

In Finland, there is such a thing as a free lunch. Finland was the first country to start serving pupils a free daily hot meal, in 1948, and continues to do so.

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EDUCATION IN FINLAND Key to the nation's success

It all starts with school

Developing education to meet the challenges of today and the future is a central issue in the survival and success of humankind. Decision-makers and specialists around the world are frantically seeking the best solutions for providing education. Their attention is increasingly drawn to the education system of Finland, which produces top results in international learning comparisons.

One of the greatest strengths of education in Finland is that it offers everyone equal opportunities to study, regardless of social and financial background. Instead of competition and comparison, basic education focuses on support and guidance for the pupils as individuals.

Teachers are highly trained, with university-level degrees. Their profession is held in high regard.

Teaching small children focuses on their inherent strengths and supports their sense of

safety and the development of their emotional life and social skills. Teachers motivate pupils with encouragement. Performance is not graded with numbers until later in school years.

After completing basic education in comprehensive school, everyone has the opportunity to continue general and professional education according to their interests and inclinations. Continuing to study is possible in various forms throughout life. In Finland, education is free, from pre-primary level to higher education and even further.

The following pages describe how this is done in Finland and what the philosophy behind Finnish education is.

Welcome to a Finnish school!

Content











Free Equal Quality Education For all

Education for everyone in all stages of life

he high quality of the Finnish school system is based on a clear national ethos that people are the nation's most important asset. They have the right to receive excellent education, which will help maximise their potential to be who and what they want to be.

This philosophy has enabled Finland to rise from one of the poorest countries in the world to the height of technological expertise and become one of the world's wealthiest countries in its 100 years since independence. Over the decades, bold solutions have allowed Finland to develop a system that gives the opportunity of life-long studying and self-development to everyone living here.

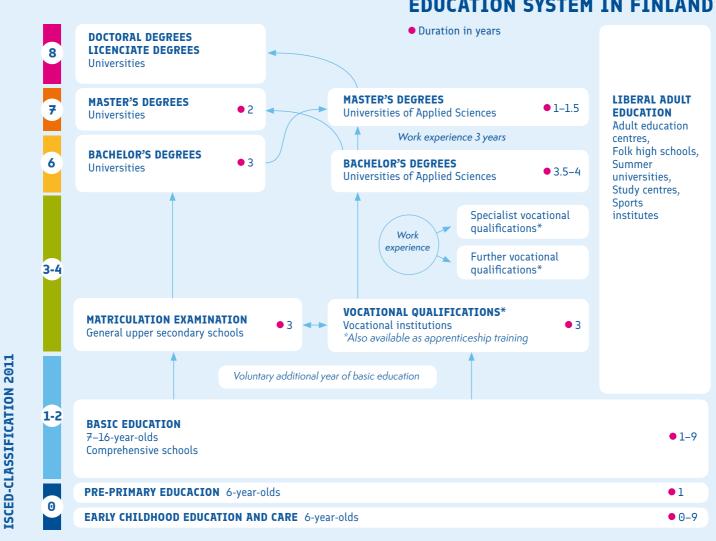
In practice, all education is financed from tax revenue. Private education markets offering superior education for money do not exist in practice. The few educational institutions run by private organisations adhere to the same objectives and standards as the public schools, their operations are publicly funded and their admission of pupils and students is based on the same principles. The share of all public funds spent on education is over 11 per cent.

Basic education lasts for nine years. What is taught at comprehensive school is guided by the national core curriculum. Municipalities have the obligation to provide compulsory basic education for all children living in their area. There are also extensive learning and well-being support services for those who need them. Basic education is preceded by high-quality early childhood education and care, available to all.

After comprehensive school, the young can continue in either vocational or upper secondary education. The duration of both is approximately three years. Both lines offer general education as well as extensive opportunities to study in accordance with personal interests and inclinations. Over 76 per cent of Finns aged 20–24 have either passed the matriculation examination or earned a vocational qualification (data from 2015). Both qualify the student for studies at a university or a university of applied science.

There are 14 universities and 25 universities of applied science in Finland. Approximately 41 per cent of working-age Finns have higher education. The changing world and working life are addressed by providing opportunities to obtain continuing education and retraining in various stages of life.

