KEY FIGURES ON GENERAL UPPER SECONDARY EDUCATION IN FINLAND





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FORFWORD

Finnish general upper secondary education has an established position within the education system. Although the education system is very permeable and has no dead-ends, general upper secondary education is still the main pathway to higher education. An integral part is the only national examination which is taken at the end of general upper secondary education.

At upper secondary level learners can choose either the general or vocational stream. These are provided in different institutions. Both give eligibility to higher education. Although attention and efforts have been made to increase the cooperation and joint studies offered, the two streams have their own distinct features. The main difference is that vocational upper secondary education results in a vocational qualification whereas the general stream does not.

General upper secondary education provides learner with wide general knowledge and ability. Students have to learn at least 16 different subjects.

The education is not tied to year classes or grades. Instead the learners choose courses and their pace of studies. The education can be flexibly completed in 2-4 years.

General upper secondary education is demanding for the learners. In practice the students make their own timetables. They also make decisions regarding which optional subjects and syllabi they want to complete. The decisions on syllabi, whether they choose an advanced or basic syllabus can influence their later options for example in higher education.

The curriculum for general upper secondary education is being renewed and will be implemented in schools in 2021. The aim is to increase the attractiveness of general upper secondary education, improve learning outcomes as well as increase cooperation with higher education institutions.

This report gives an overview of Finnish general upper secondary education. The report describes and provides statistical data on central features such as admission, curriculum and completion as well as transition to further education. Other topics discussed are teachers, network of institution and expenditure.

I sincerely thank all the colleagues who have contributed to this report,

Pirjo Karhu, senior adviser (editor, and author of chapters 1,2,4 and 5); Riikka Koivusalo, senior adviser (author of chapter 3); Hanna Laakso, senior adviser (author of chapters 7 and 8); Paula Paronen, senior adviser (author of chapter 6).

A big thank you also goes to the many colleagues who have provided valuable insights and comments to the report.

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1 GENERAL UPPER SECONDARY FDUCATION IN FINI AND

This publication provides a statistical overview of Finnish general upper secondary education. Upper secondary education is continuation of compulsory basic education. Clear majority of basic education leavers continue to upper secondary education.

Upper secondary education in Finland is divided into general and vocational education and training (VET). General upper secondary education can be completed according to the curriculum for young people or the curriculum for adults. This publication mainly looks at the general upper secondary education that comply with the curriculum for young people.

The publication discusses the application process to general upper secondary education, the attractiveness of education and the student numbers. The publication presents the subjects and the distribution of lesson hours in Finnish general upper secondary education, the availability of core subjects and their choice. It also discusses statistics on the completion in general upper secondary education, the matriculation examination as well as applying and entering further studies. Chapters of their own are dedicated to pedagogical personnel, the network of schools and the costs of general upper secondary education. Some key background information on the topic of the chapter is presented at the beginning of each chapter.

The aim is to describe the development in the 2000s and the current situation in general upper secondary education. The most recent statistics are presented on each topic. There is variation in the time range and years in the statistics as all of the information is not available for the same years.

The principal source of statistics is the Vipunen statistical service of the education administration. Unless mentioned otherwise, the statistics in the tables refer to education complying with the curriculum for young people. The data related to the figures within the text can be found in the tables at the end of each chapter.

The statistics are examined, for example, on the basis of the general upper secondary education student's mother tongue and gender. Finland's national languages are Finnish and Swedish and general upper secondary education is provided in both languages. The report looks at education provided in both Finnish and Swedish. Some chapters also discuss general upper secondary education other than those aiming at the Finnish matriculation examination, such as the IB programmes leading to the International Baccalaureate Diploma, and the core statistical information related to them. The tables following the chapters explain what kind of delimitations have been used for each of the statistics.

1.1. Focus on general knowledge and ability and course-based structure special features

In addition to legislation, general upper secondary education is governed by the national core curriculum. The national core curriculum provides instructions on the objectives and core contents of teaching in different subjects, on cooperation between the educational institution and home, and on the core principles and objectives of student welfare. Based on the national core curriculum, education provider draws up a local curriculum forming the backbone of the instruction provided. Local special features can be taken into account in the local curriculum.

There are clear differences between general and vocational upper secondary education and training in Finland. In contrast, for example in Sweden vocational and general upper secondary education are provided in the same institutions. In the other Nordic countries – Denmark, Norway and Iceland – general upper secondary education also provide general education and abilities, but they do not have compulsory courses in as many subjects as in Finland.

The completion of the Finnish general upper secondary education is not tied to grades. The education is completed as courses, which means that the general upper secondary education syllabus consists of individual courses with an average duration of 38 hours. Depending on the individual school, the school year is divided into 5 or 6 periods, during which students usually study 5 or 6 subjects at a time. The duration of one period is approximately 1.5 months. The same subjects are usually studied during several periods. In some schools, individual courses can also be completed as distance learning.

The general upper secondary education syllabus for adults is usually narrower than in education for young people and the instruction is more flexible. General upper secondary education for adults are mainly intended for people aged over 18. In certain justified cases, a person aged under 18 may complete the syllabus for adults. For example, it is easier for a student to reconcile studying and a sports programme in a general upper secondary school for adults.

1.2. General upper secondary education renews itself with the changing world

In spite of its established position, general upper secondary education is currently being reformed. The Government decided on the reform in spring 2017. The aim of the reform is to:

 increase the attractiveness of general upper secondary education as a form of education providing solid general knowledge and eligibility for further studies in higher education,

- enhance the quality of education and learning outcomes, and
- make the transition from upper secondary education to higher education smoother.

With increasing immigration, Finland has begun to provide preparatory education for general upper secondary education. The aim of this preparatory education is to enable a person whose mother tongue is a foreign language to gain the abilities, such as language skills, required in studies in general upper secondary education. This preparatory education is intended to be completed during one year.

In autumn 2017 the Ministry of Education and Culture commissioned a report on the reform of general upper secondary education, in which the challenges brought about by foreign-language speakers and their effect on general upper secondary education are also described. As more foreign-language speakers are beginning to study in general upper secondary education, there will be an increase in the need for additional remedial instruction, as well as instruction in Finnish or Swedish as a second language, the pupil's mother tongue and in-service training for teachers on language awareness and cultural diversity.

2 APPLYING TO GENERAL UPPER SECONDARY EDUCATION AND NUMBER OF STUDENTS

- Application to general upper secondary education takes place through the joint application system in spring.
- Studies start in autumn.
- General upper secondary education can be completed either in Finnish or Swedish. A majority of students complete the education in Finnish.

In Finland, basic education usually ends at the age of 16. After that learners can apply to upper secondary education, either to general upper secondary education or vocational education and training (VET). In addition, different kinds of training available to young people include preparatory education for both vocational and general upper secondary education, voluntary additional basic education (grade 10) and different kinds of flexible learning opportunities.

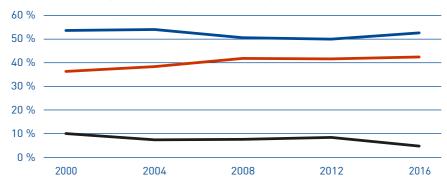
Thanks to the joint application system, applying to education is easy. The joint application system is intended for those who have completed basic education and apply to general upper secondary education or VET. There is one national application period in the system. When applying to general upper secondary education and VET, the applicant fills in one application form with the support of the guidance counsellor. As a rule, pupils are selected to upper secondary education on the basis of their grades in the basic education certificate. Some schools also organise entrance or aptitude tests in the spring after the application period. Especially schools that offer studies with an emphasis on a specific subject, such as music, use the results of the entrance tests in addition to the grades when selecting students.

2.1. General upper secondary education and VET equally attractive

The attractiveness of general upper secondary education and that of VET have become more even during the 2000s. At the start of the millennium, a clear majority of those who completed basic education chose general upper secondary education. At the time about 55 per cent of those who completed basic education started to study in a general upper secondary education and about 37 per cent in VET. In 2016 the corresponding proportions were 53 per cent and 42 per cent.

The number of students starting general upper secondary education directly after basic education has fallen during the 2000s. In 2016 just over 30 000 students began studies in general upper secondary education, a decline of 14 per cent from 2000. The factors explaining this include the declining size of the age group and an increase in the attractiveness of VET.

FIGURE 2.1. CONTINUATION IN UPPER SECONDARY EDUCATION AFTER **COMPLETION OF BASIC EDUCATION 2000-2016**



Proportion of students who continued their studies in the same year they completed basic education.

- General upper secondary education
- Vocational upper secondary education and training
- Did not continue in education leading to a qualification

Source: Statistics Finland - Vipunen - statistical service of the education administration

Table 2.1.

The number of young people who do not find a place in education leading to any qualification directly after basic education has halved during the 2000s. In 2016 less than 5 per cent of those who completed basic education remained outside education leading to a qualification. In 2012 their proportion was 8 per cent. The situation can partly be explained by the amendments made to the selection criteria for VET in 2013. The amendment meant that more study places became available to those who have completed basic education in the same year. Consequently, access to education became considerably easier.

As the number of students starting general upper secondary education has been decreasing year by year, it has naturally also resulted in a decline in the number of general upper secondary students. In 2016 the number of students studying according to the curriculum for young people was slightly more than 96 000, which is over 16 per cent less than at the beginning of the 2000s.

