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Introduction

This brochure provides a summary of education finance in Switzerland. It is based on the public education expenditure statistics, the Cantonal grants and loans statistics and on the funding of higher education institutions statistics. Information is presented for the most recent financial year available: 2015 for public expenditure on education¹ and 2016 for higher education institution funding and expenditure.

At national level the public education expenditure of the financial statistics of the Federal Finance Administration is the only data source that enables a uniform analysis of education finance from primary to university. To depict the detailed costs and performances of higher education institutions, the statistics on public expenditure on education are not sufficient. This information gap is filled by the higher education funding statistics that cover both public and private funding. The data offer a precise insight into the funding of higher education institutions, cost developments, performances rendered and enable the calculation of indicators such as costs per student.

The statistics on public expenditure on education and the higher education funding statistics differ in terms of the institutions surveyed and the scope of the survey. Both data sources cannot be compared directly and are therefore discussed in separate chapters.

In 2015, the Confederation, cantons and communes spent CHF 36.7 billion on education. The public sector invests the largest proportion of this expenditure in compulsory schooling.

One percent of all public education expenditure is paid out in the form of grants and loans. Benefiting students study at the upper secondary and tertiary levels.

Higher education institutions are mainly funded by the cantons. In the higher education institutions, the greatest part of the costs is generated by research and development (R&D) in the universities; at the universities of applied sciences and the universities of teacher education by teaching staff.

¹ Due to the complexity of collecting and harmonising data, the final results on public expenditure of a given financial year are available two years later.

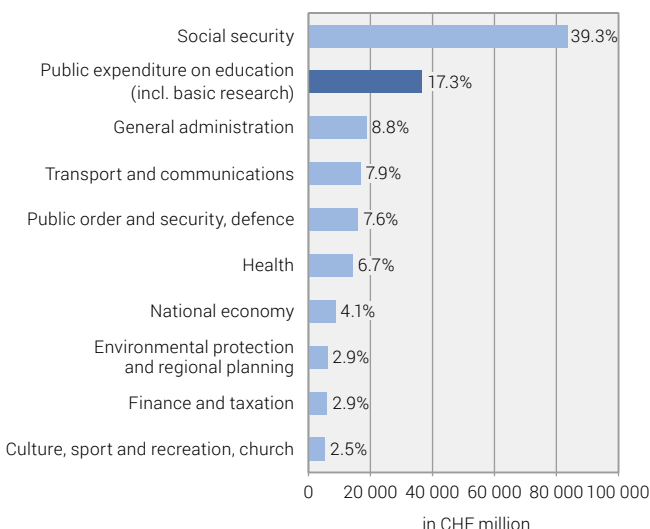
Statistics on public expenditure on education

In 2015 the Confederation, cantons and communes spent 17% of their total expenditure of CHF 213 billion (including social insurances) on education.

Funding for education comes mostly from public authorities. The graphic shows that in relation to other budgetary items, education is a major public undertaking.

Public expenditure by budgetary item in 2015

G1



Sources: FSO – ÖBA; FFA – FS

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In 2015, at 39%, “Social security” is the public sector’s greatest budgetary item. This is followed by “Public education expenditure” (incl. research). Since 1990, these two budgetary items have occupied the first and second place.

The distribution of total expenditure by budgetary item varies depending on the canton. Education is the biggest budgetary item in nearly all cantons, accounting for between 20% and 34% of total expenditure.

Financial flows in education

The 17% of total expenditure allocated to the public education expenditure corresponds to CHF 36.7 billion.

Education is not always funded directly, but also in the form of contributions towards the expenditure undertaken by other administrative levels. The Confederation contributes to the costs of vocational and professional education and training in accordance with the Vocational and Professional Education and Training Act with approximately 25%. All expenditure at this level, however, is made by the cantons.

The graph below shows on the left side, which is the financing administrative level, and on the right side the one that makes the expenditure.

