

The Educational System of Finland

Background, Structure, Equivalencies, and New Directions

by John D. Hopkins

Finland is increasingly in the news. With the international focus on European integration and the warming of relationships between the United States and the Soviet Union, considerable publicity is accruing to Finland in the world media. As host of the Conference on Security and Cooperation in Europe in 1975, it was Finnish diplomacy that provided the foundation via the Helsinki Accords for the eventual liberalization of Eastern European politics. The 1990 Bush-Gorbachev summit in Finland finalized details for the unification of Germany and European conventional arms reduction agreements. Such events have confirmed Finland's importance as a bridge between East and West, and Finland's reputation for reliability and efficiency in service to international diplomacy.

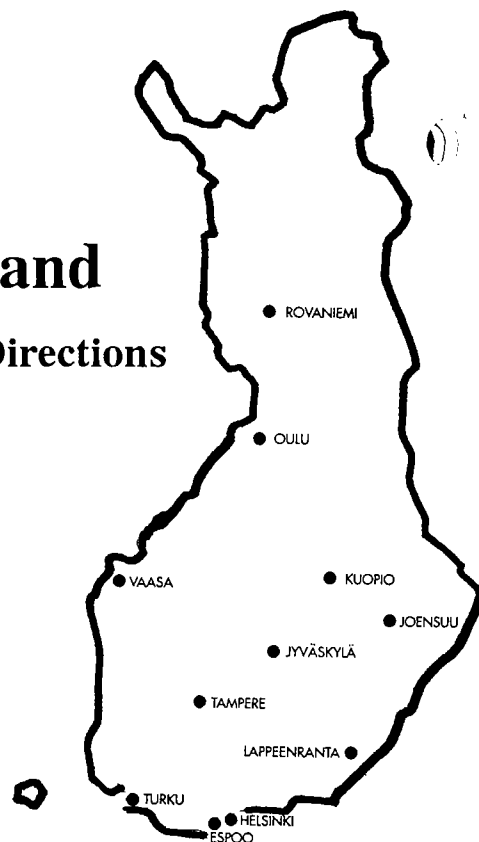
Finland is also known for academic

excellence, and the reputation of Finnish scholarship has spread widely through its success in sponsored exchange programs. American universities especially will be familiar with Finnish Fulbright scholars, who since 1952 have established outstanding study and research records. The unique Finnish-American Binational Trust Fund, established from the proceeds of Finland's repaid post-World War I relief debt, ensures that as the numbers of Fulbright scholars from other countries diminish from reduced government funding, Finnish scholars will continue to be exchanged in significant numbers.

More recently, the International Student Exchange Program (ISEP) established its Nordic beachhead in Finland in 1982, and the numbers of Finnish ISEP exchanges have grown steadily since. New Finnish ISEP member institutions for 1990, and new options for both Nordic and Soviet

and Eastern European exchange linkages via Finnish member institutions, promise to expand further ISEP exchanges both to and from Finland.

From the foundation of sponsored exchange programs, interest has steadily increased in bilateral institutional linkages and the direct admission of Finnish students. Through schemes such as NORDPLUS and COMETT, exchanges are rapidly expanding to Scandinavia and Europe and beyond.



FINLAND, THE NATION

Finland is a land rich in contrasts. Geographically, it is the fifth largest country in Europe, with an area of 130,126 square miles (338,145 square kilometers). Some 188,000 lakes comprise 10 percent of the area, and 73 percent is covered by forest. Roughly one-third of the land is above the Arctic Circle, making it, after Iceland, the northernmost country in the world. Finland is bordered on the West by Sweden and the Gulf of Bothnia, in the North by Norway, and in the East by a long border with the Soviet Union. To the South lies the Gulf of Finland, the easternmost branch of the Baltic.

Despite its latitude, Finland enjoys a

temperate climate, due to the influence of the North Atlantic drift. Southern Finland has up to 19 hours of daylight (and no complete darkness) at midsummer, while in the north there are 73 days of perpetual daylight in the summer months, balanced by 51 days of perpetual darkness around Christmas.

Demographically, Finland (*Suomi* in Finnish) is a small country. Some 60 percent of the five million Finns (*suomalaiset*) live in cities, principally in the south-central and southwest regions. Helsinki, the capital, is the largest city, with 500,000 inhabitants. With suburban Espoo and Vantaa, it comprises a metropolitan area of some 800,000 people. Second is Tam-

pere, the largest inland city in Scandinavia, and third in size is Turku, Finland's oldest university town. The Finns are 100 percent literate, and statistically one of the healthiest nations in the world.

