

R24: Labour force status for leavers from education

R24 : Situation au regard de l'emploi des jeunes qui sortent du système éducatif

Table R24
Unemployment rates after leaving education
for leavers from different school levels
(according to follow-up surveys for leavers)
and unemployment rates for the total labour force
(1992)

Tableau R24
Taux de chômage des jeunes sortant
de différents niveaux du système éducatif
(selon les enquêtes de suivi)
et taux de chômage de la population active totale
(1992)

	Year Age	Relative unemployment for leavers from Taux de chômage des jeunes qui sortent du système aux niveaux suivants				Relative unemployment in the labour force Chômage relatif dans la population active		
		Lower secondary education Enseignement secondaire 1 ^{er} cycle	Upper secondary education Enseignement secondaire 2 ^e cycle	Non-university tertiary education Enseignement supérieur non universitaire	University education Enseignement supérieur universitaire	Age 15-24 15-24 ans	Age 25-64 25-64 ans	
One year after leaving education								Un an après la sortie du système éducatif
Australia	1992	33	...	...	...	18	9	Australie
Canada	1988	...	...	8	9	18	10	Canada
Denmark	1991	9	15	11	12	11	11	Danemark
Finland	1990	18	10	3	12	23	11	Finlande
France	1992	57	24	8	12	2	19	France
Ireland	1992	35	24	21	10	23	14	Irlande
Italy	1992	...	...	...	39	33	7	Italie
Spain	1991	34	36	13	26	34	15	Espagne
Sweden	1992	8	13	...	...	11	4	Suède
Switzerland	1993	...	...	12	8	7	3	Suisse
United Kingdom *	1993	15	13	...	...	15	8	* Royaume-Uni
United States	1991	37	12	6	8	14	7	Etats-Unis
Five years after leaving education								Cinq ans après la sortie du système éducatif
Canada	1991	...	...	8	6	18	10	Canada
Denmark	1991	23	12	5	6	11	11	Danemark
Finland	1990	17	6	2	1	23	11	Finlande
France	1992	34	18	4	5	21	9	France
Spain	1991	34	21	7	13	34	15	Espagne
Sweden	1992	16	5	...	...	11	4	Suède
Switzerland	1993	...	...	...	3	7	3	Suisse

See Annex 1 for notes
* England and Wales

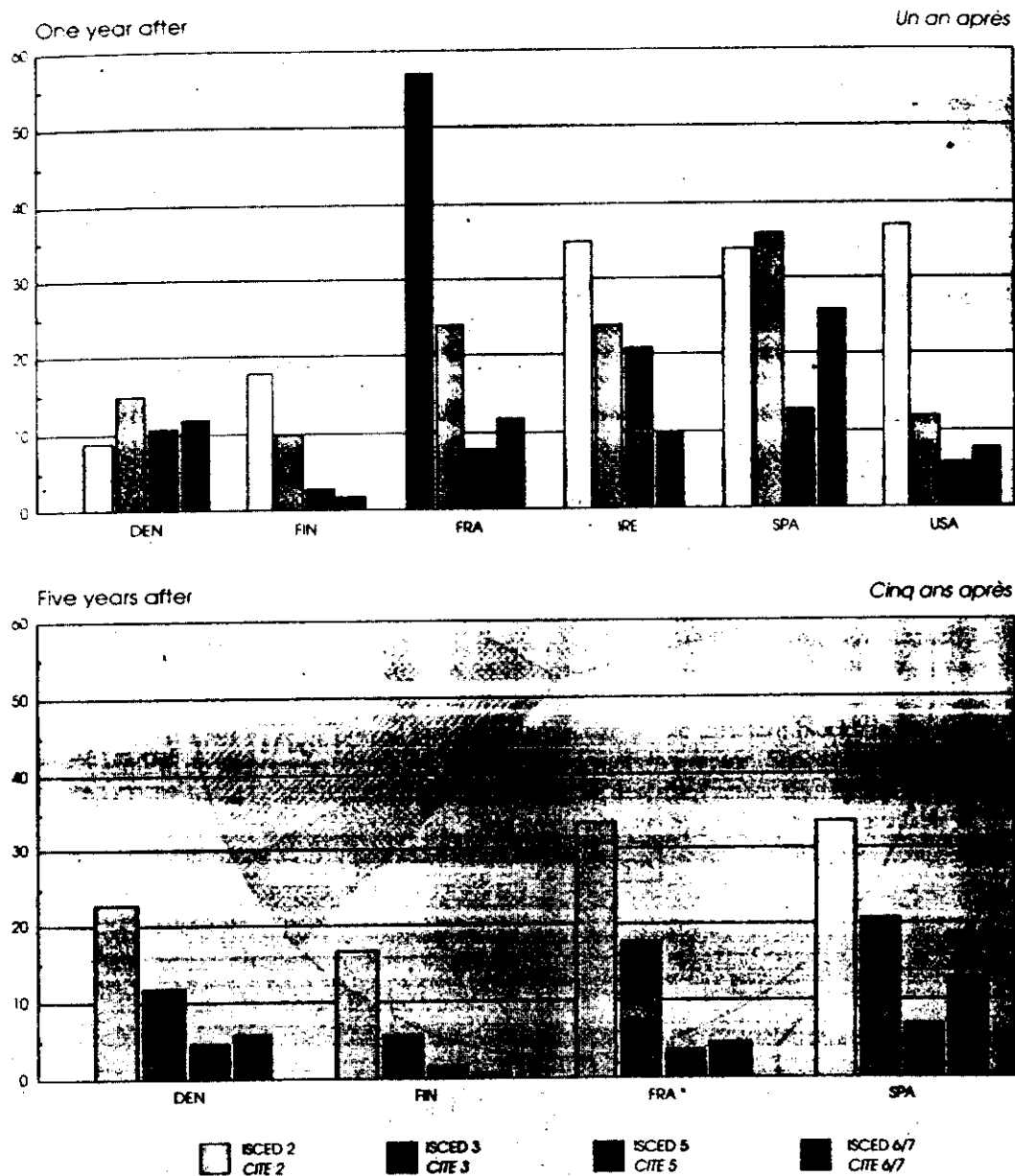
Voir notes en annexe 1
* Angleterre et Pays de Galles

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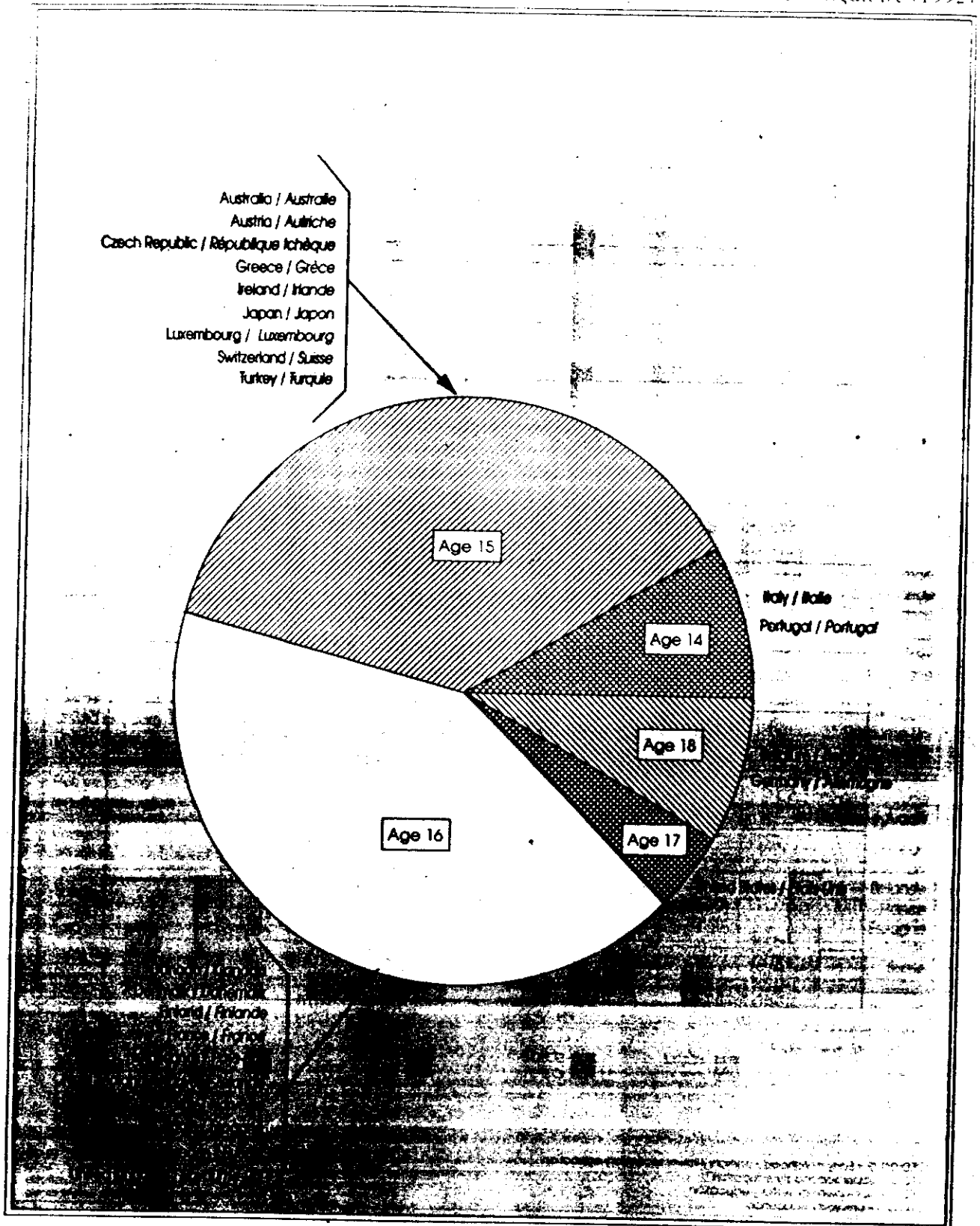
Chart R24:
Unemployment rates one year
and five years after leaving education
for leavers from different ISCED levels

Graphique R24
Taux de chômage un an et cinq ans
après la sortie du système éducatif
pour différents niveaux CITE



ISCED 0/1/2 = Early childhood / primary / lower secondary education
 ISCED 3 = Upper secondary education
 ISCED 5 = Non-university tertiary education
 ISCED 6/7 = University education

CITE 0/1/2 = Préscolaire / primaire / secondaire 1^{er} cycle
 CITE 3 = Secondaire 2^e cycle
 CITE 5 = Enseignement supérieur non universitaire
 CITE 6/7 = Enseignement supérieur universitaire