Opportunities are also available to increase one's knowledge and skills at institutes of adult education open to all, offering subjects ranging from languages to weaving and from information technology to dancing.



EDUCATION SYSTEM IN FINLAND

0 Early childhood education, **1** Primary education, **2** Lower secondary education, **3** Upper secondary education, 4 Post-secondary non-tertiary education, 6 Bachelor's or equivalent, 7 Master's or equivalent, 8 Doctoral or equivalent

02. Lifelong learning

Finns have access to free education throughout their lives, beginning with preprimary education, up to the highest level at institutes of higher education. Various routes provided in the Finnish education path are described on the following pages.



Early childhood education and care Pre-primary education

Play and care prepare children for school

hildren in Finland start school relatively late, at the age of seven. It is a national principle that children need time and space to grow and develop. Finnish teaching takes advantage of the sensitive periods of development and encourages children to think independently and be creative.

During their early childhood, children can enjoy the nurturing and care provided by their parents while also benefitting from day care, where they can practice working in groups by playing, exercising and spending time outdoors. Parents of small children are entitled to long family leaves. Families can choose between municipal or private day care, either in small groups in the home of the care provider or in a day care centre. Day care receives considerable financial support from the state, and day care charges are proportionate to the incomes of families. The early education and care services provided by municipalities have pedagogical objectives, and the competence requirements of personnel are regulated by law. Day care teachers have university degrees.

Six-year olds participate in pre-primary education, which prepares them for school and promotes their social skills and healthy self-esteem, either in a day care centre or school. National standards exist for the content of pre-primary care. Municipalities have the obligation to provide children with transport to and from school where needed.

If necessary, a child's readiness for school is tested and he or she can start school a year earlier or later.

Basic education – common for all

Required knowledge and skills

ducation at school is compulsory for Finnish children and young people. Compulsory education begins the year the child turns seven and ends when they have completed the 9-year comprehensive school syllabus in full or after ten years of compulsory education. Basic education is also available for adults, such as immigrants.

The objective of basic education is to support personal growth as individuals and as members of society as well as to teach important knowledge and skills. Basic education provides everyone with the same opportunities to pursue further studies, and is free of charge. All tools, supplies and materials used in teaching are also free for pupils. The responsibility for providing basic education rests with municipalities, and therefore, comprehensive schools are located where there are families with children. The schools may be either joint schools with all nine grades in the same building, or grades 1–6 and 7–9 in separate school buildings. Small rural schools may have a couple of dozen pupils, while urban schools may have more than a thousand. Regardless of the schools' size, the standard and level of teaching vary little by international standards. The qualifications of teachers are also uniform everywhere.

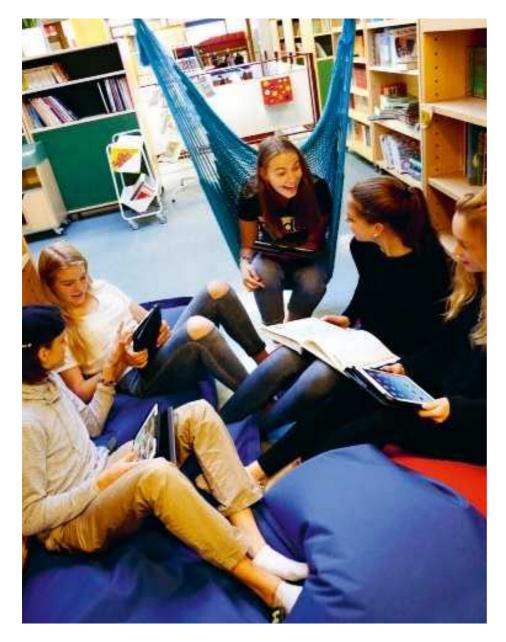
The expenses of basic and upper secondary education are included in the municipalities' budgets, although the government reimburses an average of 25 per cent of the expenses. The cost to society of the school year of one Finnish pupil was 8,025 euros (US\$ 8,519) in 2016.

The pupils' learning outcomes in comprehensive school are monitored by means of national assessments, in which approximately 5–10 per cent of the age group participate through random sampling.

