

OECD Reviews of Vocational  
Education and Training

# A SKILLS BEYOND SCHOOL COMMENTARY ON SWEDEN

Małgorzata Kuczera



November 2013



OECD Reviews of Vocational Education and Training

# A Skills beyond School Commentary on Sweden

Małgorzata Kuczera





## **ACKNOWLEDGEMENTS**

The OECD is grateful to the Swedish national co-ordinators Carina Linden and Stefan Skimutis, and all their colleagues for their work in providing information and advice and organising the visits and meetings, and for work on the background report and other preparation. We would also like to thank the many other people in Sweden who, during our visit and meetings, gave their time to welcome us and answered our questions.



## *Table of contents*

Summary: Strengths and challenges of postsecondary VET in Sweden.....	7
The commentary on Sweden and its place in the wider OECD study .....	8
Postsecondary VET in Sweden: A snapshot.....	9
Comparing Sweden with other countries .....	12
Previous OECD analysis and recommendations.....	15
Strengths and challenges in Sweden .....	17
<i>References</i> .....	31
<b>Boxes</b>	
Box 1 Skills beyond School: The OECD study of postsecondary vocational education and training .....	8
Box 2 Funding arrangements for postsecondary VET .....	15
Box 3 The <i>Learning for Jobs</i> OECD review of upper secondary VET in Sweden...	16
Box 4 International experience of credit transfer and articulation .....	27
<b>Figures</b>	
Figure 1 Participation in postsecondary VET .....	9
Figure 2 Trends in participation.....	10



## **Summary: Strengths and challenges of postsecondary VET in Sweden**

In summary, the OECD assessment of the strengths and challenges of the Swedish postsecondary VET system is as follows:

### ***Strengths***

- Higher vocational education (HVE) is a highly innovative model of postsecondary provision, particularly in its capacity to encourage partnership between employers and training providers.
- Higher vocational education benefits from substantial, quality assured and mandatory workplace learning.
- The social partners in Sweden are fully engaged in postsecondary provision.
- Quality assurance arrangements for both higher vocational education and professional programmes in higher education are strong.
- There are relatively good data available, particularly through longitudinal register data covering labour market outcomes.

### ***Challenges***

- There is limited provision for those who might wish to pursue postsecondary VET courses part-time, particularly adults in work.
- Transition from higher vocational education to higher education is sometimes hard, with no systematic arrangements for credit transfer.
- Development of a more systematic qualification framework for the whole postsecondary system, including both HVE and higher education would help to reinforce consistency of qualifications. Among other valuable benefits, this could promote more effective articulation between the HVE and higher education sectors.
- Workplace learning opportunities in higher education vocational programmes are patchy, with strong arrangements in place in some programmes and some institutions.
- Further expansion of higher vocational education is attractive, but needs to be backed by evidence of demand.

## The commentary on Sweden and its place in the wider OECD study

This commentary is one of a series of country reports on vocational education and training (VET) in OECD countries, prepared as part of an OECD study (see Box 1). The series includes *reviews*, involving an in-depth analysis of a country system leading to a set of policy recommendations backed by analysis. The *commentaries* are simpler exercises, largely descriptive but also including an assessment of strengths and challenges in the country system. The commentaries are designed to be of value as free-standing reports, but are also prepared so that they can become the first phase of a full review, should a country so wish.

### Box 1 Skills beyond School: The OECD study of postsecondary vocational education and training

Increasingly countries look beyond secondary school to more advanced qualifications to provide the skills needed in many of the fastest growing technical and professional jobs in OECD economies. The OECD study, *Skills beyond School*, is addressing the range of policy questions arising, including funding and governance, matching supply and demand, quality assurance and equity and access. The study will build on the success of the previous OECD study of vocational education and training *Learning for Jobs* which examined policy through 17 country reviews and a comparative report. The study also forms part of the horizontal OECD *Skills Strategy*.

Full country policy reviews are being conducted in Austria, Denmark, Egypt, Germany, Israel, Netherlands, Korea, Switzerland, the United Kingdom (England), and the United States (with case studies of Florida, Maryland and Washington State). Shorter exercises leading to an OECD country commentary will be undertaken in Belgium (Flanders), Canada, Iceland, Romania, Spain, Sweden and in Northern Ireland and Scotland in the United Kingdom. Background reports will be prepared in all these countries, and in France and Hungary.

See: [www.oecd.org/education/vet](http://www.oecd.org/education/vet)

This commentary describes the context of the wider OECD study, outlines the main features of the Swedish postsecondary VET system, and compares its main features with those of other countries. It then provides a brief assessment of the main strengths of the system, and the policy challenges which need to be addressed in Sweden.

This commentary was prepared using a standard methodology. The Swedish authorities provided a background report (Ministry of Education and Research Sweden, 2013) following which an OECD team made a visit

to Sweden in February 2013, where the team discussed issues arising with a range of policy makers, stakeholders and staff and students in training institutions.

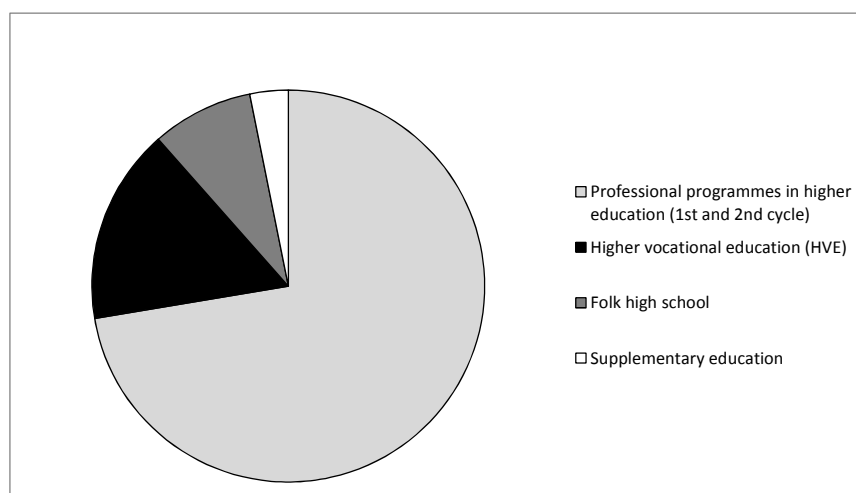
### Postsecondary VET in Sweden: A snapshot

Sweden has a relatively high participation rate in postsecondary education in comparison to other OECD countries with nearly four upper-secondary students in five expecting to enter tertiary education during their life time.<sup>1</sup>

There are two main types of postsecondary vocational education and training provision in Sweden. First, professional bachelor's degrees in universities and university colleges enrol 40% of all postsecondary students. Second, labour market oriented programmes in higher vocational education (HVE) catering to 15% of the postsecondary student population (2011 year of reference). Some vocational courses are also available at folk high schools, and through independent adult education and supplementary education. This commentary focuses on the first two types of provision (see Figure 1).

