



## Does upper secondary vocational education and training improve the prospects of young adults?

- One-third of the population of OECD countries hold an upper secondary vocational education and training (VET) qualification as their highest educational attainment, and it is estimated that nearly half will graduate from a VET programme in their lifetime.
- Keeping up with technology developments in industry can be a costly endeavour, although partnering with employers can help to spread the cost of VET programmes.
- While vocational qualifications offer young people a good chance of finding employment, they are sometimes seen as a second-class choice and limit their value in the labour market overall.
- Countries need to ensure their vocational programmes offer all students the basic skills they need in the labour market and in life, as well as the opportunity to progress on to tertiary education if they wish.

Employers, teachers and students from OECD countries are increasingly turning their attention to vocational education and training (VET)<sup>1</sup> in their search for better ways to smooth the transition from school to work. With unemployment hitting the younger generations hard, recent OECD data shows some of the strengths of upper secondary VET systems for increasing the chances of graduates in the labour market.

However, vocational education does not refer to one single type of programme or education system. As flexibility is one of its main characteristics, VET encompasses many different types of programmes and practices, at different education levels. This variety makes it very difficult to obtain internationally comparable data and to identify best practices that can be applied across borders.

### *VET: an old practice with new challenges*

In several European countries, upper secondary level VET programmes have been around for decades and are now well established. In Austria, the Czech Republic, Germany, Poland, the Slovak Republic and Slovenia, an upper secondary VET qualification is the highest qualification achieved by at least half the population, while the OECD average is about a third (34%). In other countries, like Belgium and the Netherlands, even though attainment rates seem lower, VET programmes count as an important part of compulsory education.

Upper secondary VET programmes have been successful at giving young adults (25-34 year-olds) the skills basis to find employment – on average, 79% of young adults with VET qualifications are employed. Yet, in a number of countries, upper secondary VET faces important challenges. VET programmes are often stigmatised as “second class” options, and only a low proportion of VET graduates continue on to tertiary education. Workers with just an upper secondary VET qualification face significant disadvantages such as low foundational skills or lower salary levels.

1. Throughout this brief, data for upper secondary VET may also refer to the combination of upper secondary vocational with pre-vocational programmes or with vocational programmes at post-secondary non-tertiary level.

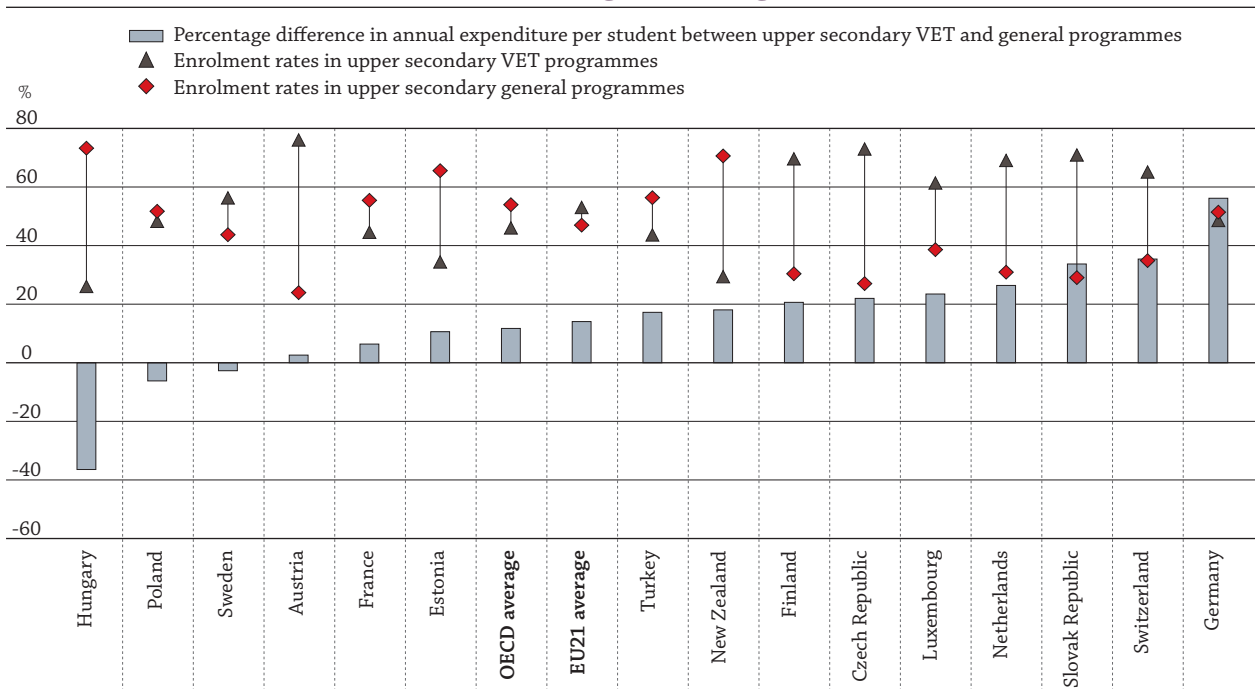


**VET entails a significant investment...**

VET programmes are expected to keep up to date with the development of technology in their industries, and once you include the costs of instructors and facilities this makes them generally a costly endeavour.