UNIFORM TEACHING OBJECTIVES NATIONWIDE

The Finnish government decides on the general objectives and the division of hours between the subjects taught in early education, basic education and upper secondary education. Based on the objectives, the Finnish National Agency for Education, subordinate to the Ministry of Education and Culture, decides on the national core curriculum. The education providers, the majority of which are municipalities, base their own curricula on the national core curriculum, and ultimately the schools prepare their own individual plans.

This ensures that the level and scope of teaching in the same subjects is the same for all school-goers across the country. However, the system does allow for local emphasis and additions.





FREE LUNCH FOR EVERY PUPIL

Each child and young person in Finland, from day care to upper secondary school and vocational schools, receives a daily, healthy hot meal, including salad, milk or other beverage and bread.

The free lunch is included in the curriculum. The meal refreshes the pupils and students, gives them energy and helps them stay alert for the remainder of the day. At the same time, the school lunch is an opportunity to teach children about health, nutrition and good manners.

Special diets are taken into consideration. An increasing number of schools offer a vegetarian option, organic food and environmentally friendly food every day.

Finland was the first country in the world to provide schoolchildren with free lunches, in 1948.



Learning skills for the future together in Metsokangas school

stately group of colourful buildings stands at the edge of a snowy forest in a suburb of Oulu. It is the Metsokangas comprehensive school, where more than 1,100 pupils aged 7–16 and approximately one hundred teachers, special needs assistants and other adults work every day.

Here, a couple of hundred kilometres from the Arctic Circle, the school day on a cold January morning starts an hour before the sun comes up over the horizon. However, Metsokangas pupils are not fazed: a majority of them come to school from the nearby residential area by bicycle all year round.

Inside the building, the pupils leave their outdoor clothes and shoes in the hallway, and cheerful greetings fill the air as they, teachers and other members of the school community proceed to their classrooms and duties. The atmosphere is friendly and equal.

"There is no way I can remember the names of everybody in this big a crowd, but I try to walk in the hallways to greet people," says principal **Kalle Komulainen**. He has been involved in designing the buildings and planning the pedagogy of the school since the beginning: the school opened in 2008 and is still being expanded. The guiding principle of the school is communality, illustrated by the school motto: "Our Metsokangas!"

"We aim to teach the pupils not only basic skills but also skills for the future: cooperation, discussion, independent thinking and self-direction," Komulainen says.

The school is increasingly moving teaching from the classroom out to the world and from books to the information highways. Project-based learning breaks down barriers between different subjects and teaches to search, analyse and process information. All teaching includes a focus on learning and actively using IT skills.

"The role of the pupil has expanded from a learner of information to a producer of information. The duty of us teachers is to encourage them and provide a solid framework for a self-directed journey into the world," Komulainen concludes.





In Finland, school days are shorter than the OECD average, but they are spent efficiently. The amount of homework is also small by international standards.



LET'S GO TO SCHOOL!

The school day of Hilma Visuri, a fourth-grader

n a regular school day, ten-year-old Hilma Visuri wakes up at seven in the morning and has breakfast at home. She splits her time living with her mother and father, each of whom lives near Hilma's school. The school day usually starts at 8:15 a.m., sometimes even later, at 9:30 a.m. Hilma usually bicycles to school.

Hilma's class studies in the newest building of the Metsokangas school, named Korpimetso, which was built in 2016. Instead of traditional classrooms, the building features four large teaching modules of approximately 320 m2 each. They house three or four teaching groups, their teachers and assistants – 100 people at most. The space is flexible and adaptable, making it possible to work in a variety of group compositions and situations and engage in different activities.

The new kind of learning environment suits Hilma well. "The best thing is that you get to choose how and where you study and that the space is not confined," she says.

In Hilma's class, the exercises for the week are handed out on Mondays, and the pupils themselves can plan when and how they complete them. A large portion of school work is carried out in groups and as projects. The planning of the exercises and the division into small groups take into consideration the pupils' personal prerequisites and inclinations.

The atmosphere in the multi-functional space is that of focus and motivation; one group is searching for information on the countries in Europe on a computer while another is learning English verbs with a teacher. A few small groups are playing learning games and the rest are concentrating on reading. If any student needs special attention or things start getting restless in the room, an available teacher or assistant intervenes. Soundproof spatial elements can be used to create quiet nooks for more private studying, if needed. Hilma's favourite subjects are arts and crafts, for which the module is equipped with a damp-proof space.

