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Education and Science

865-1300

Origin of students in Swiss higher education institutions

Preliminary results of the 2013 Survey on the Social and Economic Conditions of Student Life



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Department of Home Affairs FDHA
Federal Statistical Office FSO

Neuchâtel, 2014

Introduction

This brochure presents the preliminary results of the 2013 Survey on the Social and Economic Conditions of Student Life (SSEE). The SSEE was carried out for the third time following 2005 and 2009 and enables the study and general living conditions of students at Swiss higher education institutions to be monitored. Conducted by an on-line questionnaire, the survey took place during the spring semester in 2013. Data from the Swiss Higher Education Information System (SHIS) statistics and the Swiss Labour Force Survey (SLFS) is also used in the brochure.

For this publication, we have chosen indicators related to inequalities in access to higher education institutions. This includes gender, parents' educational level, differences between cities and rural areas and migration background.

The concept of migration background was able to be applied in the analysis of the results for the first time with the SSEE 2013, in which the country of birth of the respondent and his or her parents are determining criteria.

Student statistical population

This brochure considers students enrolled in a Bachelor, Master, diploma or university "licence". A total of 185,687 students were included in the 2012/2013 autumn semester. Doctoral students and those pursuing adult learning (MAS, etc.) were not considered.

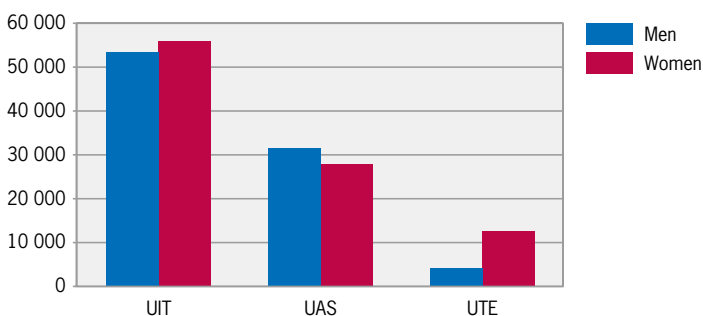
The largest share of students were enrolled at universities and institutes of technology¹ (UIT) in 2012/2013 (109,334 students). Around half as many students were enrolled at universities of applied sciences (UAS) (59,521 students). A total of 16,832 people studied at universities of teacher education (UTE) in 2012/13.

Slightly more women than men studied at universities and institutes of technology while the reverse is true of universities of applied sciences. 75% of students at universities of teacher education were female.

Of all of the higher education institutions, students at universities and institutes of technology were the youngest. 68% of them were at most 25 years old, another 22% aged between 26 and 30. A smaller share of students were aged 25 or under at universities of applied sciences with 58%. There was only a small difference in the share of students aged over 30 at the universities of applied sciences (13%) and the universities

¹ University or Federal Institute of Technology (ETH)

Students by gender and by higher education institution type, number



Source: SHIS – Autumn semester 2012/13

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T1 Age of students by higher education institution type and gender, in %

Age in years	UIT		UAS		UTE	
	Men	Women	Men	Women	Men	Women
Up to 20	8%	10%	2%	3%	1%	4%
21–25	59%	60%	53%	58%	31%	55%
26–30	24%	20%	32%	26%	28%	17%
31–35	5%	5%	8%	7%	15%	8%
More than 35	4%	6%	5%	6%	25%	16%

Source: SHIS – Autumn semester 2012/13

and institutes of technology (10%). In comparison, students at the universities of teacher education were the oldest. 28% of students at the universities of teacher education were aged 31 or over.

