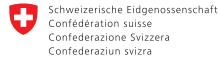
#### **FACTS AND FIGURES**

# VOCATIONAL AND PROFESSIONAL EDUCATION AND TRAINING IN SWITZERLAND





Swiss Confederation

Federal Department of Economic Affairs FDEA

Federal Office for Professional Education and Technology OPET



An initiative of the Confederation, the Cantons and professional organisations

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# **OVERVIEW**

Vocational education and training (VET) enables young people to enter the labour market and ensures that there are enough specialists and managers in the future. VET is geared to the labour market and is part of the education system.

# The most popular form of basic education and training

Vocational education and training provides twothirds of young people in Switzerland with a solid basis for lifelong learning. It also opens up a wealth of job prospects.

#### **Dual-track approach to learning**

Most VET programmes consist of part-time studies at a vocational school combined with a part-time apprenticeship at a host company. There are over 200 careers to choose from. There are also VET programmes based on a full-time curriculum (i.e. no apprenticeship). These full-time VET programmes are generally offered by trade schools or commercial schools.

#### Qualifications which lead to jobs

VET programmes closely match the needs of the labour market, both in terms of professional qualifications and the number of available jobs. The close correlation with the labour market explains why Switzerland has one of the lowest youth unemployment rates among European countries.

#### Part of the education system

Vocational education and training takes place at upper-secondary level. It is based on clearly defined curricula and national qualification procedures. Typically, it is very flexible: students may pursue vocational opportunities and change course in their professional life with relative ease. Continuing education and training (CET) opportunities are also available at all levels.

#### **Career prospects**

Tertiary-level professional education and training (PET) is the next step after vocational education and training (VET). PET programmes provide students with specific qualifications and prepare them for managerial and specialised positions. There are around 400 PET programmes leading to national professional examinations and 400 PET programmes leading to professional college degrees. The Federal Vocational Baccalaureate provides direct access to Swiss universities of applied sciences (UAS).

#### **Joint mission**

VET/PET is a partnership, a joint mission pursued by the Confederation, the Cantons and professional organisations.

#### **Key VET/PET figures**

Students in final year of lower-secondary	88,200
New students enrolling in VET programmes	82,000
Total number of VET students	226,800
VET graduates	65,700
PET graduates	27,600

# THE SWISS VET/PET SYSTEM

Vocational education and training (VET) is provided at upper-secondary level and professional education and training (PET) is provided at tertiary B level. Both VET and PET programmes use clearly defined curriculums and national qualification procedures. They are also characterised by a high degree of flexibility: it is possible for students to pursue additional educational opportunities and change course in their professional life with relative ease. A wealth of continuing education and training (CET) courses can also be found at all levels. There is a broad selection of VET and PET programmes available. Courses cater to different abilities and are geared to the needs of different age groups.

#### Vocational education and training (VET)

VET programmes provide upper-secondary school students with recognised qualifications and pave the way for lifelong learning.

# Three- or four-year VET programmes leading to a Federal VET Diploma

Provide students with the qualifications needed to carry out a specific occupation and gain access to tertiary-level professional education and training (PET) programmes.

# Two-year VET programmes leading to a Federal VET Certificate

Allow students who are more practically minded to obtain a recognised federal certificate that matches their needs. Graduates from the two-year VET programme may directly enrol in a three- or four-year VET programme.

#### Federal Vocational Baccalaureate (FVB)

The optional FVB is available to VET students who attend the FVB preparatory course (which consists of general education subjects) either during their VET programme or afterwards. FVB holders are entitled to enrol in any of Switzerland's universities of applied sciences (UAS) without having to take an entrance examination. Alternatively, FVB holders may take the University Aptitude Test to obtain admission to a cantonal university or either of Switzerland's two federal institutes of technology (ETH in Zurich or EPF in Lausanne).

#### Professional education and training (PET)

PET programmes combine solid practical skills with established theoretical expertise. They also prepare students for managerial and/or specialised positions.

#### **National professional examinations**

The Federal PET Diploma Examination is intended for people with several years of professional experience who would like to specialise in a given field. The Advanced Federal PET Diploma Examination is generally for people who have acquired a great deal of professional expertise and/or who intend to hold a managerial position in an SME.