The lessons at Metsokangas school last 60 minutes, and there is a 15-minute recess in between. The lunch break is longer. The children spend recesses outdoors and are also allowed to venture into the woods nearby.

Hilma's school day is usually over by 1:30 p.m. at the latest. She goes back home on her own, usually by bicycle. At home, she has a snack and does her homework, which usually takes about 10 minutes, sometimes longer. During her free time, Hilma plays with her friends and takes dance lessons three times per week. Usually her mother or father takes her to the lessons, sometimes she goes by bus.

"When I grow up, I'd like to be a fashion designer or an actress," Hilma says.

Secondary education Individual paths to professional skills

fter completing comprehensive school, slightly less than half of the age group will continue studies in the upper secondary school and slightly over half will take up vocational studies. Approximately five per cent of pupils who complete comprehensive school will not continue studies. For them, career guidance is available. The goal is that after comprehensive school, everyone should obtain at least a secondary education degree, in other words, complete a matriculation examination or a vocational upper secondary gualification.

Both upper secondary school and vocational education, including school lunches, are free of charge, regardless of whether the educational institution is owned by the municipality, state, or a private education provider. The students need to purchase their own textbooks and other supplies. Students can receive financial aid from the government and have access to an extensive system of various social benefits and well-being support services.

UPPER SECONDARY SCHOOL AND MATRICULATION EXAMINATION

In upper secondary school, obtaining more indepth general education continues and students start familiarising themselves with academic content. The comprehensive school-leaving certificate is used when applying to upper secondary school. Each upper secondary school student studies their mother tongue, the other national language and at least one foreign language, mathematics and science, humanities and social subjects, religion or ethics as well as physical education, arts and crafts. In addition to the subjects compulsory for all, students have a fairly wide freedom of choice and, if they so wish, they can study optional subjects in greater depth.

The studies are organised in courses and

last 2–4 years, depending on the student's own choices. The curricula of some upper secondary schools have a special emphasis, for example, on music, sports or visual arts. In addition to academic skills, the application criteria in these schools include the applicant's hobbies and interests and demonstration of skills.

The upper secondary school studies culminate in the national matriculation examination, which provides eligibility for studies at higher education institutes. The examination is organised every spring and autumn. Each candidate must take tests in their mother tongue, literature, and a minimum of three optional subjects: the second national language, a foreign language and mathematics or the humanities and natural sciences. The examination can be spread over several of the biannual examination sessions.

In the Finnish education system, the matriculation examination is the only national examination that assesses the skills and maturity of all students on a nationwide basis.

VOCATIONAL EDUCATION AND QUALIFICATIONS

Vocational basic education provides students with the basic knowledge and preparedness to work in a vocation as well as important knowledge and skills for further studies, hobbies and personal development. Vocational studies can begin either directly after comprehensive school, after completing upper secondary education, or during working life. Those who have earned a vocational qualification can continue studies in universities and in universities of applied science.

Vocational basic education is provided in several sectors and by a variety of providers: in vocational schools, folk high schools, through apprenticeship training or on-the-job learning. The duration of studies is usually 2–4 years and depends on the student's educational background, among other things. Students can also demonstrate their competence by means of various qualifications, which may also be competence-based qualifications.

DUAL QUALIFICATION AND PERSONALISED STUDY PATHS

In many municipalities, students have the opportunity to complete both upper secondary school and their choice of vocational studies at the same time. At the end of the combined studies, which last 3–4 years, they will complete both the matriculation examination and a vocational qualification. Those studying for a vocation may also design a personalised study path themselves and include modules offered by different schools in their studies.











Higher education

Academic and practical studies at a higher level

fter completing their secondary education, students can continue studying at a university or a university of applied science. Applications to these are submitted primarily through the joint application system, and student selection is based either on the upper secondary certificate, an entrance examination, an aptitude test or a combination of these.

UNIVERSITIES OF APPLIED SCIENCE/TECHNOLOGY

These offer practical studies requiring high-level competence. The degrees that can be earned include, among others, business administration, engineering, information technology, social services, culture and arts, and nursing.