The popularity of general upper secondary education for adults has been decreasing even more dramatically. The proportion of those studying according to the curriculum for adults has declined from 12 per cent to 8 per cent of all general upper secondary students since 2000. In the past few years the number of students has been approximately 8 000 per year. The proportion of students aged under 18 among those studying according to the curriculum for adults has decreased from 10 per cent to 5 per cent over the past five years. In 2016 the number of students aged under 18 was just under 400. In addition to those completing the whole syllabus, there are also students completing individual subjects in general upper secondary education for adults.

Annually approximately 1 700 students, that is about one per cent of all students in general upper secondary education, study in upper secondary education aiming at examinations other than the Finnish matriculation examination. Most of them complete the International Baccalaureate Diploma, the IB Diploma. In addition, it is possible to complete the European Baccalaureate (EB) or the Reifeprüfung (RP) corresponding to the German matriculation examination in Finland.

2.2. Admission varies according to the students' mother tongue

Those young people who apply to general upper secondary education are usually admitted. In the 2000s there have been more study places than the number of applicants whose first choice has been general upper secondary education. The applicants' first choice means that they have prioritised general upper secondary education as their most desirable choice in the selection process.

Not all applicants, however, are admitted to the general upper secondary school of their choice. In the past few years, about 93 per cent of those who placed general upper secondary education as their primary choice received a study place. One of the reasons is that large cities in particular have several general upper secondary schools and some of the applicants apply to schools that they do not have high enough grades for. In addition they might not pass a possible entrance test for the school concerned. Small communities with only one general upper secondary school do not often have this problem.

It seems to be slightly more difficult for foreign-language speaking applicants to enter general upper secondary education than it is for Finnish or Swedish-speaking applicants. In 2016 on average 95 per cent of Finnish or Swedish-speaking applicants were admitted while 77 per cent of foreign-language speaking applicants were admitted. The reason for the lower percentage of admitted foreign-language speakers may be weak proficiency in the national languages, for example. A foreign-language speaker refers to a student whose mother tongue is other than Finnish, Swedish or Sami.

General upper secondary education not as attractive to 2.2.1. foreign-language speakers as VET

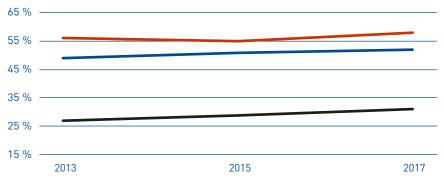
General upper secondary education is not as attractive option to foreignlanguage speakers as VET. Still the proportion of foreign-language speakers in general upper secondary education has grown steadily during the 2000s. Some 9 per cent of students in VET and 5 per cent of students in general upper secondary education studying according to the curriculum for young people have been speakers of foreign languages in the past few years.

The proportion of foreign-language speakers among those studying according to the curriculum for adults is larger than among those studying according to the curriculum for young people. Of all students in general upper secondary education for adults, about 12 per cent are speakers of foreign languages. One explaining factor is proficiency in the national languages. When young people are not yet sufficiently proficient in Finnish or Swedish for them to be admitted to a general upper secondary education, their proficiency will already be better when they are adults.

2.2.2. **Greater proportion of Swedish-speakers than Finnish** speakers start general upper secondary education

Some 6 per cent of those who have completed basic education attended Swedishspeaking basic education. Over the years the differences between Finnish and Swedish speakers have been discussed in many ways in Finland. Consequently, it is fruitful to look at the differences between these groups.

FIGURE 2.2. PROPORTION OF ALL 16-YEAR-OLDS WHO ENTERED GENERAL **UPPER SECONDARY EDUCATION BY MOTHER TONGUE 2013–2017**



Entrants as a proportion of 16-year-olds in their language group

- Proportion of 16-year olds with Finnish as their mother tongue
- Proportion of 16-year olds with Swedish as their mother tongue
- Proportion of 16-year olds with a foreign mother tongue

Source: Statistics Finland - Vipunen - statistical service of the education administration

Table 2.2.

In proportion to the size of the age group of 16-years-olds, a greater proportion of Swedish speakers than Finnish speakers start upper secondary education. Since 2013 on average 56 per cent of 16-year-old Swedish speakers began their studies in general upper secondary education, while the corresponding proportion of the age group among Finnish speakers has been about 50 per cent. Among foreignlanguage speakers, on average 28 per cent of the age group of 16-year-olds start upper secondary education.

2.3. Women the majority in general upper secondary education

The proportion of women in general upper secondary education has been on average 57 per cent during the 2000s. Depending on the student's mother tongue, there are small differences in the gender distributions of students. The distribution of women and men is the most even among Swedish-speaking students. Among Swedish speakers women account for an average of 55 per cent of the students and among Finnish speakers, 58 per cent. Among foreign-language speakers, women account for 56 per cent of the students.

The proportion of women among those who have completed the International Baccalaureate Diploma is even larger and has risen from 60 per cent to 63 per cent. The fact that there are fewer men than women in general upper secondary education is reflected in how students apply to further studies and find a study place. This is discussed in Section 5.4.

2.4. Few complete the matriculation examination and VET qualification simultaneously

Since the late 1990s it has been possible to complete a vocational upper secondary qualification and the matriculation examination simultaneously in Finland. The matriculation examination is an examination which students usually take at the end of general upper secondary education. Completing two qualifications means that the student completes the entire scope of the VET qualification and part of the general upper secondary syllabus. However, this option is not often chosen by students. Although the number of students studying for two qualifications has risen, their proportion in all general upper secondary students is still only about two per cent.

One of the reasons why this option has not been popular may be the work load of the studies. On the other hand, only very few educational institutions seem to offer the possibility to complete two qualifications. The majority of students completing two qualifications study in the fields of technology, communications and transport.

Tables

TABLE 2.1. NUMBER AND PROPORTION OF STUDENTS WHO CONTINUED THEIR STUDIES IN THE SAME YEAR THEY COMPLETED BASIC EDUCATION 2000-2016

	2000	2004	2008	2012	2016
Basic education graduates	66 278	63 523	64 625	61 059	57 615
Entered general upper secondary education	35 603	34 380	32 649	30 539	30 364
	54 %	54 %	51 %	50 %	53 %
Entered vocational upper secondary education	24 054	24 374	27 100	25 360	24 459
	36 %	38 %	42 %	42 %	42 %
Did not continue in education leading to a qualification	6 621	4 769	4 897	5 160	2 792
	10 %	8 %	8 %	8 %	5 %

Source: Statistics Finland - Vipunen - statistical service of the education administration

TABLE 2.2. NUMBER OF ENTRANTS INTO GENERAL UPPER SECONDARY **EDUCATION AS A PROPORTION OF THEIR AGE GROUP BY MOTHER TONGUE** 2013-2017*

	2013	2015	2017
Number of 16-year olds with Finnish as their mother tongue	54 447	52 648	51 360
Entrants with Finnish as their mother tongue	26 437 49 %	26 696 51 %	26 589 52 %
Number of 16-year-olds with Swedish as their mother tongue	3 424	3 384	3 185
Entrants with Swedish as their mother tongue	1 914 56 %	1 872 55 %	1 847 58 %
Number of 16-year olds with foreign mother tongue	2 897	3 394	3 932
Entrants with foreign mother tongue	788 27 %	987 29 %	1 218 31 %

^{*} The figures have been updated 11 March 2019

3 CHOICE OF SUBJECTS

- Studies in general upper secondary education are divided into courses: compulsory, specialisation and applied courses.
- A minimum of 75 courses must be completed.
- Duration of one course is on average 38 hours.
- Some courses can be completed as distance learning or self-study.
- Students have a lot of freedom in choosing content and pace of their studies.

Provisions on the distribution of lesson hours in general upper secondary education for young people at the national level are laid down in a government decree. The education provider can decide on the provision of local specialisation and applied courses in addition to the compulsory and specialisation courses determined in the distribution of lesson hours.

In addition to specific subjects the national core curriculum comprises crosscurricular themes. These are transveral themes that combine areas of knowledge and skills in a manner that is suitable for each subject. The themes in the national core curriculum are

- active citizenship
- entrepreneurship and working life
- wellbeing and safety
- sustainable way of life and global responsibility
- knowledge of cultures and internationality
- multiliteracy and the media
- technology and society.

These themes represent some of the key objectives of the curriculum. Consequently they must be integrated into the learning content of all subjects.

3.1. Wide variety of subjects studied

As the task of general upper secondary education is to provide students with solid general knowledge, the range of subjects offered is wide. All students study 18 different subjects and there are a large number of compulsory courses. The general upper secondary syllabus includes the following subject groups: mother tongue and literature, second national language and foreign languages, mathematics and natural sciences, humanities and social sciences, religious

education or ethics, physical education and other practical and art subjects, health education and guidance counselling.

The general upper secondary syllabus comprises a minimum of 75 courses. The studies are divided into compulsory, specialisation and applied studies. Compulsory courses belong to the study programmes of all students and their number varies between 47 and 51. The difference in the number of courses is determined according to the chosen syllabus in mathematics: the number of courses for those who have chosen the basic syllabus is lower and the number of courses for students who have chosen the advanced syllabus is higher.

For more information on distribution of lesson hours, see: Teaching and Learning in General Upper Secondary Education

3.2. Studies flexible for both students and schools

There are school-specific differences in the subjects offered by general upper secondary education. An individual general upper secondary school may tailor the courses it offers as long as the nationally determined distribution of lesson hours in subjects and the conditions in the national core curriculum are met. This enables schools to tailor the subjects they offer to meet local demand and their possible special educational mission.