Finland was part of Sweden from 1155 to 1809, when it was ceded to Russia and became an autonomous Grand Duchy. Finland declared its independence from Russia in 1917, and its present constitution was adopted in 1919.

Both Finnish and Swedish are official languages, although only 6 percent of the Finns speak Swedish as their mother tongue. In addition, the Lappish language (*saame*) is spoken by some 2,200 Lapps in the north of the country, and Romany

by indigenous gypsies. About 90 percent of the population belongs to the Finnish Evangelical Lutheran Church, and about 1.3 percent to the Orthodox Church. Both are state churches, but there is complete freedom of religion.

Finland is a thriving western-European democracy, with a 200-seat Parliament (*Eduskunta*), elected every four years. Governments are usually coalitions of several of the many political parties. The President, who is chiefly responsible for the guidance of foreign

policy, is elected every six years by an electoral college of 301. The voting age is 18, and there is universal suffrage. Finland has a private-ownership, free-enterprise market economy with a stable currency (the Finnish mark, or *markka*), and a per capita GDP of USD\$15,200 in 1989, a close fourth in Europe behind Norway, Sweden, and West Germany (pre-unification). Both the standard of living and cost of living are among the highest in the world.

Education has been the key to Finn-

ish prosperity. As a small population spread thinly through a large and costly country with few natural resources other than the "green gold" of its forests, the Finns cannot compete on world markets with cheap labor or the export of raw materials. The products for which modern Finland is known range from highly-engineered industrial technology to artistic consumer goods that have inspired the accolade "Finnish design."

PRE-SCHOOL EDUCATION

Informal pre-school education is provided through age six by the municipally-sponsored *päiväkoti*, neighborhood centers combining the functions of day-care and kindergarten. Children are

generally divided into age groupings of 1-2 and 3-6. Children under age one are usually cared for at home as Finns are entitled to paid maternity or paternity leave up to a year, with guaranteed job

return. Finnish law requires that day care be available on demand for children up to the age of three.

ELEMENTARY AND SECONDARY EDUCATION

Public education is available free of charge throughout Finland via the nine-year *peruskoulu*, or comprehensive school. The new *peruskoulu* was adopted over a seven-year period between 1971-78, replacing the older combination of primary and civic school (6 years + 2 or 3 years) or primary and junior secondary school (4 years + 5 years).

All costs of education, including books, supplies, and even medical and dental checkups, are financed by local municipalities. Pupils begin school at the age of seven, and finish at the age of 16. The *peruskoulu* is divided into a six-year *ala-aste*, or lower division, in which most instruction is given by a classroom teacher (the curriculum is the same in schools at this level), and a three-year *ylä-aste*, or upper division, in which instruction is subject-based, with specialized teachers for different classes.

In the larger cities, there are some private fee-paying schools, which chiefly cater to children of the international business or diplomatic communities. Helsinki has private English, French,

German, and Russian-language schools, with a modified Finnish curriculum and instructors both from Finland and the country in question. There is also a small network of schools following the pedagogy of Rudolf Steiner.

A sense of discipline and authority is evident throughout the school system, and daily homework assignments are common from the very beginning. Both pupils and parents take school seriously.

Foreign languages are an essential component of education at all levels. Although the vast majority of instruction is given in Finnish, in cities and regions of the country where Swedish-speaking Finns reside, one may choose between Swedish and Finnish-language public schools. The curriculum is the same; only the language of instruction differs. In addition to instruction in one's mother tongue (either Finnish or Swedish), a compulsory first foreign language is begun in the third grade (age 9) and continued until graduation, and a second compulsory language is begun in the seventh grade. A third language is very

often chosen in the eighth grade. Over 90 percent of all pupils choose English as their first foreign language, but other languages, notably German, are slowly gaining ground.

Starting in 1990, small English-language comprehensive schools have been established in major cities such as Helsinki and Tampere. These schools follow a modified Finnish curriculum and also offer the International Baccalaureate. They are intended primarily for the children of exchange students and scholars and foreign residents, but are also open to Finnish pupils who have lived, or plan to live, abroad.