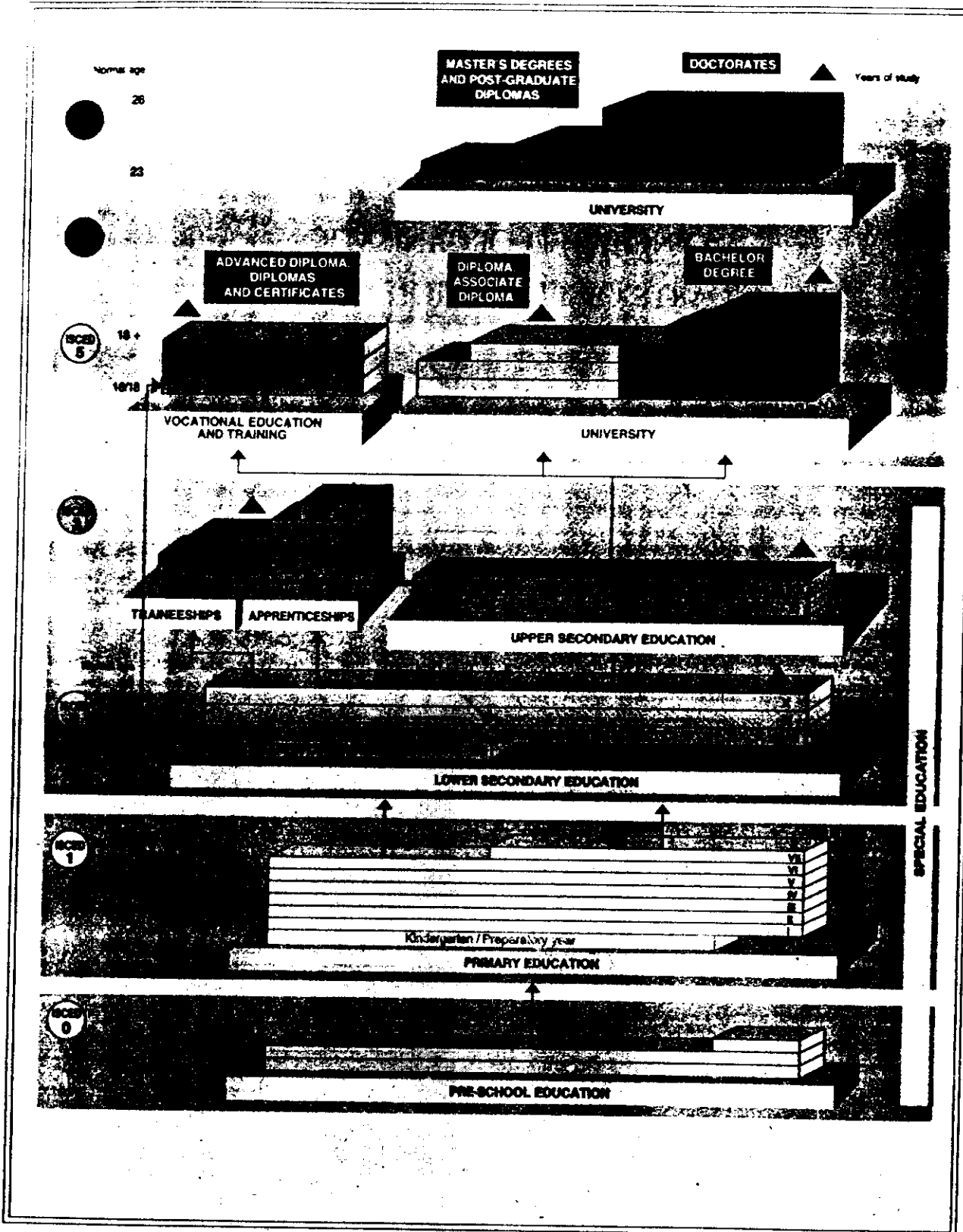


ANNOTATED ORGANISATION CHARTS OF EDUCATION SYSTEMS

The notes accompanying these charts have been prepared and approved by the education authorities of the respective countries and not by the OECD. The terms used may vary from country to country. It should also be noted that the terms pertain strictly to the charts and not to the indicators.

It must be remembered that the relative size of the different blocks in the diagrams in no way represent the proportion of enrolments in a sector. Space considerations are determined by the complexity of what must be described rather than by the relative importance of specific programmes. Data on enrolments by programme are available in *OECD Education Statistics, 1985-1992, Chapter 4*.

Note: Each level of education is represented by a different colour. Part-time programmes within a level are indicated in *pink*. Vocational education is indicated in *mauve*.



Australia

PRIMARY EDUCATION

Schooling is compulsory between the ages of 6 and 15 (16 in Tasmania). In most of Australia's six states and two territories children start primary school at around the age of 5, when they enrol in a preparatory or kindergarten year. After that primary education lasts either six or seven years, depending on the state concerned. The scattered rural population in most states has necessitated a large number of very small primary schools, although this number is declining. All government and most non-government primary schools are co-educational.

SECONDARY EDUCATION

Secondary education is available for either five or six years, depending on the length of primary school in the state concerned. Students normally commence secondary school at about age 12. Most government secondary schools are co-educational, but a significant number of non-government secondary schools are single-sex.

Government schools, which enrol the majority of both primary and secondary students, operate under the direct responsibility of the State Education Minister. Non-government schools, which operate under conditions determined by government registration authorities, are required to provide certain minimum education standards and satisfactory premises. About all non-government schools have some religious affiliation, with the Catholic Church having the largest non-government school system. Each state has a substantial system of private schools. Approximately 800 non-government schools are independent, that is, they do not belong to a system.

HIGHER EDUCATION

Higher education includes higher education and vocational education and training. Higher education is provided in universities and vocational education and training in Technical and Further Education (TAFE) institutions and private institutions such as business colleges. Universities are autonomous and make their own decisions on, for example, matters of staff allocation, staffing and academic courses. The TAFE system is administered by state and territory governments.

Vocational education and training (VET). Most vocational education and training is provided by the TAFE system. There are also a growing number of private sector bodies offering accredited training, and less formal adult and community education providers.

TAFE institutions provide a full range of training, from entry level, pre-vocational, operator, trade, post-trade, diploma (for paraprofessional) and (in some fields) certain professional courses. A typical student completes a one-year course, while others complete a three- or four-year course part-time. Courses are open to all age groups. Ninety per cent of students in VET are part-time.

Higher education. Students commencing higher education courses will have completed a full secondary education or will have demonstrated that they have a high probability of successfully completing such a course. There is keen demand for places at many institutions, and quotas are often placed on new enrolments. Students are able to study on a full-time or part-time basis and external studies are offered by a large number of institutions. Some institutions offer full-time courses during breaks from full-time employment.

There are 43 publicly funded higher education institutions and private universities. Australian undergraduate students at the publicly funded institutions pay part of their education costs through the Higher Education Contribution Scheme (HECS).

The basic undergraduate course at most institutions is a Bachelor degree course of three or four years' duration, although at some institutions courses may be offered at the diploma or associate diploma level. Most institutions also offer post-graduate levels of study. The equivalent of one or two years of full-time post-graduate study is required for a Master's degree, and the equivalent of three to five years of full-time study for a doctoral degree. Post-graduate diplomas are offered in some disciplines.

OTHER EDUCATION

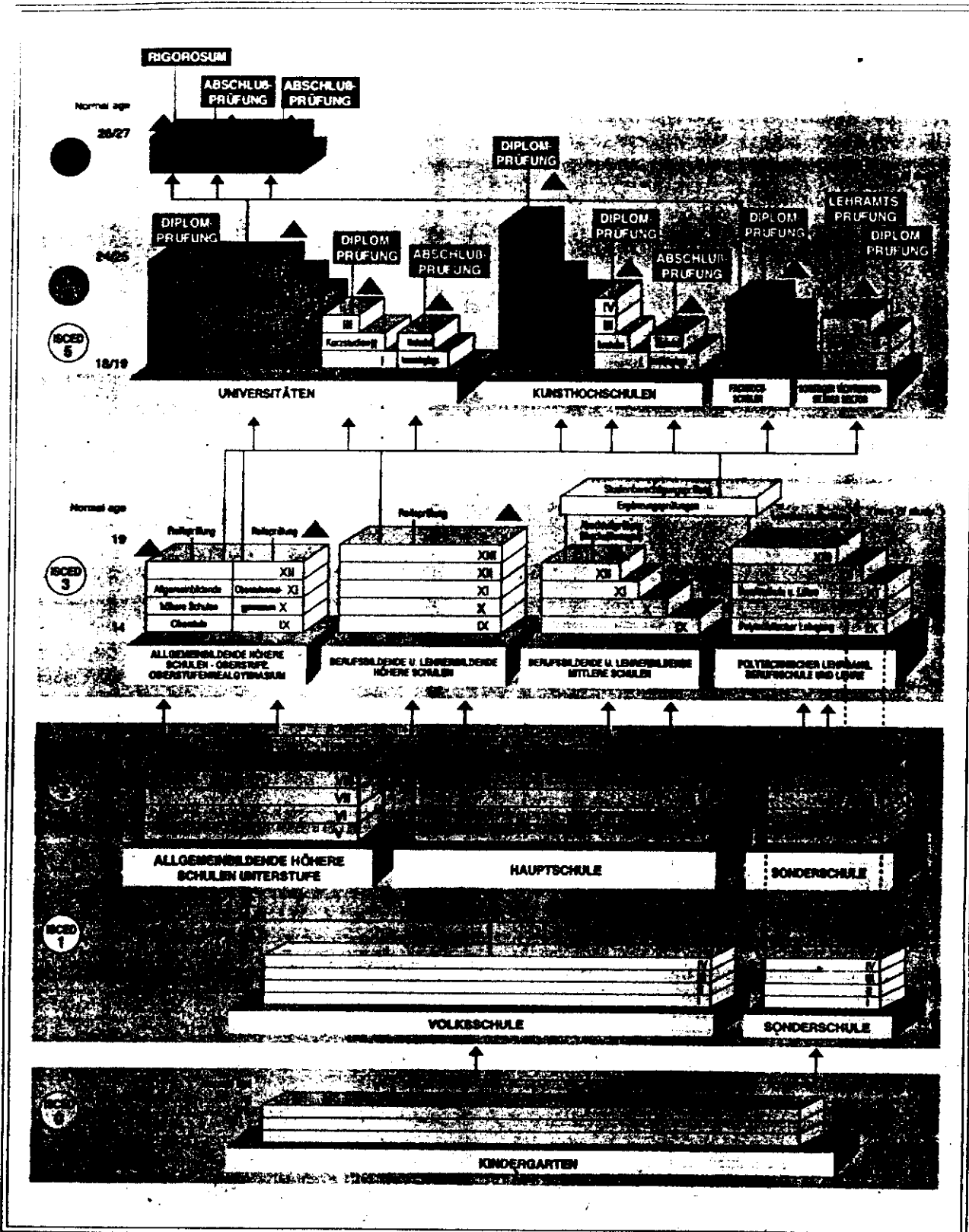
Traineeships and apprenticeships are the two main forms of structured training allowing entry to the workforce, widely available.

Traineeships provide an avenue for people to gain structured entry to occupations not covered by the apprenticeship system. They provide either planned and structured on-the-job training or a combination of on- and off-the-job training; the latter instruction is provided by a TAFE college or other approved training provider. Traineeships, in which employers and unions participate, aim to assist trainees to gain a foothold in the workforce and add to the stock of skills in the economy.

Apprenticeships provide young people with an entry point into the trades. They typically involve a combination of on- and off-the-job training at a TAFE college or other training institution. While an apprenticeship typically lasts four years, durations are progressively becoming more flexible.

Traineeships and apprenticeships are administered through a Vocational Training Authority or a similar body in each state or territory.

From 1995, Australia will commence a new national entry-level training system called the Australian Vocational Training System (AVTS). The AVTS provides a broad range of articulated pathways combining education, training and experience in workplaces. It is based on competency rather than time served, and will eventually subsume the existing system of apprenticeships and traineeships.



Austria

PRE-PRIMARY EDUCATION

This sector (with private and public institutions) is non-compulsory, and consists of *crèches* for the very young (up to 1 year old), day nurseries (1 and 2 year-olds) and kindergartens (3 to 6 year-olds). Children of school age whose enrolment for the first school year would be premature in the light of their educational development attend a pre-primary stage (*Vorschulstufe*) to facilitate transfer to primary school proper. In administrative terms, the pre-primary stage forms part of the primary school.

PRIMARY AND LOWER SECONDARY EDUCATION

Compulsory education in Austria is predominantly supplied by public institutions (there are a few dependent denominational schools) and comprises nine years of school. As a rule, children commence school at 6 years of age, attending primary school (*Volksschule*) for four years. Special schools (*Sonderschule*) exist for the physically or mentally disadvantaged where enrolment in a mainstream school is not feasible. On completion of the fourth *Volksschule* year, the choice is between:

- the four-year main general secondary school (*Hauptschule*) – the majority choice outside large cities; and
- the four-year first stage of a higher general secondary school (*allgemeinbildende höhere Schule- AHS-Unterstufe*).

Choices must again be made prior to enrolment in the ninth year. A substantial proportion of the pupils in this age bracket – chiefly those from the *Hauptschulen* – opt for the pre-vocational year (*polytechnischer Lehrgang*), which becomes their last year of compulsory full-time schooling before entering apprenticeship training.

The primary, special, main secondary general schools and the pre-vocational year are referred to as general compulsory schools (*allgemeinbildende Pflichtschulen*).

UPPER SECONDARY SCHOOL

Apprenticeship (*Berufsschule und Lehre*)

Completion of compulsory general education (i.e. nine years of schooling) is obligatory to enter this path. Apprentice training college (*Berufsschule*) attendance is compulsory for all apprentices throughout their term of apprenticeship (i.e. up to four years) and is on a block- or day-release basis. Training at work is given by qualified instructors and takes place according to national syllabi. This so called "dual" educational path ends in a final formal examination (*Lehrabschlussprüfung*) and culminates in a vocational or craft qualification, such as a *Gesellenbrief* (Journeyman's Certificate).