General upper secondary studies are flexible for the student as the student can regulate the content of the studies and the time used for the studies. Study groups are determined by the courses offered by the school and the student's study programme. It is also possible to complete subject as distance studies either entirely or in part.

Students plan their studies themselves with the guidance counsellor's help. If students are not able to keep the number of courses and timetables at a reasonable level, study programmes may sometimes become heavy. New students in particular may find it difficult to perceive how much time courses take and how demanding they may prove to be.

3.3. Range of specialisation and applied courses offered usually widest in large municipalities

Specialisation courses are often further courses that follow compulsory courses. Often, they do not all have to be completed, but the student must choose at least ten specialisation courses among different subjects. Applied courses contain material from different subjects, methodology courses or vocational studies offered by the same or a different education provider or studies applicable to

the task of school. Applied courses may also include general upper secondary diplomas in for example arts and physical education. These diplomas provide an opportunity to demonstrate special competences and interests.

The education provider decides on the range of the applied and school-specific specialisation courses offered. Factors affecting the range of specialisation and applied subjects offered include the location of the school, the number of students and the possible special emphasis on certain subjects.

It is typical that schools of large cities and growth centres can offer more subjects than schools in sparsely populated areas. For example the language programme can be wider and comprise languages other than the most common ones, which are English, Swedish or Finnish. On the other hand, distance studying and digital learning materials and platforms are making these differences narrower.

Statistical data is not available for all subjects. This is, for example, the case for subjects related to the humanities and social sciences – history, social studies and psychology.

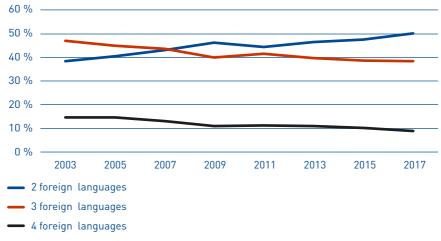
3.4. Choice of foreign languages narrower than earlier

3.4.1. Two foreign languages most commonly studied

General upper secondary students must study at least two foreign languages. Except for the second national language, no compulsory languages are defined in regulations in Finland. In general upper secondary education, students need to continue learning the languages they already studied in basic education. These are the compulsory second national language and in most cases English. In addition to these languages, students may also choose other foreign languages if any are offered by the school.

In 2017, 50 per cent of general upper secondary students completed the minimum, two foreign languages. Some 38 per cent of students completed studies in three languages. The number of languages studied has become less diverse and has deteriorated clearly from 2003. In 2003, 37 per cent completed studies in two languages and 46 in three languages.

FIGURE 3.1. PROPORTION OF STUDENTS BY NUMBER OF FOREIGN **LANGUAGES STUDIED 2003-2017**



The data includes students who studied according to the curriculum for adults.

Source: Statistics Finland - Vipunen - statistical service of the education administration

Table 3.1.

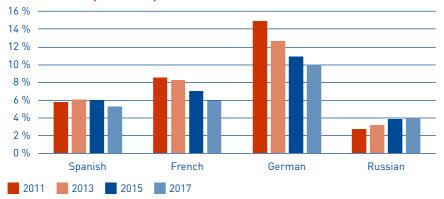
A similar trend is visible in many European countries as the number of foreign languages studied in upper secondary education is declining and the focus is strongly on English. English, unlike in Finland, is a compulsory subject in many countries.

3.4.2. Almost everyone studies advanced syllabus in English

English is by far the most popular choice of language studied according to the advanced syllabus (first language) and it is currently completed by 99 per cent of general upper secondary students. The situation has remained almost the same over the past few years. The second most popular languages studied according to the advanced syllabus are the compulsory second national languages Finnish and Swedish. Finland is a bilingual country and proficiency in both national languages is important for example when applying for public posts.

In addition to the compulsory foreign languages students can choose other optional languages. German, Spanish and French are the most popular choices. In 2017 between 5 and 10 per cent of all general upper secondary students studied each of the above-mentioned languages.

FIGURE 3.2. PROPORTION OF GENERAL UPPER SECONDARY STUDENTS WHO STUDIED SPANISH, FRENCH, GERMAN AND RUSSIAN 2011–2017



The data includes students who studied according to the curriculum for adults.

Source: Statistics Finland - Vipunen - statistical service of the education administration

Table 3.2.

The rising trend in studying Spanish since 2010 seems to have started to fall slightly. In 2017 just over 5 per cent of upper secondary students studied Spanish. The numbers of students studying French and German have also been declining slightly. In the long term, the number of students studying German has declined most, falling to a third in just over ten years. Only the number of students studying Russian has been rising slightly in the long term.

3.5. Women's interest in natural sciences has increased

3.5.1. Half of the students studying according to the advanced syllabus in mathematics are women

In general upper secondary education, students must choose either the basic or advanced syllabus in mathematics. A majority complete the basic syllabus. In 2017 the advanced syllabus in mathematics was completed by 42 per cent of students one half of them being women. The proportion of women who study the advanced syllabus in mathematics has grown by a few percentage points in the 2010s.

According to a report by the Finnish Education Evaluation Centre (FINEEC) in 2015, the level of mathematical skills at the end of general upper secondary education was better among men than women. In addition, the impression female students had of their mathematical skills was more negative than that of men. No significant differences were observed between students with different mother tongues.

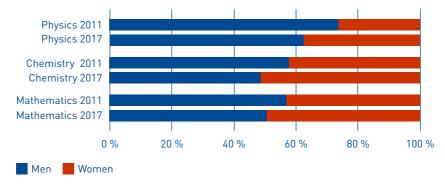
In terms of further studies, the choice of course in mathematics does matter. The grade in the advanced syllabus in mathematics bears more weight in the admissions to higher education than the grade in the basic syllabus in mathematics. In addition, in some fields of higher education, completion of the advanced syllabus in mathematics is a requirement for admission.

3.5.2. In physics male students still dominate

Finnish general upper secondary education has only one compulsory course in most natural sciences. This is the case in physics, chemistry and geography. In biology, however, there are two compulsory courses. In addition to these compulsory courses, the education provider must offer specialisation courses in each subject.

Women accounted for more than 50 per cent of students in all free-choice specialisation courses in natural sciences in 2017. However, there were differences between the subjects. The proportion of women was lowest, 43 per cent, in specialisation courses in physics. It was highest, 64 per cent, in specialisation courses in biology. In 2017 female students chose the advanced syllabus in the so-called hard natural sciences, or the advanced syllabus in mathematics, physics and chemistry, significantly more often than in 2011. The result is possibly a reflection of the work carried out for the past few decades to increase interest in natural sciences and technical subjects among girls and women.

FIGURE 3.3. COMPLETION OF ADVANCED SYLLABUS IN NATURAL SCIENCES BY GENDER 2011 AND 2017



The data includes students who studied according to the curriculum for adults.

Source: Statistics Finland - Vipunen - statistical service of the education administration

Table 3.3.

The low interest in the so-called STEM subjects (science, technology, engineering and mathematics) among girls is a global challenge. As they get older, girls seem to lose interest in the STEM subjects so that the difference between them and boys is already apparent in upper secondary education (UNESCO 2017).

The attitudes towards mathematics and natural sciences are considered to be a significant reason for the difference. In Finland, the attitudes of girls are the same level with boys when internal motivation is compared, but confidence in one's own skills (self-efficacy) is lower among girls than boys.

3.6. Most students study Lutheran religion

Religious education and ethics are studied in general upper secondary education and the studies are compulsory to almost all students. According to legislation, a student who is a member of a religious group must be given non-denominational teaching in his or her own religion if there are more than three students in this religion. Students with no affiliation have to participate in either religious education or ethics.

Each general upper secondary school determines which religion is taught in the school. This is done according to the religion of the majority of the students. The majority of the population in Finland, about 70 per cent, are members of the Lutheran Church, so at least the Lutheran religion is taught in all Finnish general upper secondary schools. Everyone can participate in the teaching of the Lutheran religion, but it is compulsory for the members of the Lutheran Church.

In 2017 almost 90 per cent of students studied the Lutheran religion, 6 per cent ethics, about one per cent the Orthodox religion and 1.5 per cent other religions. To just over one per cent of the students, no teaching was provided in their own religion or they did not participate in religious education and ethics.

Some minor changes are visible in the studying of religious education and ethics. The proportions of students have declined in the Lutheran religion, risen in ethics and other religions, and the proportions of those not studying religion or ethics and of those studying the Orthodox religion have remained almost the same.

Tables

TABLE 3.1. NUMBER AND PROPORTION OF STUDENTS BY NUMBER OF FOREIGN LANGUAGES STUDIED 2003-2017 1)

	2003	2005	2007	2009	2011	2013	2015	2017
2 foreign languages	12 716	12 877	13 405	14 504	13 639	14 074	13 964	14 579
	38 %	40 %	43 %	46 %	44 %	48 %	48 %	50 %
3 foreign languages	15 658	14 301	13 631	12 569	12 774	12 036	11 316	11 111
	47 %	45 %	44 %	40 %	42 %	41 %	39 %	38 %
4 foreign languages	4 822	4 685	4 102	3 443	3 487	3 307	2 988	2 564
	15 %	15 %	13 %	11 %	11 %	11 %	10 %	9 %
Total ²	33 196	31 863	31 138	30 516	29 900	29 417	28 268	28 254

¹⁾ Foreign languages are defined as other languages than the language of instruction.