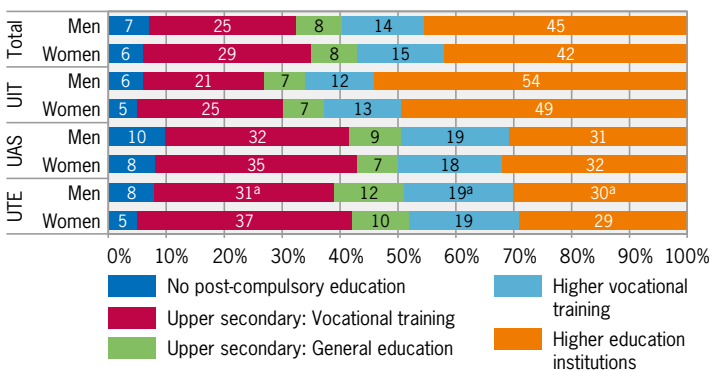
While there were only minor differences in the age structure by gender at universities and institutes of technology and universities of applied sciences, male students at universities of teacher education were considerably older than their female fellow students. 59% of female students at the universities of teacher education were thus 25 years or under while 68% of male students at the universities of teacher education were aged 26 or over. These gender-specific age differences can be explained by the distribution across the courses and their different entry requirements (e.g. low proportion of men in primary school teacher training and a higher proportion among vocational school teachers).

Most students at universities and institutes of technology (75%) and universities of teacher education (57%) had an academic Matura as their higher education entrance qualification, this figure is 22% in the case of universities of applied sciences. A larger proportion of students at universities of applied sciences had a vocational Matura or a specialised Matura (49%). 13% of students at the universities of teacher education had a specialised Matura or vocational Matura.

Parents' educational level

Parents' educational level is a traditional indicator of students' social background. It is a known fact that there is a link between the parents' educational level and pursuing studies at higher education institutions. Indeed, individuals whose parents have completed tertiary level education are more likely to go to a higher education institution.

Highest educational level of parents by gender and type of higher education institution, in %



95% confidence interval < ±5%

^a 95% confidence interval > ±5% and < ±10%

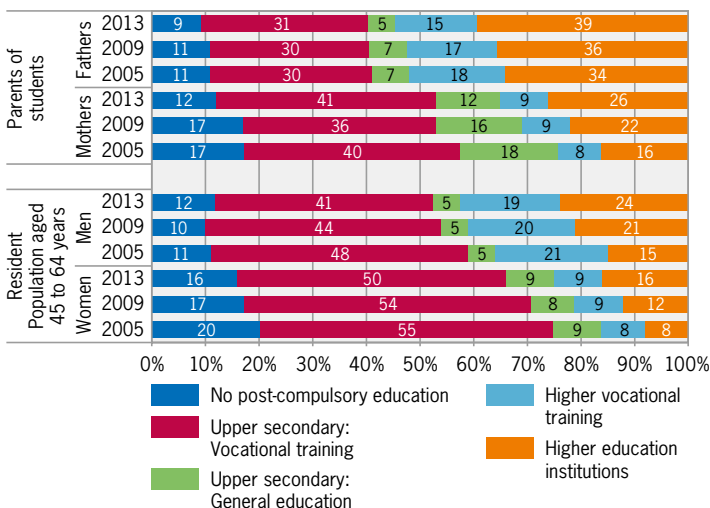
Source: SSEE 2013

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For all students, the proportion of individuals among whom at least one parent held a tertiary diploma (from higher vocational education and higher education institutions) was 59% for men and 57% for women. Students at universities and institutes of technology most often had parents with tertiary education (66% and 62%), and among them, the vast majority had graduated from a higher education institution. The proportions were lower at universities of applied sciences and universities of teacher education (between 48% and 50%); parents more frequently had an upper secondary level vocational diploma (between 31 and 37%). The difference in the social background between persons of different types of higher education institutions was notably linked to certificates granting access to higher education institutions.

The proportion of parents holding a diploma from a higher education institution increased between 2005 and 2013, more considerably for mothers (from 16 to 26%) than for fathers (from 34 to 39%), because during the same period we saw an increase in the educational level of women in the population. At the same time, proportions remained stable for people who held an upper secondary level vocational diploma (e.g. federal proficiency certificate).