Intermediate and higher technical and vocational education

Intermediate and higher technical and vocational colleges (*Berufsbildende mittlere Schulen – BMS* and *Berufsbildende höhere Schulen – BHS*) and intermediate and higher teacher training colleges (*Lehrerbildende mittlere und höhere Schulen*), e.g. for kindergarten teachers, represent an alternative route to vocational qualifications from the ninth year (grade) onwards. The sector which provides formal education and training is almost all public, or dependent when run by trades or denominational organisations. The colleges offer programmes of up to five years and, on completion, award qualifications equivalent to those gained in the "dual" system, with well-defined paths to self-employment. The technical and vocational programmes train students for skilled industrial, commercial, business and agricultural occupations, and all higher programmes which terminate in final Matriculation Examinations (*Reifeprüfung*) qualify for university and most non-university tertiary admission. Their formal intermediate programmes terminate in an *Abschlußprüfung* *Abschlußzeugnis*.

Higher general (or academic) secondary school

Second stage (ISCED level 3) programmes (*AHS-Oberstufe*) are mainly for pupils from the first stage, who continue on the premises. There are few private denominational, yet dependent schools; the vast majority are state institutions. Three prime *AHS* categories are distinguished: *Gymnasium*, *Realgymnasium*, and *wirtschaftskundliches Realgymnasium*. The *Realgymnasium* also exists as a separate second stage institution (*Oberstufenrealgymnasium*), designed as a special programme for main general secondary school leavers. All *AHS* programmes culminate in the Matriculation Examination (*Reifeprüfung*).

Public sector adult education (*Zweiter Bildungsweg für Berufstätige*)

In the public sector there are part-time (mostly evening) classes based on approved syllabi for technical trades, business, social work and *AHS* programmes. These are either second chance programmes for adults or modular programmes for qualified workers after their apprenticeship and offered by special adult education departments at intermediate/higher technical and vocational colleges, or at higher general secondary schools in the case of higher general education. These courses result in qualifications corresponding to those of their formal education equivalents (in terms of ISCED the higher of the technical and vocational programmes are located at the border of upper secondary and tertiary education and a few higher ones are in the tertiary bracket or distinctly transgress into tertiary education). A substantial proportion of the intermediate modular programmes are offered by the private technical and vocational colleges of the social partners.

TERTIARY EDUCATION

Tertiary education in Austria takes place at Universities (*Universitäten*), Colleges of Music and Arts (*Kunsthochschulen*), *Fachhochschulen* (as from 1994), and other non-university institutions (*sonstiger nichtuniversitärer Sektor*). Universities and

Colleges of Music and Arts are state institutions, while *Kunsthochschulen* are constructed as private, largely publicly subsidised establishments.

1. Entrance requirements

University education is open to all candidates who have successfully completed their secondary studies at a higher general or higher technical and vocational institution, i.e. passed the Matriculation Examination (*Reifeprüfung*). For adults without this formal qualification, an alternative route is offered by a set of preparatory courses and a special examination (*Studienberechtigungsprüfung*) leading to university admission in a certain field of study.

Colleges of Music and Arts: entrance examinations to test the artistic ability of the candidates are obligatory for admission; an additional Matriculation Examination is required for some study courses.

Fachhochschulen (as from 1994 onwards): the same entrance requirements as for universities apply. Admission is also possible for young people who have completed a vocational training pertinent to the field of study; to ascertain their educational level, additional examinations (*Ergänzungsprüfungen*) may be required.

Other non-university institutions: the main areas of education and training in this field are the training colleges for teachers of compulsory schools and for social workers (*Akademien*) and the *Kollegs* (the shorter tertiary version of the higher technical and vocational, and higher social and teacher training programmes). In principle the same entrance requirements as for universities apply. The training of paramedical staff at this level is usually attached to hospitals.

2. Types and duration of courses

Most courses offered at universities are degree courses which are completed by a final diploma examination after submission of a thesis (*Diplomstudien*, ISCED 6); graduates are awarded a Master's degree (*Magister/Magistra, Diplomingenieur*). A course in medicine leads to a doctor's degree. In the case of continuing and adult education, there are also non-degree courses (*Kurzstudien*) and vocationally-oriented courses at post-secondary level

(*Hochschulkurse, Hochschulelehrgänge* at post-secondary level, ISCED 5). Students having successfully completed a non-degree course may continue in the corresponding degree course. Students with a Master's degree may enrol in doctoral studies (*Doktoratsstudien*, ISCED 7) or in continuation courses (*Aufbaustudien*, ISCED 7). Universities also offer vocationally-oriented courses at post-graduate level (*Hochschulkurse, Hochschulelehrgänge* at post-graduate level, ISCED 7).

The minimum length of all the study courses is defined by law: *Diplomstudien* require between four and five years, a course in medicine six years, doctoral studies between one and two years. Duration of non-degree courses is between two-and-a-half and three years. A longer duration of study, however, is usual.

Colleges of Music and Arts: most of the courses offered are degree courses leading to a diploma (*Diplomstudien*, ISCED 6).

These institutions also offer non-degree courses (*Kurzstudien*, ISCED 5) and vocationally-oriented courses at post-secondary level (*Hochschulkurse, Hochschulelehrgänge* at post-secondary level, ISCED 5). Students having successfully completed a non-degree course may continue in the corresponding degree course. Duration of degree courses is between four and eight academic years, that of non-degree courses between two and four years.

The corresponding age groups indicated in the diagram are not suitable for students of music, because they often begin their studies some years earlier.

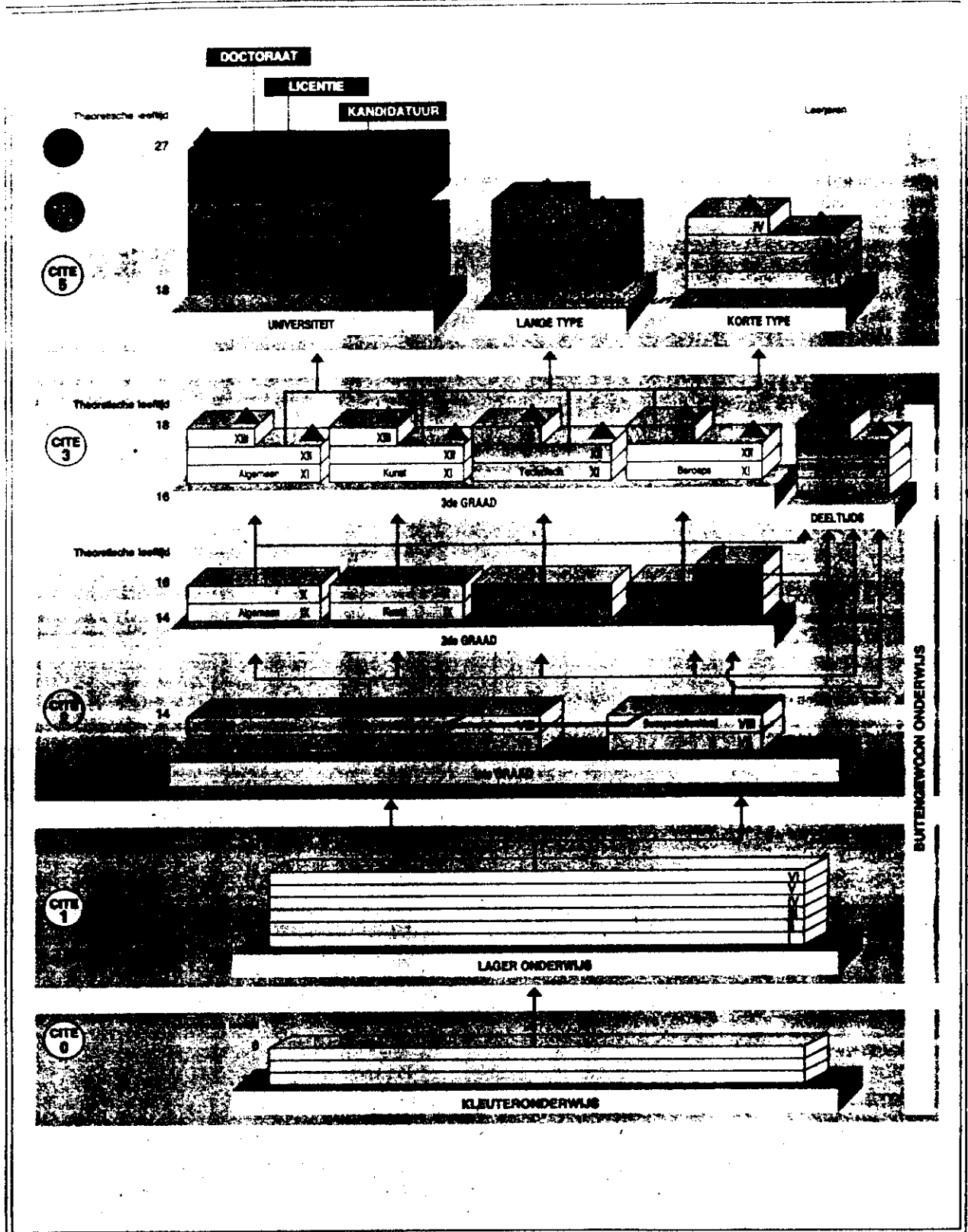
Fachhochschulen: have been recently established; the first courses are offered in the academic year 1994/95.

Fachhochschulen will provide degree courses leading to an academic degree (ISCED 6). The minimum duration of the courses will be three years plus a period of practical work. Graduates of *Fachhochschulen* will be entitled to enrol in doctoral studies at universities.

Other non-university institutions: *Kolleg* in two years (three years for adult part-time programmes); Teacher training colleges (*Akademie*) for teachers at general compulsory schools, in three years.

Vorschulstufe
Volksschule
Sonderschule
Hauptschule
Allgemeinbildende höhere Schulen Unterstufe
Reifeprüfung
Polytechnischer Lehrgang
Berufsschule und Lehre
Universitäten
Kunsthochschulen
Diplomstudien
Sonstiger nichtuniversitärer Sektor

Pre-primary school
Primary school
Special school
General secondary school
Higher general secondary school
Matriculation examination
Pre-vocational year
Apprenticeship
Universities
Colleges of Music and Arts
Final Diploma
Non-university sector



Belgium (Flemish community)

The present organisation of secondary education was adopted in 1989. In 1992 some schools still worked according to the old system with two cycles of three years, instead of the model with three stages of two years.

Education is compulsory from 6 to 18 years of age. In principle students complete at least secondary education before leaving school or continuing studies at (non-compulsory) higher levels. Since "compulsion" refers to age rather than education level, in practice many students leave formal education at the age of 18 without having successfully completed secondary education, due to the high percentage of repeaters.

Compulsory education is full-time until at least 14 years of age. From the age of 15 students can continue in part-time education until the age of 18. Students may still transfer to part-time education at the age of 16.

All forms of secondary education (general or *algemeen*, technical or *technisch*, arts or *kunst*, vocational or *beroeps*) give access to higher education. Students who complete vocational secondary education need to follow a seventh year of secondary education before entering higher education.

Students may move between different forms of secondary education, but there are some restrictions: for example a student in vocational secondary education may only move to

technical education by repeating either one or two years. Nevertheless, most transfers between the different forms of the secondary education system occur from general to technical or arts, or from technical to vocational. Students may only continue in secondary education if they have successfully passed an examination in all subjects.

There are no entrance examinations for higher education (except for civil engineering). There are three types of higher education: Universities, short-type, and long-type higher education outside universities. Both universities and institutions for higher education outside universities (long type only) offer education at university level - ISCED 6.

There are different systems for teacher training depending on the initial diploma and the level of education the teacher will work in. Teachers for pre-primary, primary and lower secondary education follow a three-year full-time programme (ISCED 5). University students can obtain a certificate for teacher training in higher secondary education after completing their initial university programme.

There is a separate system for special education (*buitengewoon onderwijs*). Pupils with disabilities may also follow regular education while benefitting from special aid programmes.