Students following both the curricula for young people and adults are included.

Source: Statistics Finland - Vipunen - statistical service of the education administration

TABLE 3.2. NUMBER AND PROPORTION OF GENERAL UPPER SECONDARY STUDENTS WHO STUDIED SPANISH, FRENCH, GERMAN AND RUSSIAN 2011-2017

		2011	2013	2015	2017
French	First language	584	565	461	371
	Second language	2 040	1 958	1 590	1 345
	Total	2 624	2 523	2 051	1 716
	As a proportion of all graduates %	9 %	8 %	7 %	6 %
German	First language	1 637	1 303	910	721
	Second language	2 935	2 529	2 287	2 181
	Total	4 572	3 832	3 197	2 902
	As a proportion of all graduates %	15 %	13 %	11 %	10 %
Russian	First language	172	235	213	181
	Second language	662	745	934	980
	Total	834	980	1 147	1 161
	As a proportion of all graduates %	3 %	3 %	4 %	4 %
Spanish	First language	52	16	30	21
	Second language	1 729	1 805	1 683	1 526
	Total	1 781	1 821	1 713	1 547
	As a proportion of all graduates %	6 %	6 %	6 %	5 %
	All graduates	30 751	30 231	29 252	29 019

The data includes students who studied according to the curriculum for young people and adults.

²⁾ Those who studied less than one or more than 4 foreign languages are not included. Consequently, the total figures exceeds the sum of student ins the columns.

TABLE 3.3. COMPLETION OF ADVANCED SYLLABUS IN NATURAL SCIENCES BY **GENDER 2011 AND 2017.**

	Proportion of general upper secondary graduates				
	20	11	2017		
	Men	Women	Men	Women	
Physics	73.9	26,1	62.7	37.3	
Chemistry	57.6	42.4	48.7	51.3	
Mathematics	56.8	43.2	50.6	49.4	

Advanced syllabus in mathematics generally comprises 13 courses in physics 6 courses and 3 courses in chemistry.

The data includes students who studied according to the curriculum for adults.

4 COMPLETION OF GENERAL UPPER SECONDARY EDUCATION

- Target time for completing general upper secondary education is 3 years and maximum time 4 years.
- When the general upper secondary students have completed the syllabus and passed the matriculation examination, they will receive the general upper secondary school certificate and the matriculation examination certificate.
- The matriculation examination is the only national examination in Finland.
- Examination is organised simultaneously in all general upper secondary schools in spring and in autumn.
- The Matriculation Examination Board decides on the grades given in the matriculation examination.

The target time for completing general upper secondary education is three years. The majority, 72 per cent, of students studying according to the curriculum for young people complete their education in the target time. The difference between the genders is a few percentage points. An average of 73 per cent of female students complete upper secondary education in target time, while the percentage for male students is 71.

In adult education a minority of the students complete their studies in target time. On average 21 per cent of those studying the general upper secondary syllabus according to the curriculum for adults complete it in three years. The life situation of an adult is often different to that of a young person and very few manage to complete general upper secondary education in the target time. In VET the proportion of students completing the qualification in the target time is lower than in general upper secondary education, 65 per cent.

4.1. Swedish-speaking students complete their studies in target time more often than Finnish speakers

Completion time of general upper secondary education varies based on the student's mother tongue. Swedish-speaking students are more likely to complete their studies in the target time than other language groups. In 2011 about 81 per cent of those Swedish speakers who had started their studies in general upper secondary education completed their studies in 3 years and circa 73 per

cent of the Finnish speakers. Of foreign-language speakers, or students whose mother tongue was other than Finnish, Swedish or Sami, just under 55 per cent completed these in the target time. However, the situation with foreign-language speakers has improved significantly.

FIGURE 4.1. COMPLETION OF GENERAL UPPER SECAONDARY EDUCATION IN TARGET TIME BY STUDENTS' MOTHER TONGUE 2007–2011

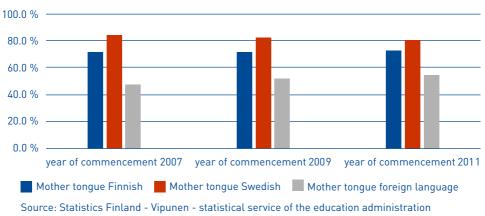


Table 4.1.

There have been no recent studies on the subject so any considerations of what lies behind the above-mentioned differences will be only speculation. However, it is a known fact that Swedish-speaking general upper secondary schools are on average smaller than the Finnish-speaking ones. Guidance counsellors and teachers know their students better in smaller schools and are able to provide more personal guidance. It has also been said that Swedish speakers appear to enjoy going to school more than Finnish speakers and that the community spirit in Swedish-speaking schools appears to be stronger.

The lower rate of completion in the target time by foreign-language speakers compared to Finnish and Swedish speakers is likely to result from deficiencies in Finnish and Swedish language skills. In addition, the studies of foreign-language speakers may be prolonged by adaptation problems related to the culture of teaching and study and by culturally conflicting social expectations, and not so much by problems with attitude or motivation (Ministry of Education and Culture 2017).

4.2. Foreign-language speakers most commonly need maximum time to complete their studies

General upper secondary education must be completed during the fourth year of study at the latest. The group that most commonly does not complete the

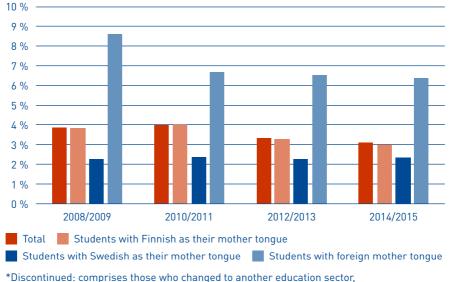
education until the fourth year is foreign-language speakers. Of foreign-language speakers who started general upper secondary education in 2011, 20 per cent completed their studies in 4 years, of Finnish speakers about 16 per cent and of Swedish speakers 12 per cent.

Completing general upper secondary education in 4 years seems to be becoming slightly more common. There are several underlying factors. There is increasingly a desire to stress that general upper secondary education can be completed in a flexible manner, which is beneficial especially in schools with a special educational mission, such as sports. On the other hand, many students build themselves an ambitious study programme that is difficult to complete in three years.

4.3. Foreign-language speaking students discontinue their studies more often than students whose mother tongue is one of the national languages

Drop-out from general upper secondary education is rare in Finland and it has decreased slightly in the past few years. Every year some three per cent of students discontinue their studies. Although dropping out is most common among foreign-language speakers, it has decreased in the last few years.

FIGURE 4.2. PROPORTION OF STUDENTS WHO DISCONTINUED* THEIR STUDIES IN GENERAL UPPER SECONDARY EDUCATION PER SCHOOL YEAR 2008–2015



^{*}Discontinued: comprises those who changed to another education sector, entered the labour market, registered as unemployed or other reason.

Source: Statistics Finland - Vipunen - statistical service of the education administration

<u>Table 4.2.</u>

Since 2014 preparatory education for general upper secondary education has been available. This for its part helps foreign-language speakers to both complete general upper secondary education and doing it in the target time. However, the effect of preparatory education on the upper secondary studies of foreign-language speakers is not yet visible in the statistics.

Those who do not complete general upper secondary education usually move to some other education. Only a small part does not enter any kind of education or employment after discontinuing general upper secondary education.

In upper secondary education, vocational studies are discontinued more often than studies in general upper secondary education. About 6 per cent of students discontinue VET every year, which is twice as many as in general upper secondary education. No data is available on those who have interrupted general upper secondary education for adults.

4.4. Matriculation examination only national examination

At the end of general upper secondary education, students usually take the matriculation examination. Almost all of those who complete the general upper secondary syllabus pass the matriculation examination. Students must pass tests in four compulsory subjects in the matriculation examination. Mother tongue and literature is compulsory for all. In addition, students choose three tests from the following: second national language, foreign language, mathematics or a test in one subject in the humanities and natural sciences. In addition to the compulsory tests, one or more optional tests can be taken.

Those who pass the tests receive the matriculation examination certificate, provided that they have completed the general upper secondary syllabus. The matriculation examination is organised twice a year. The examination does not need to be completed over one examination period. In most cases, the examination is completed over two terms. The tests in the matriculation examination can also be retaken and supplemented after the examination has been passed.

The number of students passing the matriculation examination has declined at almost the same rate as the number of students in general upper secondary education. Just under 30 000 candidates passed the examination in 2016, a decline of 12 per cent from 2000. The proportion of women in those who have passed the matriculation examination has remained at around 58 per cent.

The matriculation examination is constantly being developed. Currently, the examination is undergoing digitalisation. In spring 2019, the tests in all subjects of the matriculation examination will be completed electronically.

The aim is also to develop the matriculation examination so that it would serve students better when they apply to further studies. The aim of the reform is to increase certificate-based admissions and to cut down entrance tests in higher education. The intention is that from 2020, the majority of applicants admitted to higher education will be selected either on the basis of their grades in the matriculation examination or their performance in vocational studies.

Access to higher education to those who have performed less well in upper secondary education will be secured by organising entrance tests also in future. In the end, the decision on the admission criteria and the grading of certificates is made by the higher education institution concerned.