**Figure 1 Participation in postsecondary VET**

Students enrolled in autumn term 2011



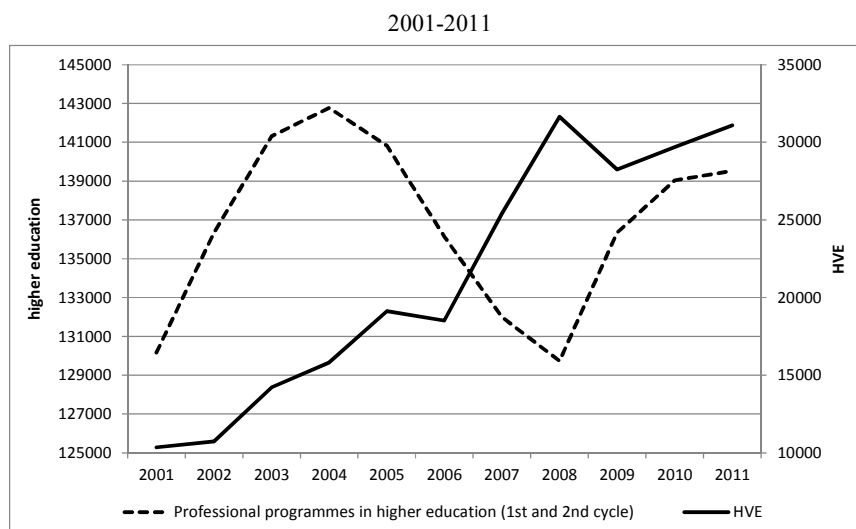
Source: Ministry of Education and Research Sweden (2013), *Skills beyond School. OECD Review of Vocational Education and Training. Background Report from Sweden*, Table 1, [www.oecd.org/edu/skills-beyond-school/SkillsBeyondSchoolSwedishBackgroundReport.pdf](http://www.oecd.org/edu/skills-beyond-school/SkillsBeyondSchoolSwedishBackgroundReport.pdf)

The precursor to postsecondary education in Sweden is a comprehensive system at lower secondary level, followed by three years of upper-secondary education. There are 18 national upper-secondary programmes – both academic and vocational. Vocational programmes can also be pursued as apprenticeships. Foundation subjects such as mathematics and English are included in all these programmes. Upper-secondary VET does not automatically give eligibility to enter higher education. VET students who wish to continue to higher education have to complete additional courses provided within their vocation tracks or in municipal adult education.

### ***Higher vocational education (HVE)***

Higher vocational education (previously called advanced vocational education and training) was established in 2001 to fill a gap in the education market by providing postsecondary non-university programmes closely connected to labour market needs. Since 2001 enrolment in HVE has tripled (see Figure 2). Most HVE programmes require between six months and two years of full-time study with 70% of programmes lasting two years.<sup>2</sup> The one-year programme (equivalent to 200 HVE credits) leads to a diploma qualification and the two-year programme (equivalent to 400 credits) to an advanced diploma.

**Figure 2 Trends in participation**



Source: Ministry of Education and Research Sweden (2013), *Skills beyond School. OECD Review of Vocational Education and Training. Background Report from Sweden*, Table 1, <http://www.oecd.org/edu/skills-beyond-school/SkillsBeyondSchoolSwedishBackgroundReport.pdf>

Unlike similar programmes in other OECD countries, HVE programmes are not tied to any particular set of institutional providers. Many different bodies, public and private, can provide HVE if they comply with the established requirements. In 2011, out of 242 institutions providing HVE, roughly half were private while the rest belonged to local and regional authorities (Ministry of Education and Research Sweden, 2013). All HVE programmes are publicly funded, with no tuition fees. The overall budget for HVE is determined by the government, and the agency for HVE funds individual providers in the form of grants covering two training periods based on an evaluation of the programme and the provider.<sup>3</sup>

The largest programmes by number of enrolled students are in economics, administration and sales (28% of students); technology and manufacturing (18%); and in healthcare, nursing and social work (11%). HVE tends to serve young adults (rather than school leavers) with the average age of entrants being 29 years in 2011. Men are nearly as likely to be enrolled in HVE as women (in contrast to other postsecondary programmes) (Ministry of Education and Research Sweden, 2013).

A completed upper-secondary diploma or equivalent is required for entry to HVE. Depending on the programme students might be required to meet additional criteria, such as proving they have relevant work experience. Among upper-secondary graduates entering HVE roughly half completed vocational programmes and nearly one student in four starting on a programme already had some postsecondary education. Students with a foreign background (born outside the country, or with both parents born in a foreign country) represent 22% of new entrants to HVE (Ministry of Education and Research Sweden, 2013).

### ***Professional higher education***

Higher education qualifications at both bachelor's and master's level can be either general or professional, with both strands having the same academic status. Professional qualifications in teacher training and nursing were upgraded to bachelor's level at the end of the 1970s, reflecting the growing importance of academic knowledge and research in these occupations. In 2010/2011 nearly half of the students starting on a higher education professional programme were enrolled in nursing and other health related programmes (Ministry of Education and Research Sweden, 2013).

Professional higher education qualifications are mainly awarded by public institutions (14 universities and 20 university colleges). Private providers enrol only 8% of the total student population (full-time equivalent). Students tend to be younger (22 on average) than those starting on HVE, but slightly older than those who pursue general higher education

qualifications. 18% of new entrants to professional programmes are of foreign descent (Ministry of Education and Research Sweden, 2013).

Higher education institutions enjoy considerable autonomy. They therefore decide on the design and content of courses and study programmes, and the number of students accepted.

## Comparing Sweden with other countries

### *The importance of postsecondary VET across the OECD*

Some assessment of the wider global context of postsecondary vocational provision provides a good basis for understanding recent developments in Sweden. Professional bachelor's degrees are common in many countries. Less well-recognised is the fact that in many OECD countries, substantial proportions of upper secondary graduates go on, at some points in their lives, to pursue a professional qualification through programmes of study that are shorter than a full bachelor's degree at a university.

In the United States around 12% of the labour force has a postsecondary certificate (typically a one-year degree) as their highest qualification – and certificate graduation rates are burgeoning – tripling in recent years. A further 10% have an associate degree (two-year degree), many of which will be vocational (Kuczera and Field, 2013). Similarly in Canada, around one-quarter of the cohort gains a (typically professional) associate degree as their highest qualification (Human Resources and Skills Development Canada, 2012). In France, in 2010-2011 almost 360 000 students were enrolled in two-year postsecondary VET programmes (*Brevet de technicien supérieur* and *Diplôme universitaire de technologie*), representing one-third of the students entering postsecondary education (Ministère de l'éducation nationale / Ministère de l'enseignement supérieur et de la recherche, 2013). In Korea, roughly one-third of the youth cohort enters junior college or polytechnic programmes, which are dominated by two-year vocational programmes (Kis and Park, 2012). In Australia in 2011, 260 000 students were enrolled in postsecondary diploma and advanced diploma qualifications, up from 166 000 in 2007 (NCVER, 2012). In Scotland in 2008/9 nearly 17 000 persons graduated with one or two-year higher national certificates and diplomas, compared with 32 000 with bachelor's degrees (Scottish government, 2010). In the very different circumstances of Switzerland around 15% of the cohort graduate through the professional education and training system, through professional colleges and industry-led federal exams (Fazekas and Field, 2013a). In some other countries, while postsecondary VET is smaller in scale, it is rapidly

growing. In Romania enrolments in “post high school” grew from 44 000 in 2005/6 to 70 000 in 2010/11 (NCDTVET Romania, 2013).