Studies at universities of applied science last 3–4½ years and include a practice period of one semester. After completing the Bachelor's degree, those who have at least three years of employment experience can apply to a Master's programme. Studying full-time it takes 1-1½ years to complete the Master's degree. When certain conditions are met, the studies can lead to additional, scientific studies in a university.

UNIVERSITIES

The universities of Finland represent all fields of science and arts, and the network of universities covers the entire country. The oldest and largest is the University of Helsinki, which was founded in 1640 and today has more than 34,000 students. In international comparisons, the University of Helsinki has repeatedly ranked among the 100 best universities in the world.

In most fields, students first complete a Bachelor's degree, which takes approximately three years, and then pursue the Master's degree, usually complete in two years.

Those who have completed a Master's degree at a university or university of applied science may apply for further studies at a university to pursue a licentiate or a doctoral degree. Universities also offer adult education and a variety of research and consulting services.

FINANCIAL AND SOCIAL SUPPORT FOR STUDIES

Studies in higher education are free for Finnish citizens and citizens of the EU/EEA countries. Under certain conditions, the students have access to financial aid, subsidised housing services, affordable meals, discounts on local public transport, health care services, and other support services.

HIGHLY EDUCATED FINNS

Finland has a total of 14 universities and 25 universities of applied science, which prepare students for tasks requiring high vocational skills. Currently, approximately 40 per cent of the age group of 30–34-year-old Finns has earned a higher education degree.

Universities in Finland



Rovaniemi

Oulu

Opportunities for all Developing skills and knowledge

In Finland, everyone has the opportunity to educate and develop themselves and obtain new skills and hobbies, either free of charge or at a low cost.

BASIC EDUCATION IN THE ARTS FOR CHILDREN AND THE YOUNG

A basic education in the arts provides students with skills to express themselves and to pursue vocational and higher education in their selected field of art after sufficient basic studies. The basic education is provided by nearly 400 music institutes as well as schools for visual arts, dance, drama, literary art, and crafts and design. Teaching in these institutions has fixed objectives and studies advance from one level to the next. Families of students pay a term fee, but most of the expenses of the institutions are covered by the government and municipalities. Approximately 12 per cent of all children and young people in Finland participate in basic education in the arts.

LIBERAL ADULT EDUCATION

Nearly all municipalities have at least one educational institution offering liberal adult education, supported by society. Liberal adult education has long traditions – the first folk high school was established even before the end of the 19th century.

Liberal adult education is available for anyone, and the cost is usually a few dozen euros per course to study subjects such as foreign languages, photography, guitar playing, etc., at adult education centres in one's hometown. In the summer, diverse practical and academic studies are available in summer universities and folk high schools. Folk high schools organise one-year studies for those who are trying to decide what vocation would best suit them and who are taking a break after completing basic or secondary education.

The purpose of liberal adult education is to support diverse personal development and the ability of individuals to function in a community, as well as to promote democracy, equality and diversity in Finnish society.

The educational institutions themselves decide on the contents of liberal adult education, and the studies do not lead to a degree. The communities running the institutions may hold a variety of ideological or religious views or be based on local and regional educational needs.









Out of the classroom and into the world

he national core curriculum for basic education, implemented in 2016, emphasises the development of learning environments. In addition to a traditional classroom, teaching and studying are increasingly moving to environments outside the school: lessons are given outdoors and excursions are made to museums, companies, and so on. Games and other virtual environments are also among the learning environments. The importance of technology is increasing in the daily activities of schools. Diverse methods are used in the teaching of all subjects.

PROBLEM-ORIENTED LEARNING, INTERACTION AND RESPONSIBILITY-TAKING

The curriculum highlights extensive and transversal competence as well as interaction and expression skills. Children and young people are shown how to take responsibility for their studies, and they set goals, solve problems and assess their progress towards the goals. Personal experiences, emotions, interests and interaction with others contribute to creating a foundation for learning. The teacher guides pupils to become life-long learners. Education also pays attention to everyday life skills and the pupils' ability to take care of themselves.

MULTILITERACY AND ACTIVE CITIZENSHIP

Traditional text literacy has expanded into multiliteracy, which means the ability to produce and interpret information in different formats, environments and situations as well as by means of different tools verbally, graphically, auditively and kinesthetically. This helps pupils understand the changing world around them and to perceive its cultural diversity. Multiliteracy supports the development of critical thinking and learning and is strongly linked to ICT skills.