Tables

TABLE 4.1. COMPLETION OF GENERAL UPPER SECONDARY EDUCATION IN **TARGET TIME 2007-2011**

Mother tongue of entrants and year when studies began	Entrants	Completion in target time (3 years)	%
Finnish 2007	31 533	22 260	71 %
Finnish 2009	31 017	21 741	70 %
Finnish 2011	29 648	21 273	72 %
Swedish 2007	2 101	1 752	83 %
Swedish 2009	2 094	1 707	82 %
Swedish 2011	2 089	1 680	80 %
Foreign language 2007	929	402	43 %
Foreign language 2009	1 010	480	48 %
Foreign language 2011	1 238	630	51 %
All 2007	34 547	24 414	71 %
All 2009	34 093	23 928	70 %
All 2011	32 947	23 583	72 %

TABLE 4.2. NUMBER AND PROPORTION OF STUDENTS WHO DISCONTINUED* THEIR STUDIES IN GENERAL UPPER SECONDARY EDUCATION BY MOTHER **TONGUE PER SCHOOL YEAR 2008/2009-2014/2015**

	2008/2009	2010/2011	2012/2013	2014/2015
Students with Finnish as their mother tongue	95 247	91 985	88 123	85 456
Discontinued students with Finnish as their mother tongue	3 633 4 %	3 684 4 %	2 892 3 %	2 559 3 %
Students with Swedish as their mother tongue	6 113	6 260	6 354	6 184
Discontinued students with Swedish as their mother tongue	138 2 %	147 2 %	144 2 %	144 2 %
Students with foreign mother tongue	2 650	2 872	3 578	4 092
Discontinued students with foreign mother tongue	228 9 %	192 7 %	234 7 %	261 6 %
All students	104 010	101 117	98 055	95 732
Number and proportion of all discontined students	3 999 4 %	4 023 4 %	3270 3 %	2 964 3 %

^{*}Discontinued: comprises those who changed to another education sector, entered the labour market, registered as unemployed or other reason.

5 APPLICATION TO FURTHER STUDIES AFTER GRADUATING FROM GENERAL UPPER SECONDARY EDUCATION

- General upper secondary graduate = a person who has completed the general upper secondary school syllabus and passed the matriculation examination.
- General upper secondary graduates are eligible to apply to higher education.
- The majority of graduates apply to and find a place in higher education.
- Application to higher education takes place in the joint application process for higher education, arranged every spring and autumn.
- Some general upper secondary graduates apply to vocational institutions.

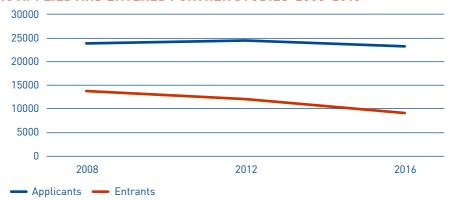
Most general upper secondary graduates apply to further studies in the same year they have graduated. The criteria used for the evaluation of applications to further studies are mainly the grades of the matriculation examination and the results of the entrance test. The general upper secondary education certificate is used very seldom because higher education institutions do not consider the grades of the certificates to be comparable. For example, grade 9 (very good) in mathematics can be given to students with skills at very different levels in different schools.

5.1. Increase in applying to further studies immediately after matriculation examination

General upper secondary graduates have been encouraged to apply to further studies as soon as possible after their graduation and they have increasingly done so. In this context, immediate application means that the person has applied to education leading to a qualification in vocational education or a degree in higher education in the same year he or she has graduated from general upper secondary education. For example, when in 2008 just over 70 per cent of new graduates applied to further studies in the year of their graduation, the proportion of new graduates who have applied to further studies has in the past few years risen to about 80 per cent.

The enthusiasm to apply to further studies is also increased by certain legislative conditions, such as the obligation to apply to education leading to a qualification to receive labour market subsidy. The figure cannot reach 100 per cent as many young people do their military service as soon as they have graduated from general upper secondary education, among other things. In Finland the compulsory military service applies to men, while women can do a military service on a voluntary basis.

FIGURE 5.1. NUMBER OF NEW GENERAL UPPER SECONDARY GRADUATES WHO APPLIED AND ENTERED FURTHER STUDIES 2008-2016 *



^{*} In Finland applicants must first be admitted to a programme and after that they can accept

The data includes students who studied according to the curriculum for young people and adults. Source: Statistics Finland - Vipunen - statistical service of the education administration

Table 5.1.

New graduates apply keenly especially to universities. While the number of those who applied immediately only to universities of applied sciences has declined by 26 per cent since 2008, the number of those who applied only to universities has risen by 28 per cent. In the past eight years, there have not been significant changes in the numbers of those who applied to both sectors at the same time.

Even the new application system introduced in 2014 has not increased the number of students applying to both sectors. The number was expected to rise because in the new application system, applicants can apply to both universities of applied sciences and universities at the same time. It was hoped that several applicants would apply to education in both universities and universities of applied sciences.

There have not been significant changes in the popularity of VET among general upper secondary graduates over the past ten years. Annually, about 2 per cent of new graduates apply only to VET. This is about 600 applicants.

5.2. Finding a study place in higher education difficult

As applying to further studies has increased, finding a study place immediately in the year of the matriculation examination has become increasingly difficult. For example in 2008, 42 per cent of new graduates started their further studies in the year of their graduation. In 2015, however, the proportion of graduates who found a place in further studies had declined to 31 per cent.

The situation has become worse especially in applications to higher education. While in 2008, 52 per cent of new graduates who applied to higher education started their higher education studies in the same year, their proportion had fallen to 29 per cent in 2016. When examined by sector, the proportion of new graduates who find a study place in universities of applied sciences has in recent years fallen from 18 per cent to just over 10 per cent and the proportion of new graduates who have found a study place in universities has fallen from about 19 per cent to 16 per cent in the past ten years or so.

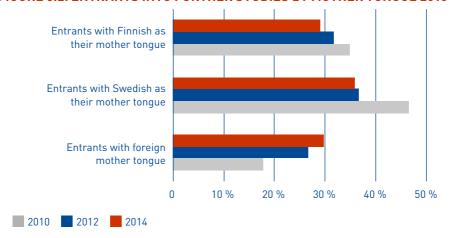
The Ministry of Education and Culture has worked on improving the situation of those applicants who do not yet have a place in higher education by issuing recommendations or making legislative changes. In 2015, quotas for first-time applicants were introduced regarding study places in order to make it easier for applicants without a place in higher education to access higher education. The effects of the quota cannot be seen in the statistics, yet. The reform of general upper secondary education, launched in spring 2017, is for its part aimed at helping new graduates move to higher education faster.

The same phenomenon as in higher education is not visible in how successfully graduates find a study place in VET. Annually, just under 5 per cent of all new general upper secondary graduates, or on average 1,400 students, begin their studies and this figure has not changed over the past ten years.

5.3. Swedish speakers more successful in finding a place in further studies than Finnish speakers

There are some differences in how Finnish and Swedish-speaking general upper secondary graduates find a place in further studies. Swedish speakers find a place more successfully than Finnish speakers. For example, 36 per cent of Swedish-speaking new graduates started further studies within six months from graduating from general upper secondary education in 2014 and 29 per cent of Finnish-speaking graduates.

FIGURE 5.2. ENTRANTS INTO FURTHER STUDIES BY MOTHER TONGUE 2010-2014



The data includes students who studied according to the curriculum for young people and adults Source: Statistics Finland - Vipunen - statistical service of the education administration

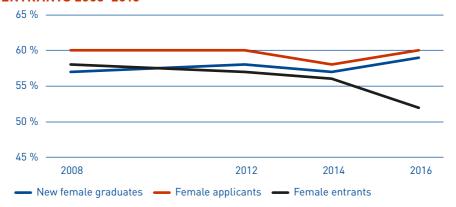
<u>Table 5.2.</u>

In the 2000s, foreign-language speakers have been able to enter further studies more successfully. For example, between 2010 and 2014, the proportion of foreign-language speaking graduates who have entered to further studies increased from 18 per cent to 30 per cent. These figures include those who have studied and graduated according to the curricula both for young people and adults.

5.4. More women than men apply to further studies, but men find a study place more successfully than women

Women have traditionally accounted for well over one half of general upper secondary graduates, on average for 57 per cent. Women also apply to education more than men. The proportion of women in those who apply to further studies immediately has been on average 59 per cent. The compulsory military service partly explains why the proportion of men is lower.

FIGURE 5.3. PROPORTION OF NEW FEMALE GRADUATES, APPLICANTS AND ENTRANTS 2008–2016



The data includes students who studied according to the curriculum for young people and adults.

Source: Statistics Finland - Vipunen - statistical service of the education administration

Table 5.3.

While women accounted for 60 per cent of those who applied to further studies in 2016, their proportion of admitted students was about 52 per cent. Although the number of men among applicants is lower, those men who apply seem to find a study place slightly more successfully than women. This especially applies to to programmes in natural sciences. One of the reasons might be that men choose the advanced syllabus physics more often than women. They also get better grades in advanced mathematics than female students. As regards foreignlanguage speakers, there does not seem to be any significant difference between women and men in admission to further studies.