Newly developing countries often show a similar picture. In Colombia, between 2002 and 2010 postsecondary enrolments in technological and professional technical institutions trebled, while bachelor’s degree enrolments grew by just 40%, so that by 2010, enrolments in the technical and professional programmes represented one-third of all undergraduate enrolments. (See Table 1.4 in OECD/International Bank for Reconstruction and Development/The World Bank, 2013.)

Across the OECD, apprenticeships also plays a significant role at postsecondary level in preparing young people for the labour market. In Ireland all apprenticeships are postsecondary, with a school-leaving certificate a pre-requisite (Kis, 2010). In Canada, a substantial proportion of apprentices have high school diplomas. Even in Germany, where apprenticeship is nominally at upper secondary level, the average age of a starting apprentice is 19, while around 20% of starting apprentices already have the German equivalent of A-levels, the *Abitur*, which also grants entry to university. In France, there were more than 110 000 apprentices at the postsecondary level in 2010-2011, about 60 % of them in two-year apprenticeships in the service sectors (RERS, 2012). These developments are not universal. Among the countries examined in the current OECD review, Egypt, England and Iceland stand out as countries where short cycle postsecondary VET participation is relatively limited, with university sectors and bachelor’s degrees appearing to dominate provision. But these countries appear to be the exceptions to the rule.

Substantial and growing provision on the supply side seems to correspond to growing demand for these kinds of midlevel professional qualifications. Within countries, it is often difficult to track latent demand, because employers tend to ask for the type of qualifications and skills to which they are accustomed in the national context (rather than for qualifications which they could make use of if they existed). Manifest demand then comes to mirror supply, disguising skills mismatches. It is therefore instructive to look more broadly at a number of countries to explore how demand for this level of education is evolving. A forecast of employment change in the 27 EU countries between 2010 and 2020 implied that nearly two-thirds of overall employment growth would be concentrated in the “technicians and associate professionals” category - the category (one of nine) most closely linked to postsecondary VET. The same category currently represents only 15% of EU employment (CEDEFOP, 2012). Similarly in the United States, a recent forecasting exercise (Carnevale et al., 2010) predicts that in the decade to 2018, nearly two-thirds of job vacancies will require more than high school education, but only half of these, or

one-third of all vacancies will require four-year degrees or higher qualifications. So nearly one-third of the vacancies will require some postsecondary qualification but less than a four-year degree – in most cases a postsecondary vocational qualification (such as an associate degree, certificate, or certification).

The implication is that OECD countries need a significant amount of postsecondary vocational provision below bachelor's level. Common sense tells us that some occupations involve more than upper secondary qualifications but less than a bachelor's degree, and the skills systems of many OECD countries reflect this fact. Occupational skills requirements do not grow naturally in chunks requiring three years of full-time education. The development of HVE therefore filled a real gap in provision, and is very much to be welcomed.

### ***Funding arrangements***

In Sweden postsecondary education, including both HVE and professional higher education, involves no tuition fees. This contrasts with many OECD countries where students contribute to the cost of postsecondary VET. While certain programmes and institutions receive quite significant public support others receive relatively little (see Box 2).

### ***Labour market background***

Economic and labour market conditions in Sweden are relatively good. Employment has been growing in Sweden since 2010 creating a favourable context for the development of vocational programmes. The overall unemployment rate in 2011 was less than 8%, significantly below that of the Euro area. But youth unemployment remains high - at 23% of 15-24 year-olds. To some extent this reflects a statistical artefact - in Sweden a large share of the young unemployed study full-time (OECD, 2012b, Box 1.2). As a result Sweden has one of the lowest rates of young people (15-24 year-olds) who are both unemployed and not in education or training among OECD countries (OECD, 2012c).

### **Box 2 Funding arrangements for postsecondary VET**

In the United States private institutions receive no direct public funding and therefore rely mainly on tuition and fees paid by students. In 2010-11 in one U.S. state the mean amount charged to a full-time student by private for-profit postsecondary vocational institutions was USD 14 117, six times more than in comparable public providers.

Similarly in Korea, while postsecondary VET is provided at no or small cost in public institutions it can be substantial in private providers.

In Denmark, postsecondary VET includes regular full-time programmes mainly for young people and parallel programmes often provided in a part-time mode for adults. They enrol 83% and 17% of VET students respectively. While regular VET is provided by public institutions at no fee to students, postsecondary VET programmes for adults at public or private providers involve fees with the fee level being set by individual institutions. As in Sweden, private providers in Denmark receive the same level of funding and operate according to the same rules as public institutions (Danish Agency for Higher Education and Educational Support, 2012).

Public funding of postsecondary VET in England and Wales depends on the level of qualification, the age of the participant and the purpose of studies (first degree or retraining). Programmes for young people (19-24 year-olds) are either free of charge or co-funded by the government whereas individuals 24 and older cover the full cost of the provision (UKCES, 2013). To facilitate access of these individuals to education and training the government makes available income contingent loans (graduates do not repay the debt unless their earnings are at or above the threshold level).

### **Previous OECD analysis and recommendations**

A 2007 OECD review of vocational education and training at upper-secondary level recommended, among other things, stronger involvement of the social partners in VET policy and the development of workplace training for students (see Box 3). We understand that many of these recommendations are now being implemented.

### **Box 3 The *Learning for Jobs* OECD review of upper secondary VET in Sweden**

This OECD review, published in 2008, recognised that Sweden's upper secondary VET system has modest dropout rates, relatively high status and allows room for local innovation. In response to the main challenges faced by the system, the report recommended:

- Maintaining non-selective arrangements for upper secondary school programmes.
- The establishment of a National Commission for VET composed of different government ministries and the social partners, to convey labour market needs.
- Scrutiny of the regulations to ensure that public and independent schools experience the same regulatory regime.
- Better information on the labour market outcomes of VET published on a school and programme basis.
- A mandatory 15-week work placement for all upper secondary VET programmes.
- The development of an apprenticeship system to complement school-based VET.

*Source:* Kuczera, M., et al. (2008), *OECD Reviews of Vocational Education and Training: A Learning for Jobs Review of Sweden 2008*, OECD Reviews of Vocational Education and Training, OECD Publishing.  
doi: <http://dx.doi.org/10.1787/9789264113978-en>

The OECD Economic Survey (OECD, 2011) argues that in Sweden some of the labour market initiatives implemented by the government have helped to mitigate the negative effects of unemployment. Among those initiatives were the improvement of job-search incentives, stimulation of labour demand and the enhancement of active labour market policies (ALMPs).