Depending on which national professional examination is taken, candidates will be awarded either the Federal PET Diploma or the Advanced Federal PET Diploma.

#### Professional college degree programmes

PET programmes offered by professional colleges are based on a core curriculum. Generally speaking, PET programmes last for two years (full-time) or three years (part-time) and lead to a federally recognised professional college degree.

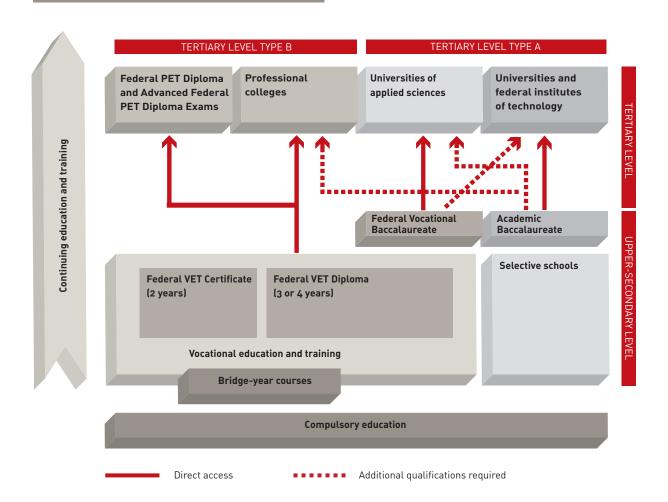
# Preparation for vocational education and training

# Bridge-year courses between lower- and upper-secondary level

Upon completion of compulsory education, students may decide not to enrol immediately in an upper-secondary level school. Instead, they may take bridge-year courses, which consist of practical training and pre-apprenticeships. Bridge-year courses are generally designed to prepare students for admission to upper-secondary level VET programmes.

#### Continuing education and training (CET)

Regardless of their stage in life, students will find a wide range of CET options (incl. both formal programmes and courses as well as non-formal courses, seminars, etc.) at all training levels.



#### Vocational education and training for adults

Adults may take remedial courses to acquire a Federal VET Certificate. The Federal Vocational and Professional Education and Training Act leaves several avenues open in this regard: these range from regulated, structured procedures for occupational categories and subcategories to individual qualification procedures.

#### **FACTS AND FIGURES**

# ONE MISSION, THREE PARTNERS

Vocational and professional education and training is a mission shouldered by the Confederation, the Cantons and professional organisations. These three partners are jointly committed to the highest possible standard of VET/PET and strive to ensure that there is an adequate number of apprenticeships and CET courses.

#### **Confederation**

# Federal Office for Professional Education and Technology (OPET)

Responsible at federal level for vocational and professional education and training needs.

# Swiss Federal Institute for Vocational Education and Training (SFIVET)

Mainly provides basic and continuing training to VET/PET professionals, particularly vocational teachers. SFIVET is also involved in research and the provision of services. It has three regional campuses: in Lausanne, Lugano and Zollikofen.

#### Confederation

#### Strategic management and development

- Quality assurance and further development of the Swiss VET/PET system
- Comparability and transparency of courses throughout Switzerland
- Enactment of over 200 VET ordinances
- Recognition of examination regulations and core curricula for PET programmes
- Payment of one-fourth of publicsector expenditure for the VET/PET system
- Promotion of innovation and support for specific activities in the public interest

#### **Professional organisations**

#### **Curricula and apprenticeships**

- Definition of the curriculum and national qualification procedures
- Creation of apprenticeship positions
- Provision of vocational qualifications
- Development of new education and training courses

#### Cantons

#### Implementation and supervision

- VET/PET offices/supervision of apprenticeships
- Vocational schools, part-time and full-time curricula
- Occupational, educational and career guidance
- Apprenticeship marketing
- Involvement in further development and planning of the Swiss VET/PET system

#### **Professional organisations**

#### **Trade associations**

Define the curriculum and national qualification procedures, organise VET programmes, create VET apprenticeships (upper-secondary level) and PET traineeships (tertiary level).