Highest educational level of parents of students and of the Swiss resident population, in %



Sources: SSEE 2005, 2009, 2013 and SLFS 2005, 2009, 2013

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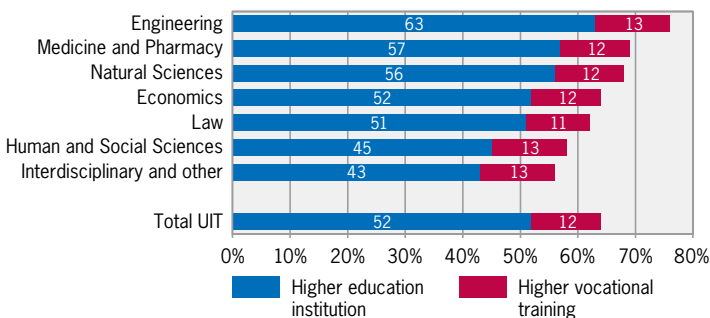
In the population intended to represent the parental generation (aged from 45 to 64), the growth of graduates from universities and universities of applied sciences followed the same trend as students' parents. In contrast, the proportion of those with upper secondary level diplomas was in decline both among men and women although the proportions remained stable among the parents of students. Structural changes have certainly resulted in greater social diversity.

The increase in students whose parents had tertiary diplomas meant an increase in the educational level of the resident population. Furthermore, these changes concerning students mirrored the effects of expanding the courses offered by higher education institutions (e.g. health, pedagogy).

The choice of study area by parents' educational level

The choice of study area could be influenced by the educational level of the student's parents. Other factors linked to social background could also affect the choice of area such as possible compatibility with paid work and study at a higher education institution.

Proportion of students' parents who hold a tertiary diploma by field of study at universities and institutes of technology, in %



Source: SSEE 2013

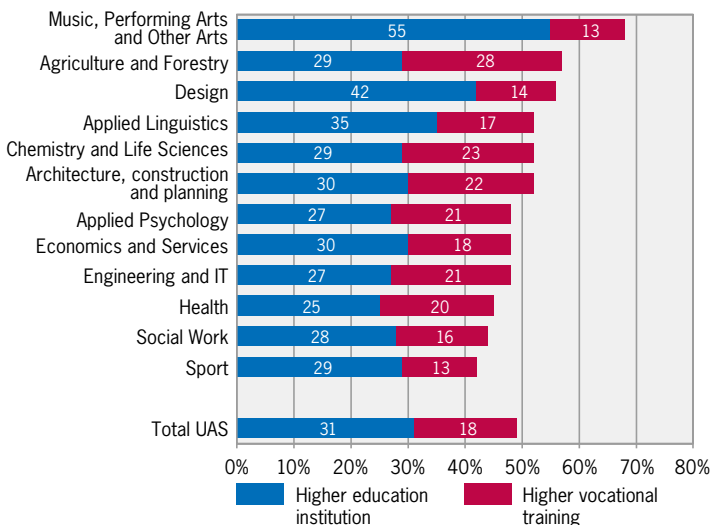
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At the universities and institutes of technology, the proportion of persons in education with at least one parent who had completed tertiary education was above average (64%) in the fields of Engineering (76%), Medicine and Pharmacy (69%) and Natural Sciences (68%). The fields of Law (62%) and Economics (64%) were closer to the average. This proportion was lower for the fields of Human and Social Sciences (59%) and Interdisciplinary Studies (56%).

At the universities of applied sciences, there was far less variation except for the field of Art and Design. The proportion of students with at least one parent who held a tertiary diploma was 42% in the field of Sport and 57% for students in the field of Agriculture and Forestry. With a proportion of 68%, the field of Music, Performing Arts and Other Arts was far off the average for the total number of students (49%).

The proportion of students with at least one parent who held a tertiary diploma was 48% for universities of teacher education (teaching training).