The expansion of education and training provision, backed by financial support for students, has also helped to restrain unemployment. As a result the share of the labour force enrolled in education rose. The study recommended the implementation of a system of tuition fees linked to the expansion of government loans for students to finance those fees, and increased incentives for students to enter the labour market as soon as job opportunities re-emerge (OECD, 2011).

The study also argues that information on the performance of VET programmes should be improved, with the national agency for higher vocational education having the responsibility for defining and publishing performance indicators for HVE programmes (OECD, 2011).

## Strengths and challenges in Sweden

### *Strengths*

#### *HVE is a highly innovative and successful model of delivery*

In OECD countries postsecondary VET programmes take three main forms:

- First, professional bachelor's degree qualifications are often provided in universities (as in Sweden). Many countries also maintain a further tier of institutions dedicated to professional education at bachelor's level and above, such as the polytechnics in Finland, *Fachhochschulen* in German-speaking countries, the university colleges in the Nordic countries and the HBO institutions in the Netherlands.
- Second, across countries, many professions organise examinations designed either to allow initial access to a profession or to achieve a higher level within the profession. In the Germanophone countries such examinations are used in particular to provide higher level technical and commercial qualifications, and "master craftsman" qualifications to qualified apprentices with some years of work experience in their trade who want to run their own small business. While such industry-led examinations are regulated in the Germanophone countries, they are quite unregulated in the United States, where such exams (or "certifications") are very common. In some cases the examinations are linked to licensed professions, such as electricians, where passing the exam is legally required to work in the profession, or to run a small business. Typically the examinations are tests of competence. While examinees very commonly pursue a course designed to prepare for the exam such courses are not usually obligatory. Examinations of this type therefore have the attractive quality of avoiding the normal constraints of educational programmes of requiring fixed "seat time" to acquire the qualification. They can also provide a practical way of recognising prior formal and informal learning, often acquired on the job.

- Third, many countries maintain a separate tier of postsecondary institutions to deliver short cycle career-oriented programmes. (Normally these range between six months and two years of full-time study). This would include further education colleges in England, TAFEs in Australia, professional colleges in Switzerland, professional academies in Denmark, *Fachschulen* in Germany, polytechnics and junior colleges in Korea, and community colleges in the United States and Canada.

The Swedish system of higher vocational education builds on the last model, but is distinctive in that it is defined as a set of programmes and a funding stream, such that it can be delivered by many providers both in the public and the private sector. Most indications are that it is a successful innovation, with demand from students, support by employers, and interest among bodies wishing to run courses. In particular, it has succeeded in filling a gap in provision. As indicated earlier, short cycle postsecondary VET provision is an important element in provision in many OECD countries, with good evidence that it corresponds to labour market demand. This gives scope for bottom-up and entrepreneurial approaches within a publicly funded framework.

It is a particular achievement of the HVE system to have developed a model with strong links to employers and labour market needs against a background in which most vocational provision has been very separate from employers (as noted below). Many countries struggle to engage employers in the development of vocational provision, and often attribute many of their difficulties to the lack of any historical tradition of such engagement. HVE may therefore be a model applicable in these contexts, possibly more exportable than other models whose success in national contexts depends heavily on deeply entrenched cultural expectations.

### *Strong workplace training in HVE*

Most OECD countries recognise the value of training in the workplace. Workplaces provide a strong learning environment in which to develop hard skills on modern equipment, and soft skills through real world experience of teamwork, communication and negotiation; workplace training facilitates recruitment by allowing employers and potential employees to get to know each other, while trainees contribute to the output of the training firm. Workplace learning opportunities are also a direct expression of employer needs, as employers will be keenest to offer those opportunities in areas of skills shortage. But the benefits of workplace learning depend on its quality. To reap these benefits, the placement has to be of quality, and this is not always the case. In the absence of quality control, workplace training

opportunities for young people can degenerate into cheap labour, or involve very narrow and firm-specific skills (OECD, 2010).

There are particular strengths in having mandatory requirements for workplace training built into vocational programmes, and as a precondition of government funding. The mandatory principle fosters partnership between training providers and employers. Training providers understand that it is a condition of funding that they pursue such partnerships, while employers for their part appreciate that if they do not offer training places, then the publicly funded training from which they benefit will be diverted to other parts of the country or other sectors of industry. This principle not only supports workplace training with all the benefits that follow, it also has the power to foster local partnerships between vocational programmes and employers with all sorts of spinoff benefits – for example in sustaining the familiarity of the teaching profession with the needs of modern industry. For these reasons OECD reviews have often encouraged countries to make more patchy and voluntary workplace training arrangements systematic and mandatory – for example in the previous OECD review of Sweden at upper secondary level (Kuczera et al., 2008), and more recently at postsecondary level, in the review of Korea (Kis and Park, 2012). Of course a mandatory arrangement is sometimes initially difficult, as employers and vocational training institutions adjust.

Outside formal apprenticeships, where workplace training is the central element, postsecondary vocational programmes make variable, but sometimes extensive use of workplace training as a component of programmes, often in the form of fixed “blocks” such as three-month internships. In some cases the requirement is mandatory. For example the Spanish two-year higher vocational education programmes include a required three-month internship right at the end of the programme (sometimes facilitating labour market insertion); in Denmark short cycle academy programmes (typically two years) include a mandatory internship of at least three months (Field et al., 2012).

Courses designed primarily for part-time students who are in work often make less formal use of workplace training, since it is often assumed that students are already gaining relevant experience through their ordinary work. But this depends on the work being relevant to the training profession, and on some capacity to systematically relate work experience to professional learning – for example by setting formal learning goals for the workplace experience.

In Sweden workplace training is obligatory in two- year HVE programmes (and programmes of longer duration) and represents one-quarter of the programme duration. The cost of work placement is

covered by the employer. It includes the cost of releasing an employee to instruct students and the cost of the material that could be damaged during the training. On the benefits side, employers receive extra input from a partly qualified workforce at a low cost as students are not paid during the training period. Through work placements employers can also identify the most promising potential recruits. This structure also builds partnership with employers into the design of the system, since it is only possible to seek funding for an HVE programme when a partnership with employers willing to offer the workplace training is already in place.

The national agency for HVE is responsible for overall quality in HVE. To this end it conducts regular inspections of programmes, including the workplace training element. HVE providers are directly responsible for ensuring that workplace training meets quality standards. The most common approach to quality assurance during workplace training is through personal contacts between HVE providers, students and tutors. Most education providers use a follow up questionnaire to obtain information from students and training instructors.

Although the overall quality of workplace training is satisfactory, the quality of workplace training might be an issue in some sectors, such as among small companies as the cost of provision of good quality workplace training is typically higher for these employers. The National Agency for HVE has identified vague syllabi and curriculum objectives, unclear grading criteria and lack of teaching abilities among tutors in companies as one of the main challenges in the HVE sector (Ministry of Education and Research Sweden, 2013).