Throughout comprehensive school, pupils receive end-of-term certificates (*lukukausitodistus*) with grading on a scale from 10 (highest) to 4. Grades of 10-9 are considered "praiseworthy" (*kiitettävä*); 8-7, "good" (*hyvä*), 6 "satisfactory" (*tydyttävä*); 5 "adequate to pass the course" (*välttävä*); and 4, "failure" (*heikko*). Although *heikko* literally means "weak," in context it is "failure"; a mark of 5 is the lowest passing grade.

continued next page

Upon completing the *ylä-aste*, the pupil receives a certificate of completion or *päästötodistus*, which certifies that the pupil may advance to the next level. Grading is the same as on the *lukukaustitodistus*; each certificate will have an explanation of the grading printed at the bottom.

Upon completing *peruskoulu*, pupils who are academically inclined, roughly

50 percent of an age cohort, would apply to a *lukio*, or senior secondary school. Admission to a *lukio* is competitive, based upon one's record in *peruskoulu*. Alternately, pupils may choose an *ammattioppilaitos* (vocational school) *teknillinen oppilaitos* (technical school), *kauppaoppilaitos* (business or commercial school), or other similar school, or else enter the

labor force directly.

The public school year is mid-August to the end of May, with 190 days attendance over a 5-day week, and a 4-7-hour school day. There are two terms, with a two-week holiday at Christmas. There is also a holiday week at Easter, and another week in February/March for winter vacation, or "ski holidays."

THE SENIOR SECONDARY SCHOOL (*Lukio*)

The most direct route to university is via the *lukio*. The *lukio* provides an intensive college preparatory course between the ages of 16-19, culminating in a national student matriculation examination consisting of four compulsory and two optional six-hour examinations, taken over a period of several weeks. The actual failure rate on these examinations is low, but as competition among a large number of applicants for relatively few university places is intense,



students are under considerable pressure to score highly in order to gain university admission.


Lukio students pursue a rigorous course of study, with regular and demanding homework in addition to class accountability. The *lukio* curriculum was formerly divided into "language" and "mathematics" streams, with widely differing curricula for the two specializations. The current curriculum is similar for all students. All take the same

range of language and mathematics courses, though students may choose between general or advanced levels of mathematics.

Students who choose general mathematics must take a third foreign language. (Students who choose advanced mathematics may take the third, and even a fourth, language as well.) There are also compulsory distribution requirements in the arts, humanities and social sciences. *Lukio* subjects are currently

Structure of the Educational System in Finland

Age	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Level						I						II					III				IV	
Stage						1				2			3		4							
Compulsory																						
School Type						Comprehensive								Lukio								
														Vocational School								
														Universities								
														Post-Secondary Vocational Institutions								

 Education preceding the first level

Source: International Handbook of Educational Systems



Education preceding the first level

Source: International Handbook of Educational Systems

taught as periodic units of varying length, with class contact time averaging some 32-34 hours weekly, plus homework.

A typical *lukio* curriculum would include, in addition to mother-tongue instruction, all three of the foreign languages begun in the *peruskoulu*, plus a possible fourth foreign language begun in the *lukio*; mathematics (general or advanced); chemistry; biology; geography; religion; psychology; history, civics and social science; health and nutrition; physical education; music and/or art; and information technology.

Mathematics for all students includes algebra, geometry, trigonometry, calculus, differential equations and statistics. The difference between general and advanced mathematics is mainly in the complexity and depth of the problems, though advanced-math students may have more mathematics class time, and usually also take additional courses in physics and chemistry.

Literature and national cultural studies are both embedded in language courses. English courses are predominantly British English, but will include American English and other world English variants, taught as part of a thematic syllabus which includes the literature, arts, history and sociopolitical cultures of the United States and Britain.

Grades for each subject, following the 10-4 scale, are itemized on the *lukio* graduation certificate (*lukion päästötodistus*), which also gives the pupil's name and social security number, date of entry into the *lukio*, graduation date, and average grade of all subjects over the three-year period. Social security numbers are written in the form "230971-171X," the first part of which would translate to "23 September 1971 (date of birth)," with the second part a personal ID number. The last number is always an odd digit for males, even for females.

A separate certificate, the *Ylioppilas-*

tutkintotodistus, is received for the national student matriculation examination. Each of the four compulsory and two optional examination components is graded separately in Latin as: *laudatur* (excellent), *magna cum laude approbatur* (very good); *cum laude approbatur* (good); *lubenter* (pass-plus); *approbatur* (pass); and *improbatur* (failure). Further, a national jury of distinguished teachers chosen by the Matriculation Board will review every answer and confirm the local evaluation of each test. The jury also awards a separate mark for overall accomplishment on the examination, using the same Latin grades.