Theoretische leeftijd

Kleuteronderwijs

Lager onderwijs

Buitengewoon onderwijs

Beroepsvoorbereidend

Algemeen onderwijs

Kunst

Technisch

Beroeps

Deeltijds onderwijs

Universiteit

Kandidatuur

Licentie

Doctoraat

Normal age

Pre-primary education

Primary education

Special education

Pre-vocational education

General education

Arts

Technical education

Vocational education

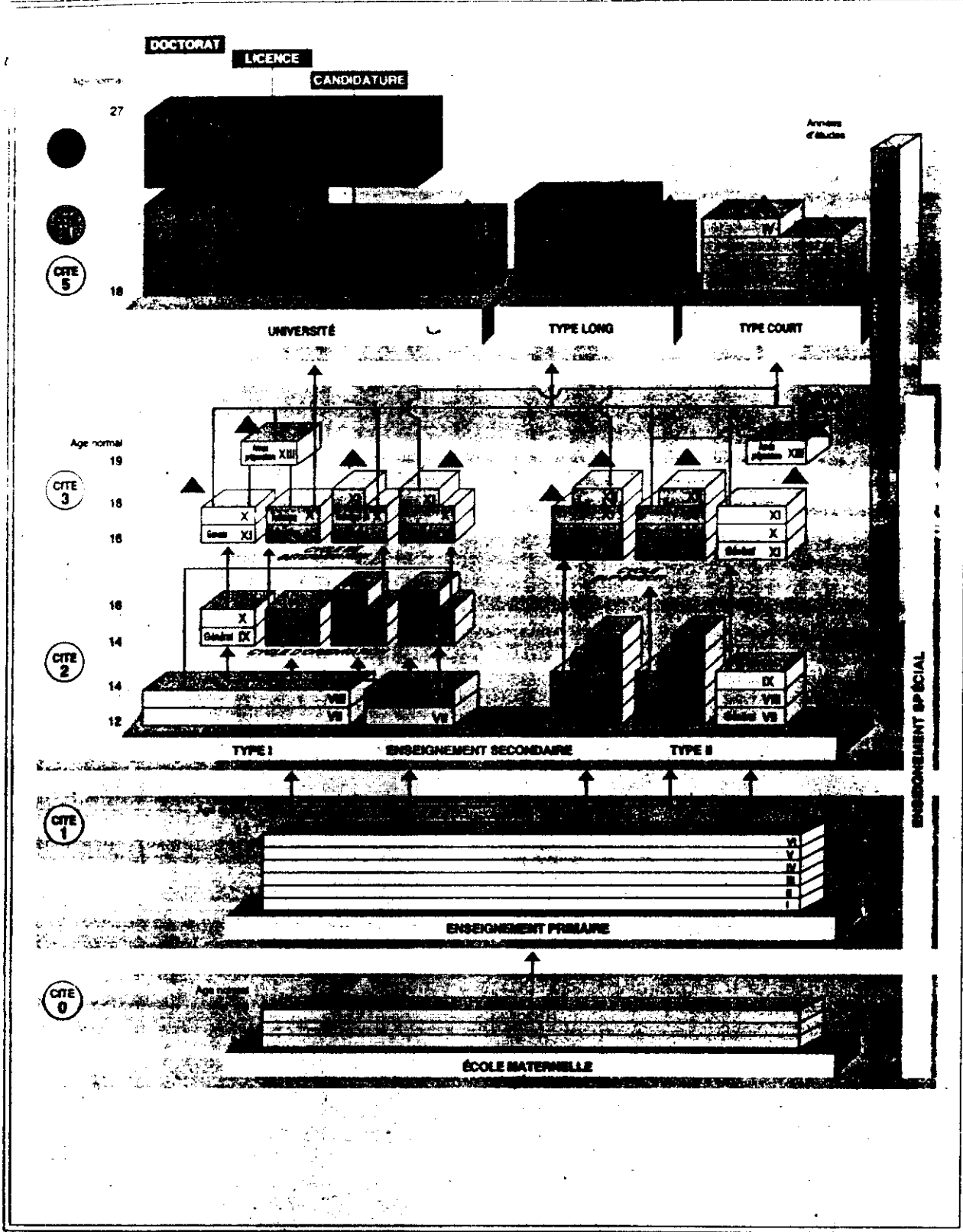
Part-time education

University

Candidate

Licenciate

Doctorate



Belgium (French community)

The education system of the German-speaking community is similar to that of the French-speaking community.

GENERAL DESCRIPTION OF THE SCHOOL SYSTEM

Education is organised on four levels corresponding to the following age groups:

- **pre-primary education** for children aged 2-and-a-half to 6 years (ISCED 0);
- **primary education** for children aged 6 to 12 years (ISCED 1);
- **secondary education** for youngsters aged 12 to 18 years and above (ISCED 2 and 3);
- **higher education** of variable length according to the area of study for students aged 18 to 25 years and above.
 - **non-university education**, "short type", includes a single cycle of 3 to 4 years of study (ISCED 5);
 - **university level education**, "long type", includes at least four years of study divided into two cycles (ISCED 6);
 - **university education** includes from 4 to 7 years of study (ISCED 5 for the first diploma (*candidature*), equivalent to two or three years of study; ISCED 6 for the first degree (*licence*), equivalent to 2 to 5 years of study; and ISCED 7 for a doctorate which may vary greatly in length but is of at least two years' duration).

There are also two other types of education:

- **special education** designed for the handicapped from three to twenty-one years of age or above and organised at nursery, primary and secondary levels;
- **social promotion education** designed for young people and adults who have left the school system and who feel the need to acquire new qualifications or to update their knowledge. This form of education may be at ISCED level 3, 5 or 6.

COMPULSORY SCHOOLING

The Compulsory Schooling Act of 29 June 1983 sets at 18 years of age the end of compulsory schooling, previously

limited to 14 years of age. On his/her 18th birthday a pupil is no longer subject to compulsory schooling. However, compulsory full-time schooling ends as soon as a pupil has reached the age of 15 and has completed (without necessarily having passed) the first two years of full-time secondary education.

SECONDARY EDUCATION

It is at this level that the education systems of the French-speaking and Flemish-speaking communities differ.

In the French-speaking community secondary education is currently organised according to two different types.

The 1st type of secondary education (or new system) organised in three two-year cycles takes one of four forms:

- general education;
- technical education;
- artistic education;
- vocational education;

and one of two degrees of guidance:

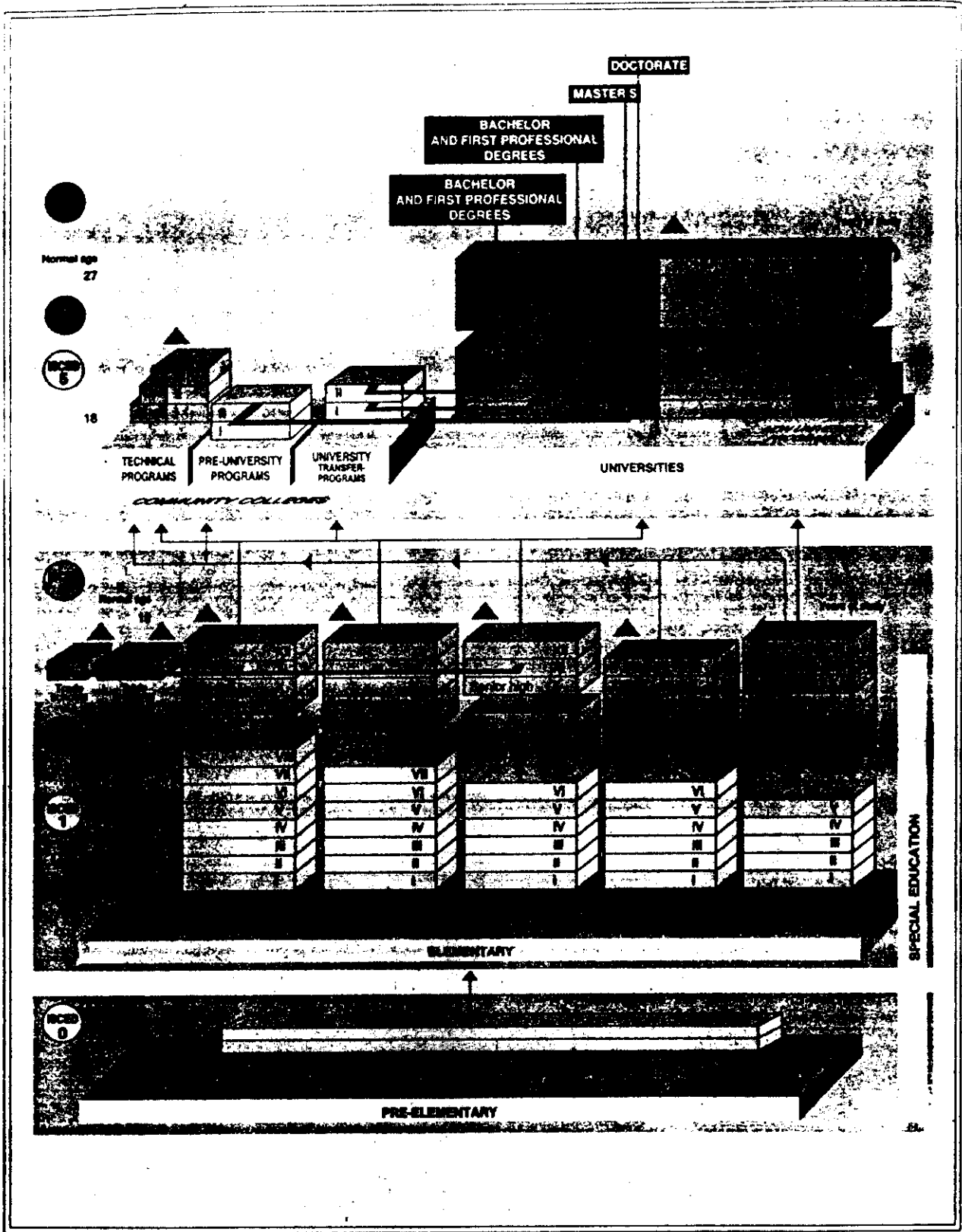
- **the transitional phase**, the aim of which is preparation for higher education whilst allowing entry into the world of work;
- **the qualification phase**, the aim of which is entry into the world of work whilst retaining the possibility of further study in higher education.

Nevertheless, various bridges exist from the first year onwards allowing pupils who have chosen the "wrong" option to change course.

The 2nd type of secondary education (or traditional system) is organised in two three-year cycles.

Unlike the new system of education where the first two years are common to all four forms, in the traditional education system a differentiation is made in the lessons from the first year onwards between the general form (ancient humanities and modern humanities) and the technical, artistic and professional forms.

The first type of secondary education is becoming more widespread whilst the second type now covers only 3.7 per cent of the total number of pupils in secondary education.



Canada

Canada is comprised of ten provinces and two territories, each of which, within the federative system of shared powers, is responsible for education. Therefore, each of the provinces and territories has developed its own educational structures and institutions; while these are similar in many ways, they reflect the circumstances of regions separated by great distances and the diversity of the country's historical and cultural heritage.

PRE-PRIMARY EDUCATION

Pre-school programmes or kindergartens, which are operated by the local education authorities and provide one year of pre-Grade One education for 5 year-olds, are offered by all provinces and territories with the exception of Prince Edward Island.

PRIMARY AND SECONDARY EDUCATION

In each province or territory, a ministry or department of education is responsible for primary and secondary education. Public education is provided free to all Canadian citizens and permanent residents until the end of secondary school – normally, age 18. The ages for compulsory schooling vary from one jurisdiction to another; generally, it is required from age 6 or 7 to age 16.

Primary education in most jurisdictions covers the first six to eight years of compulsory schooling. Afterwards, children proceed to a secondary education programme. A great variety of programmes – vocational (job training) as well as academic – are offered at the secondary level. The first years are devoted to compulsory subjects, with some optional subjects included. In the latter years, the number of compulsory subjects is reduced, permitting students to spend more time on specialised programmes that prepare them for the job market, or to take the specific courses they need to meet the entrance requirements of the college or university of their choice. Secondary school diplomas are granted to students who pass the compulsory and optional courses of their programmes.

Special-needs students, such as the physically or mentally disabled, the gifted, etc., are accommodated in the public schools in various ways. In some cases, separate programmes are available to meet their needs; in others, these students are integrated into the regular classroom and, to the extent possible, follow the regular programme of instruction.

Private or independent schools, which provide an alternative to publicly funded schools, may operate in any province or territory if they meet the general standards prescribed by that jurisdiction for primary and secondary schools. Although in most cases they closely follow the curriculum and diploma requirements of the Department or Ministry of Education, they function independently of the public system and charge fees. Five provinces – Alberta, British Columbia, Manitoba, Quebec and Saskatchewan – provide some form of financial assistance to these schools.

