In many countries companies contribute directly or indirectly to the financing of the VET systems. The most common approach to making companies pay for the VET system is a training levy, i.e. a special tax whose revenue is exclusively used for VET purposes. A more indirect approach is contributions to the public employment services, which in some countries finance (re-)training courses or entrepreneurship training and support for unemployed people, or bridging courses and other support measures for young people who have difficulties accessing the mainstream training system. Furthermore, many companies do not only train their staff in-house, but also send staff members on further training courses for up- or reskilling, i.e. they are a major client of training providers in the continuous VET sub-system.

Consider these key analytical questions regarding the link of the VET system with the labour market and the economy:

Labour market orientation:

- To what extent are the available training offers labour market-oriented, i.e. responding to identified demand and based on occupational standards?
- Is the industry adequately involved in identifying the need for, and the design and delivery of, training programmes?
- Is there an industry-led assessment system in place that assures the reliability and recognition of certificates?
- Are counselling, placement and coaching services available to facilitate the VET system graduates' transition to work?
- What role does the public employment service play in financing training courses and other support schemes for unemployed people, and how can these funds be used for specific target groups?

Job creation and economic development:

- Is entrepreneurship training included in training programmes in regions or occupational fields with limited wage employment opportunities?
- Do young entrepreneurs have access to credit, insurance and coaching? Is there a possibility for collaboration with private sector and/or financial sector development approaches?
- Is a labour market information system in place that anticipates emerging new demands for skills or obsolescence of traditional skills and informs the VET system accordingly?
- Does the VET system comprise training providers capable of responding quickly to specific skills needs of the industry and/or of supporting sectorial or regional economic development policies?
- To what extent are companies prepared to invest in upskilling and reskilling their staff, thus creating and sustaining a market for continuous training providers?

9 VET in the education system

VET builds upon the foundations laid down by the general education system in the context of compulsory basic education (BE) at the primary and lower secondary levels. Initial VET usually starts at the upper secondary level between the ages of 14 and 16. Typical formal programmes last between one and four years. Continuing (higher) formal VET offers are situated at the post-secondary and tertiary levels and can also be an integrated part of higher education systems. Depending on contexts, the intersections might then differ, and the systems will develop specific interplays (see below). Furthermore, VET systems, formal and non-formal, are an integral part of lifelong learning, which is becoming more and more important due to rapid technological changes in the world of work.

The main challenge in the relationship of VET with BE is to build bridges between these two education sub-systems to allow the frictionless transition of school graduates, weak performers at school, or early school-leavers into appropriate VET programmes.

In a lifelong perspective it is of crucial importance to make sure that participation in initial VET is not a dead-end, but allows further professional or educational steps to be taken. The main challenge here is to create horizontal and vertical permeability within the educational system.

Both above-mentioned issues are addressed in the following paragraphs.

9.1 VET and basic education (BE)

BE usually comprises primary and lower secondary levels of formal education (public and private) as well as alternative education programmes designed to respond to particular learning needs of people of all ages.

In many of our partner countries the BE systems are still rather weak, i.e. they do not reach out to all children and/or have high drop-out rates and limited quality of education, resulting in a large share of young men and women ending compulsory schooling without sufficient foundational knowledge and skills to continue their educational pathway in VET or higher education and/or to live and work in dignity. This constitutes a major challenge for VET systems and, in particular, for donor interventions that often focus on disadvantaged target groups. Many potential addressees are not granted access to (formal) VET programmes because they lack a certificate of completed BE, and those who are admitted – with or without a BE leaving certificate – often have significant deficits in basic education competencies. This hampers the learning process and progress and often results in dropping out from VET. Moreover, many school-leavers who enter the VET system have no or only a little knowledge regarding the occupations they want to be trained for.