Basic education also provides pupils with working life skills and coaches them to become entrepreneurs and to participate in and influence society.

COMPREHENSIVE SCHOOL SUBJECTS COMMON TO ALL: 00000 Mother tongue and literature The other national language (Finnish or Swedish)* Foreign language **Mathematics Environmental studies**

Biology Geography Physics Chemistry Health education Religion or ethics** History Social studies Music Visual arts Crafts Physical education Home economics

*) Finland is a bilingual country where Finnish and Swedish are the official languages. Finnish-speaking pupils learn Swedish as the other national language and Swedish-speaking pupils learn Finnish. **) As a rule, pupils in comprehensive school receive teaching in their own religion, or if they do not belong to any religious community, they receive teaching in ethics. The pupils can also choose elective subjects, including additional language studies, artistic and practical studies or other courses offered by the school.

What's our secret?

he success of the Finnish education system is based on cultural characteristics and national solutions, which ensure the high quality of education every day.

EDUCATION IS A NATIONAL PRIORITY

Education is highly valued in Finland, and the nation strongly believes in the importance of education as the primary driver of the country's success. Trust in education and the power of knowledge are still part of the nation's selfperception and identity. Education is also seen as a central way to address the challenge created by globalisation. This is implemented not only in basic education but also at its other levels.

HIGHER EDUCATION OF TEACHERS

Comprehensive school teachers must have a Master's degree. At grades 1–6, class teachers

teach all subjects, as a rule. They usually hold a Master of Arts degree in education, with emphasis on pedagogical skills. At grades 7–9 of comprehensive school and in the upper secondary school, subject-specific teaching is provided by teachers who have a Master's degree in the subject in question and have completed pedagogy studies.

Teacher training is very popular and the field is highly respected. The number of candidates who apply to teacher training is five time higher than the actual intake.

TEACHERS CAN CHOOSE THEIR TEACHING METHODS

The national curricula must be followed, but teachers have the freedom to choose their teaching methods and learning materials in the classroom. Teachers are independent specialists who, on the one hand, know the needs and strengths of their pupils and, on the other, respect the common objectives.

High-quality learning materials are an important factor in practical school work. Despite the fact that the linguistic area of Finnish is small and of the Swedish-speaking minority is even smaller, the production of textbooks and other learning materials is strongly emphasized. Materials are increasingly available in electronic form and online.

LOCAL SCHOOL PRINCIPLE AND A CULTURE OF TRUST

The principle of local schooling means that nearly all children and young people go to the school that is closest to their home. This prevents the differentiation of schools according to the social status of families.

Since the schools maintain a reliably high standard, parents are generally satisfied with the

local schools, and no system of elite schools has developed alongside the comprehensive school system. Subject to licensing, some private schools do exist, but even they receive state funding and follow the national core curriculum.

ENCOURAGEMENT INSTEAD OF CONTROL

Education in Finland stresses learning through insight and encouragement in assessing performance. It is not based on continuous assessment, the grading of performance or competition between pupils. Instead, teaching focuses on finding learning methods that best serve each pupil and on supporting those who have challenges in learning. Every pupil is also offered an opportunity to continue studying and there are no dead ends in study paths.

SUPPORT FROM THE WELFARE SOCIETY

Equal learning opportunities for all children are supported by the extensive school health care services and social benefits for pupils.



TOP OF THE WORLD

Finnish schools rank repeatedly at the top in different international comparisons. For example, in OECD's PISA study, carried out every three years to assess the skills of 15-yearolds, Finland has scored top positions throughout this century.

SCIENTIFIC LITERACY

Position of Finland among all participating countries:

2015	5	
2012	5	
2009	2	
2006	1	
2003	1	
2000	3	

READING LITERACY

Position of Finland among all participating countries:

2015	4	
2012	6	
2009	3	
2006	2	
2003	1	
2000	1	

MATHEMATICS LITERACY

Position of Finland among all participating countries:

13
12
6
2
2
4





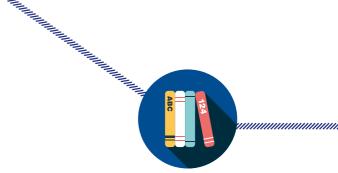
Additional support available when needed

special strength of the Finnish school system is the way it supports pupils in need of special help. The basic principle is that each child and young person has the right to receive high-quality teaching, regardless of their initial aptitude.

