

# **Educational institutions**

2018 edition



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# 1 Introduction

This brochure presents Switzerland's educational institutions and provides an overview of how they are organised by educational level, responsible authority (public or private sector, government dependent or independent), size as well as linguistic and territorial distribution.

Most of the data are from the educational institutions statistics and the statistics on pupils and students. They are based on the academic year 2016/17.

#### **Educational institutions**

An educational institution is a permanent entity offering pupils/ students one or several types of formal education, provided by teaching staff. Education is conducted on the basis of direct communication between the teaching staff and pupils/ students. An educational institution is defined by its administrative level (the management) and by the educational site(s) (buildings) under its authority. The generic terms of «school» or «establishment» used in this publication correspond to educational sites.

The published figures concern educational institutions from primary<sup>1</sup> to tertiary level. With the exception of the higher education institutions<sup>2</sup>, they generally refer to actual educational sites. Tertiary level educational institutions, which are not uniformly defined across Switzerland, are only considered in this brochure in the overview below (see graphic G1).

kindergarten/first learning cycle years 1–2 included; see details in the chapter "Educational levels"

<sup>&</sup>lt;sup>2</sup> In education statistics, higher education institutions are only defined at the administrative level. As some of them are intercantonal, they cannot be presented by canton.

# 2 The key figures of schools

In autumn 2016/17 there were 10 408 educational institutions in Switzerland including all levels.  $^{\rm 3}$ 

Compulsory education groups together most educational institutions (89%). They accommodate 59% of all people in education and 65% of teachers<sup>4</sup>. More than half of public expenditure on education is spent at this level (56%). Only 8% of schools are for upper secondary level: they group together 23% of all people in education and 19% of teachers for around a fifth of public expenditure on education (18%). At tertiary level, the proportion of educational institutions is 4%. They accommodate 18% of persons in education for 15% of teachers. A quarter of public expenditure on education<sup>5</sup> is spent at this level (26%).

#### Educational institutions, pupils/students, teaching staff and public education expenditure by educational level, 2016/17

100% 402 80% 60% 9 6 0 9 40% 67 052 936 550 18176 20% 0% educational pupils/students teaching staff public educ. institutions (FTE) expenditure (2015; in m CHF) compulsory education tertiary level upper secondary level

Sources: FSO - SBI, SDL, SSP, SHIS-studex, ÖBA

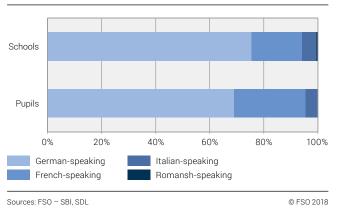
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<sup>&</sup>lt;sup>3</sup> without double counting; see explanation in the next chapter

<sup>&</sup>lt;sup>4</sup> Excl. staff teaching a foreign teaching programme (2880 FTE). This concerns compulsory schooling and upper secondary level. This category is described in detail under «Definitions» at the end of the publication.

<sup>5</sup> excl. public expenditure on research

The distribution of schools on the territory varies by language region. Three-quarters of schools, across all levels of education<sup>6</sup>, are located in German-speaking Switzerland for 69% of pupils, nearly one in five schools in French-speaking Switzerland (19%) for over a quarter of pupils (27%), 5% in Italian-speaking Switzerland (4% of pupils) and 0.5% in the Romansh-speaking part of the country (0.2% of pupils).



#### Schools and pupils by language region 2016/17 G2

<sup>&</sup>lt;sup>6</sup> excluding higher education institutions, which cannot be allocated to a particular language region

### 3 Educational levels

A school's educational level is defined by its student population and the educational programmes in which the students are enrolled. Thus one school that offers an educational programme over several educational levels may be counted several times depending on the level of detail required by the analysis (double counting principle).

In Switzerland, compulsory education lasts eleven years and includes primary level and lower secondary level. It generally starts at the age of 4 with kindergarten or the first learning cycle (primary level 1st and 2nd year) and continues with the primary level 3–8 (3rd to 8th year). All cantons offer at least one year of kindergarten. In most cantons, two years are compulsory.