Financial flows for education, 2015

G2

in CHF million

Administrative level from which financing comes

Confederation
Total: 6 358
(17.3%)

Cantons
Total: 18 793
(51.2%)

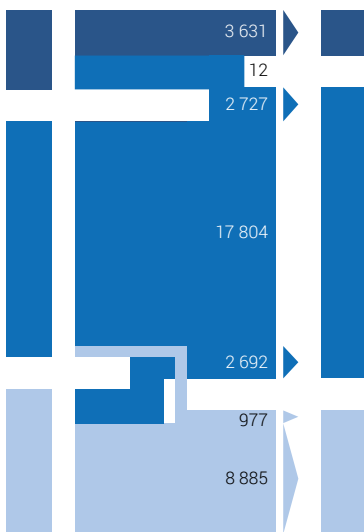
Communes
Total: 11 577
(31.5%)

Administrative level making expenditure

Confederation
Total: 3 643
(9.9%)

Cantons
Total: 23 223
(63.2%)

Communes
Total: 9 862
(26.9%)



Sources: FSO – ÖBA; FFA – FS

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In 2015, the Confederation accounts for 17% of **funding** for education, the cantons 51% and the communes 32%.

If the administrative levels that **make the expenditures** are considered, cantons account for two thirds (63%) of educational expenditure, communes for a quarter (27%) and the Confederation for the remainder 10%.

Public education expenditure by educational level

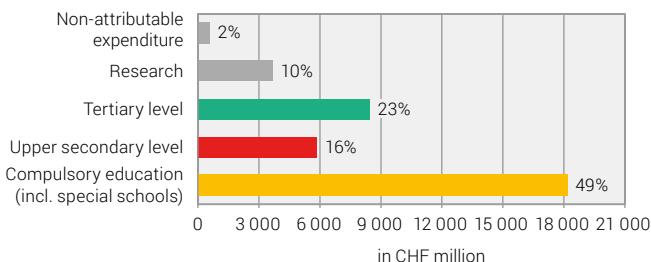
The greatest share of public expenditure on education (49%) is spent on compulsory education. This level also has the greatest number of students, some 900 000² including special schools. This corresponds to 59% of the total of all persons in education.

A quarter of the expenditure is dedicated to the tertiary level (higher vocational education and university). 18% of people in education are to be found at this level. The upper secondary level (vocational and general education) accounts for 16% of public expenditure on education as well as 23% of people in education.

The proportions of expenditure on education by educational level changed little between 1990 and 2015.

Public education expenditure by educational level in 2015

G3



Sources: FSO – ÖBA; FFA – FS

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Educational level in accordance with the harmonised accounting model HAM2. "Research" comprises basic research and "R&D in education". "Non-attributable expenditure" corresponds to the HAM2 category "Other education expenditure".

² FSO, Student statistics and Swiss Higher Education Information System

Public education expenditure by administrative level making the expenditure

The responsibility for educational funding is distributed among the Confederation, cantons and communes to varying degrees depending on the educational level concerned.

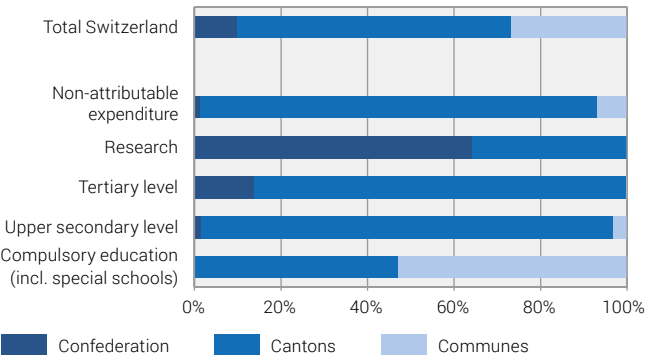
The cantons and communes share expenditure for compulsory education (including special schools) equally.

The greater part of expenditure for the upper secondary level (vocational and general education) as well as for the tertiary level (higher vocational education and university), is covered by the cantons.

The Confederation makes direct payments at the tertiary level, in the area of research and the Federal Institutes of Technology.

Public education expenditure by educational level and administrative level that makes the expenditures in 2015

G4



Sources: FSO – ÖBA; FFA – FS

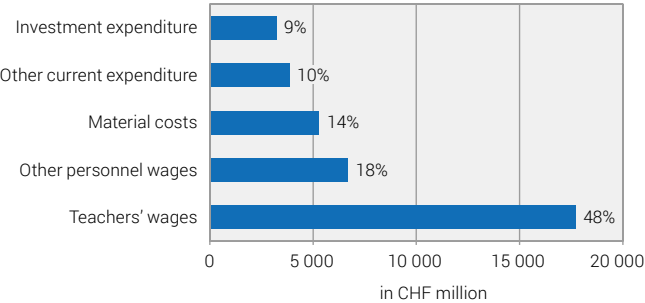
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Public education expenditure by type of expenditure

In Switzerland 91% of expenditure on education is incurred as current expenses, the remaining 9% as investments.