The average annual expenditure (public and private) per student in an upper secondary VET programme is 12% higher than the same expenditure per student in a general programme. But the difference in cost can vary widely from country to country.

**Difference in annual expenditure per student and in enrolment rates between VET and general programmes<sup>2,3</sup>**



Countries are ranked in ascending order of the difference in annual expenditure per student between upper secondary VET and general programmes. Source: OECD (2013), Education at a Glance 2013: OECD Indicators, Indicator B1 and C1 ([www.oecd.org/edu/eag2013](http://www.oecd.org/edu/eag2013)).

**How to read this chart**

The bars show the percentage difference in annual expenditure by programme orientation at upper secondary level. When the value is positive the bar represents the extra expenditure per student in a VET programme as a percentage of the expenditure per student in a general programme. Likewise, when the value is negative, the bar represents the extra expenditure per student in a general programme with respect to the expenditure per student in a VET programme.

High enrolment rates and the difference in expenditure per student suggest that for the countries on the right hand side of this chart, the overall cost of their VET programmes will be considerably higher than the cost of their general ones. This is particularly the case in Germany, the Slovak Republic and Switzerland, where enrolment rates range from 50% to 71% and the annual expenditure per VET student is at least 34% more than for a student in a general programme.

In some other countries, like Estonia, New Zealand and, to a lesser degree, Turkey, enrolment rates in general programmes are higher but investment per student in a VET programme remains high. In Poland and Sweden, VET programmes have high enrolment rates but, expenditure per student is lower.

2. In this chart and the following, the OECD average for the annual expenditure per student in upper secondary VET programmes is different from the one published in EAG 2013 due to recent data updates.  
3. The reader should note that expenditure by private parties on dual vocational programmes may be underestimated and may be significant in several countries.



...but the returns are also significant.

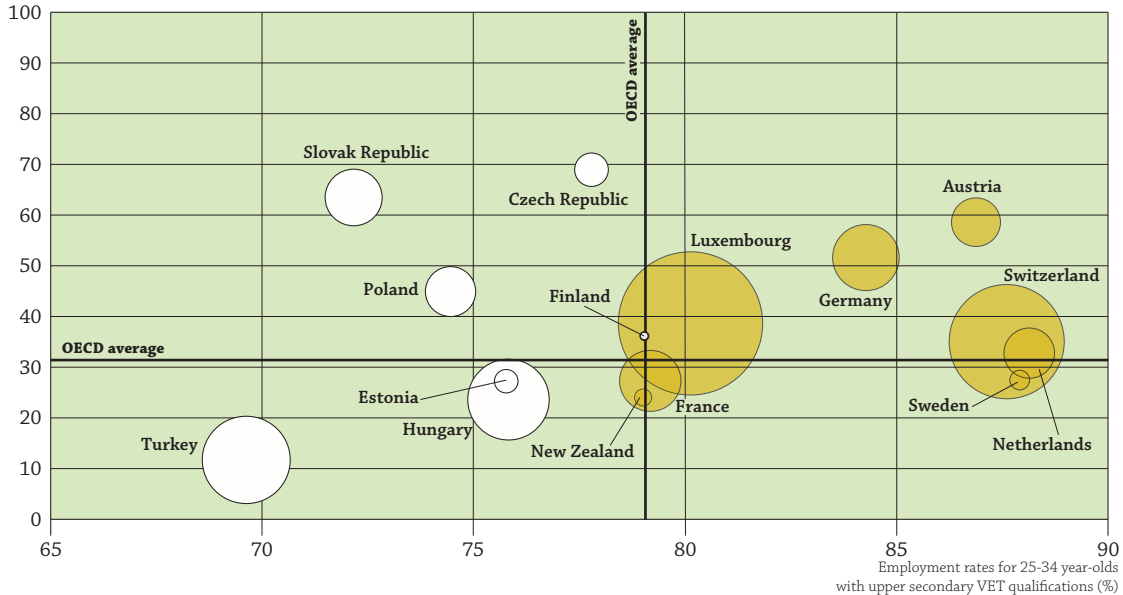
An important part of the success of VET systems may be due to their supply-side effect: they provide a skilled labour force to support and further develop industries which in turn require workers with VET qualifications. However, the labour market does not show the same pattern in all countries where VET programmes are widely attended.

With the sole exception of Austria, the countries where younger adults with VET qualifications have better employment opportunities are those where about half the population or less has an upper secondary VET qualification as their highest qualification. These are also among the countries where expenditure per student in VET programmes is the highest (countries in yellow).