### *Full engagement of the social partners*

Across OECD countries the engagement of social partners – both employers and unions - is necessary to ensure that the organisation and the content of vocational programmes, and the mix of provision meet the needs of employers, the wider economy and students. But the level of engagement varies markedly among countries. Often it is hard to engage employers, unions, and professional associations in the vocational education and training system. This is particularly true in countries, such as Sweden, without strong apprenticeship traditions.

Bodies for engaging employers and unions can be established at national level, according to industrial sectors, or may be structured regionally or at the level of the individual institution (e.g. employer representation in school boards). While involvement at national level allows for broad advice on VET policy, employer engagement at local level can help to improve the links and partnerships between the workplace and individual VET

institutions. Bodies organised by industrial sector can be helpful in developing in an organised way the industry or occupation-specific curricula associated with particular qualifications.

In Sweden social partnerships are an important part of the institutional landscape. Sweden is among the OECD countries with the highest union density and collective bargaining coverage (OECD 2012b, Figure 1.17). Despite this background the engagement of social partners has historically been limited in upper secondary vocational programmes at least until the last five years, when government reforms have sought to increase employer engagement. Vocational education and training has in the past been provided mainly by schools and mainly in schools, with little input and involvement from employers and unions. In this context, HVE stands out as a sector with strong support from the social partners. (Overall, HVE appears to enjoy rather high status both among employers and students; the social partners met by the OECD team strongly supported HVE as a source of skilled labour). By law, each HVE programme in every institution should have a steering group including employers. Employers provide training to students and advise on various aspects of provision, and have a direct impact on the programme content.

To launch a programme an education provider has to show that there is a demand for skills associated with specific qualifications among employers and that it has a framework to engage employers. The social partners are also part of the council that advises the HVE agency on the future demand for skills and on how this might be met through HVE provision. This arrangement ensures only programmes receiving the strongest support from employers are provided. Analysis of labour market needs is also carried out by the agency for HVE. HVE institutions are evaluated according to criteria which include relevance to the labour market and co-operation with employers (Ministry of Education and Research Sweden, 2013).

In professional higher education there is no obligation for any social partner engagement. Providers of programmes have a lot of discretion over the provision and the content of programmes and involvement of social partners; co-operation with employers is therefore variable.

### *Robust quality assurance*

Across many OECD countries quality assurance in postsecondary VET<sup>4</sup> represents a challenge because quality is so difficult to measure, and therefore difficult to assure. Strengthened assessment instruments have become available for core academic skills – allowing for example maths skills to be compared across institutions, systems and countries. But the assessment of quality in the teaching and learning of postsecondary VET is

much harder, because career-specific skills involve a complex blend of hard-to-measure competences. It is a particular challenge in countries such as Canada, Australia and the United States, characterised by high level of diversity, choice and a relatively substantial role for private providers; and alongside public subsidy and significant fees for many types of provision. In some other countries such as Denmark and Austria individual autonomy of institutions is balanced by quality standards applying to all relevant institutions. This ensures that all programmes meet at least minimum quality standards underpinning the confidence of students, employers and others in programmes and credentials.

Sweden has a well-established framework of national quality assurance both in HVE and professional higher education.

The Swedish Agency for HVE is responsible for overall quality assurance in HVE. It checks that programmes comply with existing rules, and lead to expected outcomes. Regular inspections and economic and labour market reviews are used in the evaluation process. Inspections are carried out regularly during the programme. They include visits to the HVE provider, interviews with head teachers, teachers, tutors, students and the steering group. Funding arrangements underpin quality assurance (Ministry of Education and Research Sweden, 2013). Providers receive grants for two periods of training after which they have to reapply and prove they meet all the requirements.

The relatively short duration of grants, while it avoids the risk that providers will relax standards during a longer period, contributes to financial instability of providers and some of them argue that this reduces the incentives to invest in high quality HVE in the long run. For example professionals working as teachers might not be willing to take up pedagogical training if they are uncertain whether their teaching activity will continue beyond two periods of training. But despite these constraints there are more institutions applying for HVE grants than grants available.

Within the higher education professional sector a national agency evaluates whether institutions reach the outcomes laid down by the government in the qualification descriptors for each professional degree. The evaluations are carried out by external assessment panels that include subject experts, students and practitioners. Evaluation is based on the student degree projects, the institutions' self-evaluations, interviews with teachers and students and questionnaires completed by former students. Programmes are assessed on a three-level scale and a small amount of funding is allocated among institutions based on their assessment. The same evaluation methods are used in academic and professional higher education.

### *Good availability of information*

Across OECD countries, information underpins the link between vocational education and training and the labour market. Knowledge of job prospects allows students to make informed choices about training programmes, and policy makers to see whether vocational programmes are successfully yielding relevant work for graduates; clear information about learning outcomes helps employers to understand what qualified recruits have learnt. Better data can be provided either through one-off surveys of those leaving vocational programmes, or by tracking cohorts of individuals through vocational programmes into employment. Such data need to be supported by the institutional capacity to analyse and make full use of the data.

Publishing results from the quality assurance process also yields more transparency in the system. The outcomes of quality controls in postsecondary VET are systematically published in Denmark, England and in some provinces in Canada.

Access to timely and reliable information on labour market outcomes and institutional quality is particularly important in systems where institutions compete for students. Adequate information helps students to choose good quality programmes, and by the same token eliminate from the market underperforming institutions and programmes.

In Sweden there are rich sources of data, including, like other Nordic countries, a national register, which identifies individuals on the basis of personal identification numbers. These are linked to a range of administrative data sets, including those on education and employment. Although the earlier OECD study of upper-secondary VET suggested that this impressive database has not always been effectively used to inform VET policy, generally, Sweden has a strong capacity for analysis in well-respected universities and research institutes.

Information on labour market outcomes of students in higher education professional programmes is available by fields of study. The results show that in 2009 81% of the graduates were in employment (compared to 74% of graduates from general higher education programmes) and earned more than 195 800 SEK (Ministry of Education and Research Sweden, 2013). Student choice of a professional higher education provider and specific programme is also informed by the publication of the results of quality control performed by the National Agency of HVE.

In HVE, the Agency carries out an annual survey one year after graduation and publishes reports from the quality assurance process. On average 86% of HVE graduates were either employed or in

self-employment, with the employment rate varying between fields of study (Ministry of Education and Research Sweden, 2013). At the same time we were informed that register data suggests less positive labour market outcomes for HVE graduates. Given fast expansion of the HVE sector and high student demand for some HVE programmes a thorough analysis of the labour market performance of HVE graduates could better guide students in choosing their postsecondary options as well as assisting policy makers and providers in determining provision.