The point of transition from primary to secondary school may vary from jurisdiction to jurisdiction. Some school boards break up the primary-secondary continuum into schools that group together, for example, kindergarten to Grade Six, Grades Seven to Nine (junior high), and Ten to Twelve (senior level). In Quebec, secondary schooling ends at Grade Eleven.

TERTIARY EDUCATION

Once secondary school has been successfully completed, a student may apply to a college or a university, depending on the region and on whether he or she qualifies.

Quebec students – again, having completed secondary schooling in 11 as opposed to 12 years – must obtain a college diploma in order to be admitted into a university programme. The colleges, called *CÉGEPs* (*collèges d'enseignement général et professionnel*), offer both a general programme that leads to university admission, and a professional programme that prepares students for the labour force. In Ontario, students must complete six Ontario Academic Credit courses in order to be admitted to a university programme. This can be accomplished during the four-year secondary school programme, or during an additional year after completion of Grade Twelve.

Tertiary education is available in both government-supported and private institutions, some of which award degrees and some of which do not. Colleges such as technical and vocational institutions, community colleges, *CÉGEPs* and other institutes of technology offer programmes for continuing education and for developing skills for careers in business, the applied arts, technology, social services and some health sciences. Programmes vary in length from six months to three years. There are also private vocational or job training colleges in some provinces. In general, colleges award diplomas or certificates only; they do not award degrees.

Many colleges offer, in co-operation with industry and business partners, professional development services or specialised programmes in high-technology areas. Technical training and technology programmes prepare students for employment in the trades, industry or agriculture, or for a job as a professional technician or technologist. A certificate is granted for programmes requiring one year of study (24 to 30 weeks). Two-year or three-year programmes lead to a diploma. Some programmes last four years; these are made up of courses of an academic rather than job-training nature.

The British Columbia community college system allows students to complete two years of academic course work towards Bachelor degrees. Thus, while some students may decide not to continue, others have the opportunity to go on to complete the third and fourth years at a university-college or university and receive a degree. In many provinces, however, the transfer is not automatic. A student must apply for admission and have his or her college studies evaluated before being granted credit for completed college courses.

Canada

Programmes leading to degrees are offered in universities or, as they are sometimes known, degree-granting institutions. Most Canadian universities, especially those in the larger cities, offer a complete range of programmes. Others are more specialised, and have developed areas of excellence. There are also some specialised institutions that are not campus-based and offer university programmes through correspondence courses and distance education.

It is possible to study at three different levels, that lead to a Bachelor, Master's or doctoral (Ph.D.) degree. Not all universities offer graduate studies (Master's and doctorates). In addition to degree programmes, most universities offer diploma and certificate programmes. These can be either at the undergraduate or graduate level, and can range from one to three years in duration.

Bachelor degrees can take either three or four years of study, depending on the programme and the province.

Universities in some provinces grant general pass degrees in three years and require a fourth year for an Honours degree. Other provinces require four years of study regardless of whether it is for a general or an Honours degree.

Master's degrees require one or two years of study after completion of an Honours Bachelor degree. Some may require a thesis or professional internship.

Doctoral degrees usually require three years of study after a Master's degree. Most students need much more time to complete a Ph.D., the average being four or five years. Doctoral degrees usually involve researching, writing, presenting and defending a thesis, in addition to attending seminars and a specified number of courses.

Czech Republic

PRE-SCHOOL EDUCATION

Kindergartens accept children from the age of 3. A child entering primary school must be judged sufficiently mature; otherwise entry (normally at age 6) is postponed a year.

PRIMARY AND LOWER SECONDARY EDUCATION

Compulsory education consists of two parts. General school lasts five years and provides primary education; the pupil receives the core knowledge of general polytechnical, physical and aesthetic education. The second level, from Grades Six to Nine, provides instruction in the mother tongue, mathematics, natural science, civics, supplemented by history, geography, physics, chemistry and other subjects including a foreign language. Each subject is taught by a different teacher. Talented students may attend a school with an extended curriculum of languages, mathematics, sport, etc. Pupils are tested in oral and written examinations.

UPPER SECONDARY EDUCATION

The upper secondary level prepares students directly for occupations or for further study at university or one of the newly established non-university schools.

There are three types of secondary schools:

- *gymnasia*;
- *secondary specialised schools and conservatoires*;
- *secondary vocational schools*.

Students are accepted for study on the basis of entrance examinations and their compulsory school results. The years since 1990 have seen the establishment of many private and church schools.

Gymnasia provide students with a broad and thorough general education in preparation for university. Studies conclude with a matriculatory final exam.

Secondary specialised schools and conservatoires compare with several non-university schools abroad, provide a broad general education as well as specialised study in a particular field (e.g. nursing, certain technical areas, tourism, library science, accounting, etc.). After four years, studies end with a matriculation exam.

Secondary vocational schools prepare students for occupations. Three-year programmes conclude with an apprenticeship exam. Students who have received high grades in compulsory education can choose a four-year programme ending with both general education and apprenticeship exams. These professional schools specialise mostly in engineering and technical areas. They provide also general education, including mother tongue, history, mathematics and sciences.

SPECIAL EDUCATION

Special schools have been established for handicapped children who cannot be integrated within the regular schools. Special education is available in kindergarten, primary, lower secondary and upper secondary levels. Those students who study at university are already integrated.

TERTIARY EDUCATION

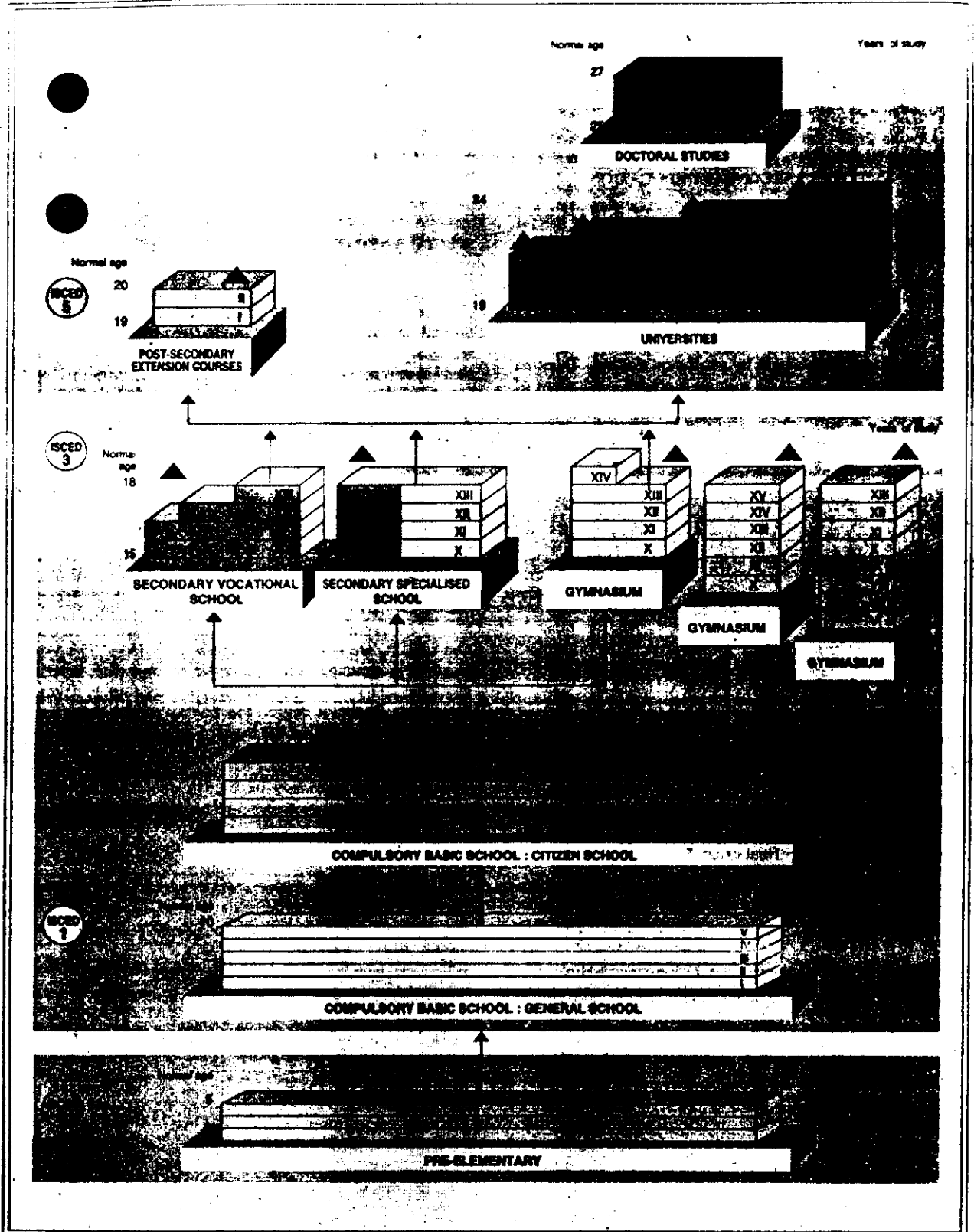
Because of the existence of specialised secondary schools, there was no perceived need for non-university tertiary schools until 1990. Since that year, however, several new schools of this kind have been developing from the extension courses organised by secondary schools; their number is expected to grow.

Universities, the highest level within the Czech education system, are granted full autonomy by law. The typical length of programmes is five years (six for medicine, veterinary medicine and architecture; teacher training four to five). A three-year Bachelor degree has recently been established. Students are admitted on the basis of an entrance examination and the results of final exams at the end of secondary school.

Post-graduate study prepares graduates for independent scientific work.

ADULT EDUCATION

Adult education is provided by secondary schools and universities. Students study the same curricula as their young colleagues, take the same examinations and receive a degree of the same value.



Denmark

PRE-PRIMARY, PRIMARY AND LOWER SECONDARY EDUCATION

Although pre-school education is voluntary, it must be offered by the municipalities; 96 per cent of all children are enrolled. Following on from this, the municipal *Folkeskole* provides a compulsory nine years of basic schooling between the ages of 7 and 16. Pupils are grouped in classes which remain together throughout the whole period of basic schooling. About half of a class stays on for 10th form, which is voluntary. Some pupils complete their final years of schooling in "continuation schools" (*efterskoler*) which are boarding schools.

The *Folkeskoler* are run by the municipalities, but there is also an independent sector which caters for 11 per cent of all pupils. Up to 80 per cent of the expenditure for private schools are covered by public funding.

UPPER SECONDARY EDUCATION

If students pass the leaving examination at the end of *Folkeskole* they are automatically qualified for general upper secondary education. This may mean three years of *Gymnasium* (upper secondary school), or a two-year higher preparatory examination course (the *HF*-course), or two years of adult upper secondary level courses. All these courses are academically oriented and both the upper secondary school leaving examination (the *studentereksamen*) and the higher preparatory examination (the *HF*-examination) qualify students for admission to higher education.

Students who have completed their basic schooling plus one year of vocational education and training can begin a course in general/vocational upper secondary education. These two-year courses lead to the Higher Commercial Examination (the *HHX*) and the Higher Technical Examination (the *HTX*), and qualify students for admission to certain higher education courses. The *HHX*, for instance, qualifies them for the humanities course in a university, and the *HTX* for degree courses in engineering.

Students who wish to proceed directly to the labour market as skilled workers can take three- and four-year vocational education and training courses. These consist of a mixture of theoretical education at a school and practical training in the workplace, and train commercial and clerical workers as well as skilled craft workers. Basic social and health education courses run parallel to the vocational education and training courses, and they also contain a mixture of practical training and theoretical education. There are also a number of specialist maritime courses at this level, and agricultural courses which lead to the award of the "green certificate" for farmers.

TERTIARY EDUCATION

Short-cycle higher education consists of courses at middle technician's level within the areas of food, construction,

clothing, electronics and mechanical technology. There are also health education courses leading to qualifications such as laboratory technician and dental technician, and maritime and home economics courses which lead to qualifications such as first mate and home economics technician. The admission requirements for some of these short-cycle courses are: an upper secondary school leaving examination; a higher preparatory examination; or a Higher Commercial or Technical Examination. Admission to other short-cycle courses requires a vocational education and training qualification.