# Social partners, other relevant organisations and VET providers

Together with trade associations, they are also involved in the further development of VET/PET programmes.

#### **Companies**

Where possible, companies provide VET apprenticeships and PET traineeships for the chosen occupation, thereby ensuring the next generation of qualified workers. Their involvement in VET/PET programmes is voluntary.

#### **Cantons**

## Swiss Conference of Cantonal Directors of Education (EDK)

The Cantons are generally responsible for education and training in Switzerland. Inter-cantonal cooperation through EDK helps to strengthen cantonal authority over education.

#### 26 cantonal VET/PET offices

Responsible for implementing vocational and professional education and training at cantonal level, VET/PET offices coordinate their activities through the Swiss Conference of VET/PET Offices (SBBK), one of the EDK's specialised committees.

# Occupational, educational and career guidance counselling services

Provide information and guidance to both young people and adults.

#### **Vocational schools**

Vocational schools generally work with host companies on what is referred to as a dual-track approach to learning: students learn theoretical principles at the vocational school part-time and do an apprenticeship at a host company part time to gain practical skills. Some vocational schools provide students with both education and training on the basis of a full-time curriculum.

# TRAINING ARRANGEMENTS

The trademark and strength of VET/PET programmes is their direct correlation with the needs of the labour market. This is reflected in various training arrangements.

#### **Vocational education and training (VET)**

#### In-company training

With the dual-track approach to learning, students attend courses at vocational schools on a parttime basis. The remaining time is spent doing an apprenticeship at a host company where they are taught the practical skills needed for their chosen occupation.

In some cases, host companies may wish to combine their strengths to offer one or more apprenticeships in a modular format. Such host company networks are suitable for companies which have limited staff capacities or which are specialised in only one or more aspects covered by the VET programme.

#### In-school education

Vocational schools provide in-school education. This consists of vocational instruction and general academic subjects. There are a number of ways in which VET programmes can be organised: the standard way is for students to attend courses one to two days per week at the vocational school and do their apprenticeship at a host company for the remaining three to four days per week; the sliding-scale model (initially more days attending courses at the vocational school and gradually decreasing the number of days to spend more time doing the apprenticeship) is another alternative; basic training years are a third alternative, etc. Some vocational schools also offer a full-time curriculum (e.g. trade schools, commercial schools, etc.) without the need for students to do an apprenticeship.

#### **Industry courses**

Industry courses are meant to complement in-school education and in-company training. Industry courses often take place at third-party training centres run by the industries involved.

#### Professional education and training (PET)

# National professional examinations for the Federal PET Diploma and Advanced Federal PET Diploma

Professional organisations as well as public and private professional colleges offer part-time courses for these two types of national professional examinations.

#### Professional colleges

Part-time and full-time professional college degree programmes are organised by professional organisations, private businesses or public education institutions.

#### Continuing education and training (CET)

There is a wide range of CET courses. These courses are tailored to suit the requirements of the given occupation or profession. CET courses are mainly organised by the private sector.





# THE APPRENTICESHIP MARKET

There are two sides to the apprenticeship market: the supply side (host companies offering apprenticeship positions) and the demand side (VET students looking for apprenticeship positions). The State plays a mediating role: it ensures the best possible general conditions for host companies, encourages the provision of apprenticeship positions and helps young people to choose an occupation.

#### Structural changes:

The number of apprenticeship positions reflects the long-term needs of the labour market.

#### **Economic fluctuations:**

Economic fluctuations are also a factor since companies need a large enough order book in order to be able to take on apprentices within the framework of a dual-track VET programme.

#### Demographic changes:

A high birth rate in a given year will have an impact on the demand side of the apprenticeship market.

According to the Federal Statistical Office (FSO), the number of lower-secondary school graduates will decrease starting from 2009.

#### **Apprenticeship market**

### 1

#### Host company ratio:

Around 30% of the companies in Switzerland take part in VET programmes. Host companies derive a tangible benefit from the apprenticeships they provide. Generally speaking, companies tend to be unwilling to provide apprenticeship positions when they are unable to derive tangible benefits. In other words, the costs of providing training must not exceed the productive output generated by apprentices or the cost of recruiting qualified personnel.