### ***Challenges***

#### *Limited part-time or flexible provision*

Across OECD countries postsecondary VET plays a large role both for those who have just completed upper secondary education, and in the upskilling and further education of adults. So while in Korea, for example, it mainly serves the needs of those who have just completed upper secondary education, in many countries provision is directed at adults developing their professional skills within their chosen career, or returning to education to prepare for a different occupation. Thus, for example, the higher professional exams in Germany and Switzerland mainly provide higher level professional skills for those already working in the profession (normally graduates of the apprenticeship system). In the United States much of the provision is for adults, and very often those adults are working while studying. In Denmark postsecondary VET plays a two-fold role, it prepares young people for jobs and thus for entry into the labour market and provides upskilling opportunities for working adults. While regular programmes for young people are mainly full-time, parallel programmes for adults are often provided in a part-time mode.

In many OECD countries, a demographic downturn means that fewer young people will be entering the labour market: the relative importance of adults and therefore adult learning in skilling the labour force is therefore increasing. Flexible systems can contribute to both equity and efficiency by providing an opportunity for those who missed out the first time around to gain skills. The common challenge is that adults with the fewest skills and with the greatest needs often participate little in adult learning.

Part-time provision facilitates the participation in education and training of working adults as it allows them to combine work and studies and therefore to maintain income from employment. Access to employment while studying is particularly important in countries where students in addition to opportunity costs (lost salary) also incur a direct cost of education – tuition fees. But even in countries with free postsecondary VET

the opportunity costs of full-time study are often high, discouraging many adults from continuing in education and training.

In Sweden, while professional higher education caters mainly for relatively young people (with 24 as the median student age), at the same time one student in four is over 30. This latter group includes some delaying their exit from education into the labour market but also some working adults who wish to upgrade their competencies and skills. (Skills upgrading through higher education professional programmes apparently sometimes takes place through nursing programmes). The OECD team was also told that since professional higher education degrees are mainly offered as full-time programmes, it is hard to continue working while pursuing such a programme.

HVE prepares young people for their first jobs but also those who want to change a career; it also serves those who want to upgrade their skills within their area of specialisation. HVE students are older than those in academic and professional higher education. Most of the time HVE programmes are provided full-time (except for some individual arrangements) and some participants who are already in employment might therefore find it difficult to combine work with studies.

In principle there are many learning opportunities for adults in Sweden. Among OECD countries Sweden has the highest adult participation rates in non-formal education (OECD 2012a, Table c6.4a). But it is unclear whether similar opportunities are available for those seeking a formal vocational postsecondary degree. Lack of part-time provision in postsecondary VET could be a challenge if relevant formal qualifications are not obtainable elsewhere (e.g. through on-line education) and if this gap in provision prevents some adults from entering postsecondary VET.

This means that there may be some latent demand for HVE among those who cannot or do not wish to stop working while studying. In other countries the needs of this group are often met through part-time provision, and provision in the evening and at weekends. Such arrangements permit students either to continue working part-time, or even to go on working full-time while studying.

### *Obstacles to transition from HVE to higher education*

Many *OECD countries* struggle with the issue of credit transfer in transitions between education institutions, and multiple *ad hoc* bilateral arrangements address them very imperfectly. Often there are particular challenges in ensuring that learning outcomes from technical and vocational programmes are fully recognised by more academic universities (see Box 4). Such opportunities are important because globally the demand for higher

level skills is expanding, and because students themselves often have aspirations to continue their education. More subtly, the existence of such opportunities helps to enhance the status of the HVE option. There is evidence that students are more willing to pursue shorter VET programmes if they know that such programmes offer a route to more advanced studies (Dunkel and Le Mouillour, 2009).

Even if access routes into academic higher education are open for postsecondary VET graduates and a range of supporting instruments are in place (such as career guidance and preparatory courses for non-traditional entrants), weak credit transfer arrangements can impose unnecessary costs on students and hence lower transition rates. These challenges have been an issue in a range of OECD countries reviewed in the course of the *Skills beyond School* exercise including Austria, Canada, Germany, Israel and the United States.

Often the problem is a lack of transparency over how different programmes relate to one another, but it may also reflect financial disincentives on the part of some higher level institutions to offer course exemptions. The effect can be multiple inefficiencies – for the student because they have to repeat course material, for funding bodies that pay for such repetition and for institutions that often have to laboriously negotiate articulation agreements on a programme by programme and institution by institution basis. As an indication of the administrative load involved, just in the U.S. state of Washington there are approximately 6 600 registered bilateral articulation agreements (WTECB, 2013).

The main potential solutions pursued by countries are: first, measures to improve transparency in course content so that overlaps can be rapidly identified and addressed through course exemptions, and second, co-ordination mechanisms to try to simplify, or sometimes to regulate articulation arrangements including the option of adjusting curricula to ensure that they are articulated with one another. For example, in the U.S. state of Florida a course numbering system is used systematically to identify overlapping course content that would lead to a course exemption. More systematic qualification systems and frameworks may also be helpful, in improving transparency about the content and level of different programmes, and therefore clarifying their inter-relationships.

**Box 4 International experience of credit transfer and articulation**

In Canada each province defines its own articulation policy. Approaches vary from a systematic, province-wide credit transfer process in British Columbia to credit transfer negotiated bilaterally by institutions in Ontario (Junor and Usher, 2008).

In Germany, postsecondary career and technical education (CTE) institutions (*Fachschule*) follow standards set up by provincial authorities (Land) (Hippach-Schneider et al., 2012). This ensures comparability of programmes at the provincial level and allows students to transfer across postsecondary CTE institutions. But in Germany transition from postsecondary CTE to academic institutions remains a challenge.

In Austria, graduates of vocational colleges can in principle start a bachelor's degree in a relevant study programme in the second or third semester (Prokopp and Luomi-Messerer, 2009). But the level of recognition depends on individual agreements between institutions and sometimes local connections. As a result vocational college graduates can be found starting in the second semester in one academic institution but in the third semester in another). In response, many vocational colleges have developed partnerships with academic postsecondary institutions outside Austria sometimes allowing their graduates to earn a professional bachelor's degree within around one year, a much swifter route than any available in Austria (Musset et al., 2013; Schneeberger et al., 2011).

In Sweden few HVE graduates continue to higher education. In 2010 4% of those who had graduated in 2009 from a HVE programme were studying at a university or university college. While HVE programmes prepare graduates for direct labour market entry and transition to a higher level postsecondary education might therefore not be a main objective, graduates might subsequently want to pursue their studies and build on their HVE degree. As elsewhere, in Sweden credit transfer is very difficult. Occasionally HVE graduates can transfer credits if the HVE institution where they completed their programme has an individual agreement with a higher education provider, but there is no automatic transfer of credits. Recognition of credits from HVE is at the discretion of individual higher education institutions. Potentially therefore, weak articulation with higher level education options could be an obstacle to the effective development of HVE. Conversely, within the higher education system transition from professional higher education programmes to a higher level degree is seamless.

### *Building a nationally consistent qualification system*

Some OECD countries organise their occupational qualification system centrally, often in collaboration with industry. The qualifications are typically developed sectorally in collaboration between industry and government authorities. This may involve organisations of sector skills councils (as for example in Australia, England and the Netherlands) or through organised social partner bodies such as chambers of labour and economic chambers in Austria and Germany. Some other countries such as the U.S. have a much more decentralised approach, with most qualifications emerging bottom-up from local initiatives, and depending on individual institutions.