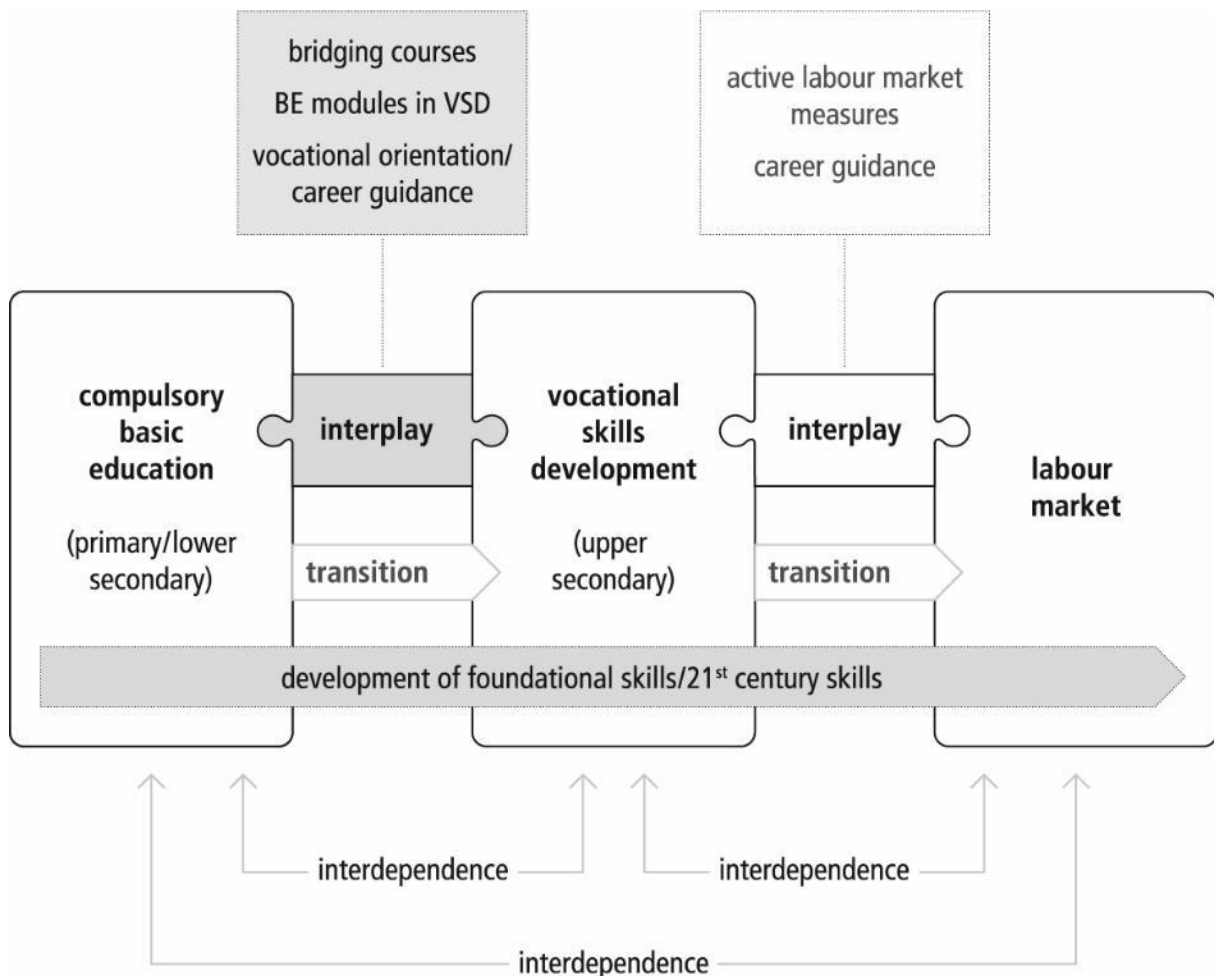


Illustration 14 - Continuum and interdependence BE – VSD – LM

As given in the illustration above, there are **three main types of interlinking BE and VET in education systems** that are applied to mitigate or overcome problems which hamper the smooth transition of graduates (or early school-leavers) of the basic education system to VET programmes:

Vocational orientation

Vocational orientation aims to better prepare pupils towards the end of (compulsory) basic education for the transition to VET and the world of work. It raises awareness amongst pupils and their parents of VET as an attractive alternative to academic pathways, and helps them to identify talents and interests and make informed choices regarding available training offers, thus reducing the risk of frustration and drop-out. Furthermore, it supports recruitment by training providers. And finally, it improves communication and cooperation between feeder schools, training providers and companies, which facilitates smooth transition processes for BE graduates.

Bridging courses

Many graduates of underperforming BE systems in partner countries, as well as drop-outs of the formal education system and young migrants, do not have the level of general education required for successful participation in VET programmes. Bridging courses help to overcome this gap and facilitate the target groups' access to VET:

Depending on the context, bridging courses can have different target groups, formats and contents:

- In some countries a certificate of completed BE is a formal prerequisite for accessing VET. In these cases, the focus of bridging courses is on school-leavers with incomplete BE and the content is primarily BE-related, possibly enriched with elements of vocational orientation and counselling. The delivery format is usually school-based;
- In other cases, VET providers put more emphasis on basic vocational knowledge and the skills and/or personal skills of the applicants, and less on a BE leaving certificate. In these cases, the target groups may include drop-outs as well as BE graduates. The content is more on vocational skills in one or more occupational areas in order to help participants to identify their interests and talents and to make informed choices. The training also often provides opportunities to bridge skills gaps in general education and/or to develop personal skills and attitudes relevant for the world of work. The delivery format has a strong focus on workshop- or work-based modalities and often includes some complementary BE-based schooling that either takes place in workshop settings or at external educational providers.