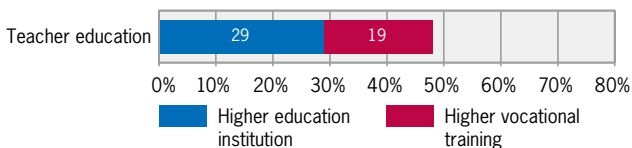
Proportion of students' parents who hold a tertiary diploma by field of study at universities of applied sciences, in %



Source: SSEE 2013

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Proportion of students' parents who hold a tertiary diploma by field of study at universities of teacher education, in %



Source: SSEE 2013

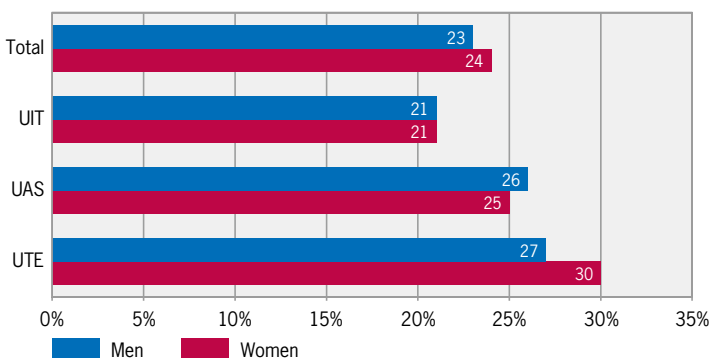
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Students from rural communes

In the study year 2012/13, 23% of students lived in rural communes before their studies, while 77% of students came from urban communes. In the comparable age group of people aged 18–34, 25% lived in rural communes (source: STATPOP 2012). The proportion of students from rural communes was higher at universities of applied sciences (26% and 25%) and universities of teacher education (27% and 30%) than at universities and institutes of technology (21%).

The determining commune is the place of residence at the time of obtaining a higher education entrance qualification in Switzerland. Although there were sometimes long periods of time between the acquisition of a higher education entrance qualification and the start of studies, particularly in the case of students at universities of applied sciences.

Percentage of students from rural communes by higher education institution type and gender, in %



Source: SHIS – Autumn semester 2012/13

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First and second generation migrants

In order to monitor the integration of the population with an immigration background, the FSO uses a population typology by migration status, based on the United Nation’s recommendations.

In the case of students with an immigration background, a distinction is made between first and second generation migrants. Students who are first generation migrants were born abroad. Second generation migrants include those whose parents migrated to Switzerland, i.e. students who were born in Switzerland but whose parents were born abroad.

T2 Classification of migration status*

Students		Place of birth of parents		
Place of birth	Nationality	Both in Switzerland	One parent in Switzerland	Both abroad
In Switzerland	Swiss nationals	o	o	II
	Foreign nationals	o	II	II
Abroad	Swiss nationals	o	o	I
	Foreign nationals	I	I	I

* Simplified classification without consideration of nationality at birth
I Students with an immigration background, 1st generation
II Students with an immigration background, 2nd generation
o Students without an immigration background

To extend the classification, the first generation is divided into two groups:

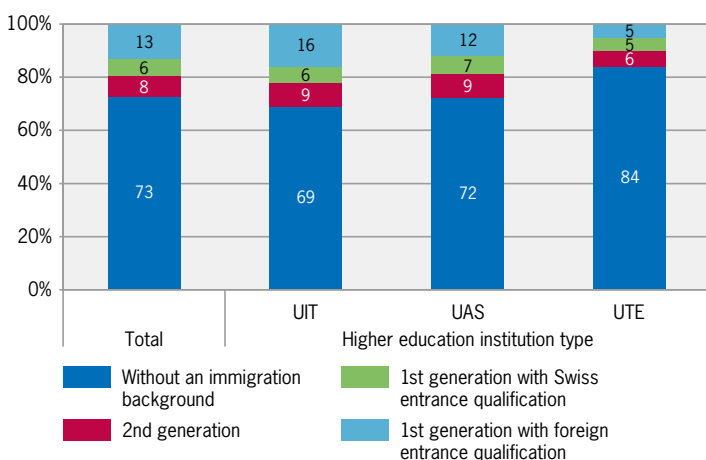
First generation students

- who have obtained their higher education entrance qualification in Switzerland, i.e. have experienced at least parts of the Swiss school system.
- who obtained their higher education entrance qualification abroad and then came to Switzerland, usually for higher education.