#### Interests of young people:

Choosing the right occupation is an important step in young people's lives. They need to take into account available apprenticeship positions when deciding which direction best corresponds to their hopes and wishes. Occupational guidance offices provide young people with information and advice.

#### Apprenticeship marketing - a cantonal task

Cantonal VET/PET offices are familiar with the conditions in their regions. They also establish and maintain contacts with local businesses. Accordingly, they are the best placed to assess the number of available apprenticeships, to take suitable measures at the right time and to offer individual support to young people in their search for an apprenticeship position. If the apprenticeship situation is disadvantageous for the host company, then the federal government may step in to offer additional financial incentives.

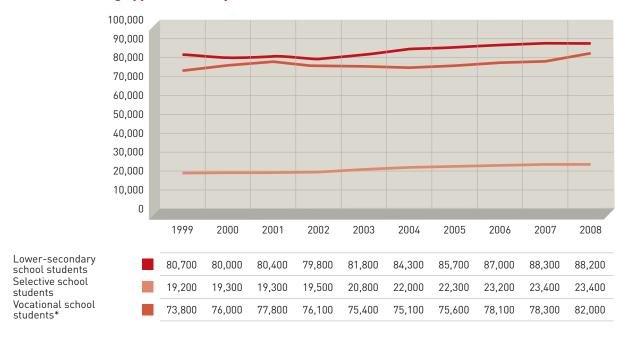
#### The most important apprenticeship marketing measures

- Information and advice on careers
- Apprenticeship records
- Creation of host company networks
- Provision of bridge-year courses (mainly to prepare students for VET programmes)
- VET promotion agents deal directly with companies, encouraging them to create apprenticeship positions
- Placement and individual mentoring of young people who have been unable to find a suitable apprenticeship

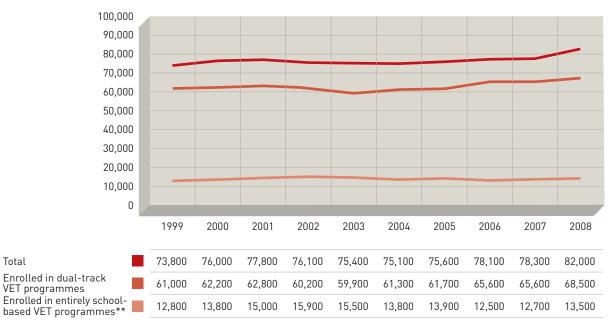
# ENTERING THE LABOUR MARKET

Around two-thirds of young people coming out of compulsory education enrol in a VET programme. Dual-track VET programmes (i.e. part-time vocational school, part-time apprenticeship at host company) are by far the most common form of vocational education and training in Switzerland. Entirely school-based VET programmes at vocational schools are more popular among students in the French- and Italian-speaking regions of Switzerland than among students in the German-speaking region.

#### Students entering upper-secondary level



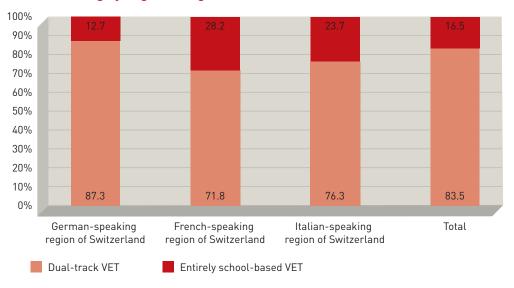
#### Students entering VET programmes: dual-track programmes predominate



<sup>\*</sup> incl. students enrolled in full-time curriculum (commercial schools and IT schools), without apprenticeship

<sup>\*\*</sup> incl. commercial schools and IT schools





#### Student enrolment ratios immediately after lower-secondary



#### **Broad range of bridge-year courses**

Upon completion of compulsory education, the vast majority of lower-secondary school students enrol directly at upper-secondary level in either a selective, specialised or vocational school.

Bridge-year courses are available to lower-secondary school graduates who do not have immediate follow-up plans.

Young people sometimes take advantage of the bridge-year period between lower-secondary and upper-secondary to learn a foreign language abroad.