Over the 2016/17 academic year, there were 5414 schools at primary level 1–2 and 4646 at primary level 3–8 spread throughout Switzerland. At lower secondary level, 1657 places of education and training were surveyed at national level.

Upper secondary level follows compulsory education. Young people choose an initial vocational education and training course, and attend one of 388 vocational schools or opt for a general education (280 educational institutions). Finally, Switzerland's education and training offerings are completed by the tertiary level (professional education and training (PET) and universities) with 402 educational institutions.

# Educational institutions by educational level, 2016/17

special schools 3.4% primary level 1-2 40.9% primary level 3-8 35.1% lower secondary level 12.5% vocational education 2.9% and training (VET) general education 2.1% professional education 2.8% and training (PET) universities 0.3% 1 0 0 0 2 0 0 0 3 0 0 0 4 0 0 0 5 0 0 0 6 0 0 0

Source: FSO - SBI

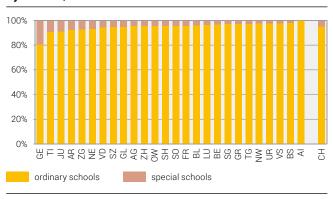
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# 4 In focus: special schools

Special schools make up a minority of schools in the Swiss school system (3.4% of all educational institutions). They cover the primary and lower secondary level. They differ greatly from other educational institutions with regard to the authority that is responsible for them and regarding their distribution and organisation in the cantons. This is why they are considered separately here.

In contrast to an ordinary school, a special school is an educational institution for compulsory education that provides teaching that is adapted to different types of disability or to pupils with considerable learning difficulties or severe behavioural problems within the scope of compulsory education.

In 2016/17 there were 445 special schools in Switzerland. The canton of Geneva had the greatest share of special schools (19%). In the three cantons with the highest number (GE, TI, JU), these schools are on average smaller than those in other cantons (fewer than 20 pupils per school). In seven cantons, the proportion of special schools was less than 3%. The canton of Appenzell Inner Rhodes did not have any. The distribution of pupils in special schools is to some extent intercantonal. In the canton of Appenzell Inner Rhodes, pupils attend mainly special schools in Appenzell Outer Rhodes and in the canton of St. Gallen. Across Switzerland, the share of special schools in compulsory education is 4.6%.



# Share of special schools in compulsory education by canton, 2016/17

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Source: FSO - SBI

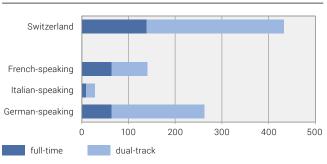
### 5 In focus: vocational education and training (VET)

In Switzerland, the vocational education and training (VET) can be completed in a training company (dual-track approach) or in a fulltime vocational school.

The dual-track approach combines practical training in a company and theoretical training in a vocational school. Switzerland's dual-track system stands out from the vocational education and training of other countries. At national level, the dual-track approach is the most common form of vocational training.

In French- and Italian-speaking regions, the share of schools offering full-time vocational education and training in school is greater than in German-speaking Switzerland: in 2016/17, this share was 46% in French-speaking Switzerland (24% of pupils), 36% in Italian-speaking Switzerland (28% of pupils) and 24% in German-speaking Switzerland (4% of pupils).

The same trend is seen in public expenditure on education per person in education: it is higher when the share of schools offering full-time vocational education and training is greater. Private companies make a large contribution to the funding of dual-track education.



#### VET schools by organisation of education and language region<sup>1</sup>, 2016/17

<sup>1</sup> Due to the limited number of VET schools in the Romansh-speaking region, the latter is not represented in this graphic. Two schools are concerned (one with the dual-track approach, one with full-time vocational educa tion and training in school).

Sources: FSO - SBI, SDL

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# 6 Size of educational institutions

The average size<sup>7</sup> of a school is 30 pupils at primary level 1–2, 110 pupils at primary level 3–8 and 150 pupils at lower secondary level. Special schools accommodate an average of 40 pupils. At upper secondary level, there are approx. 610 pupils in a vocational school and 350 pupils in a general education school.