The three-year *lukio* approximates closely the breadth and rigor of a U.S. lower-division undergraduate curriculum. Upon entering university, the Finnish student is both by age and scholastic achievement roughly equal to a third-year American undergraduate.

UNIVERSITY EDUCATION

Higher or university-level education is defined more strictly in Finland than in many other countries. Higher education is offered by research institutions awarding the master's, licentiate, and doctorate degrees. Institutions offering only programs corresponding to lower degrees, such as the bachelor's, are vocational institutes rather than universities or institutions of higher education. The Finnish words *yliopisto* (e.g. *Turun yliopisto*, The University of Turku) and *korkeakoulu* (e.g. *Lapin korkeakoulu*, The University of Lapland) are both translated into English as "university."

Finland has 20 university-level institutions, roughly divided into those in the Helsinki area, which enroll nearly a third of all Finnish students, and those elsewhere in Finland. Foremost among these is the University of Helsinki, which with its 28,000 students (1990) enrolls roughly a quarter of Finnish university students,

and is a "multiversity" by any world scale. Helsinki University celebrated its 350th anniversary in 1990. It has unique status, defined in the Finnish Constitution, and a unique administrative structure.

Other Helsinki-area universities include the Helsinki School of Economics and Business Administration, the Swedish School of Economics and Business Administration, University of Industrial Arts, College of Veterinary Medicine, Theater Academy, Sibelius Academy, and, in suburban Espoo, the Helsinki University of Technology. All are first-rate institutions, whose mutual resources are being increased further through a new cooperative framework of the capital-city universities.

However, high quality in higher education is not limited to the Helsinki area. Both Tampere and Turku have strong reputations as university cities, and many of the newer universities have quickly

developed first-class international reputations in their areas of specialization. The youthful energy, smaller scale, and more modern administration of Finland's "other universities" may enable them to respond more quickly and effectively to new opportunities than the megauniversity in Helsinki.

Joining the three universities in Turku and two in Tampere are Oulu University and the University of Lapland to the North, the University of Jyväskylä and University of Kuopio in Central Finland, the University of Joensuu and Lappeenranta University of Technology to the East, and University of Vaasa on the West coast.

University instruction is mainly in Finnish, although Åbo Akademi University, the Swedish School of Economics, and part of the University of Vaasa are Swedish-language institutions. All Finnish students must pass competency

continued next page

Finland continued...

examinations in both Finnish and Swedish and at least one other language.

Foreign students who have not mastered Finnish or Swedish may usually take examinations in their mother tongue, as long as it is a major language shared by the instructor. In practice, this means English. Instruction in English is slowly expanding to accommodate the growing numbers of incoming students on reciprocal exchange programs.

Overall, there are some 102,000 students (1200 foreign students in 1988) in higher education. Of these, 55 percent study the humanities, social sciences, education, economics, law and theology, 19 percent study mathematics and science, 16 percent technology, and 7 percent medicine. All subjects and disciplines are not available in all universities. The newer institutions, especially, are built around certain disciplines in

accordance with regional priorities.

The university calendar starts in early September and includes two 14-week terms, with the first term ending in mid-December. The second term begins in mid-January and ends in May. The only official "in-term" vacation is a week at Easter, although it is not unusual for departments to have an unofficial winter holiday in February/March to coincide with the public school calendar.

ACADEMIC STAFF STRUCTURE

The staff structure of Finnish university departments differs considerably from that of American universities. At the top of each regular department are one or more full professors, who wield considerable influence within the university. Subordinate to these may be several associate professors, who may be influential by force of their personality or particular specialty, but who are clearly secondary to the full professors in the academic pecking order.

Professors are officially appointed by the President of Finland after a nomination process at the university level. Associate Professors are appointed, after the nomination process, by the university chancellor. In those universities without a chancellor, appointments are made by the Minister of Education.

Appointment is for lifetime tenure.

Many departments have docents (*dosentti*), visiting scholars who offer occasional specialized courses. A docent may be an outstanding scholar tenured at another institution.

Most foundation teaching in humanities departments is done by lecturers (*lehtori*), who are tenured. There are also instructors (*tuntiopettaja*), who are paid by the hour (*tunti*) without tenure, and full-time instructors (*päätoiminen*), who receive a monthly salary, have semi-permanent tenure, and a teaching load equivalent to that of a lecturer.