VET courses with integrated BE

For target groups beyond school age participation in a bridging course is often not appropriate because they are under pressure to get a job as soon as possible in order to earn their living. A bridging course followed by a VET programme would exceed the time span and budget they could afford to invest in skills development. In these cases, VET programmes can integrate BE in their training curricula.

What seems to be a compromise owing to the precarious situation of these target groups has often turned out to be a perfect solution. Experience shows that general education subjects can sometimes more easily be imparted in the context of vocational training and practical application than in a classroom setting. Particularly in fragile contexts, where the need for immediate employment and income is high for most of the target groups, the integrated approach of VET and BE is promising.

Consider these key analytical questions regarding the link with basic education:

- What is the outreach of basic education in the country? Are parts of the population or regions undersupplied? How many and who are dropping out of BE before graduation or at the entrance to VET?
- How is the quality of basic education in the country? Do most of the graduates possess the levels of knowledge and skills necessary for successful participation in initial vocational training?
- Are there specific target groups affected by undersupply or low quality of basic education?
- If lack of basic education is a challenge for VET performance or reform, could an interlinked BE and VET approach be an option?
- Who are potential allies in such an interlinked approach and which of the above-mentioned formats would be the most suitable?

9.2 VET and higher education (HE)

Higher Education, in some countries also called tertiary education, is delivered at universities, universities of applied sciences, specialised academies, and institutes of technology. Whereas VET qualifications pursue the specific goal of preparing students with skills for work, and support students to join the workforce, HE programmes traditionally do not provide direct preparation for an occupation or job in the labour market. Higher VET qualifications, which exist in some countries, are usually governed by sectoral reference frameworks, for example for health care professionals, and delivery is undertaken by sectoral (private) institutions, operating independently from actual HE and VET systems.

In certain areas traditional boundaries and fixed lines between VET and HE are becoming blurred and **permeability** between the two education sub-systems is tending to increase. Without doubt this is a big step forward for VET graduates, as it greatly expands the **options for progression** in their professional career. In many of our partner countries VET still has a very low reputation and (non-formal) VET programmes are often a dead-end that only allows exit to the labour market. Consequently young people and their parents opt for an academic pathway and higher education where- and whenever possible, resulting in an oversupply of HE graduates who cannot find appropriate jobs, and in a lack of skilled labour for non-academic occupations. Increasing permeability between VET and HE would therefore be an important contribution to mitigating this problem.

Lifelong learning, which will be presented in the following section, also helps to gradually reduce the traditional division and increase the **permeability** between VET and HE. However, there are still a number of problems and obstacles that prevent a smooth transition between the two sub-systems. These will be dealt with in the following section.

Consider these key analytical questions regarding the relationship between VET and HE:

- Are there any indications of some convergence between VET and HE?
- Are there any opportunities for access to HE with a VET qualification?
- What kind of “higher VET qualifications” are available and how are they delivered?
- How to increase permeability between VET and HE? What are the options, and what are the main barriers?
- Which stakeholders should be involved in work across the borders of the education sub-systems?

9.3 VET in a lifelong learning perspective

The time when people received initial training in an occupation that allowed stable employment for their whole working life is over for the vast majority of new entrants to labour markets. Developing economies and modern technologies require frequent skills adaptation of the labour force to maintain employability. The growing need for lifelong learning is a global megatrend that challenges traditional education systems as well as individuals. Lifelong learning covers general education, vocational education and training, non-formal education and informal learning activities undertaken throughout life, i.e. all activities that result in improved knowledge, know-how, skills and competences for personal, social and professional life.

In the context of lifelong learning, continuous VET is gaining in importance. In addition to the – mainly publicly financed – initial VET systems, a growing number of further training or retraining courses are offered by public and private training providers in a **continuous VET sub-system** that follows market rules. Clients are companies which want their staff upskilled, individuals who want to secure their employability or progress in their career, and institutions like public employment services that are in charge of preventing or combatting unemployment.

9.4 Permeability of education systems and recognition of prior learning

Although lifelong learning is of particular importance for low-skilled people, these take less advantage of the available learning opportunities. **Access** to continuous VET offers or other educational pathways is a major problem for low-skilled without a formal VET qualification, despite the fact that they often have significant skills and competences in one or more occupational areas, acquired through work experience or other types of informal learning. The same often applies to migrants who have acquired certain competences or even formal qualifications in their home country, which are not adequately considered in their host country.

Against this backdrop more and more VET systems provide opportunities for the **recognition of prior learning**, i.e. for assessment and certification of competences acquired informally or non-formally, e.g. at the workplace, during social activities or in a private context, in order to stimulate and facilitate lifelong learning, increase salary or improve labour mobility. Various approaches to the recognition of prior learning are applied. The most common are individual skills audits and particular assessments, whereas a coherent and coordinated approach to the recognition of prior learning is still missing in many countries.