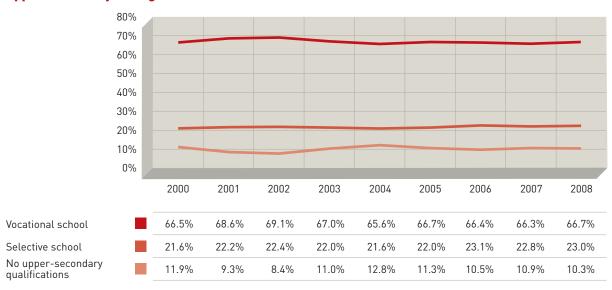
<sup>\*</sup> Bridge-year courses include 10th school year courses, pre-apprenticeships and preparatory school courses

#### **FACTS AND FIGURES**

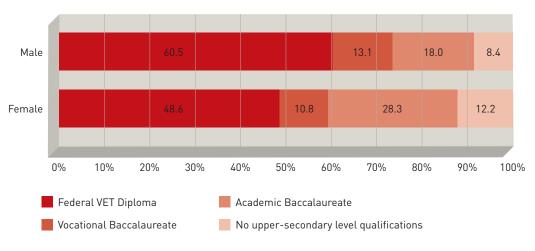
# **GRADUATION RATE OF 90%**

VET qualifications increase a person's job prospects on the labour market and form the basis for lifelong learning. In Switzerland, 90% percent of young people hold upper-secondary level qualifications. The aim is to increase this figure even more in the coming years.

#### **Upper-secondary level graduation rates**



#### Completed upper-secondary level education and training in 2008

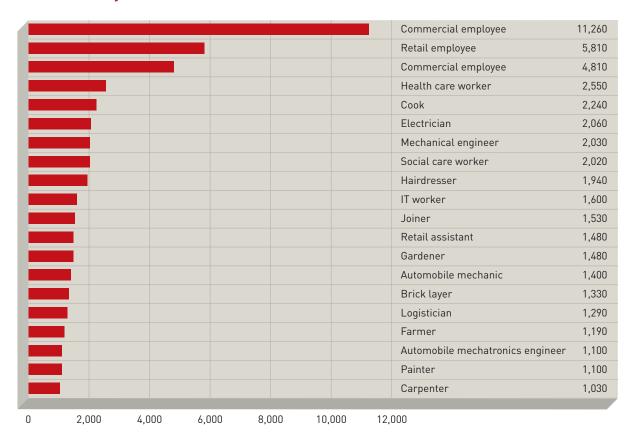


# THE 20 MOST POPULAR OCCUPATIONS

In Switzerland, there are VET programmes for over 200 different occupations.

The 20 most popular occupations in 2008 account for about 60% of all VET programmes.

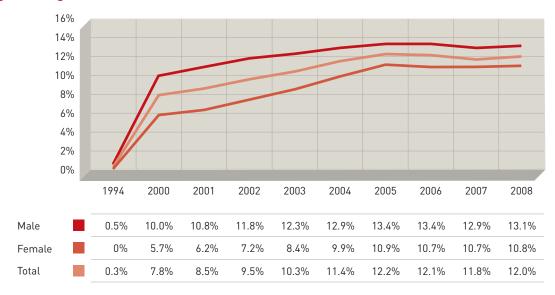
#### Number of newly enrolled VET students in 2008



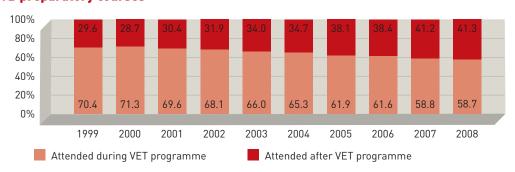
# VOCATIONAL BACCALAUREATE: A SUCCESS STORY

The Federal Vocational Baccalaureate (FVB) was introduced in 1994. It is awarded to VET students with strong academic skills. Issued as a complement to the Federal VET Diploma, the FVB entitles the holder to enrol directly in a Swiss university of applied sciences (UAS). If an FVB holder then takes the University Aptitude Test (UAT), the transition to a cantonal university or either of Switzerland's two federal institutes of technology (FIT) is also possible.