Most departments also have senior assistants (*yliaistentti*) and/or assistants (*assistentti*) of various grades who are non-tenured and appointed for 3- or 5-year periods, which may sometimes be re-

newed. Most assistantships are intended as research slots to help junior scholars complete a licentiate or doctoral degree. Depending on the individual, department, and length of service, however, they may range from "general factotum" to the equivalent of an assistant professorship.

Professorships, associate professorships, and docentships require the PhD degree as a basic qualification. Assistants, lecturers, and instructors are usually required to have a master's as the minimum qualification, although there is increasing pressure to raise the minimum qualification to a licentiate. Exemptions from these requirements are possible, but Finnish academic bureaucracy is renowned for strict adherence to formal qualifications.

UNIVERSITY ADMISSION

Admission to a Finnish university is highly competitive. One applies for admission directly into a specialized program of a university department. This is roughly equivalent to a U.S. student applying for admission into a major at the beginning of the third year of study. Admission is determined by an

entrance examination to the department of choice plus scores from both one's *lukio* transcript and *ylioppilastutkinto*, the national student examination. Despite the fact that Finland has more university students per capita than the other Nordic countries, only one third of each *lukio* cohort will gain admission to a

university. It is understandable how the overall standard of excellence is maintained. There is no tuition charge. Students pay only student union and health insurance fees, and may receive government-subsidized study loans and some grants.

PROGRAM STRUCTURES, DEGREE REQUIREMENTS, AND ACADEMIC CREDIT

The basic Finnish university degree is the Master's. There is no formal lower

degree, although a certificate corresponding to the American bachelor's

degree can be obtained at some universities after completing about 100 credits

(2-3 years of study). There are various names for the master's degree in the different disciplines, often abbreviated to two or three letters, such as FK, HK, KK, KTK, VTK and YK. "FK" is short for *filosofian kandidaatti*, or Master of Arts; "YK" is *yhteiskuntatieteiden kandidaatti*, or Master of Social Sciences.

From 160-250 "study weeks" (*opintoviikot*) of credit is required for the master's degree. Requirements are divided into courses in General Studies (*Yleisopinnot*), Subject Studies (*Aineopinnot*, i.e. courses in the student's major field), and Advanced Specialized Studies (*Syventävät opinnot*), largely independent research and the writing of a master's thesis.

Between five and seven years is the average time to obtain the master's degree, but combining one's studies with part-time work and the starting of a family often lengthens the time required. However, 10 years is considered the maximum time to complete one's master's degree without special dispensation. Beyond the master's one can study for the licentiate degree (*lisensiaatti*), a sort of junior doctorate, and upon defense of a dissertation the licentiate holder may be awarded a doctorate (*tohtori*).

Previously, the licentiate was a prerequisite for obtaining the doctor's degree, but in the new system, the doctor's degree may be obtained without first having to take the licentiate. The requirements for the doctor's degree include writing a doctoral dissertation and defending it in a public debate. Studies toward the licentiate or doctorate are mostly of an independent nature.

The study system is based on lectures. Students have the choice of attending lectures and passing examinations on these, or taking examinations on set books which are considered the equivalent of the lectures. Science degrees also will include laboratory and practical work which cannot be compensated for by books or lectures.

The courses offered by the different departments vary greatly in the amount

of credit offered. Some lectures or practicals may be as brief as one study week, whereas thesis or advanced seminar work may award 20 study weeks.

Although procedures may vary from one university to another, the following is typical for a 160-study week master's curriculum in the humanities. First, there are the faculty's General Studies, with compulsory and optional courses ranging from 9-30 study weeks. These are usually courses in philosophy of science, man in relation to nature and society, development of western culture, and so on. The student must also demonstrate written and oral competency in several languages. Swedish (or Finnish) is compulsory as the second national language.

The remainder of the *filosofian kandidaatti* (Master of Arts) curriculum is Subject and Advanced Specialized Studies. Subject Studies also include about 70-80 credits of required and elective courses from the student's major subject. Students must also choose first and second subsidiary subjects from their own or another faculty. After Subject Studies, the student moves to Advanced Specialized courses, about 30-40 credits, of which 16-20 are awarded for a thesis (*pro gradu*) in one's major subject.