Migration status by higher education institution type

In 2013, the percentage of students with an immigration background was 28%, thus lower than the 41% of people aged 18–34 in Switzerland's permanent resident population (source: SAKE, 2nd quarter 2013). Almost half of these students were first generation migrants who came to Switzerland after obtaining their higher education entrance qualification (13%). Another 6% of students were first generation students who migrated to Switzerland before obtaining their higher education entrance qualification. The remaining group included students born in Switzerland and who were thus part of the 2nd generation (8%).

Migration status of students by higher education institution type, in %



Source: SSEE 2013

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The number of students with an immigration background was lowest at the universities of teacher education (UTE). While there was otherwise no distinction in the proportions of migration groups between universities and institutes of technology and universities of applied sciences, the proportion of first generation migrants at universities and institutes of technology (UIT) was higher than at universities of applied sciences. First generation students who obtained their higher education entrance qualification abroad most commonly came from abroad to Switzerland to study at universities and institutes of technology (UIT).

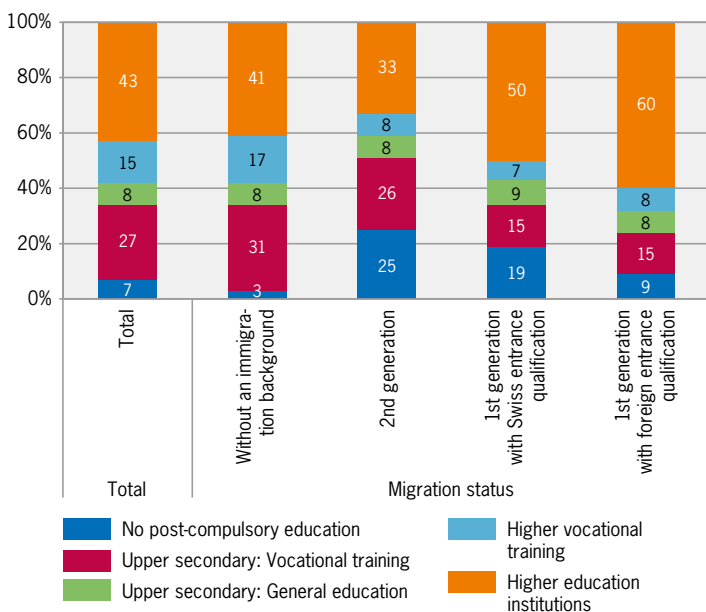
Educational level of parents by migration status

Second generation migrants who studied at Swiss higher education institutions in 2013 mainly came from parental homes without tertiary education (59%). The greatest difference here was in the proportion of students with parents without post-compulsory training or education (25% compared with 3% of students without an immigration background).

In the case of first generation migrants who had spent part of their school careers in Switzerland, the proportion of students with parents without post-compulsory training or education was 19%. In the case of 57% of these students, at least one parent had received tertiary education.

More than two thirds (68%) of students who came to Switzerland after obtaining their higher education entrance qualification came from parental homes with tertiary education, compared with 58% of students without an immigration background.