Medium-cycle higher education consists of complete courses, which qualify people directly for the labour market as, for example, school teachers, nurses, or journalists. The *Bachelor degree* can also qualify individuals directly for the labour market, but usually from part of a long-cycle higher education course. The admission requirement for a medium-cycle course or a Bachelor degree course is the school leaving examination at general or general/vocational upper secondary level.

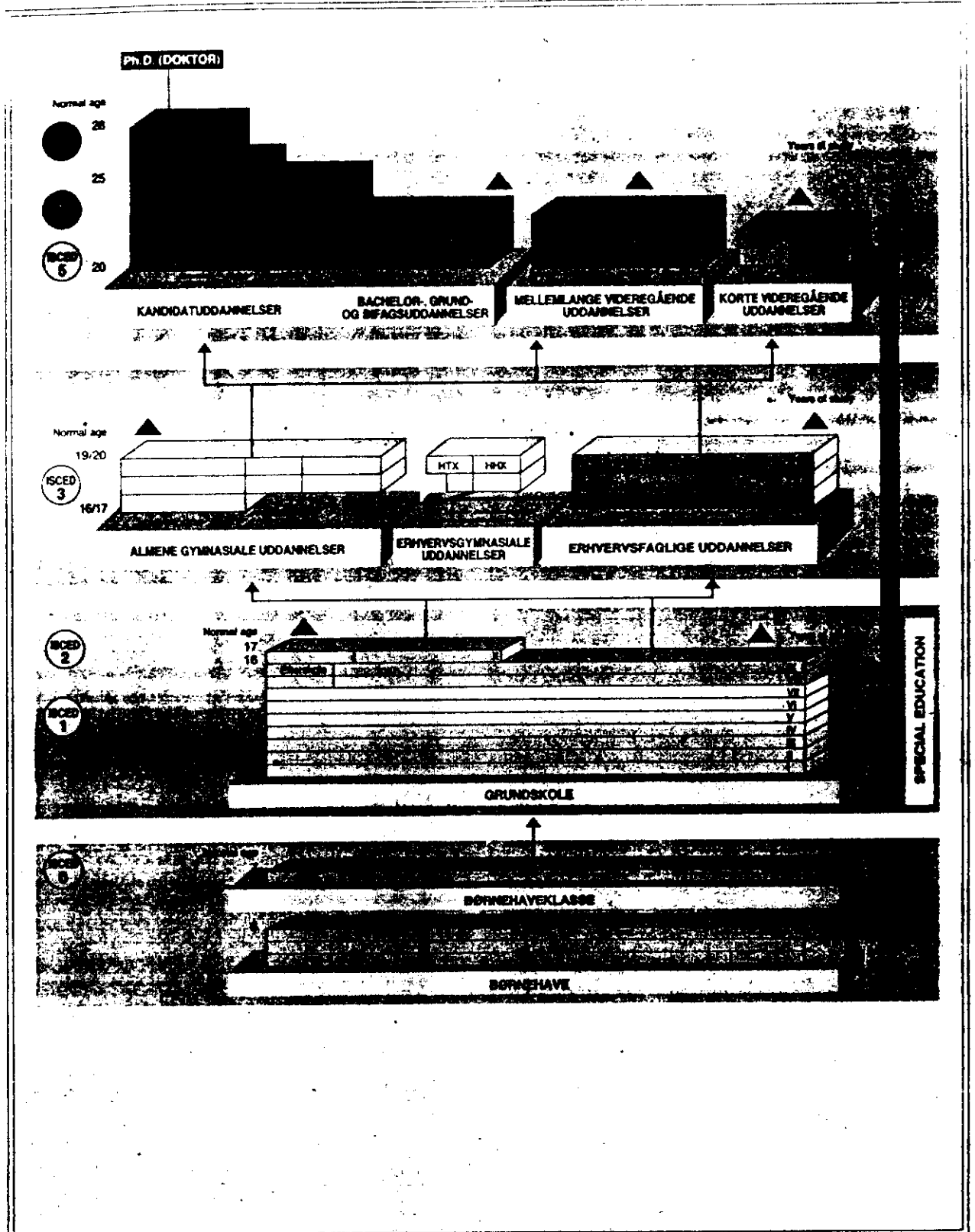
Master's degree courses consist of courses within the social sciences, the humanities, music, theology, psychology and the natural sciences, as well as degree courses in law and economics, courses for the *cand.mag.-degree* (degree with a minor and a major subject), for the *cand.ling.merc.-degree* (degree in applied languages), for the *cand.scient.-degree* (degree in the natural sciences), for doctors of medicine, dentists, veterinary surgeons and "civil" engineers (Master's degree in engineering). The admission requirement is a Bachelor degree or – for some courses – the leaving examination from general or general/vocational upper secondary level.

Courses for researchers build on the Master's degree. When they have passed their examinations, the graduates from these courses are entitled to be awarded the Ph. D. degree.

ADULT EDUCATION

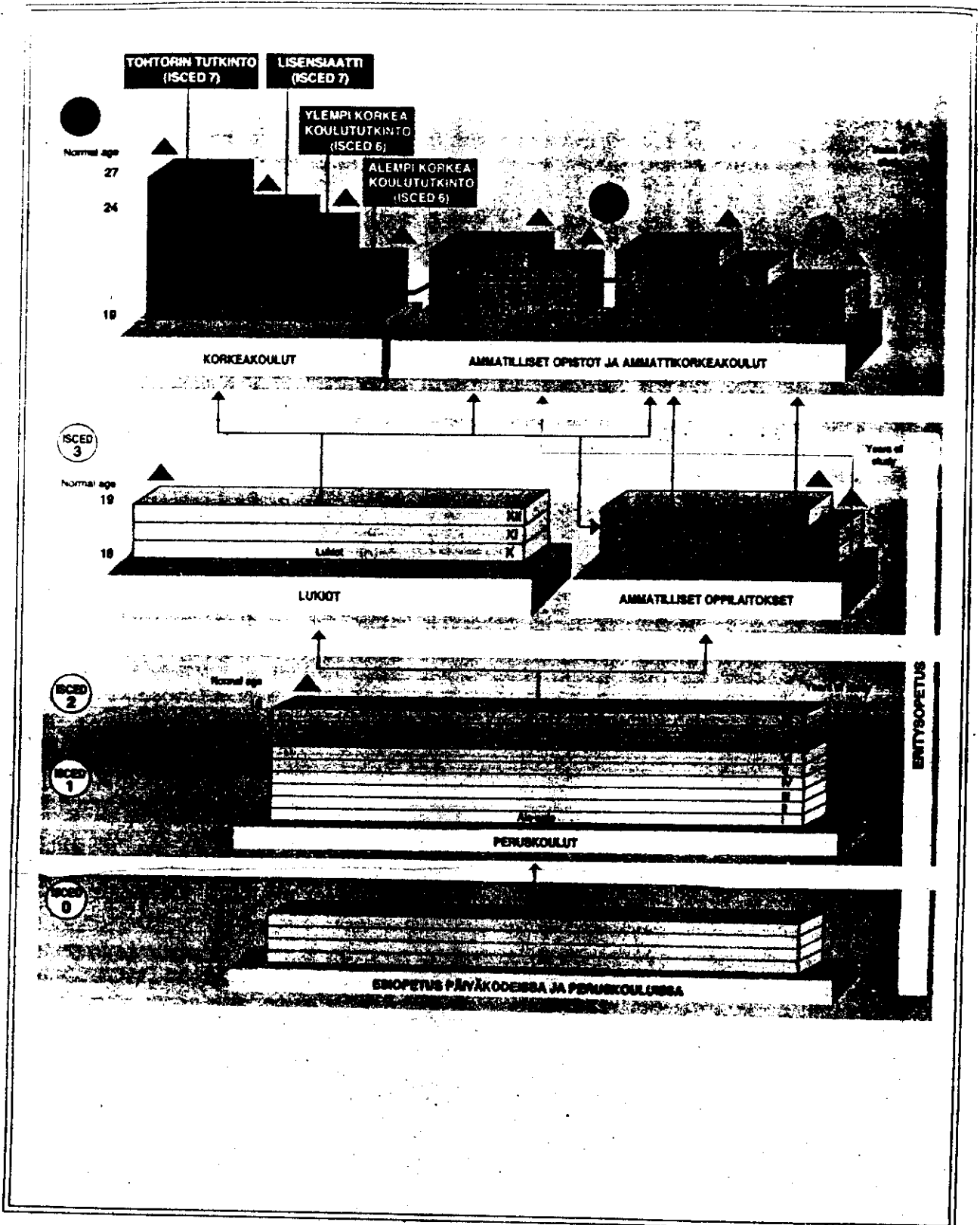
In Denmark, there is a long and strong tradition of adult education and continuing training. There is a wide range of programmes for adults who want to learn general subjects such as Danish, mathematics, history and languages. There are also many examples of vocationally oriented continuing training for unskilled and skilled workers and for people with higher education qualifications. Finally – in step with the increasing unemployment of recent years – large-scale education, training and employment programmes have been developed.

Adult education and continuing training are financed from both public and private sources. The scope and depth may vary a great deal – from only one lesson a week for a short period to full-time courses lasting more than a year. Such courses take place at single-subject centres (*VUC*); at open education and vocational schools or universities and other higher education institutions; at *AMU* (labour market training) centres; in the workplace; at folk high schools and at non-residential folk high schools.



Denmark

<i>Børnehave</i>	Kindergarten
<i>Børnehaveklasse</i>	Pre-school class
<i>Grundskole</i>	Basic school
<i>Efterskole</i>	Continuation school
<i>Almene gymnasiale uddannelser</i>	General upper secondary education
<i>Gymnasium</i>	High school
<i>Studenterkursus</i>	(Adult) upper secondary level courses
<i>HF-kursus</i>	Higher preparatory examination course
<i>Erhvervs-gymnasiale uddannelser</i>	General/vocational upper secondary education
<i>HTX (højere tekniskeksamen)</i>	Courses for higher technical examination
<i>HHX (højere handelseksamen)</i>	Courses for higher commercial examination
<i>Erhvervsfaglige uddannelser</i>	Vocational education and training
<i>Afslutningsuddannelse</i>	12/13 years of study
<i>Grunduddannelse</i>	10 years of study
<i>Handel- og kontor</i>	Commercial and clerical vocational courses
<i>Teknik</i>	Technical vocational courses
<i>Sundhed</i>	Health-related auxiliary programmes
<i>Husholdnings-, landbrugs- og søfartsuddannelser</i>	Domestic, agricultural and fishery programmes
<i>Andre</i>	Other
<i>Korte videregående uddannelser</i>	Short-cycle higher education
<i>Mellemlange videregående uddannelser</i>	Medium-cycle higher education
<i>Bachelor-, grund- og bifagsuddannelser</i>	Bachelor degree courses
<i>Kandidatuddannelser</i>	Master's degree courses
<i>Voksen- og efteruddannelse</i>	Adult education and further training



Finland

PRE-PRIMARY EDUCATION

Pre-school education (ISCED 0), in the main, is handled by the Social Welfare authorities and organised in conjunction with the day care of children below regular school age. For 6 year-olds, pre-school education may also take place in conjunction with comprehensive school. This alternative, however, requires a permit from the Ministry of Education, and is designed mainly to take care of the needs of the children in the country's sparsely-populated areas. Approximately 60 per cent of all 6 year-olds partake in pre-school education.

PRIMARY AND LOWER SECONDARY EDUCATION

Comprehensive schooling is nine years of compulsory education. It is divided up into a lower stage (ISCED 1) comprising six years and an upper stage (ISCED 2) comprising three years of education. It may also contain a tenth optional school year. Comprehensive schools, with very few exceptions, are maintained by the municipalities.

A child becomes subject to compulsory school attendance from age 7. Compulsory school attendance is ten years; for certain groups of seriously disabled children, it begins when they are 6 and extends for eleven years.

Special education is arranged in special schools annexed to comprehensive schools, in special classes as part of normal education, or as integrated teaching in normal education. The general trend is to decrease segregation and to increase integration. For some special groups, there are state-owned special schools (e.g. schools for pupils with impaired hearing and vision).

UPPER SECONDARY EDUCATION

Post-comprehensive education is given by senior secondary schools and vocational schools. Approximately 90 per cent of the comprehensive school leavers continue their studies in upper secondary education and 60 per cent of these in senior secondary schools. The senior secondary schools are mainly run by the municipalities. The senior secondary schools (ISCED 3) offer a general education of three years' duration, at the end of which the pupil takes the national matriculation examination, which is the general eligibility criterion for university admission. Senior secondary education has traditionally been the main channel to higher education. Special education, as a rule, is integrated into normal education.