With CHF 18 billion, 48% of total education expenditure is spent on teaching staff. The remaining current expenses are divided among other staff, material costs and other current expenses (subsidies and grants to private institutions and households).

Public education expenditure by type of expenditure in 2015 G5



Sources: FSO – ÖBA; FFA – FS © FSO 2018

The same division of expenditure applies separately to compulsory education, the upper secondary level and the tertiary level.

The breakdown in percentage of education expenditure by type of expenditure has hardly changed since 1990.

Expenditure on personnel accounts for the greatest share of public expenditure on education in all cantons.

Per capita public education expenditure

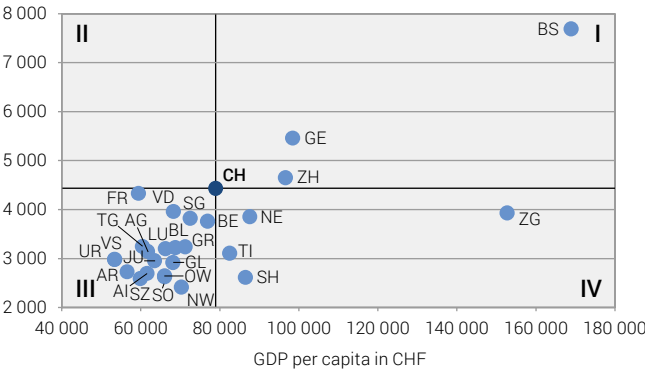
A direct comparison of costs can be made between cantons by means of per capita public expenditure on education. At the national level, the annual per capita education expenditure was CHF 4400, although considerable differences can be observed between the cantons.

Another means of comparison between cantons is the gross domestic product (GDP). The GDP quantifies the economic performance of the national economy. It is an estimate of the value of goods and services produced in a country as far as they are not used as input for the production of other goods or services, in other words it is the value added.

Public education expenditure and gross domestic product in 2015

G6

Public education expenditure per capita in CHF



Sources: FSO – ÖBA; GDP of the cantons; FFA – FS

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The urban university cantons of Basel-Stadt, Geneva and Zurich show a high GDP and above-average per capita expenditure on education (quadrant I).

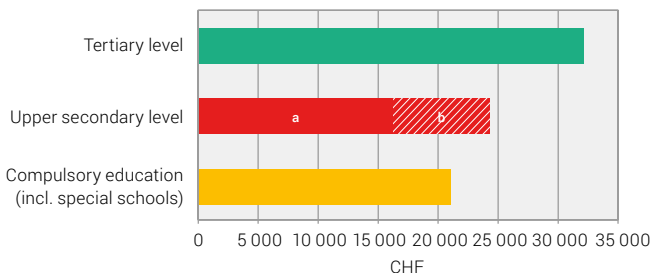
The cantons in the quadrant III show a comparatively low GDP and below-average per capita education expenditure.

Education expenditure per person in education

In 2013, CHF 21 100 was spent per person in education in compulsory education (incl. special schools). At upper secondary level, CHF 16 200 was spent and at tertiary level CHF 32 200. These figures represent only the amount contributed by the public sector.

Education expenditure per person in education by educational level in 2015

G7



^a excl. private expenditure of enterprises

^b incl. private expenditure of enterprises

Sources: FSO – ÖBA, SDL, Studierende und Abschlüsse der Hochschulen; FFA – FS © FSO 2018

Private contributions are particularly relevant for higher vocational education as well as for vocational education. However, there are currently no figures available at national level regarding higher vocational education. Estimates exist, however, regarding dual-track VET programmes for the education expenditure undertaken by enterprises³. In 2013 private enterprises spent CHF 2.7 billion on their apprentices. If this amount is taken into account, expenditure per person in education at upper secondary level was CHF 24 300.