Expenditure, educational attainment and employment rates among young adults

- Countries where expenditure in VET programmes is above the OECD average
- Countries where expenditure in VET programmes is below the OECD average

Percentage of 25-34 year-olds that have attained an upper secondary VET qualification as highest level of education (%)



Source: OECD (2013), Education at a Glance 2013: OECD Indicators, Indicators A1, A5 and B1 (www.oecd.org/edu/eag2013).

How to read this chart

This chart shows a comparison of VET systems taking into account the share of the 25-34 year-old population with upper secondary VET qualifications as highest level of attainment (vertical axis), the employment rates among that population (horizontal axis). The difference in expenditure per student with respect to the OECD average is represented by the size of the bubbles.

In countries like Switzerland, where expenditure per student is considerably higher than the OECD average, the demand for VET qualifications is high among both students and employers: about 35% of Swiss 25-34 year-olds have a VET qualification as their highest level of education and 88% of them are employed. In contrast, in the Slovak Republic, while the demand from students is also high, with 63% of young adults holding an upper secondary VET qualification as the highest level of education achieved, both expenditure per student and employment rates (72%) remain below other OECD countries.

Work-study programmes come with many benefits

VET students benefit largely from improving their skills in the workplace and programmes can take advantage from the partnerships that come with it. Combining school-based and workplace learning in an integrated formal education supports the incorporation of VET students into the labour market, helps keep the mix of provision up to date and enables programmes to share the costs of instruction with employers.



**Dual systems**

In some systems, school-based learning is widely combined with workplace learning. Examples of this type of “dual system” can be found in Austria, Germany, Luxembourg, the Netherlands and Switzerland. One of the strengths of this practice is that it forms a series of public-private partnerships, allowing social partners and employers to get involved in the development of VET programmes, often including the definition of curricular frameworks. In many of these systems, employers invest significantly in VET programmes by financing apprenticeships, assuming the costs of instructors, materials and/or equipment.

In Germany and Switzerland, 10% or more of all 15-29 year-olds are enrolled in work-study programmes and at least 40% of all VET students are. In Austria, the Czech Republic and the Slovak Republic these programmes are also common, but to a lesser degree, ranging from 29% to 35% of all students enrolled in VET programmes.

However, enrolment rates overall show that most systems do not exploit vocational work-study programmes widely. On average, only 12% of all upper secondary VET students in the OECD are enrolled in work-study programmes.

**VET also faces some important challenges**

Despite its many positive features, there can be also significant downsides to studying in an upper secondary VET programme.

Only a small share of students graduate from tertiary education after obtaining an upper secondary VET degree – of the countries with high enrolment rates in VET programmes, only in New Zealand are attainment rates for tertiary education higher than for upper secondary education. The consequences of this are significant to the workers involved: there is not one OECD country where the wages of workers with an upper secondary education as their highest qualification are as high as the wages for people with tertiary education, and the gap tends to grow larger with age.

Likewise, upper secondary VET graduates usually face other disadvantages. The Survey of Adult Skills (PIAAC) has shown the value of foundational skills like literacy and numeracy. These skills increase opportunities in the labour market but also enable people to live better lives. The PIAAC evidence has shown that people with upper secondary VET qualifications generally have lower foundational skills than people with a general upper secondary education. Moreover, in countries where vocational and general programmes are more clearly divided (e.g. where there are fewer opportunities to switch between them, or students are assigned to one or the other at an early stage), the data indicate that the difference in literacy levels tends to be larger (OECD, 2013).

**References**

OECD (2013), *OECD Skills Outlook 2013: First Results from the Survey of Adult Skills*, OECD Publishing. <http://dx.doi.org/10.1787/9789264204256-en>

**The bottom line** Estimates show that in OECD countries, almost half of today’s population (47%) will graduate from an upper secondary VET programme over their lifetime. Countries can benefit from investment in VET programmes by partnering with employees to share costs and provide students with a well-integrated practical education, but need to ensure that they have the same opportunities to develop their basic skills – and move on to tertiary education – as their peers in general programmes.

<p><b>Visit:</b>  <a href="http://www.oecd.org/edu/eag.htm">www.oecd.org/edu/eag.htm</a>  <a href="http://www.oecd.org/site/piaac/">www.oecd.org/site/piaac/</a></p>	<p><b>See:</b>                  OECD (2013), <i>Education at a Glance 2013: OECD Indicators</i>, OECD Publishing.                  OECD (2013), <i>OECD Skills Outlook 2013: First Results from the Survey of Adult Skills</i>, OECD Publishing.</p>	<p><b>For more information, contact:</b>                  Rodrigo Castañeda Valle                  (Rodrigo.Castanedavalle@oecd.org)</p>	<p><b>Coming next month:</b>  <i>What is the impact of the economic crisis on education budgets?</i></p>
--	--	--	--

Photo credit: © Ghislain & Marie David de Lossy/Cultura/Getty Images