Initial vocational education and training is given mainly in educational institutions run and aided by the State or municipalities. The share of apprenticeship training is very small (in 1992 less than 1 per cent of the admission places). There are special institutions of vocational education for the seriously disabled.

Post-comprehensive vocational education extends for two or three years after comprehensive schooling.

At present, vocational education comprises 26 comprehensive basic programmes and approximately 250 specialisation programmes which represent all occupational sectors (part of the 250 programmes belong to the advanced vocational education level). From 1995, on there will be no more basic programmes and the number of specialisation programmes will be reduced to about 160. In lieu, programmes will become more comprehensive and elective. Students will also be more free to make selections, allowing for a more personal study programme. In future, it will also be possible to combine general education studies with vocational studies which is even now a reality in experimental programmes.

TERTIARY EDUCATION

Tertiary education consists of *higher education* and *advanced vocational education*. Most institutions of vocational education impart both academic and vocational subjects in vocational training at all levels (ISCED 5 and 6).

Advanced vocational education

At advanced vocational level, students are offered college-level diplomas and higher vocational diplomas. College-level qualifications take three to five years, and higher vocational five to six years. The entry requirement is the leaving certificate of either comprehensive or upper secondary education.

The structure and diplomas of vocational education will be reformed in 1995. Education will be arranged linearly so that students at the tertiary level are required to have attained either the senior secondary or the secondary vocational school. There is currently an experimental project in which part of the institutions giving advanced vocational education have been changed into temporary polytechnics (see higher education).

Higher education

The Finnish higher education is divided into two sectors: the *university sector* and the *non-university sector*.

The *university sector* consists of 21 institutions of higher education. These institutions are financed by the State and are free for the students. The basic degree, corresponding to a Master's degree, ideally takes from five to five-and-a-half years to complete. In some fields, it is possible to sit for a lower examination, corresponding to a Bachelor degree, the foregoing studies take from three to three-and-a-half years to complete. During the years 1994 and 1995, the lower university degree will be extended to almost all fields of study. Post-graduate studies lead to a licentiate's degree followed by a doctorate, both of which take several years to complete.

Finland

A student who passes the matriculation examination is eligible for university studies. Since 1991, higher vocational level diplomas awarded by vocational institutions give the same eligibility.

The *non-university sector* consists of 22 temporary, experimental polytechnics formed out of 85 institutions providing advanced vocational education. The experiment began in 1991 and the target is to improve the standard and quality of vocational education. Diplomas of these polytechnics are classi-

fied on a level with university degrees. Studies generally take three to four years to complete.

A prerequisite for admission into polytechnics is a senior secondary school leaving certificate, either a matriculation certificate or a vocational certificate in the same branch of education. From 1995 on, a prerequisite for admission to higher educational institutions (ISCED levels 5 and 6) other than the polytechnics is that the candidates have a matriculation certificate or a vocational certificate.

<i>Esiopetus päiväkodeissa ja peruskouluissa</i>	Early childhood education in day-care centres (kindergartens) and comprehensive schools
<i>Peruskoulu</i>	Comprehensive schools
<i>Ala-aste</i>	Lower stage
<i>Yläaste</i>	Upper stage
<i>Ammatilliset oppilaitokset</i>	Vocational education
<i>Lukiot</i>	General education
<i>Korkeakoulu</i>	Universities
<i>Ammatilliset opistot ja ammattikorkeakoulu</i>	Higher vocational institutions and polytechnics
<i>Alempi korkeakoulututkinto</i>	Bachelor degree
<i>Ylempi korkeakoulututkinto</i>	Master's degree
<i>Lisensiaatti</i>	Licentiate degree
<i>Tohtorin tutkinto</i>	Doctor's degree

The French education system continues to be largely state controlled in spite of the radical changes it underwent in the 1980s. A number of basic powers are still held by the State, including teacher recruitment, the setting of national curricula, the conferment of university diplomas of which the *baccalauréat* is taken to be the first level. The conferment of these diplomas is under full State control. Since the decentralisation acts were introduced however (1982-1985), many of the powers formerly held by the State have been passed on to the regional authorities. Vocational training, for instance, is now fully under regional control. Meanwhile, secondary education establishments have become more independent and their legal status has been adjusted accordingly. Universities have already been autonomous to a large extent since 1968, and even more so since 1984.

GENERAL ORGANISATION OF THE EDUCATION SYSTEM

Education is divided into three main levels:

- **primary education** (first level): pre-primary and primary education provided in nursery schools and primary schools. In the first cycle starting skills are taught, in the second basic skills, and in the third further skills;
- **secondary education** (or second level): the first cycle is provided in *collèges* and the second cycle in vocational *lycées* (vocational training) or in general or technical *lycées* (for these two types of education). It is sanctioned by the award of the *baccalauréat* (general, technical or vocational), which still enjoys considerable status. The implementation of the vocational option in 1985 led to a very high increase in access to the *baccalauréat* by creating an opening via vocational training. Thirty-four per cent of a generation obtained the *baccalauréat* in 1980, and 65.5 per cent in 1992, of which 8.6 per cent via vocational training;
- **higher education**: provided in universities, including University Institutes of Technology (*IUT*), or by *grandes écoles* but also by *post-baccalauréat* classes in *lycées*: higher technician sections (*STS*) and preparatory classes for the entrance examinations to the *grandes écoles*. The latter recruit through competitive examination following a preparation of one to three years depending on the case. By contrast the *baccalauréat* is a sufficient entrance requirement for university.

In 1992/93 the school and university population accounted for over one-quarter of the total French population.

The share of private education varies depending on the levels concerned: 13.8 per cent of pupils in the first level, 20 per cent in the first cycle of secondary education, 22.3 per cent in the second vocational cycle, 21.3 per cent in general and technical secondary education, and 29.3 per cent in upper *lycée* classes. At the first and second levels, most private schools are under State contract with majority public funding. In higher education

not provided by universities, the share of private funding without contracts is much larger. There are no private universities without contracts.

In the first and second cycle of secondary education, pupils are channelled (repeating, moving up to the next class, changing streams) according to a procedure involving the teachers, management and parents of pupils within each school. While teachers' opinions come first, parents may appeal if the decision does not suit them and may insist on their children moving up to the next class instead of repeating, or repeating instead of changing streams, depending on the educational level. At each school a specialised team of advisors helps pupils, parents and teachers to settle any problems.

Apprenticeship training mostly concerns those who have completed compulsory education (age 16) and are learning a trade, partly in employment under the responsibility of an apprenticeship trainer and partly in educational centres referred to as *Centres de formation d'apprentis (CFA)*. They are bound by a special type of work contract allowing them to follow courses at *CFAs*. Over three-quarters of apprentices are enrolled at *CFAs* run by trade chambers, chambers of commerce and industry or vocational company or joint bodies. The other *CFAs* are run by vocational *lycées* or regional authorities. Apprenticeship training leads to the first vocational training diplomas of upper secondary education. Since 1987 it leads to the award of the vocational *baccalauréat*, short higher education diplomas (higher technician diplomas, technology university diplomas) and even engineering diplomas. It concerns just over 10 per cent of a generation.

Special education is mostly provided in primary and secondary schools but also in special institutions under the control of the Ministry of National Education or the Ministry of Health. It caters for students with various types of disability.

Adult training is an important activity of the public education sector. It has long been established, especially through social promotion action. Since the 1989 orientation act, it forms an integral part of the schools' functions. Public education accounts only for a small share of adult training however: 1.9 million out of 7.8 million adults who received training in 1992. There are three main sources of funding: the State, regional authorities and business. The latter must allocate 1.4 per cent of total wage costs to adult training. Each year one out of five wage-earners obtains training courses, with management staff in the lead. The government provides most of the funding for training courses offered to job-seekers.

Second level educational institutions are grouped into *GRÉTAs (Groupement d'établissements)* to co-ordinate this training. They are more concerned by public-funded courses than company-funded ones. In the case of universities, the opposite is true. Overall, *GRÉTAs* and universities received FF 4.1 billion in 1992 for adult training activities.

Age and school attendance

While education is compulsory from the age of 6 to 16, practically all children attend school by the age of 3 and 35 per cent of children at the age of 2 (53 per cent of children aged 2 at the start of the school year). After the age of 16, more and more students go on to the second cycle of secondary education, higher education or apprenticeship training.

Although it is difficult to draw parallels between the age and the level of achievement of students owing to the introduction of pluriannual cycles in primary education, to differing syllabuses and rates of progress at secondary level and to possible repeating in all cycles, the most common pattern for a student who has not repeated any year is as follows:

- elementary education for five years from the age of 6 to 10;

- first cycle of secondary education for four years from the age of 11 to 14;
- second cycle for two or four years for vocational training, three years for general technological training (from the ages of 15 to 16, 15 to 18 or 15 to 17 depending on the case);
- higher education includes short two-year courses (*IUT* or *STS*). Universities award diplomas after two years of study (*DEUG*); degrees usually correspond to three years of study and Master's degrees to four years. To obtain a doctorate or certain medical specialisations, training may take nine to ten years. For the *grandes écoles*, prior preparation of two years at *lycées* is followed by three or four years of study at the schools concerned. Engineering diplomas awarded by universities and *grandes écoles* correspond on the whole to the *baccalauréat* level plus five years of study.

Germany

Responsibility and competence for educational policy and planning are determined by the federative state structure. Accordingly, competence in education and science are divided up between the Federal and *Länder* governments. The *Länder* are predominantly in charge of legislation and administration.

PRE-PRIMARY AND PRIMARY EDUCATION

Pre-school education caters for children between the ages of 3 and 6 (mostly kindergartens, but also pre-school classes) as well as for children who are of school age but not yet ready for school (school kindergartens, pre-school classes and other, similar forms of pre-primary education, remedial classes).

Primary education. Compulsory schooling begins for all children at the age of 6. All children of compulsory school age attend the common primary school, which comprises the age levels 1 to 4 (in Berlin and Brandenburg the age levels 1 to 6).

LOWER SECONDARY EDUCATION

Secondary education stage I (Sekundarbereich I) comprises school provision from age level 5 (or 7) to 10 and is subdivided into various school types. In the sphere of general education most *Länder* have secondary general schools (*Hauptschulen*), intermediate schools (*Realschulen*), grammar schools (*Gymnasien*), and comprehensive schools (*Gesamtschulen*). A few *Länder* have so-called *Mittel-, Regel- und Sekundarschulen*. In some *Länder*, the age levels 5 and 6 of all general education schools are organised as an orientation stage.

UPPER SECONDARY EDUCATION

Secondary education stage II (Sekundarbereich II) comprises all educational provision which builds on secondary education stage I, that is to say, mainly age levels 11 to 13. It provides both general and vocational education courses leading to vocational qualifications or the right to enter the higher education sector.

In 1992, at general education schools, approximately 21.7 per cent of the relevant age group acquired either general university entrance qualifications or entrance qualifications for studies at *Fachhochschulen*.

Vocational education is characterised by a great variety of educational institutions. Their very number testifies to the special significance of vocational education in Germany. Vocational education comprises – sometimes with special forms in some *Länder* – the following types of secondary education stage II: part-time vocational school (*Berufsschule*), which is offered in combination with in-company training (the dual

system), the basic vocational training year (*Berufsaufbaujahr*), full-time vocational school (*Berufsschule*), vocational extension school (*Berufsaufbauschule*), *Fachoberschule*, specialised grammar school (*Fachgymnasium*) and trade and technical school (*Fachschule*).

Vocational education and training in the dual system are provided both in the company and at part-time vocational school. Training in individual occupations is based on training regulations. The dual system constitutes the core of vocational education and training in Germany. Approximately 70 per cent of an age group are provided with vocational education and training under this system.

The *Berufsgrundbildungsjahr* (basic vocational training year) provides students with a general or occupational field-related basic education either full-time or part-time. The *Berufsfachschulen* are full-time vocational schools to be attended for at least one year. The certificate awarded after two years' schooling qualifies its holder for admission to a *Fachschule* and is equivalent to an intermediate school certificate.

The *Berufsaufbauschulen* (vocational extension schools) are attended by adolescents who are at the same time undergoing vocational training or pursuing an occupation. The certificate awarded by these schools provides holders with *Fachschule* entrance qualification and is equivalent to an intermediate school certificate.