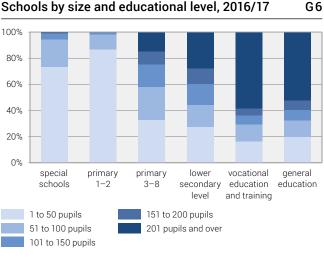
#### Size of an educational institution

A school's size is determined from the number of pupils following education and training at the school. In this brochure, it takes into account all pupils educated in the establishment by the educational level followed. The size of the school may also be defined by the total number of pupils, without taking into account the education level (see example under "Definitions" at the end of the publication).

In compulsory education, three quarters of special schools (74%), 87% of primary level 1–2 schools and 33% of primary level 3–8 schools have 50 pupils or less, as have a quarter of schools at lower secondary level (27%). A further quarter of schools at this level have over 200 pupils (see graphic G6).

<sup>&</sup>lt;sup>7</sup> To calculate the average size of a school, the total number of pupils enrolled at an educational level is simply divided by the total number of schools offering this educational level.

At upper secondary level, around half of schools accommodate more than 200 pupils (59% for vocational schools and 52% for general education schools). The remainder of educational institutions at this level are divided among the other sizes, following a similar trend.



Schools by size and educational level, 2016/17

Sources: FSO - SBI, SDL

# 7 Authority responsible for educational institutions

In Switzerland, most schools are managed by public authorities: across all levels of education, 88% of schools are public. Furthermore, around one third of private schools are subsidised (35%).

#### Responsible school authority (status)

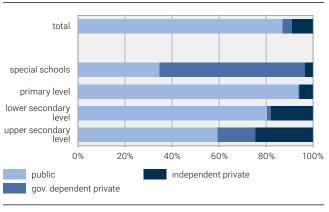
Educational institutions are either public or private. Furthermore, private institutions are classified between government dependent private (public funding of 50% or more) and independent private institutions (public funding of less than 50%).

The organisation, location and composition of private schools varies considerably from public schools. In compulsory schooling, almost all private schools have fewer than 100 pupils (90%). 73% of independent private schools offer two or more education levels from primary level to upper secondary level. This share rises to 36% in public schools. 81% of private schools are located in communes with highly dense populations, compared with 55% of public schools.

Across all levels of education, 51% of pupils attending a dependent private school are girls while the latter are in the minority in public schools (48%) and in independent private schools (47%). Public sector schools account for the majority of schools in compulsory education (primary level: 94%; lower secondary level: 80%). The share of the independent private sector is 6% for the primary level and 18% for the lower secondary level. The share of the government dependent private sector is virtually zero (0.4% resp. 2%). Special schools differ from other levels with a majority of government dependent private schools (62%).

At upper secondary level, 59% of schools are public, 16% are dependent private schools and the remaining quarter are independent private schools. The distribution of vocational schools by status is different to that of schools offering general education: 71% of vocational schools and 53% of general education schools are public, 16% and 8% are government dependent private schools, 13% and 39% are independent private schools.

The share of the government dependent and independent private sectors increases with educational level, with the exception of special schools.



#### Schools by educational level and responsible authority, 2016/17

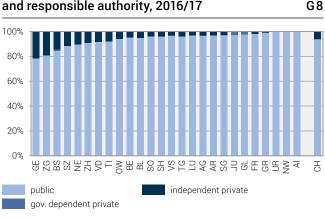
Source : FSO - SBI

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#### 8 In focus: cantonal diversity

The responsible authority of educational institutions varies not only with educational level but also by canton. Across all levels of education, half of the 1291 private schools surveyed in 2016/17 (454 of which are dependent private) are located in six cantons (ZH, VD, BS, SZ, GE, ZG). The comparison between the cantons of public and private schools by education level reveals quite contrasting trends.

At primary level, the share of government dependent private schools in all cantons is very low (less than 3%) or zero. The share of independent private schools varies between 1% in Graubünden and 22% in the canton of Geneva. Five cantons do not have any schools of this type on their territory (JU, GL, UR, NW, AI).