Highest educational level of parents by migration status of students, in %



Source: SSEE 2013

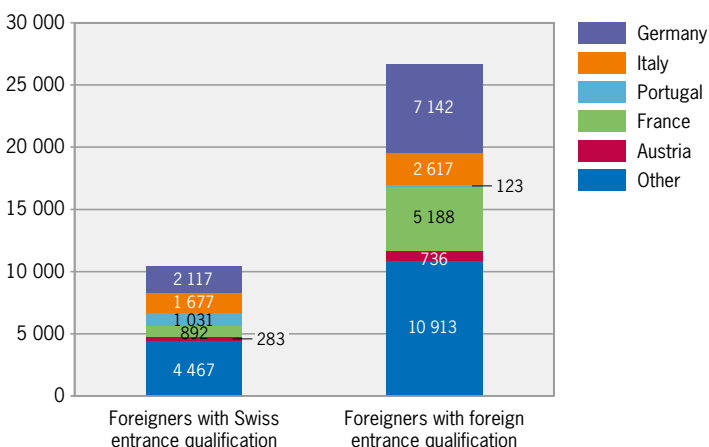
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Student nationality

In the autumn semester 2012/13, of the 185,687 students enrolled at Swiss higher education institutions, 37,186 were foreign nationals. Since the 2005 survey, this percentage increased from 15% to 20%.

A distinction was made between foreign-educated foreign nationals who had obtained their higher education entrance qualification (e.g. Matura) abroad and Swiss-educated foreign nationals who had obtained their higher education entrance qualification in Switzerland. Foreign-educated foreign nationals here largely corresponded to first generation migrants who had obtained their higher education entrance qualification abroad.

Nationality of foreign students by place of education, in absolute figures



Source: SHIS – Autumn semester 2012/13

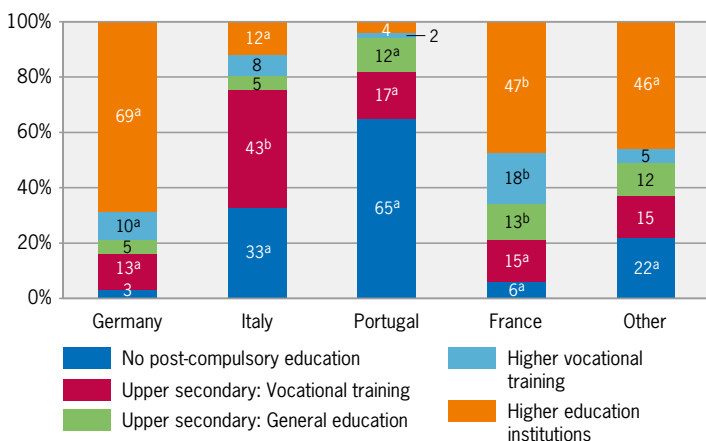
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26,719 foreign-educated foreign nationals and 10,467 Swiss-educated foreign nationals were enrolled at Swiss higher education institutions in 2012/13. 59% of foreign-educated foreign nationals came from Switzerland's neighbouring countries with 15,683 students. Among foreign students with a Swiss higher education entrance qualification, they comprised around 47% (4969 students). Furthermore, the 1031 students of Portuguese nationality made up the next largest group with 10% of Swiss-educated foreign nationals.

Educational level of parents of Swiss-educated foreign nationals

In the study year 2012/13, 6% of enrolled students were Swiss-educated foreign nationals. The four most commonly represented nationalities (German, Italian, Portuguese and French) made up a total of 55% of the foreign students who obtained their higher education entrance qualification in Switzerland. Meanwhile, the educational level of parents of students varied considerably by nationality.

Highest educational level of parents by nationality of students educated in Switzerland, in %