Overall, i.e. by including private expenditure at upper secondary level, education expenditure increases as the level of education gets higher. The higher the educational level, the higher the cost of wages and the need for administrative and technical staff as well as the infrastructure requirements. This applies at national level as well as in the cantons.

³ Strupler, M.; Wolter, S.C. (2012): Die duale Lehre: eine Erfolgsgeschichte – auch für die Betriebe. Chur: Rüegger.

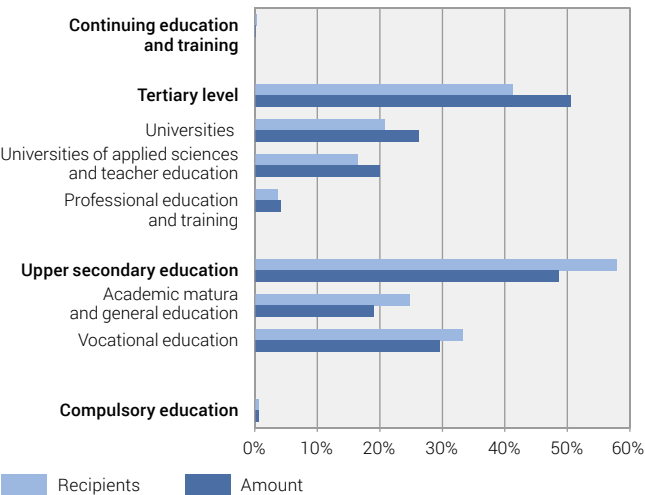
Education contributions

Cantonal grants and loans, as well as education contributions from the Confederation to the cantons are part of public expenditure on education (1%).

In 2016, the cantons paid a total of CHF 311 million in grants and CHF 16 million in the form of loans to persons in education. Although loans are also an important tool in the financial support of education, they are only a small part of the cantons' financial commitment (5% of education contributions).

Grants: Recipients and amounts by educational level in 2016

G8



Source: FSO – STIP

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Grants play an important role at all levels of post-compulsory education. For compulsory education and further education, their importance is minimal.

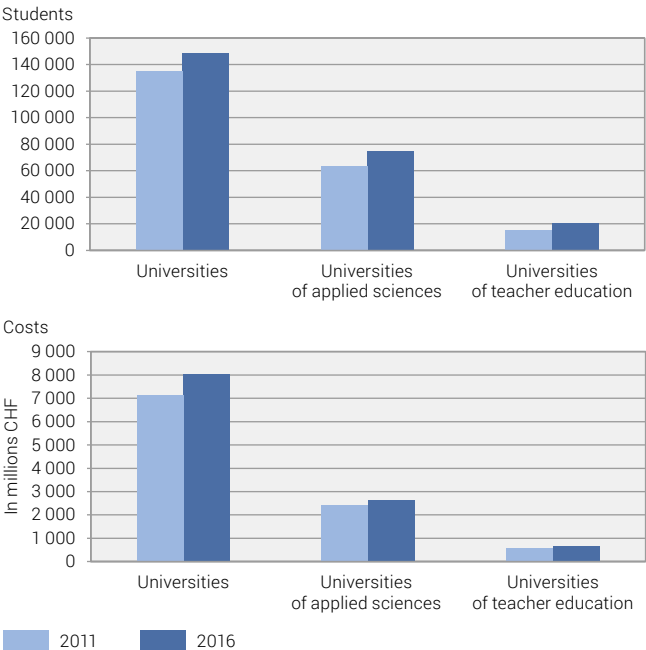
51% of the total amount of grants is allocated at tertiary level and 49% at upper secondary level but only 41% of recipients are tertiary level students and more than half (58%) are upper secondary level students.

Statistics on higher education funding

In recent years, student numbers have constantly increased at the three types of higher education institution. The majority of students are enrolled at universities and institutes of technology: in 2016 148 500 students were enrolled, corresponding to a five-year increase of around 10%. Higher education costs rose by more than 12% over the same period, reaching a total of CHF 8 billion.

Student numbers and costs in 2011 and 2016

G9



Sources: FSO – Finances of higher education institutions, Studentstatistics

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The growth of the universities of applied sciences (UAS) was even greater between 2011 and 2016 with over 75 000 students registered, i.e. an increase of almost 18%.