An advantage of the bottom-up approach is that institutions can adapt both the mix of provision and curricula to local needs, including local employer needs. The downside of this approach is that it means that the qualifications are highly variable across the country and their overall visibility to employers may therefore be more limited. National consistency allows students to see their career pathways clearly and employers to have consistent signals of the competences of potential recruits. It also allows individual qualifications to be more transparently situated within the education and training system, facilitating student transition. In response to this challenge some countries combine a local approach with a country-wide policy in the area of qualifications. For example in Germany the curricula for *Fachschulen* qualifications are determined by each *Land* and applied in every school. But these curricula leave around 20% of the curriculum to be determined locally by each *Fachschule*, in response to local employer needs (Fazekas and Field, 2013b). Similarly in Romania, in post-high school provision, curricula for each qualification are set nationally in collaboration with employers, but around 15% of the curriculum is determined locally (Musset, forthcoming).

In Sweden, every HVE programme has a steering group involving employers that advises on provision and ensures programmes and qualifications are in line with the needs of the local labour market. At the same time the requirements of national consistency are addressed, at least for certain qualifications in the HVE system, as in programmes leading to these qualifications the Agency for HVE defines the learning outcomes to be attained upon completion, regardless of the provider.

Development of a more systematic qualification framework for the whole postsecondary system, including both HVE and higher education would be a further step in reinforcing the consistency of qualifications. Among other valuable benefits, this could promote more effective articulation between the HVE and higher education sectors.

---

### *Developing work-based learning and employer partnerships in higher education vocational programmes*

As discussed above, work-based learning has large benefits, and in many countries training with companies is a mandatory component of postsecondary vocational programmes, including in some professional bachelor programmes. For example, professional bachelor programmes in university colleges in Denmark include a mandatory internship of at least six months. Similar requirements are found in the professional bachelor qualifications in the HBO institutions in the Netherlands. One of the advantages of such mandatory arrangements is that they provide a direct indication of employer demand for skills, a point particularly relevant to Sweden. The Ministry of Education and Research Sweden (2013) points out that the supply of graduates in professional higher education is not in complete balance with labour market demand for certain professions.

In Sweden in professional higher education workplace training is not obligatory in all fields. In some programmes such as nursing, workplace training is required, though its organisation is at the discretion of the provider. Some higher education institutions are more systematic than others in securing workplace opportunities, for example in Kristianstad University all programmes (professional and general) include work placements (Ministry of Education and Research Sweden, 2013). The implication is that mandatory work-based learning would be feasible in other institutions.

Mandatory workplace training can also encourage broader partnerships between higher education and employers. It can encourage teachers of vocational subjects in higher education to engage with the latest developments in industry, and provides strong incentives for curricula to be regularly updated to reflect labour market requirements. While higher education institutions often have a great deal of autonomy, they also need incentives to engage with local economic requirements, for example by more fully including local employers in their governance. Partnerships with employers have a wide range of spinoff benefits, including the development of applied research, in curriculum development and in enhancing and updating the experience of teaching staff with the requirements of modern industry.

### *Further expansion of HVE remains a challenge*

Given the success of HVE, further expansion of the programme has understandably been suggested. Compared with other postsecondary systems where up to one-quarter of the cohort obtain postsecondary VET qualifications, HVE is still relatively modest in size in Sweden. Apparently there is also demand from suitable providers seeking funding for HVE

programmes. Conversely, as mentioned above, the evidence on returns from HVE remains somewhat ambiguous. The challenge is to ensure that the further development of HVE is pursued effectively and on the basis of sufficient evidence to ensure success. Systematic use of the CEDEFOP forecasts for Sweden would be a good point of departure – noting that they imply growth in employment for Sweden in the technicians and associate professionals category most closely linked to postsecondary VET. The further development of HVE might also naturally involve the extension of the programme to part-time students.

## Notes

1. Assuming current patterns of entry continue (OECD, 2012a, Table C3.1).
2. A few programmes can take more than two years to complete.
3. The period of time covered by the grant varies according to length of the programme.
4. In the field of VET “quality” refers to the capacity of a programme or institution to equip students with the skills and knowledge required for entry to the labour market and the foundation for a successful career, including further learning as well as employment.

## References

- Carnevale, A., N. Smith and J. Strohl (2010), *Help Wanted: Projections of Jobs and Education Requirements Through 2018*, Georgetown University Center on Education and the Workforce.  
<http://cew.georgetown.edu/certificates/>
- CEDEFOP (2012), *Future Skills Supply and Demand in Europe: Forecast 2012*, Publications Office of the European Union, Luxembourg.  
[www.cedefop.europa.eu/EN/Files/5526\\_en.pdf](http://www.cedefop.europa.eu/EN/Files/5526_en.pdf)
- Danish Agency for Higher Education and Educational Support (2012), *Skills beyond School: OECD Review of Post-Secondary Vocational Education and Training – National Background Report for Denmark*,  
<http://fivu.dk/en/publications/2012/oecd-review-skills-beyond-school-2013-national-background-report-for-denmark>
- Dunkel, T. and I. Le Mouillour (2009), “Through the looking glass: diversification and differentiation in vocational and training and higher education” in CEDEFOP, *Modernising Vocational Education and Training, Fourth Report on Vocational Training Research in Europe, Vol. 2*.
- Fazekas, M. and S. Field (2013a), *A Skills beyond School Review of Switzerland*, OECD Reviews of Vocational Education and Training, OECD Publishing. doi: <http://dx.doi.org/10.1787/9789264062665-en>
- Fazekas, M. and S. Field (2013b), *A Skills beyond School Review of Germany*, OECD Reviews of Vocational Education and Training, OECD Publishing. doi: <http://dx.doi.org/10.1787/9789264202146-en>
- Field, S., et al. (2012), *A Skills beyond School Review of Denmark*, OECD Reviews of Vocational Education and Training, OECD Publishing. doi: <http://dx.doi.org/10.1787/9789264173668-en>
- Hippach-Schneider, U., et al. (2012) (eds.), *Getting Ahead through Advanced Vocational Training. German Background Report on the OECD study “Skills beyond School”*, BMBF, Bonn.  
[www.bmbf.de/pub/getting\\_ahead\\_through\\_advanced\\_vocational\\_training.pdf](http://www.bmbf.de/pub/getting_ahead_through_advanced_vocational_training.pdf)