Tables

TABLE 5.1. NUMBER AND PROPORTION OF NEW GENERAL UPPER SECONDARY GRADUATES WHO APPLIED AND ENTERED FURTHER STUDIES 2008–2016*

	2008	2012	2016
New general upper secondary graduates	32936	31 996	30 980
Applicants	23787	24 521	23 281
	72 %	77 %	75 %
Entrants	13770	12 009	9 076
	42 %	38 %	29 %

^{*} In Finland applicants must first be admitted to a programme and after that they can accept a study place

The data includes students who studied according to the curriculum for young people and adults.

TABLE 5.2. NEW GENERAL UPPER SECONDARY GRADUATES WHO ENTERED **FURTHER STUDIES 2010-2014**

	2 010	2012	2014
General upper secondary graduates with Finnish as their mother tongue	29 511	29 078	28 840
Entrants with Finnish as their mother tongue	10 266 35 %	9 216 32 %	8 370 29 %
General upper secondary graduates with Swedish as their mother tongue	1 930	2 102	2 113
Entrants with Swedish as their mother tongue	897 46 %	771 37 %	756 36 %
General upper secondary graduates with foreign mother tongue	1 254	822	1 111
Entrants with foreign mother tongue	222 18 %	219 27 %	330 30 %

The data includes students who studied according to the curriculum for young people and adults.

Source: Statistics Finland - Vipunen - statistical service of the education administration

TABLE 5.3. NUMBER AND PROPORTION OF NEW FEMALE GRADUATES, **APPLICANTS AND ENTRANTS 2008-2016**

	2008	2012	2014	2016
Graduates	32 936	31 996	32 060	30 980
females	18825	18480	18347	18122
%	57 %	58 %	57 %	58 %
Applicants	23787	24 521	25 170	23 281
females	14 297	14 630	14 715	13 882
%	60 %	60 %	58 %	60 %
Entrants	13 770	12 009	10 665	9 076
females	7 961	6 893	5 965	4 719
%	58 %	57 %	56 %	52 %

The data includes students who studied according to the curriculum for young people and adults.

6 PEDAGOGICAL PERSONNEL IN GENERAL UPPER SECONDARY EDUCATION

- Teaching is a popular profession in Finland.
- The salary of teachers in general upper secondary education is better in relation to the salary of other teachers.
- In 2016 a total of 5 900 teachers worked in the 363 general upper secondary schools in Finland.

Pedagogical personnel in general upper secondary education comprise teachers and guidance counsellors. Each general upper secondary school also has a principal who is responsible for the operation of the school. In addition to qualifying for teaching in general upper secondary education, the principal must have a sufficient background as a teacher and hold a certificate in educational administration or have sufficient knowledge of educational administration gained in some other way. Guidance counsellors' task is to guide students in their choice of subjects and in questions concerning further studies.

All teachers are subject specialists. They are required to hold a master's degree: at least 300 ECTS (European Credit Transfer and Accumulation System) which include pedagogical studies with the scope of 60 ECTS and of 60 ECTS in the taught subject. In addition to the core and advanced studies, they must have completed the specialisation studies in one of the taught subjects.

6.1. Finnish teachers enjoy flexibility in organising their working time

The compulsory teaching time and the salary are agreed upon in a collective bargaining process between the employers' representatives and the Trade Union of Education. The compulsory teaching time of pedagogical personnel in general upper secondary education depends on the subject taught and the salary varies according to the years of service and the subject taught.

Examples of minimum teaching hours in general upper secondary education:

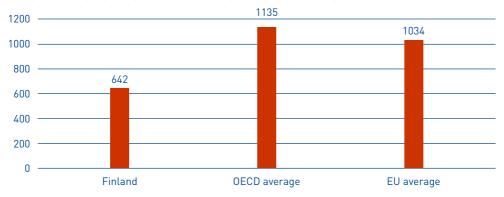
	lessons/week (lesson 45min)
Mother tongue and literature	16
Foreign languages and ICT	18-19
Mathematics, physics, chemistry, arts, music	20
Religion, philosophy, psychology, biology, history	21
Guidance counselling, home economics, crafts	22
Physical education	23

Source: Local government employers, Collective agreement for municipal teaching personnel 2018-2019.

In addition to the compulsory teaching time, pedagogical personnel must participate in 1 or 2 hours of collaborative planning with their colleagues and the principal every week. Collaborative planning means staff meetings and meetings of teachers in the same subject group. In addition, they have other duties, such as the preparatory marking of the tests in the matriculation examination.

In international comparisons, the teaching hours of teachers in general upper secondary schools in Finland are low in relation to the other OECD and EU countries. The average number of annual working hours of teachers in upper secondary education in the OECD countries was 1 095 hours and in the EU22 countries 1 028 in 2017.

FIGURE 6.1. ORGANISATION OF TEACHERS' WORKING TIME* 2017



Source: OECD, Education at a Glance 2018 (Table D4.1. 2/2)

Working time required at schools, in hours (60 minutes lessons) over the school year*

*Working time required at school refers to the time teachers are required to spend working at school, including teaching and non-teaching time.

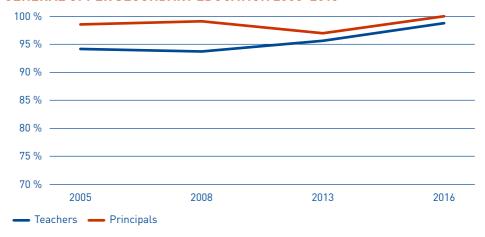
The annual working hours of teachers in Finnish upper secondary education totalled only 645 hours. According to the Education at a Glance 2018 comparison, the hours in Finland were even 50 per cent lower compared to Sweden, Norway and Estonia.

6.2. Majority of pedagogical personnel formally qualified

The formal qualifications of pedagogical personnel in general upper secondary education and the quality of teaching are important factors regarding students' capabilities for further study. The formal qualifications of teachers in Finland have long been at a good level at all levels of education and more than 90 per cent of the pedagogical personnel and principals in general upper secondary education have been fully qualified since 2005. The Ministry of Education and Culture collects information on the qualifications of teachers, principals, quidance counsellors and special needs teachers every three years.

The qualification rate among principals in general upper secondary education is slightly higher than that of other pedagogical personnel. Based on the information collected, between 98 and 99 per cent of principals were qualified for their positions between 2005 and 2016. In 2016, 100 per cent of principals in general upper secondary education were qualified, which is 3 percentage points higher than in 2013.

FIGURE 6.2. PROPORTION OF QUALIFIED TEACHERS AND PRINCIPALS IN **GENERAL UPPER SECONDARY EDUCATION 2005–2016**



Source: Teachers and Principals in Finland Data collection 2005, 2008, 2013, 2016

Table 6.1.

Between 2005 and 2016, there has been an increase of 4.6 percentage points in the qualification rate of teachers and guidance counsellors and the increase has been fairly even. In 2016, 98.8 per cent of the teachers and guidance counsellors were formally qualified to provide instruction.

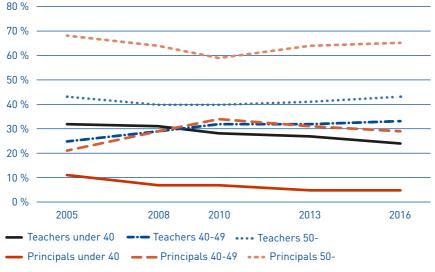
Compared to other levels of education, a slightly larger proportion of teachers, guidance counsellors and principals were qualified in general upper secondary education. Based on the information collected in 2016, 99 per cent of them were qualified. This is higher than in basic education and VET, where the qualification rate was 97 and 92 per cent respectively.

If there was no formal qualification, it was most commonly because the person did not have an applicable degree or had not completed the teacher's pedagogical studies. Especially in sparsely populates areas, it may be difficult to find a qualified teacher to teach the not so commonly studied courses.

6.3. Teachers are getting older

Most pedagogical personnel in general upper secondary education are aged 50 or older. Slightly more than 40 per cent of them belong to this age group. The proportion has remained stable between 2005 and 2016. The situation reveals that teachers are getting older, which is common everywhere in the EU countries. The proportion of teachers aged between 40 and 49 has also increased. In 2016, about 34 per cent of general upper secondary teachers were aged between 40 and 49, while the corresponding figure in 2005 was 25 per cent.

FIGURE 6.3. AGE DISTRIBUTION OF TEACHERS AND PRINCIPALS IN UPPER GENERAL EDUCATION 2005–2016



Source: Teachers and Principals in Finland data collection 2005, 2008, 2010, 2013 and 2016

Table 6.2.

The proportion of young teachers has fallen in the past ten years. In 2016, 22 per cent of upper secondary teachers were under 40 years old, when the corresponding figure in 2005 was about 32 per cent. The decline in the number of young teachers may partly be a result of the cuts made in education between 2013 and 2015. According to the Trade Union of Education, young teachers were at the time mostly employed as part-time teachers, not in permanent positions, and therefore it may have been easier to terminate their employment relationship.

The principals in general upper secondary education are on average older than the teachers. In 2016 a clear majority, or about 65 per cent of principals were aged 50 or older. The proportion of principals aged between 40 and 49 has in the past few years remained at about 30 per cent and the proportion of the age group has risen by about 8 percentage points between 2005 and 2016. The proportion of under 40-year-olds in principals of upper secondary education is low and the proportion of the age group has been declining. In 2016 the proportion of principals aged under 40 was only about 5 per cent, while it was 10 per cent in 2005.