Pupils are entitled to special support as soon as the need arises. Common forms of support include remedial teaching in small groups and one-on-one guidance. They are entitled to individualised teaching according to their personal prerequisites even during group study work. In most schools, there are special needs teachers and almost all schools have special needs assistants. If extensive, permanent learning difficulties are observed in a pupil, an individual learning plan is drawn up for them. Pupils with minor or medium learning difficulties study in the same schools and classrooms as the others, but the schools are allocated additional resources.

For pupils with developmental disabilities and severe sensory handicaps or physical disabilities or other special health or mental health issues, there are special classrooms or schools. For some of them, compulsory education lasts 11 years.

The schooling of immigrant children is supported in many ways. Immigrant children with poor or no skills in the Finnish or Swedish language are provided with preparatory teaching in small groups, and they have an opportunity to study Finnish in accordance with an adjusted syllabus. In the largest cities, immigrant children have the opportunity to receive teaching of their own native languages.



1921

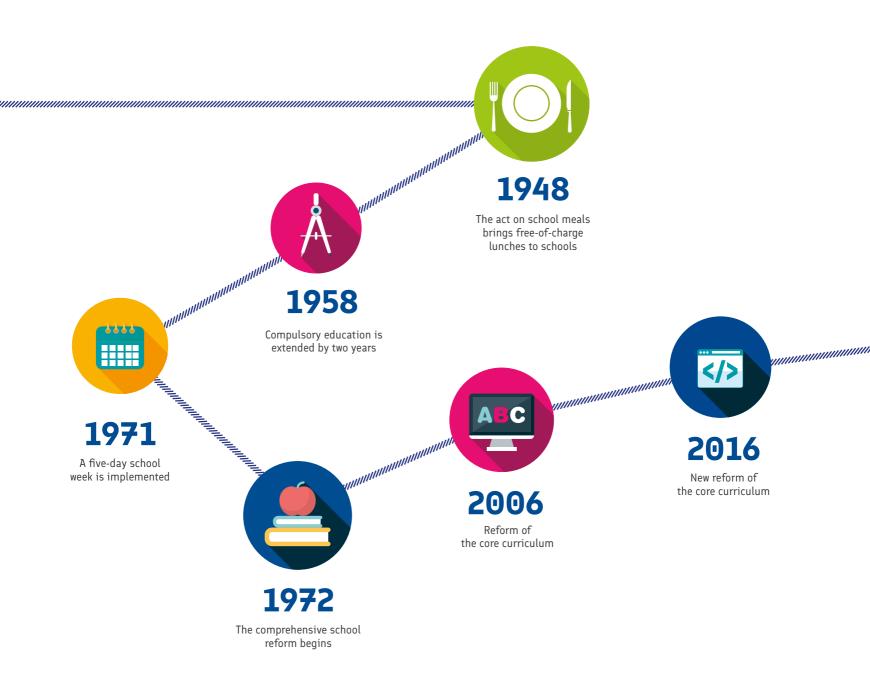
The act on compulsory education is enacted, covering all children aged 7–13

100 years of Finnish education

he primacy of education as a factor ensuring the nation's success was realised towards the end of the 19th century in Finland. This was linked to the powerful awakening of national awareness: the nation needed enlightened literate citizens and a literary culture. That marked the emergence of primary schools to provide each child with general elementary education.

A large number of primary schools were established in municipalities across Finland at the beginning of the 20th century. The law on compulsory education was enacted in 1921. It obligated all pupils to complete at least six grades in primary school. The first national curriculum was drawn up in 1925. There had been secondary schools and lyceums in Finland as early as in the 1800s, but their number increased greatly after the Second World War.

The 1970s saw a transformation of the education system, when the system of primary and secondary schools was replaced by the comprehensive school system. It consisted of nine years of basic education, generally provided by municipalities, and also extended compulsory education to nine years. The objective of the school reform and the introduction of the comprehensive school was to ensure equal, free basic education for all children regardless of where their families lived and what their families' socio-economic status was.