- Human Resources and Skills Development Canada (HRSDC) (2012), *Skills Beyond School – Canada (HRSDC) Background Paper*.
- Junor S. and A. Usher (2008), *Student Mobility and Credit Transfer. A National and Global Survey*, Educational Policy Institute.
- Kis, V. and E. Park (2012), *A Skills beyond School Review of Korea*, OECD Reviews of Vocational Education and Training, OECD Publishing. doi: <http://dx.doi.org/10.1787/9789264179806-en>
- Kis, V. (2010), *OECD Reviews of Vocational Education and Training: A Learning for Jobs Review of Ireland 2010*, OECD Reviews of Vocational Education and Training, OECD Publishing. doi: <http://dx.doi.org/10.1787/9789264113848-en>
- Kuczera, M. and S. Field (2013), *A Skills beyond School Review of the United States*, OECD Reviews of Vocational Education and Training, OECD Publishing. doi: <http://dx.doi.org/10.1787/9789264202153-en>
- Kuczera, M., et al. (2008), *OECD Reviews of Vocational Education and Training: A Learning for Jobs Review of Sweden 2008*, OECD Reviews of Vocational Education and Training, OECD Publishing. doi: <http://dx.doi.org/10.1787/9789264113978-en>
- Musset, P. (forthcoming), *A Skills beyond School Commentary on Romania*, OECD Reviews of Vocational Education and Training, [www.oecd.org/education/vet](http://www.oecd.org/education/vet)
- Musset, P., et al. (2013), *A Skills beyond School Review of Austria*, OECD Reviews of Vocational Education and Training, OECD Publishing. doi: <http://dx.doi.org/10.1787/9789264200418-en>
- Ministère de l'éducation nationale / Ministère de l'enseignement supérieur et de la recherche (2013), « *Apprendre au-delà de l'école : Contribution de la France* », *Examens de l'enseignement et la formation professionnels (EFP) au niveau postsecondaire*.
- Ministry of Education and Research Sweden (2013), *Skills beyond School. OECD Review of Vocational Education and Training. Background Report from Sweden*, [www.oecd.org/edu/skills-beyond-school/SkillsBeyondSchoolSwedishBackgroundReport.pdf](http://www.oecd.org/edu/skills-beyond-school/SkillsBeyondSchoolSwedishBackgroundReport.pdf).
- NCDTVET Romania (2013), *Skills beyond School, OECD Review of Vocational Education and Training, Background Report from Romania*.
- National Centre for Vocational Education Research (NCVER) (2012), *Students and Courses 2011: Revised 2012 Edition*, Australian Government.

- OECD/International Bank for Reconstruction and Development/The World Bank (2013), *Reviews of National Policies for Education: Tertiary Education in Colombia 2012*, OECD Publishing, doi: <http://dx.doi.org/10.1787/9789264180697-en>
- OECD (2012a), *Education at a Glance 2012: OECD Indicators*, OECD Publishing. doi: <http://dx.doi.org/10.1787/eag-2012-en>
- OECD (2012b), *OECD Economic Surveys: Sweden 2012*, OECD Publishing. doi: [http://dx.doi.org/10.1787/eco\\_surveys-swe-2012-en](http://dx.doi.org/10.1787/eco_surveys-swe-2012-en)
- OECD (2012c), *OECD Employment Outlook 2012*, OECD Publishing. doi: [http://dx.doi.org/10.1787/empl\\_outlook-2012-en](http://dx.doi.org/10.1787/empl_outlook-2012-en)
- OECD (2011), *OECD Economic Surveys: Sweden 2011*, OECD Publishing. doi: [http://dx.doi.org/10.1787/eco\\_surveys-swe-2011-en](http://dx.doi.org/10.1787/eco_surveys-swe-2011-en)
- OECD (2010), *Learning for Jobs*, OECD Reviews of Vocational Education and Training, OECD Publishing. doi: <http://dx.doi.org/10.1787/9789264087460-en>
- Prokopp M. and K. Luomi-Messerer (2009), “Permeability between vocational education and training and higher education in Austria – experiences, good practices and perspectives” in Tutschner R., W. Wittig and J. Rami (eds.), *Accreditation of Vocational Learning Outcomes European Approaches to Enhance Permeability between Vocational and Higher Education*, Nationale Agentur Bildung für Europa beim Bundesinstitut für Berufsbildung.
- Repères et références statistiques sur les enseignements, la formation et la recherche (RERS) (2012), « Repères et références statistiques sur les enseignements, la formation et la recherche - édition 2012 », ministère de l'éducation nationale, ministère de l'enseignement supérieur et de la recherche, [www.education.gouv.fr/cid57096/reperes-et-references-statistiques.html](http://www.education.gouv.fr/cid57096/reperes-et-references-statistiques.html)
- Schneeberger A., K. Schmid and A. Petanovitsch (2011), *Skills beyond school in Austria: Country Background Report*, OECD Review of Postsecondary Vocational Education and Training.
- Scottish Government (2010), “Statistical Publication – Table 1: Qualifiers from higher education courses at Scottish institutions by institution type, level of qualification obtained and academic year: 1999-00 to 2008-09”, [www.scotland.gov.uk/Publications/2010/09/28110151/4](http://www.scotland.gov.uk/Publications/2010/09/28110151/4), accessed 11 April 2013.

UK Commission for Employment and Skills (UKCES) (2013), *OECD Review: Skills beyond School Background Report for England. Briefing Paper February 2013*, [www.ukces.org.uk/publications/oecd-skills-beyond-school-england](http://www.ukces.org.uk/publications/oecd-skills-beyond-school-england)

Workforce Training and Education Coordinating Board (WTECB) (2013), *Skills beyond School: OECD Review of Post-Secondary CTE – State Background Report for the US, Washington State*.

## **ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT**

The OECD is a unique forum where governments work together to address the economic, social and environmental challenges of globalisation. The OECD is also at the forefront of efforts to understand and to help governments respond to new developments and concerns, such as corporate governance, the information economy and the challenges of an ageing population. The Organisation provides a setting where governments can compare policy experiences, seek answers to common problems, identify good practice and work to co-ordinate domestic and international policies.

The OECD member countries are: Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The European Union takes part in the work of the OECD.

OECD Publishing disseminates widely the results of the Organisation's statistics gathering and research on economic, social and environmental issues, as well as the conventions, guidelines and standards agreed by its members.





## OECD Reviews of Vocational Education and Training

### A Skills beyond School Commentary on Sweden

Higher level vocational education and training (VET) programmes are facing rapid change and intensifying challenges. What type of training is needed to meet the needs of changing economies? How should the programmes be funded? How should they be linked to academic and university programmes? How can employers and unions be engaged? The country reports in this series look at these and other questions. They form part of Skills beyond School, the OECD policy review of postsecondary vocational education and training.

#### Contents

Summary: Strengths and challenges of postsecondary VET in Sweden  
The commentary on Sweden and its place in the wider OECD study  
Postsecondary VET in Sweden: A Snapshot  
Comparing Sweden with other countries  
Previous OECD analysis and recommendations  
Strengths and challenges in Sweden

#### Further reading

OECD (2010), *Learning for Jobs*, OECD Reviews of Vocational Education and Training, OECD Publishing.  
See also [www.oecd.org/education/vet](http://www.oecd.org/education/vet).  
For more information about OECD work on skills, see [skills.oecd.org](http://skills.oecd.org).