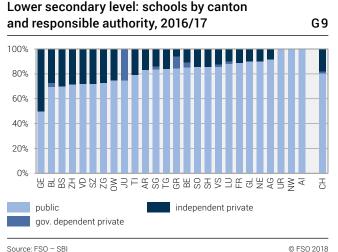


#### Primary level: schools by canton and responsible authority, 2016/17

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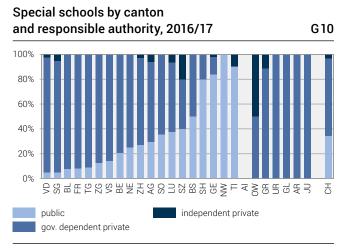
At lower secondary level, the share of government dependent private schools reaches or exceeds 10% in two of the eight cantons that collect this data: Jura (25%) and Graubünden (10%). The canton of Geneva has the greatest share of independent private schools (50%; see graphic G9).

Source: FSO - SBI



Source: FSO - SBI

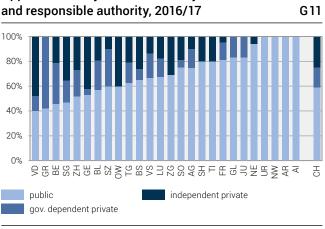
Special schools also have a particular position in the Swiss school system with regard to the responsible authority. In most cantons, the majority of these schools are government dependent private schools. Furthermore, in five cantons they have only this status. Only two cantons (TI, NW) do not have government dependent private special schools. In six cantons, there are no public special schools (GR, UR, OW, GL, AR, JU).



Source: FSO - SBI

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The majority of upper secondary level schools are public in all cantons. The cantons of Vaud, Graubünden, Bern and St. Gallen are exceptions having a majority of private schools (dependent or independent private) at this level. The share of independent private schools varies between 48% in the canton of Vaud and 5% in Fribourg. Three cantons do not have any independent private schools at this level (GR, GL, JU) and four cantons only have public schools (UR, NW, AR, AI).



Upper secondary level: schools by canton

Source: FSO - SBI

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### 9 Territorial distribution of educational institutions

The distribution of educational institutions on Swiss territory is based on the definition of larger urban zones and other urban area categories<sup>8</sup>. The main distribution criteria used are population density, the number of jobs, the link of continuity of the developed area and the minimum number of inhabitants and commuter flows.

Three urban area categories were created for the analysis in this brochure:

- The urban centre areas: communes with high population and employment density;
- The area under the influence of urban centres: communes with large commuter flows to urban centres;
- The area outside the influence of urban centres: communes with small commuter flows to urban centres.

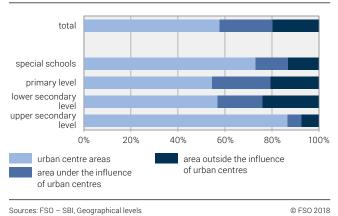
In 2016/17 more than half of Switzerland's educational institutions were located in urban centre areas (58%), almost one quarter were under the influence of urban centres (22%) and the rest in the area outside the influence of urban centre areas level (20%; see graphic G12).

The territorial distribution of schools varies by educational. Around half of the schools at primary and lower secondary levels (55% resp. 57%), 73% of special schools and 87% of upper secondary level schools are located in urban centre areas.

The other schools are equally dispersed in the areas under and outside the influence of urban centres (25% and 21% for primary level schools, 19% and 24% for lower secondary level schools, 14% and 13% for special schools, and 6% and 7% for upper secondary level schools).

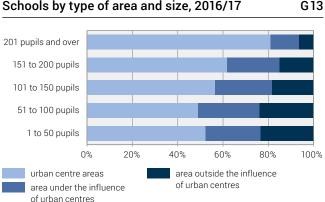
<sup>8</sup> Urban area in 2012. FSO (2014)

Schools by type of area and educational level, 2016/17



All levels considered together, around half of schools with 100 pupils or under and some 60% of schools with between 101 and 200 pupils are located in urban centre areas. The 81% of schools with more than 200 pupils are also located in this area.

In the area under the influence of urban centres, each size category represents around one quarter of schools, apart from schools with more than 200 pupils (13%). In the area outside the influence of urban centres, the greatest share is of schools with between 51 and 100 pupils (24%) and the lowest share is of schools with more than 200 pupils (6%).