A leading country in modern learning

he ambitious vision for 2025 is that Finland will be a country where everybody wants to learn more. The knowledge and education level of the nation has risen, promoting equality of opportunity and supporting the renewal of society. Finland is a leading country in education, knowledge and modern learning.

Current reforms cover the whole knowledge chain from early childhood education to top scientific research. In Finland, developing education is always collaborative, involving all relevant stakeholders.

COMPREHENSIVE EDUCATION

The new national core curriculum has been implemented in schools since August 2016. The New Comprehensive school programme focuses on new pedagogy, new learning environments and the digitalisation of education. The reform makes full use of teachers' skills and experiences while allowing them considerable pedagogic freedom. Local solutions, creativity and experimentation are encouraged. A Centre of Innovation, operating in connection with the National Agency for Education, ensures that best practices are disseminated efficiently. The Finnish Teacher Education Forum has been established to renew teacher education.

The promotion of physical activity among school-aged children comprises both an increase in physical activity and a reduction in the time when pupils are sitting still. Schools on the Move is a project that ensures that all pupils get at least one hour of physical activity each day. Children and young people are also offered greater opportunities to take an active part in art and cultural pursuits.

VOCATIONAL EDUCATION

The reform in vocational education is one of the most extensive in Finland for many decades. Vocational qualifications are no longer defined by the length of curriculum study but by learning outcomes. The objective is to build a flexible vocational education system which responds optimally to the needs of working life and enhances the ability to learn throughout the career.

HIGHER EDUCATION AND SCIENCE

Flexible learning paths help students to complete their degrees and better combine work with studies. In future, higher education institutions in Finland will offer education throughout the year. Promoting digital learning environments and providing online teaching will also facilitate progress in studies.

New steps are being taken to raise the quality of higher education and research, and to develop a genuinely international higher education and research community. Mergers of higher education institutions have led to new, exciting solutions such as Aalto University and the impending Tampere New University.

Finland has a well-developed innovation system and seeks to further strengthen cooperation between higher education institutions and business life. The start-up environment ows much of its success to the lively entrepreneurship of students in higher education institutions. An example of this are the SLUSH events held around the world.



Embracing challenge

he quality of the Finnish education system is among the highest in the world. Professor **Pasi Sahlberg**, who has made the Finnish school system known abroad and written several internationally acclaimed books on the topic, assesses how Finnish schools could best develop to meet future challenges.

INTERACTION, COOPERATION, PROBLEM-ORIENTED LEARNING

"Most of the vocations and jobs that will be filled by the school-goers of today, do not exist yet. The school can no longer coach the young for working life in the same way as it could earlier. It is important to learn skills and abilities in school that do not depend on the vocation or situation, such as communication, interaction, leadership, empathy, and creative problem-solving. Cooperative and problem-oriented learning, and the teaching of discussion skills, are good methods, which should be developed further."

ATTENTION TO SPECIAL NEEDS TEACHING AND EQUAL OPPORTUNITIES FOR CHILDREN

"In light of the PISA 2015 study results, equality, which was previously considered to be a strength of Finnish education, is deteriorating. This is worrisome, and finding remedial measures will require a deep understanding of the social roots of the problem. Even when the economic situation is tight, schools should be guaranteed sufficient resources for special education and leisure activities for children; currently these are increasingly dependent on how wealthy the parents are. We should also ensure that schools in larger cities, in particular, do not diverge into good schools and bad schools."

MOTIVATING BOYS TO READ

"Finnish girls do better in international learning studies than boys. If there were only girls in Finnish schools, we would be one of the best in the PISA study, together with Singapore. Among the reasons for this development is the fact that boys no longer read for fun, as they did before, and this rapidly results in weakened reading skills. The time spent by the young, and boys in particular, on computers is one of the reasons for the deterioration of learning in schools. Restoring learning by boys to what it was before requires effective time management measures both at home and in school."

BEING OPEN TO INNOVATIONS - AND EVEN WILD IDEAS

"Education in Finland and elsewhere is changing, and it will not be possible to meet the needs of the future using old models, even if they worked well before. Finland is a country of innovation and an open community with plenty of room for wild ideas. Therefore, this would be the perfect place to discover a new direction for education. However, success in it will require close international cooperation and goodwill."