At 8.3%, costs of UAS increased in comparison with the students only half as much and reached in excess of CHF 2.6 billion.

The greatest relative increase in the number of students, however, was seen by the universities of teacher education (UTE); with an increase of around 35% with almost 20 500 registrations in 2016. But annual growth stabilised compared with previous years. The total cost of this type of higher education institute is now greater than CHF 657 million, i.e. 14% more over the same period.

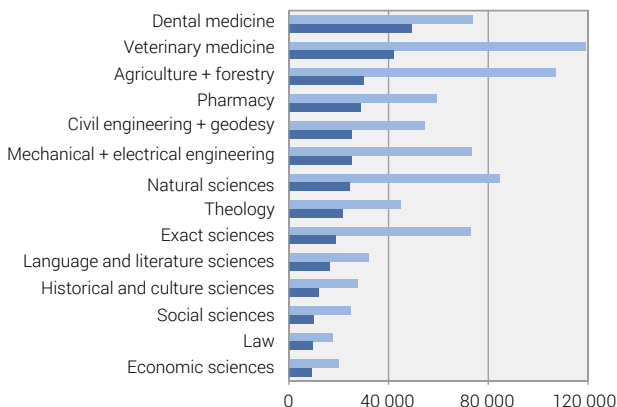
Costs per student

Cost indicators per student allow average costs to be compared between the different categories of study. On average, a university student costs between CHF 9200 and CHF 49 400. This indicator ranges from 14 800 to 47 700 per year in the universities of applied sciences and the universities of teacher education. If, in addition to teaching, research and development (R+D) is also included in the calculation, the costs per student increases considerably. For the universities, the least costly fields cost around CHF 20 000, while the most expensive can cost more than CHF 118 000. In the universities of applied sciences, the minimum costs is around CHF 20 000, while the maximum cost is below CHF 73 000.

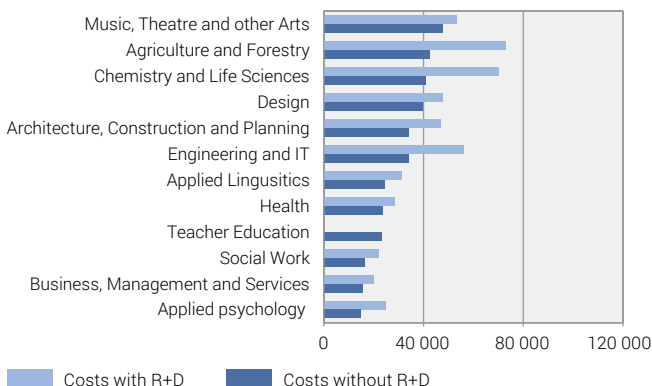
Costs per student by category of study, 2016

G10

Universities



Universities of applied sciences and universities of teacher education



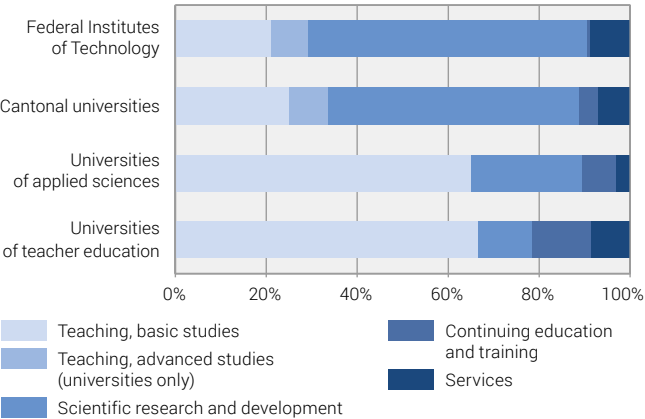
Types of higher education

The universities provide five types of higher education: teaching for basic studies, teaching for advanced studies, research and development, further education and the provision of other services. In this type of higher education institution, which includes the cantonal universities as well as the two EPF/ETH, research and development represent the largest budgetary item, with more than half of the costs. In second place comes teaching for basic studies, which generates approximately a quarter of the costs of these universities.