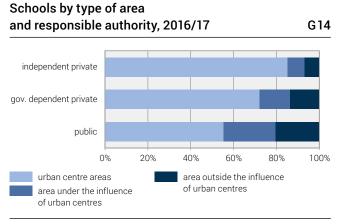
#### Schools by type of area and size, 2016/17

18

Sources: FSO - SBI, Geographical levels

Dispersed by responsible authority, more than half of public schools (55%), almost three quarters of government dependent private schools (72%) and the vast majority of independent private schools (85%) are located in urban centres.

The remaining schools are almost equally dispersed between areas under and outside the influence of urban centres (24% and 20% for public schools, 14% for government dependent private schools, 8% and 7% for independent private schools).



Sources: FSO - SBI, Geographical levels

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## 10 Sources

### Educational institutions statistics (SBI)

The educational institutions statistics describe educational infrastructure by canton, from primary to tertiary level. All of the ordinary and special educational institutions, public and private, in which at least one pupil is surveyed are part of these statistics. The data are collected using the statistics on pupils and students (SDL, SHIS-studex) and are complemented by information from the Business and Enterprise Register (BER).

## Statistics on pupils and students (SDL)

The statistics on pupils and students group together pupils and students from primary to tertiary levels (excluding universities). All people who have followed an educational programme for at least half a year, either full or part-time, are surveyed. Private and public educational institutes are included in the survey.

# School staff statistics (SSP)

The school staff statistics collect information on those working in all public or private schools in Switzerland, from primary to tertiary level (excluding universities).

#### Swiss university information system (SIUS)

The Swiss university information system's database contains data relating to students and exams (SHIS-studex) and personnel (SHIS-PERS) of universities, universities of applied sciences and universities of teacher education. It provides information on the situation regarding courses of study, how they are run and on various sociodemographic factors concerning students and personnel.

## Public expenditure on education (ÖBA)

The statistics on public expenditure on education deal with the part of the federal administration's public expenditure listed under «Education». It includes expenditure by public authorities from compulsory education to institutions of higher education. It refers to the results of the most recent accounting year (2015).

# 11 Definitions

#### Double counting

In the statistics on educational institutions, a school that offers an educational programme over several educational levels may be counted several times, depending on the level of detail required by the analysis.

#### **Educational institution**

An educational institution is defined by its administrative level (the management) and by the educational site(s) (buildings) under its authority. An educational site usually consists of a single building. It may, however, consist of several buildings if these are only a short walking distance apart. In general, the terms «school» or «establishment» correspond to educational sites. An educational institution constantly receives teaching staff and pupils/students. It is founded on a communal, cantonal or federal law, has an explicit educational mandate and implements this. The educational institutions are placed under the responsibility of either public authorities (the Confederation, canton, commune or other public body), or a private body.

#### Language region

The language regions are based on the national language spoken by the majority of a commune's population. In Switzerland there are four language regions:

- German-speaking region
- French-speaking region
- Italian-speaking region
- Romansh-speaking region

#### Size

A school's size is determined from the number of pupils following education and training at the educational institution. The pupils considered in this calculation vary, however, according to the perspective chosen for the analysis (see double counting principle). The size of the school may thus be calculated based on the total of pupils enrolled at the school (perspective A) or based on the number of pupils enrolled in an educational level offered by the school (perspective B). For example: a school has 110 pupils with 10 pupils at primary level 1–2 and 100 at primary level 3–8. According to perspective A,

this school is classified in the category "101 to 150 pupils" because the entire cohort is taken into consideration. According to perspective B, it is classified in the category "1 to 50 pupils" for primary level 1–2 as only 10 pupils enrolled in primary level 1–2 were counted, and in the category "51 to 100 pupils" for primary level 3–8. In this brochure, the size of the institution is generally calculated according to perspective B.

# Teaching staff

In this brochure, teaching staff includes personnel who directly teach in the schools (excluding personnel teaching a foreign education programme) as well as the professors and other teachers in higher education institutions. To allow comparison with the pupils/students, the figures relating to the teachers correspond to full-time equivalents (FTE) and not persons.

The other definitions, presented in this publication are available on the website of the Federal Statistical Office (www.statistics.admin.ch).

# Information

Educational institutions statistics: schulstat@bfs.admin.ch.

For further information concerning educational areas, see: www.education-stat.admin.ch.

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