6.4. Nearly 70 per cent of teachers women

Most teachers in Finland are women. The proportion of women varies from 80 per cent in pre-primary education to 56 per cent in vocational upper secondary education. The proportion of women in lisää general upper secondary teachers has over the past few years continued to increase. In 2016 almost 70 per cent of general upper secondary teachers were women. Proportionally the lowest number of women was found among the principals although their proportion increased slightly during the years examined.

Teaching profession is female-dominated all around the world. The proportion of women in teachers is one of the highest by international standards, but when higher levels of education are examined, the proportion of women becomes smaller. According to Education at a Glance 2018, women accounted for an average of 83 per cent of teachers in basic education in the OECD countries while their corresponding proportion in lisää general upper secondary education was 62 per cent. Women accounted for an average of 65 per cent of lisää general upper secondary teachers also in a comparison between the EU countries. (OECD 2018).

Tables

TABLE 6.1. NUMBER AND PROPORTION OF QUALIFIED TEACHERS AND PRINCIPALS IN GENERAL UPPER SECONDARY EDUCATION 2005-2016

	Number of principals in data colle- ction	Number of qualified principals in data colle- ction	%	Number of teachers in data collection	Number of qualified teachers in data collection	%
2005	432	426	99 %	6937	6532	94 %
2008	387	382	99 %	6739	6464	94 %
2013	1732	1666	97 %	7398	7069	96 %
2016	275	275	100 %	4235	4185	99 %

Source: Teachers and Principals in Finland Data collection 2005, 2008, 2013, 2016

TABLE 6.2. AGE DISTRIBUTION OF TEACHERS AND PRINCIPALS IN GENERAL **UPPER SECONDARY EDUCATION 2005-2016**

	Teachers under 40 years	%	Teachers 40-49	%	Teachers over 50-	%	Total
2005	2470	32 %	1981	25 %	3326	43 %	7804
2008	2287	31 %	2201	29 %	2999	40 %	7487
2010	2233	28 %	2502	32 %	3175	40 %	7910
2013	2224	27 %	2645	32 %	3316	41 %	8185
2016	1228	24 %	1748	33 %	2242	43 %	5218
	Principals under 40 years	%	Principals 40-49	%	Principals over 50-	%	Total
2005		% 11 %		% 21 %		% 68 %	Total
2005	40 years		40-49		over 50-		
	40 years 47	11 %	92	21 %	over 50- 293	68 %	432
2008	40 years 47 27	11 % 7 %	40-49 92 113	21 % 29 %	over 50- 293 247	68 % 64 %	432

Source: Teachers and Principals in Finland data collection 2005, 2008, 2010, 2013 and 2016

7 GENERAL UPPER SECONDARY EDUCATION PROVIDERS AND NETWORK OF EDUCATIONAL INSTITUTIONS

- In Finland providers can be a local authority, joint municipal authority, state and private actor.
- Providers need a permission issued by the Ministry of Education and Culture.
- A precondition for the permission is that the education is necessary and the applicant has the professional and financial resources necessary.
- The education cannot be provided for the purpose of making a profit.

In 2016 general upper secondary education providers totalled 255. There were a total of 363 general upper secondary schools and schools providing education at both basic and general upper secondary levels. There are more general upper secondary schools than providers because in large municipalities the same education provider may have several educational institutions providing general upper secondary education.

Regardless of the education provider, students in all Finnish general upper secondary schools study according to the same national distribution of lesson hours and the same national core curriculum. The general upper secondary education is free of charge including school lunch and welfare services. This applies to all the education providers, including private ones. The difference between the education providers is mainly visible in how the administration of the general upper secondary education has been organised. However, differences in quality between general upper secondary schools in Finland are small by international standards, and the education provider is not the reason for choosing a specific school.

7.1. General upper secondary education provider most commonly local authority

In Finland upper secondary education is not within the scope of compulsory education, so local authorities do not have an obligation to provide these. However, there was a general upper secondary school in most (more than 70 per cent) of Finland's 311 municipalities in 2016. Most typically general upper secondary education is provided by a local authority. Almost 90 per cent of education providers were local authorities.

Local authorities also provide general upper secondary education jointly. Joint municipal authorities consisting of several local authorities providing general upper secondary education for young people have been operating since 2001. However, joint municipal authorities seldom act as general upper secondary education providers as less than two per cent of all providers were joint municipal authorities. In 2016 just over four per cent of general upper secondary students studied in schools maintained by joint municipal authorities.

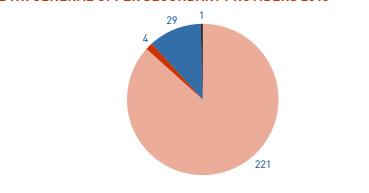


FIGURE 7.1. GENERAL UPPER SECONDARY PROVIDERS 2016

Municipality Joint municipal authority Private State

Source: Statistics Finland - Vipunen - statistical service of the education administration

<u>Table 7.1.</u>

Just under ten per cent of education providers were private and under nine per cent of all general upper secondary students studied in private schools. Private education providers include different associations, limited liability companies and foundations. In Finland even private general upper secondary schools are free and provide the same student welfare services as schools in the public sector.

The state also provides general upper secondary education. Just under one per cent of schools were maintained by the state and just under three per cent of all general upper secondary students studied in them. One of the general upper secondary schools maintained by the state is the European School of Helsinki operating in the European Schools network.

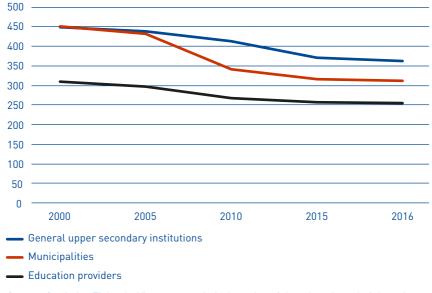
Furthermore, universities maintain general upper secondary schools in their teacher training schools in which student teachers complete training periods related to their studies. Just over three per cent of the education providers were universities and two per cent of students studied in their general upper secondary schools.

7.2. Number of education providers and schools has fallen in the 2000s

The number of general upper secondary education providers has fallen by more than 50 per cent and the number of schools by almost 20 per cent from the beginning of the 2000. All schools that have been closed have been Finnish-speaking. The decline in the number of general upper secondary schools is partly explained by the falling sizes of age groups. The number of people aged between 16 and 18 has fallen by almost 24 000 from the beginning of 2000s. The decline in the number of schools is also partly due to the increase in the popularity of VET.

The decline in the number of education providers is also due to a decline in the number of municipalities, which was mainly caused by the regional reform launched in 2005. In the first years of the reform, many municipalities merged to form larger entities and the number of municipalities fell by 20 per cent in five years.

FIGURE 7.2. GENERAL UPPER SECONDARY EDUCATION PROVIDERS, INSTITUTIONS AND NUMBER OF MUNICIPALITIES 2000–2016



Source: Statistics Finland - Vipunen - statistical service of the education administration, The Association of Finnish Local and Regional Authorities

Table 7.2.

Although the number of general upper secondary schools and students has decreased, the average size of schools has remained almost the same in the 2000s. In 2016 the average number of students in a general upper secondary school was 266. However, the numbers of students vary a lot. Schools of fewer

than 50 students accounted for eight per cent and those of more than one thousand students for one per cent of all general upper secondary schools.

General upper secondary schools are fairly evenly distributed across Finland. Although Finland is a relatively sparsely populated country, on average 82 per cent of all students lived within a ten-kilometre radius from the nearest general upper secondary school in 2015. However, the proportion varied in different parts of Finland. The majority of the population lives in the southern parts of the country, where more than 90 per cent of general upper secondary students lived within a ten-kilometre radius from a school. In sparsely populated areas in the eastern parts of the country, just over 70 per cent of students lived within a ten-kilometre radius.

There are about one hundred municipalities with no general upper secondary school in Finland. They are small municipalities in sparsely populated areas with few residents of upper secondary school age. The largest cities have the largest number of general upper secondary schools.

7.3. Special educational mission assigned to 16 per cent of schools

In addition to the usual general upper secondary studies, general upper secondary schools with a special educational mission offer the opportunity to study in a special programme in which a specific subject is studied in more depth than in normal schools. Such subjects are usually music, sports, natural sciences and mathematics. There are also schools placing an emphasis on entrepreneurship or expressive skills. General upper secondary schools specialising in Steiner pedagogy are also considered schools with a special educational mission.

Nearly 16 per cent of general upper secondary schools have been assigned a special educational mission. The Ministry of Education and Culture grants schools with a special educational mission the permission to deviate from the normal distribution of lesson hours. This allows their students to take more courses related to the special educational mission and, correspondingly, fewer of the other compulsory courses. The Ministry also grants additional funding to these schools.

Schools providing education according to the International Baccalaureate programme (IB) are also schools with a special educational mission. There are 16 such general upper secondary schools. The difference between the IB programme and the normal Finnish general upper secondary education is that the language of instruction in the IB programme is mainly English and the International Baccalaureate Diploma is taken at the end of it. Compared to

other general upper secondary schools, fewer subjects are studied in the IB programme and they are studied in classes instead of as courses. General upper secondary schools with an emphasis on the Russian or the French languages and culture are also schools with a special educational mission.

If it so wishes, the education provider may without the express permission from the Ministry provide general upper secondary education with an emphasis on some specific subjects and offer more courses in these subjects. However, it is not possible for such schools to deviate from the normal distribution of lesson hours and leave out any compulsory courses. The additional studies in the subject of specialisation are studied in addition to the other compulsory courses. These schools do not receive such additional funding that is available to schools with a special educational mission granted by the Ministry.