Academic credit in Finnish universities is based on the idea of *opintoviikot* or "study week." Calculated as 40 hours of work, a study week may be awarded for a lecture series, book examination, independent research, or other combinations of 40 hours of student input. Study week allocation for a course should include, in addition to class contact time, a reasonable estimate of time for books read, papers written, or any other required out-of-class activity. For example, a course with 28 hours of contact lectures, and evaluation by a student paper, may allow 12 hours for the writing of the paper. This would total 40 hours, or one study week of credit. A study week would seldom represent 40 "contact hours" only, with

no outside work allowance.

The study week thus differs remarkably from the U.S. semester credit. An American three-credit course would typically comprise 45 contact hours, with about two hours of outside preparation presumed for each contact hour. In converting Finnish credits to American, 1.5 to 2 study weeks may reasonably be considered the equivalent of an American three-credit (semester) course.

EXAMINATIONS & GRADING

Both faculties and departments have set examination dates on their official calendars. Students register for faculty examinations by submitting an examination envelope, 7-10 days in advance, with their name, address, social security number, and other details, as well as the books read for the examination. On arrival at the examination, the student gets the envelope back with questions inside. On leaving the examination, one's identity must be proved. The procedure may vary in different universities.

Examinations are also held at the end of lecture series for students who have attended the lectures. Some courses may not have examinations, but require instead compulsory attendance and a certain number of completed exercises.

The grading scale is from 3 to 1 (3 being highest) or alternately "ET" (*erinomainen tieto*, or excellent), "HT" (*hyvää tietoa*, or good) and "TT" (*tydyttävä tieto*, satisfactory). Some courses may be pass/fail, in which case only the pass is marked. Grades are entered into the university computer. In addition to the computer register, students in most universities also have personal study books, in which an instructor enters each course or examination grade and verifies it with his signature.

Students applying for admission to foreign universities would usually provide a transcript, or extract (*opinto-ote* or *ote opintosuoritusrekieristä*) from their computer record, which would be in Finn-

continued next page

Finland continued...

ish (or Swedish). They would have to translate this themselves. Students might also send copies of extracts from their study books, containing details not (yet) entered on the computer transcript.

Only passing grades will appear in the study book or transcript. Failures are not recorded. If a student fails an examination or is otherwise not satisfied with his grade, he or she has the right to retake the examination an unlimited number of times on dates set by the examiner. If the student passes, the grade is then recorded in the study book and the computerized records.

EQUIVALENCY CONSIDERATIONS

The differing structure and definition of higher education in Finland often pose problems in determining the equivalency of credentials. The fact that Finnish universities do not have the bachelor's degree is one of these. What level is required for foreign students to enter a Finnish university, and at what level can Finnish students be placed in foreign universities if they have not completed the full master's program?

The concept of a *lukio* graduate being at roughly the level of an American who has completed the first two years of college or university study (lower-division study), is a useful starting point. The Finnish Ministry of Education recommends, for example, that U.S. students applying to Finnish universities must show that they have either completed two full years of col-

lege, or else have gained admission to a research university.

Similarly, Finnish students who have completed 3-4 years of study (about 100 credits) of university may often qualify for admission to a master's level program in the United States, either directly or with a minimum of probationary coursework. Entering a master's program in a Finnish university from *lukio*, the Finn would be the equivalent of a U.S. student beginning major studies in the junior year. After about 100-120 credits, the Finn would reach the equivalent of a bachelor's degree (and in some universities could obtain such a certificate) with mainly the *pro gradu* research and writing and related seminars remaining for the master's degree. Both maturity and academic record would compare favorably to an American B.A. applying

to graduate school.

A different problem in the evaluation of Finnish transcripts is with American definitions such as "full-time student" or "normal class load." These terms do not exist in Finland. Students register at the beginning of each academic year, but as they do not pay for tuition, and may determine their own pace of study, "full-time" is difficult to determine, except indirectly. Finnish students must complete 18 study weeks of credit during their first year in order to retain their government study loan. From the second year onwards, this rises to 20 credits per year. Thus a rough calculation might be made whether study was "full-time." However, should the student not need the study loan, this requirement would be irrelevant.

POST-SECONDARY VOCATIONAL EDUCATION

Vocational education is provided by 682 post-secondary institutions throughout Finland. These are gradually being renamed as Vocational Institutions (*Ammatillinen oppilaitos*) in a form such as *Rovaniemen metsäoppilaitos* (Rovaniemi Forestry Institution), but some still retain older names, such as *Finnairin ilmailuopisto* (Finnair Aviation School); *Vapaa Taidekoulu* (Free Art School); or *ATK-Instituutti* (Automated Data Processing Institute). Music conservatories, such as *Tampereen konservatorio*, or other training centers, such as *PTL Posti Henkilöstön kehittämiskeskus* (The Postal Authority Staff Training Center) will also have names which differ from "-oppilaitos" form.