95% confidence interval < ±5%

^a 95% confidence interval > ±5% and < ±10%

^b 95% confidence interval > ±10%

Source: SSEE 2013

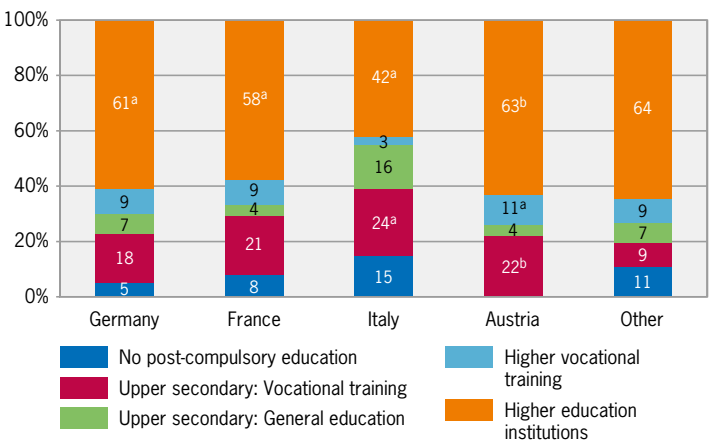
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Swiss-educated foreign nationals of German and French nationality mainly came from parental homes with a tertiary diploma. Among them, 79% (Germany) or 65% (France) had at least one parent with a tertiary diploma. The distribution among parents of students with Portuguese or Italian nationality was reversed. The majority of parents of Portuguese Swiss-educated foreign nationals did not have a post-compulsory school qualification (65%), as was the case for 33% of parents of students with Italian nationality.

Educational level of parents of Swiss-educated foreign nationals

In the study year 2012/13, 14% of students enrolled at Swiss higher education institutions were foreign-educated foreign nationals. Together Switzerland’s neighbours made up the largest group with a proportion of 61% of the foreign students who obtained their higher education entrance qualification abroad (Germany 27%, France 19%, Italy 10%, Austria 3% and Lichtenstein 2%). Overall, the educational level of parents varied less considerably by nationality among foreign-educated foreign nationals than among Swiss-educated foreign nationals.

Highest educational level of parents by nationality of students educated in Switzerland, in %



95% confidence interval < ±5%
^a 95% confidence interval > ±5% and < ±10%
^b 95% confidence interval > ±10%

Foreign-educated foreign nationals from Germany, France and Austria mainly came from parental homes with a tertiary diploma. Between 67% and 73% of them stated that at least one parent had a tertiary diploma. Among foreign-educated foreign nationals of Italian nationality, this percentage was 45%. The proportion of students from a parental home without a post-compulsory school qualification among foreign-educated foreign nationals from Italy was 15%. This figure was between 0% and 8% for the other three nationalities considered here.

Methodological remark on the accuracy of the results

As random sample surveys are comprised of only a fraction of the population of interest, their findings are always marked by a degree of uncertainty. They can be quantified by calculating a confidence interval which grows wider as the results become more imprecise.

A confidence interval depends on its “confidence level” which is usually set at 95%. Assuming that the parameter to be estimated is within the confidence interval, then the risk of error is limited to 5% in the long term. The definition of the confidence interval thus means that it is indeed unlikely although not completely impossible that the parameter is not within the calculated confidence interval.

The accuracy of relative frequencies is calculated using a confidence interval with a confidence level of 95%. The sample plan rates have also been considered here.

The estimates are classified as follows:

Without details: Good, 95% confidence interval $< \pm 5$ percentage points
a: Adequate, 95% confidence interval $\geq \pm 5$, $< \pm 10$ percentage points
b: Poor, 95% confidence interval $\geq \pm 10$ percentage points

Glossary

Highest level of education completed by parents

The highest level of education completed by parents is depicted by five categories. No post-compulsory education corresponds to compulsory schooling. Upper secondary level: vocational and professional education and training includes vocational education (apprenticeship or vocational school). Upper secondary level: in addition to grammar school (gymnasium), general education also includes other general education schools lasting at least two years. Higher vocational education corresponds to training of at least two years following vocational education. Higher education includes all diplomas from universities and institutes of technology, universities of applied sciences and universities of teacher education.

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Original text: German/French

Translation: FSO language services

**Graphics/
layout:** Sektion DIAM, Prepress/Print

**Cover
graphics:** FSO; Concept: Netthoevel & Gaberthüel, Biel;
Photograph: © gradt – Fotolia.com

Order number: 865-1300