7.4. Swedish the language of instruction in one tenth of schools

In 2017 there were 34 general upper secondary schools whose language of instruction was Swedish. Their proportion was just under ten per cent of all general upper secondary schools in Finland. Just over six per cent of general upper secondary students studied in them.

Unlike Finnish-speaking general upper secondary schools, no Swedish-speaking ones have been closed as their number in 2017 was exactly the same as in 2000. Over the same time period, the number of Swedish-speaking students had fallen by just over one hundred students. However, Swedish-speaking general upper secondary schools were smaller than the Finnish-speaking ones. Their students numbers varied between 40 and 550 students, being on average 194 per school.

Of Swedish-speaking general upper secondary education providers, 85 per cent were municipal and just over 10 per cent were private. In addition to them, the language of instruction at the teacher training school at the University of Vaasa is Swedish. The largest Swedish-speaking general upper secondary schools were located in the Helsinki metropolitan area, on the western coast and in the Åland Islands.

Tables

TABLE 7.1. GENERAL UPPER SECONDARY PROVIDERS 2016

Type of education provider	Number of education providers
Municipality	221
Joint municipal authority	4
Private	29
State	1

Source: Statistics Finland - Vipunen - statistical service of the education administration

TABLE 7.2. GENERAL UPPER SECONDARY EDUCATION PROVIDERS, **INSTITUTIONS AND NUMBER OF MUNICIPALITIES 2000-2016**

	2000	2005	2010	2015	2016
General upper secondary institutions	448	439	413	370	363
Municipalities	452	432	342	317	313
Education providers	309	298	268	257	255

Source: Statistics Finland - Vipunen - statistical service of the education administration, The Association of Finnish Local and Regional Authorities

8 COSTS OF GENERAL UPPER SECONDARY EDUCATION

- General upper secondary education accounts for 6 per cent of total costs of education.
- Average expenditure per student was 7 700 euro per year in 2016.
- Instruction accounts for 65 per cent of costs.

In Finland the relative proportion of general upper secondary education in the total costs of education has been significantly smaller compared to other educational levels. It was six per cent in 2016. As altogether just over 20 per cent of the total costs were spent on upper secondary education, a significantly larger amount (14 per cent) was spent on VET. The higher costs can partly be explained by the special facilities and equipment required in some of the fields in VET, while there is no need for anything similar in the more academically oriented general upper secondary studies. Of all costs of education in Finland, clearly the largest proportion was spent on basic education, which accounted for almost 40 per cent of the costs.

The relative proportion of the costs of general upper secondary education in the total costs of education has fallen by one percentage point in the past fifteen years. The decline can be explained by factors such as the declining size of the age group.

The expenditure per student, or the costs of education per one student in a year to the education provider, on the other hand, have long remained fairly stable. When comparing the real costs over sixteen years, in other words when the price level of 2000 is changed to correspond to prices in 2016, the average expenditure per student was the same in both years.

8.1. Costs vary by education provider

The average expenditure per student in general upper secondary education was 7 700 euro in 2016. There was, however, wide variation. When examined according to the education provider, the costs were the lowest in general upper secondary schools of private providers and joint municipal authorities consisting of several authorities. In these cases the costs were on average just over 6 600 euro per student per year. The costs were about one thousand euro higher in education provided by individual local authorities, the average expenditure per student being 7 800 euro per year respectively.

The costs were the highest in the teacher training schools of universities, on average almost 11 100 euro per student. The corresponding cost in state-owned general upper secondary schools was almost 9 800 euro.

12000 — 10000

Joint municipal Municipality

State

Universities

FIGURE 8.1. AVERAGE EXPENDITURE PER STUDENT BY EDUCATION PROVIDER 2016

authority

Source: Finnish National Agency for Education expenditure report

Private

Table 8.1.

2000

The wide variation in the expenditure per student is the sum of many factors. The number of students and group sizes in schools affect the costs of teaching, in particular. Teaching is therefore one of the most important individual cost items. Large schools often have larger teaching groups and as a result, their teaching costs per student remain lower than in smaller general upper secondary schools. The number of students in Finnish general upper secondary schools varied considerably: in 2016 the largest one had about 1 200 students and the smallest one 12 students.

Teaching costs were the lowest in the schools of joint municipal authorities, in which the numbers of students were on average higher than in schools of other education providers. This partly explains the lower total costs per student in education provided by joint municipal authorities compared to other education providers.

The higher student-specific costs in teacher training schools of universities can partly be explained by the higher salaries of their teachers compared to other schools. The salaries are made higher by the fact that in addition to the compulsory teaching time, the duties of teachers in teacher training schools include the guidance given to the teacher trainees.

8.2. Great variation in the costs provided by local authorities

Biggest differences in the expenditure per student can be found between individual local authorities. In 2016 the biggest difference between cost per student was 30 000 euro.

One of the factors explaining the difference in costs is the size of the municipality: the costs are usually higher in rural municipalities than in large, urban municipalities. Municipalities in urban areas have more residents of general upper secondary school age and the numbers of students in their schools are higher than in municipalities in rural areas.

In 2016 the average expenditure per student in general upper secondary education provided by local authorities was just under 7 700. There are differences even in the average expenditure per student between local authorities in urban and rural areas. This difference is about 3 000 euro per student per year. The costs of instruction in municipalities in urban areas are lower than in rural areas, but their real estate costs are higher.

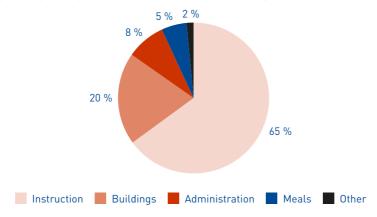
There are also regional differences in the costs of general upper secondary education between local authorities. The differences can be explained by the size of the population. The largest numbers of people of upper secondary school age live in southern and western Finland, where the costs are lower than in northern and eastern Finland, where the size of the population is smaller.

8.3. Instruction is the largest cost item

The costs of general upper secondary education can be itemised in more detail according to the purpose for which the money has been used. The largest proportion of the costs, well over one half, is spent on instruction, mostly on teachers' salaries. About one fifth of the costs result from the maintenance of the school buildings. The next largest amount of money has been used on internal governance. This category includes items such as the salary costs of personnel other than teaching staff, for example, principals' salaries.

All general upper secondary schools in Finland provide a free daily lunch. The proportion of school meals has been relatively small in the costs incurred by the education provider as they have accounted for only about five per cent of total costs.

FIGURE 8.2. DISTRIBUTION OF EXPENDITURE PER STUDENT 2016



Source: Finnish National Agency for Education expenditure report

Table 8.2.

The relative proportion of real estate costs in total costs has increased. Over a period of ten years, the proportion of real estate costs grew by eight percentage points. School buildings in Finland are on average rather old, which partly explains their high maintenance costs and the need for repairs and renovation. Correspondingly, the relative proportion of teaching in total costs has diminished by eight percentage points over ten years.

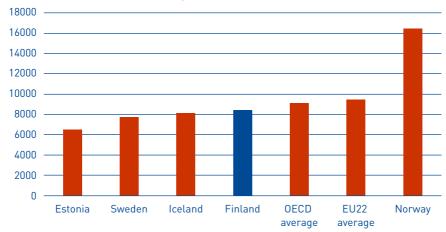
8.4. The expenditure moderate by international standards

The expenditure per student in general upper secondary education in Finland is lower than the international average, as the costs in Finland remain below the average of both the EU and the OECD countries.

When the neighbouring regions— the Nordic countries and Estonia — are compared to Finland, the expenditure per student in Iceland was lower than in Finland, almost the same in Sweden and almost twice as much in Norway in 2014. The average expenditure in Estonia was much lower than in Finland. The corresponding information on Denmark is not available.

Because a significant part of the costs of education consist of teachers' salaries, the cost levels in these countries are at least partly explained by differences in the salaries. For example, teachers' salaries in Estonia are half of the salaries in Finland, whereas in Denmark, they are almost 20 per cent higher than in Finland.

FIGURE 8.3. ANNUAL EXPENDITURE PER STUDENT IN GENERAL UPPER **SECONDARY EDUCATION 2015, USD**



^{*}In equivalent USD converted using PPPs for GDP

Source: OECD, Education at a Glance 2018 (Table C1.1)

Table 8.3.

Tables

TABLE 8.1. AVERAGE EXPENDITURE PER STUDENT BY EDUCATION PROVIDER 2016

Private	6634
Joint municipal authority	6705
Municipality	7784
State	9761
Universities	11090

Source: Finnish National Agency for Education expenditure report

TABLE 8.2. DISTRIBUTION OF EXPENDITURE PER STUDENT 2016

Type of expenditure	euro
Instruction	4 998
Buildings	1 523
Administration	644
Meals	417
Other • accommodation • other student welfare • small projects	114
Total	7 696

Source: Finnish National Agency for Education expenditure report

TABLE 8.3. ANNUAL EXPENDITURE PER STUDENT IN GENERAL UPPER **SECONDARY EDUCATION 2015, USD***

Country	USD
Estonia	6514
Sweden	7749
Iceland	8142
Finland	8425
OECD average	9119
EU22 average	9445
Norway	16429

^{*}In equivalent USD converted using PPPs for GDP

Source: OECD, Education at a Glance 2018 (Table C1.1)

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