There are 25 basic branches (*peruslinjat*) of vocational training, comprising 220 lines of specialization (*erikoistumislinjat*) leading to either a lower (*kouluaste*, school level) or higher (*opistoaste*, institute-level) diploma, depending on one's qualifications and the specialization of the training. At the school level, vocational studies take 2-5 years, and at the institute level 3-5 years. Either level will prepare students to enter working life directly, or help qualify them for further training at an advanced level.

Vocational programs are tuition-free. They also include one free meal daily, bus transportation to and from the school, and often housing. The only student costs are for books, required

uniforms or equipment, and in some cases special entrance examinations.

Admission requires completion of either *peruskoulu* or *lukio* and an entrance matriculation examination. Most vocational streams include general studies (*yleisjaksot*), with languages, mathematics, civics and social sciences in addition to vocational subject instruction. There are different curricula for students from *peruskoulu* and *lukio* backgrounds. Curricula for *lukio* graduates (*Ylioppilaspohjaiset*, or [*YO-pohjaiset*] *linjat*) include fewer general studies (these already having been taken in *lukio*). *Lukio* graduates may thus complete a vocational diploma (*Tutkintotodistus*) up to 1.5 years sooner than students with only

a *peruskoulu* background.

The 25 basic vocational branches include health care; agriculture; dairying; forestry; textiles; printing; heat, water and ventilation; electrical engineering; surveying; surface treatment; food processing; home and institutional economics; commerce and administration; social services; horticulture; fishery; handicrafts and industrial arts; garment trade; mechanical engineering; vehicles and transportation; construction; woodworking; chemical engineering; hotel services and catering; and seafaring. Each basic stream has a wide selection of possible specializations.

In the basic health care stream, students would attend a *terveydenhuolto-oppilaitos* (formerly *sairaanhoito-opisto*). There are 22 specializations from which to choose, including licensed practical nurse (*perushoitaja*), midwife (*kättilö*), specialized registered nurse (*erikoissairaanhoidaja*) and dental technician (*hammasteknikko*). The lower, licensed practical nurse training is school-level. It requires 2.5 years of study for students

with a *peruskoulu* background, and 1.5 years for those with a *lukio* background.

The higher, institute-level curriculum would train, for example, a registered nurse, midwife or physical therapist. Registered nurses must specialize in surgery and anesthesiology, pediatrics, internal medicine, or psychiatry (one can no longer graduate as an RN without a specialization). The graduate will emerge with a *Tutkintotodistus* (Diploma, or literally "certificate of study") specified, for example, as *sairaanhoidaja, lasten sairaanhoito*, or "Registered Pediatric Nurse." The institute-level curriculum is 4.5 years for students with a *peruskoulu* background, and 3.5 years for those with a *lukio* background.

General studies for all specializations in the basic health care line would include an introduction to theoretical and practical health care and nursing behavior, Finnish and foreign languages, mathematics, physics, chemistry, biology, information technology, physical education, art, and environmental studies.

While vocational studies are not uni-

versity-level, some vocational credits may be applied toward university degrees. Graduates with a health care specialization might wish to enter a university to continue training in such related areas as pharmacology, medicine, dentistry, public health, physical education, psychology, or veterinary science. Their vocational training would help in meeting the admission requirements, and may sometimes exempt them from part of the university curriculum.

The level and breadth of Finnish vocational curricula often compare favorably with undergraduate-level curricula in other countries. A graduate from the five-year music educator's curriculum in one of Finland's ten conservatories, for example, which requires a *lukio* diploma and the matriculation examination for admission, would have training at least equal to an U.S. bachelor's degree in music. Such a student could be admitted directly to a U.S. master's program in music education, even though not having been a university student in Finland.

TEACHER TRAINING

During the educational reforms of the late 1970s and 1980s, teacher training was simplified. Private kindergarten-teacher schools were taken over by the state in 1977 and became part of the public vocational education structure. Training for *päiväkoti* (pre-school) teachers lasts three years, with 40 percent of this time devoted to supervised practical training.