#### Percentage of VET graduates issued an FVB



#### Attendance of FVB preparatory courses



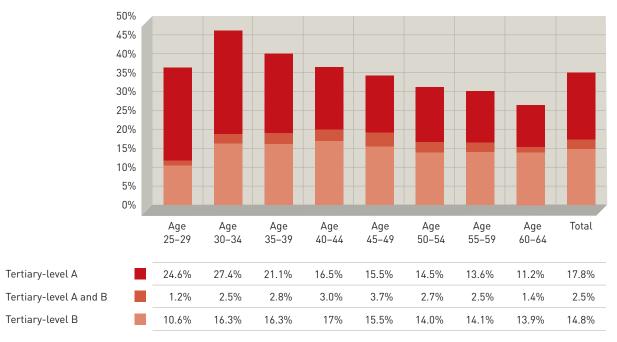
#### Proportion of FVB holders who enrolled in a UAS degree programme

Immediate enrolment	26.0%	24.0%	24.8%	20.6%	19.9%	18.9%	19.3%	19.5%
Enrolment after one year	14.8%	14.4%	13.5%	16.3%	15.7%	17.1%	19.3%	
Enrolment after two or more years	18.1%	16.4%	15.9%	15.4%	13.2%			
Total	58.9%	54.8%	54.2%	52.3%	48.7%			
	2001	2002	2003	2004	2005	2006	2007	2008

# INCREASING NUMBER OF TERTIARY-LEVEL QUALIFICATION HOLDERS

The number of tertiary-level qualification holders has been increasing steadily. In 2009, one-third of the population had a tertiary-level A or B qualification.

#### Tertiary-level A and B qualifications by age group 2009



#### Tertiary-level B qualifications by type

Professional College Degree	2,800	3,600	3,600	4,000	4,100	4,100	4,200	4,200
Advanced Federal PET Diploma	3,200	3,100	3,000	3,200	2,600	2,900	2,600	2,800
Federal PET Diploma	6,100	9,500	12,400	11,400	12,200	13,200	11,700	12,500
Other PET Certificate	8,800	8,700	8,000	10,700	10,600	9,400	8,800	8,100
Total	20,900	24,900	27,000	29,300	29,500	29,600	27,300	27,600
	1995	2002	2003	2004	2005	2006	2007	2008

# **SWISS VET/PET FUNDING**

VET programmes are funded by the Confederation, the Cantons and professional organisations, each to their own degree. Most of the costs of PET and CET programmes are borne by companies and private individuals.

#### **Public funding**

The Cantons are responsible for implementing VET/PET programmes. As such they provide at least three-fourths of public funding. Under the new Vocational and Professional Education and Training Act, the Confederation will increase its share of public funding of the VET/PET system to one-fourth of the total cost. 10% of federal funding will be used to promote VET/PET development projects as well as specific activities that serve the public interest.

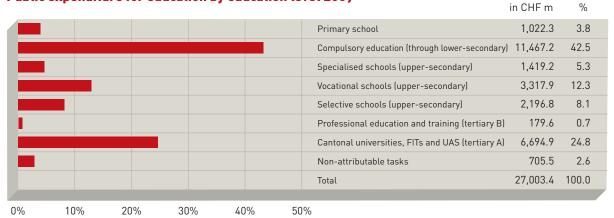
#### **Professional organisations**

Professional organisations provide both services and funding to the VET/PET system: they do the groundwork, run their own training centres and promote specific occupations. Generally speaking, host companies stand to benefit from taking part in VET and PET programmes. According to a cost/benefit study conducted in 2004, gross costs of involvement in VET/PET programmes amounted to CHF 4.7 billion. This figure was outweighed by the productive output generated by VET apprentices and PET trainees, which amounted to CHF 5.2 billion.