The recognition of prior learning implies that learning experiences are valued and can be transferred and used as building blocks in further learning and professional careers. This requires a certain degree of **permeability** between the general education and the VET systems as well as within the two systems, e.g. between formal and non-formal VET. The equivalence of qualifications is a prerequisite for both vertical progression within a certain career pathway and horizontal pathways for individuals who would like to change their career path but build on their existing competences.

The worldwide trend to **increased permeability** of the general, vocational education and training systems, and the higher education systems is pushing towards greater coherence and more cooperation between and across education sub-systems. And granting better access to further learning for graduates of VET programmes makes VET more attractive, facilitates career pathways, and thereby supports the concept of lifelong learning.

Consider these key analytical questions regarding VET and lifelong learning:

- Is there a lifelong learning policy in the country? What are its characteristics?
- What about vertical and horizontal pathways within and between the education sub-systems and the labour market?
- What about access to the continuous VET system? What about the quality of the CVET system?
- Are there any regulations for validation and recognition of prior learning?
- How widespread is the learning outcomes approach used in VET?
- How is the relationship of the learning outcomes approach to the national qualifications framework?
- Is there a credit and accumulation system in place?
- Which factors may contribute to increased permeability within and across the education sub-systems? What are the main barriers?
- Which stakeholders should be involved in work on the lifelong learning strategy of the country?

10 Other policy areas relevant for VET

The VET system is the main pillar of the school-to-work transition process of young people. Basic education on the one hand and the labour market and the economy on the other are the two main reference systems for VET actors at all levels. However, there are several other policy areas that have an influence on VET system design and implementation. These will be summarised briefly below:

10.1 VET and social policies

VET is considered a powerful instrument to support the social inclusion and labour market integration of the manifold target groups addressed by social policies in different countries, from handicapped people, ethnic minorities, refugees and demobilised soldiers to unemployed

youth and long-term unemployed people. The approaches and programmes are numerous and diverse; but in general terms **two main approaches** can be distinguished:

- a. social policy actors provide **support services** to their respective target groups in order to **facilitate** their **access** to and/or their **successful performance within the mainstream VET system** (preparatory courses, tutoring, remedial courses in maths or language, socio-pedagogical support, stipends etc.), similar to those described above in the interplay between BE and VSD and those mentioned in Part I in the chapter on access to VSD,
- b. social policy actors fund and provide **separate training programmes** for their respective target groups outside the mainstream VET system. Depending on the target groups these courses are often enriched with life skills training and/or basic education modules.

These two approaches usually coexist. To what extent the latter approach, with additional and separate training offers outside the mainstream system, is necessary depends on the capacities and flexibility of the mainstream VET system on the one hand and on the scope and characteristics of the different target groups on the other. The main problem with the latter approach is the risk of stigmatisation of graduates on the labour market. This can be mitigated through a reliable and competence-based assessment and certification system.

10.2 VET and youth policies

Initial VET addresses young people who are in a transition process not only from school to work but also from childhood to adulthood. They are not only about to become competent workers, employees or young entrepreneurs, they are also expected to become good and socially included adults. Although modern (initial) VET systems usually cover in their curricula issues like social and personal competences, political and citizenship education, complementary offers by youth policy actors are frequent and useful. Making young people aware of their rights as VET students or apprentices, offering them counselling services for individual problems, or simply involving them in leisure activities with peers, are important contributions of youth policy to the prevention of frictions in the above-mentioned double transition process.

10.3 VET and migration policies

Migration is a global megatrend that affects VET systems in many countries and in many different ways:

- Some countries follow a more active approach towards labour-induced migration, i.e. they are aware (or assume) that the expected job growth in the national economy is far from providing realistic employment perspectives for the majority of the young generations about to enter the labour markets. Consequently, they try to orient (parts of) their VET systems towards the demand of labour markets abroad in order to facilitate and to benefit of circular labour migration.
- Other countries actively search for and recruit skilled labour from other countries in order to supply their booming industries with the labour force they need. These

countries are under pressure to develop reliable instruments for skills gap analysis, appropriate assessment and recruitment mechanisms, and flexible further training offers for the skills adaptation of incoming labour force.

- Some countries are confronted with high numbers of migrants and/or refugees who challenge their education systems. In particular VET systems are required to develop adequate instruments and offers, from procedures for recognition of foreign diplomas and certificates to competence assessment and provision of tailor-made complementary training. They also need to adapt the mainstream initial VET system to the specific demands and characteristics of young migrants and refugees.

Consider these key analytical questions regarding the relevance of other policy areas for the VET system in your country:

- Which youth policy actors are relevant for the VET target groups and how can cooperation with them be developed in order to make the best use of their potential?
- To what extent is the country affected by emigration or immigration? Which of the above-mentioned scenarios applies?
- Has the VET system already been adapted to the challenges of migration?

Colophon

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