Since 1975, teacher education for the *peruskoulu* and *lukio* has been conducted by the 10 universities with faculties of education. Teachers earn master's degrees of either 160 or 180 study week credits. Degrees include 35-40 credits in general pedagogy, with an emphasis on didactics. General studies in languages and communication comprise about 10

credits, optional studies 20 credits, and the thesis and related seminars about 20 credits. The median time to obtain the degree is about 5 years.

Ala-aste (lower division *peruskoulu*) class teachers earn a 160-credit Master's in Education, which includes both practical teacher training and the writing of a thesis. Class teachers must qualify in at least two special subjects, with a minimum of 15 credits required for each.

Ylä-aste (upper division *peruskoulu*) subject teachers earn a 180-credit master's in their main field (e.g. history teachers earn a master's in history), with a minor in education, including supervised teacher training. Subject teachers must qualify to teach three subjects, with 15 to 80 credits required

for each subject.

Once in the profession, teachers generally are required to undergo in-service training for three days annually, as well as counseling throughout the year.

Beginning in 1990, teachers of vocational and teachers of general educational subjects will be taught in different institutions. General education teachers (languages, history, mathematics, etc.) will continue to be trained in universities. Teachers of vocational subjects will be trained in new Vocational Universities (*ammattikorkeakoulu*), a parallel to the German *fachhochschule* which is designed to bridge the gap between vocational and university studies. The first *ammattikorkeakoulut* began in Hämeenlinna and Jyväskylä in autumn 1990.

continued next page

NEW DIRECTIONS IN FINNISH UNIVERSITY EXCHANGES

As the 1990s begin, Finnish universities are increasing their capacity to accommodate foreign students. Recognizing that few of them will speak Finnish or Swedish, emphasis is being placed on increasing instruction in English. Universities are being encouraged to develop study and research opportunities in English, and some specialized programs have been introduced which are taught entirely in English. Such programs combine Finnish and foreign students, teachers, and researchers, and will further aid the internationalization of Finnish higher education.

The pioneer in this field has been the International Master of Business Administration program begun in 1983 by the Helsinki School of Economics and Business Administration. HSE's annual intake of 50 International MBA students is typically 60 percent Finnish

and 40 percent other nationalities. HSE also offers Executive MBA and Bachelor in Business Administration programs, all conducted in English by both Finnish and foreign guest professors, and coordinated by HSE's International Center. Finnish technological expertise is available to foreign scholars through year-long masters and doctoral-level programs in pulp and paper chemistry, architecture, digital signal processing, and materials science offered jointly by the Helsinki and Tampere Universities of Technology and Åbo Akademi University, as well as programs in forestry and information technology in education by the University of Joensuu.

Finnish Design is represented by a new English-language Master's in Design Leadership (product, interior, and graphic design) program at the University of Industrial Arts in Helsinki.

New administrative structures are also emerging. The three Turku institutions have created Turku International University, which has already produced an Eastern European Studies Program using the expertise of each institution. Åbo Akademi University has begun a summer program in Swedish for English-speaking students in the Åland Islands, halfway between Finland and Sweden. Instruction has not normally been offered by Finnish universities during the summer months, though this is a time when the Finnish climate is at its best, and students are free to travel and study in short-term courses. The prospects are encouraging.

It can be said that Finnish education enters the 1990s healthy and dynamic, enjoying firm national support, and well-equipped to respond to the challenges of internationalization.



About the Author

John D. Hopkins is Lecturer in American Language and Culture in the Department of Translation Studies of the University of Tampere, Finland, and Coordinator of the Tampere American Studies Program. He served on the Board of Directors of the Finland-United States Educational Exchange Commission from 1978-1990, and is presently a member of the ISEP Advisory Board.

SOURCES OF FURTHER INFORMATION

Several excellent sources of information on Finnish education are available free of charge. The Ministry of Education publishes three guidebooks which are available from Finnish Embassies and Consulates. These are:

1. *Higher Education in Finland: Guide For Foreign Students*;
2. *Higher Education and Research in Finland*; and
3. *An Introduction to Higher Education in Finland*.

General and practical advice for scholars departing for Finland can be found in the *FUSEEC Incoming Fulbright Orientation Handbook*, which may be requested from the Finland-United States Educational Exchange Commission, Mechelininkatu 10-A, SF-00100 Helsinki, and *ISEP Participant's Handbook: Finland*, available from university ISEP coordinators or the International Student Exchange Program, Georgetown University, Washington D.C. 20057.

Finnish university International Coordinators may be contacted directly for information on programs at their institutions, or assistance with the documentation of students or scholars coming from or going to their institution.