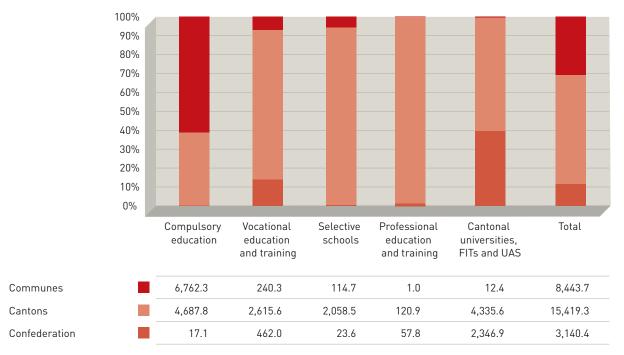
#### **VET/PET funds**

Under VPETA provisions, VET/PET funds are specific to a given economic branch. These funds ensure that all companies, including those that do not belong to the professional organisation, make suitable contributions to help cover the cost of the professional organisation's involvement in VET/PET programmes. The Confederation may declare some VET/PET funds to be of general interest and therefore mandatory for all companies within a given economic branch.

#### Public expenditure for education by education level 2007



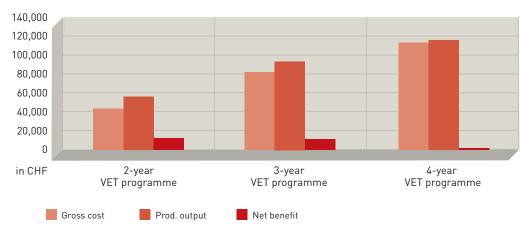
#### Public sector expenditure in CHF million in 2007



# Cost/benefit ratio for Swiss companies involved in VET programmes, in CHF million, survey year 2004

Productive output by apprentices	5,200
Gross cost for host companies	4,700
Net benefit	500

#### Cost/benefit ratio by programme duration, survey year 2004





## **PROJECTS**

#### **Apprenticeship barometer**

Representative survey of the apprenticeship situation from the perspective of young people and host companies. Conducted every April and August since 1997.

www.bbt.admin.ch

# Cost/benefit survey of Swiss companies involved in VET programmes

Conducted by the University of Bern's Centre for Research in Economics of Education, this survey focuses on the economic aspects of VET/PET programmes.

www.vwi.unibe.ch/ffb

#### National and international skills competitions

Each year, a large number of professional organisations hold competitions to determine the best in their field. The Swiss championships also determine who will go on to represent Switzerland at the World Skills Competition.

www.swiss-skills.ch

#### Vetplus.ch

Information and guidance on the wide range of VET courses.

www.vetplus.ch

#### Copenhagen process

The Copenhagen process seeks to improve accessibility, transparency and mobility in education. Through OPET, Switzerland is involved in this EU initiative.

www.bbt.admin.ch

# Recognition of non-formal education and training

This initiative gives adults the opportunity to gain federally recognised education and training qualifications without having to attend formal education and training programmes.

www.validacquis.ch

# OECD studies of vocational education and training

Switzerland took part in two OECD studies of VET in various countries and received good ratings. Both studies can be found at:

www.bbt.admin.ch.

#### Web site on Switzerland's VET/PET sector

This Web site provides information about Switzerland's VET/PET sector as well as important aspects.

www.berufsbildungplus.ch

#### Host company label

In recognition of their work, companies that train apprentices receive a special label from the cantonal VET/PET office each year. This label can also be used for marketing purposes.

www.sbbk.ch



#### **FACTS AND FIGURES**

# **ADDITIONAL INFORMATION**

#### **Directory of occupations**

List of all federally recognised occupations: Legal bases and addresses. www.bbt.admin.ch

#### Federal Statistical Office (FSO)

www.education-stat.admin.ch

#### Federal Finance Administration (FFA)

www.efv.admin.ch

# Swiss Federal Institute for Vocational Education and Training (SFIVET)

www.sfivet-switzerland.ch

# Swiss Conference of Cantonal Directors of Education (EDK)

www.edk.ch

# Portal for occupational, educational and career guidance

www.berufsberatung.ch

#### **Swiss education server**

www.educa.ch

#### **Electronic VET/PET newsletter**

www.panorama.ch

#### **VET/PET Lexicon**

www.lex.berufsbildung.ch

#### **VET/PET research**

Leading Houses have been commissioned by OPET to encourage the sustainable development of VET/PET research in Switzerland.
www.bbt.admin.ch

#### **Masthead**

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