In the universities of applied sciences and the universities of teacher education, the courses of study are oriented towards obtaining skills linked to a well-defined occupation. They offer an education and training that is practical in nature and for this reason, the teaching of basic studies is by far the main service provided with roughly two-thirds of all costs in these two types of establishment. Applied research and development represents the second biggest cost item in the universities of applied science; in the universities of teacher education, continuing education and research generate similar costs.

Higher education institution costs by type in 2016

G11



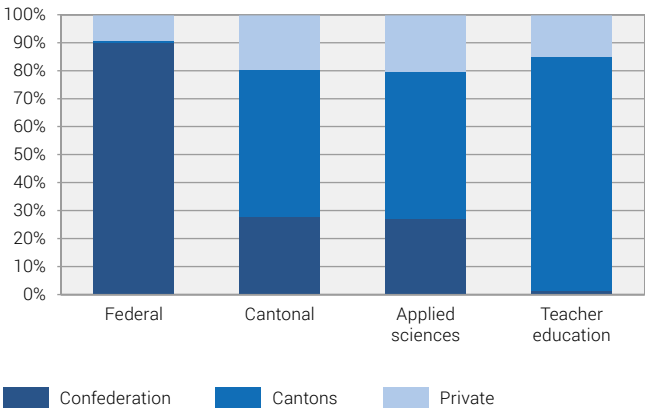
Funding of higher education

While the following data for UAS and UTE are based on their cost calculations, the data source for the UH is the expenditure statistic. This is because the cost accounting model of the UIT does not allow for detailed funding information.

Since 1999⁴ the Confederation (28%) and cantons (52%) have been responsible for most funding of the cantonal universities. More than 90% of the costs of the federal institutes of technology (EPF/ETH), which fall within the responsibility of the Confederation, are met by federal funding sources, in particular global EPF/ETH budgets. The cantons (53%) are the main funder of the universities of applied sciences, through AHES (inter-cantonal agreement) contributions and budgetary coverage of the cantons responsible. Similarly to the universities of applied sciences and by means of the same sources of funding, the cantons are the main funders of the universities of teacher education and cover some 84% of their needs.

Financing of higher education institutions by funder in 2016

G12



Source: FSO – Finances of higher education institutions

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⁴ Since the coming into force of the Federal Act on University Funding and Cooperation in the field of University Education (UFundA). Its successor, the Higher Education Act (HEdA), came into force in 2016.

Sources

Statistics on public expenditure on education (ÖBA)

The statistics on public expenditure on education is the share of the public expenditure of the Federal Finance Administration (FFA) that concerns "Education". It comprises public sector expenditure on education from compulsory education to higher education institutions, therefore enabling the analysis of education expenditure across all educational levels. Childcare prior to starting school and further education are not included.

The finance statistics model is based on the harmonised accounting model used by cantons and communes (HRM2). The survey units of the finance statistics are the public authorities, i.e. Confederation, cantons, communes and public social insurances. In accordance with HRM2 expenditure on basic research is included in expenditure on education.

Higher education funding statistics

At higher education level, the cost and performance accounting for the three types of higher education institution provide information about the costs and performances of the individual institutions. They include both public and private funding (e.g. tuition fees, R&D commissioned by companies as well as contributions from foundations).

For universities, the FSO has collected data on expenditure since the financial year 1996 and on costs since 2006. For universities of teacher education, data has been collected since 2008. The SBFI has provided information on the costs of the universities of applied sciences since 2000.

Further sources

Information on financial assistance towards education from the cantons is based on the FSO's **Cantonal grants and loans statistics (STIP)**, which has existed since 2004 and which comprises data from the cantonal grant-providing agencies.

The data used to calculate the expenditure per person in education is based on the **Statistics on pupils and students (SDL)** and on the **Swiss university information system (SHIS)**

Private education expenditure is only partly taken into account. Apart from higher education information is only available for the upper secondary level. Estimated expenditure by enterprises for dual-track VET programmes is used to this end.



Abbreviations

EPF/ETH Federal Institute of Technology

FDF Federal Department of Finance

FS Financial Statistics

FSO Federal Statistical Office

ÖBA Public education expenditure

R-D Research and development

SDL Student statistics (without universities)


SHIS Swiss Higher Education Information System

STIP Cantonal grants and loans

UAS Universities of applied sciences

UIT Universities and institutes of technology

UTE Universities of teacher education



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