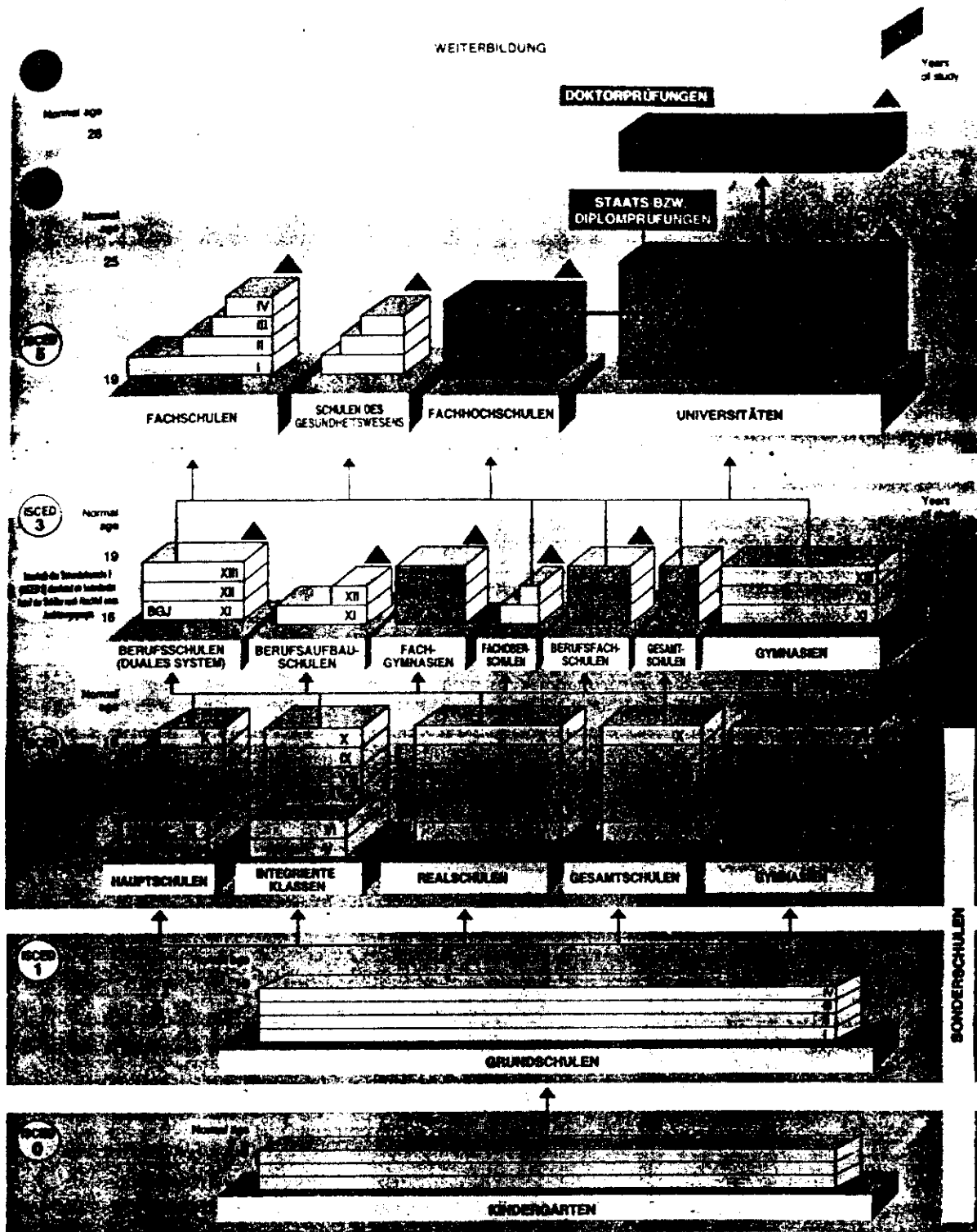
Fachoberschulen provide either full-time or part-time instruction. The certificate they award provides entrance qualification for studies at *Fachhochschulen*. *Fachgymnasien* (specialised grammar schools) are vocational grammar schools providing general higher education entrance qualification.

In 1992, approximately 11 per cent of the corresponding age group acquired entrance qualifications for general higher education or for studies at *Fachhochschulen* (higher vocational schools).

Health sector schools (for nurses, midwives, etc.) occupy a special position. They provide training for non-academic health-sector occupations, beginning at the level of secondary education II and overlapping into the higher education sector. In terms of organisation and location, many of these schools are associated with hospitals where training is provided in theory and practice.

SPECIAL EDUCATION

For pupils who, owing to a mental or physical handicap, are unable to attend general schools, various types of special schools are available in the sector of general and vocational education.



TERTIARY EDUCATION

The higher education sector comprises state or state-recognised universities and higher education institutions with comparable goals, e.g. comprehensive universities and colleges of education, colleges of art and music as well as *Fachhochschulen* and colleges of public administration. There are only few private higher education institutions and *Fachhochschulen* for specific disciplines. Universities provide a wide range of study courses. They combine teaching and research and are entitled to award doctorates. The *Fachhochschulen* and colleges of public administration, which are increasingly gaining significance, provide their students with a strongly application-oriented education for occupations requiring the application of scientific knowledge and methods or of creative design abilities.

In 1992, the share of first-year students at universities – as a percentage of the number of all new entrants – was around 68 per cent, that of *Fachhochschulen* around 32 per cent. The share of new entrants of the corresponding age group amounted to approximately 32.8 per cent. There are also institutions offering courses leading to vocational qualifications for secondary education stage II graduates.

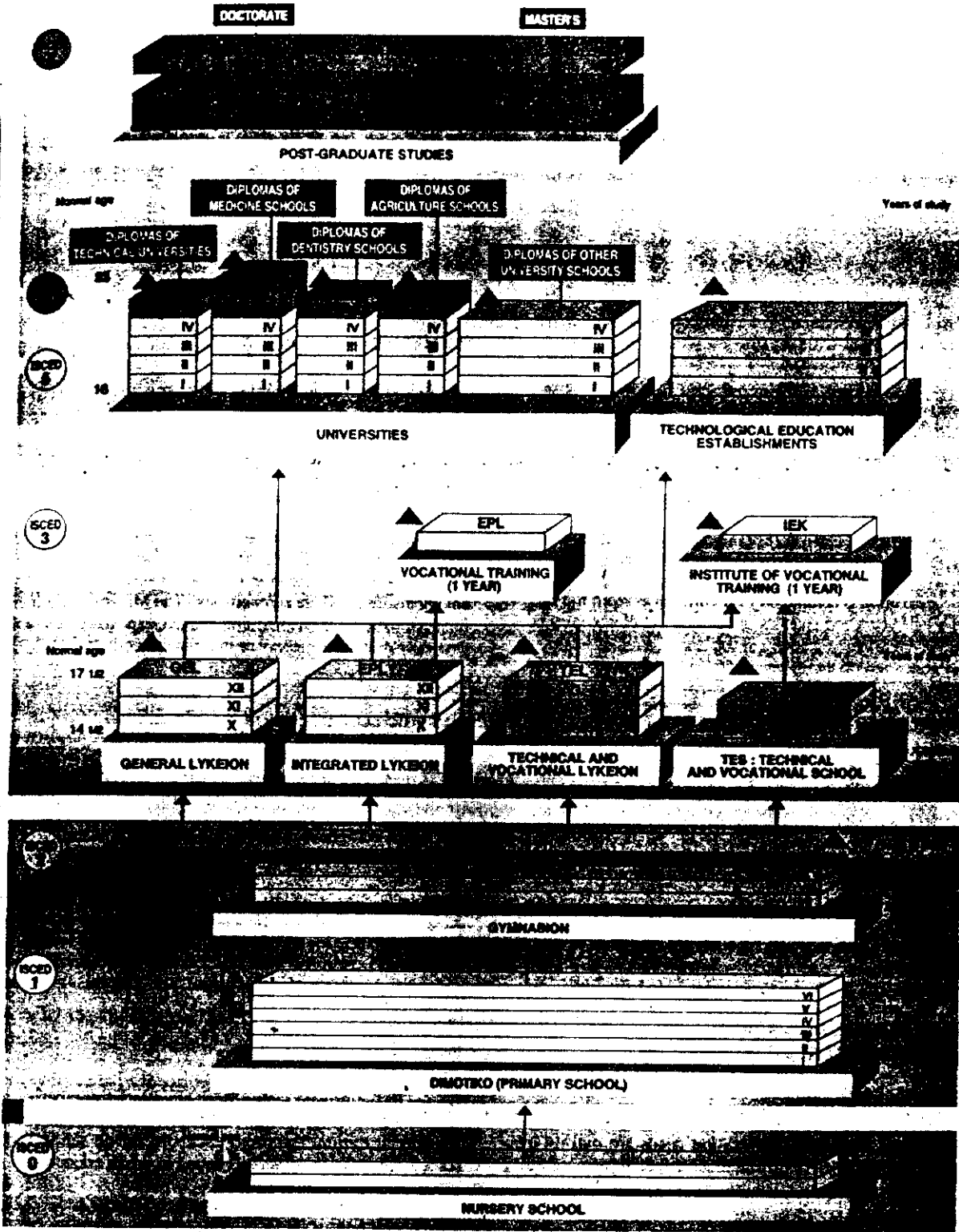
It is typical of both secondary and higher education institutions to offer the possibility not only of vertical but also of horizontal mobility. Thus, it is possible to go on to vocational training under the dual system after graduating from full-time vocational school and to continue and complete training there, or to start training under the dual system after graduating from grammar school (equipped with general university entrance qualification or entrance qualifications for studies at *Fachhochschulen*) and, perhaps subsequently, to take up studies at higher education institutions.

Fachschulen (trade and technical schools) are attended by students after completion of vocational training and practical occupational experience. These schools provide advanced vocational training (leading for example to masters' or technicians' qualifications).

Continuing education comprises general, vocational and academic continuing education. It covers all forms of organised and informal learning after completion of the education and training phase. Participation is voluntary. The continuing education sector is characterised by a multitude of offerings, a plurality of providers and the subsidiary role of government.

Grundschulen
Sonderschulen
Hauptschulen
Orientierungsstufe
Integrierte Klassen
Realschulen
Gesamtschulen
Gymnasien
Berufsschulen (duales System)
Berufsaufbauschulen
Fachgymnasien
Berufsfachschulen
Fachschulen
Schulen des Gesundheitswesens
Universitäten
Fachhochschulen
Staats- bzw. Diplomprüfungen
Doktorprüfungen
Weiterbildung

Primary schools
 Special schools
 Secondary general schools
 Orientation stage
 Integrated classes
 Intermediate schools
 Comprehensive schools
 Grammar schools
 Part-time vocational schools
 Vocational extension schools
 Specialised grammar schools
 Full-time vocational schools
 Trade and technical schools
 Schools for nurses and midwives
 Universities
 Higher vocational schools
 State University Diploma Examinations
 Doctorate Examination
 Continuing Education



Greece

Education is the responsibility of the Ministry of Education which issues almost all the decisions that concern educational policy, planning of curricula, teaching staff, school operation, etc. As a result of decentralisation over the past ten years, funds for general expenditure may be transferred directly to the prefectures (*Nomarchia*) through the Ministry of Education or directly from the Ministry of National Economy. Funds may also be administered by the regional authorities (*Peripheries*).

The 54 prefectures are responsible for the planning of school buildings. At the prefectural level there are also education authorities concerned with the school administration and the appointment of staff. The municipalities (*Demos*) are responsible for the construction and maintenance of the school buildings, and the school committee at the school level is responsible for small-scale repairs.

PRE-PRIMARY, PRIMARY AND LOWER SECONDARY EDUCATION

- The Greek education system consists of three levels:
- primary education (nursery and primary schools);
 - secondary education (in *gymnasia* and *lykeia*);
 - higher education (universities and institutions for technological education).

Education is compulsory for children as from the age of 5-and-a-half years and consists of six years of elementary education (in the primary schools) and of three years of lower secondary education (in the *gymnasia*).

The schools for primary and secondary education are mostly state-run (public), and exclusively so at the higher education level. Public education is provided free at all levels, there being no registration or tuition fees and pupils/students are provided with textbooks without charge. During the six years of elementary education, all pupils are promoted automatically to the next grade.

UPPER SECONDARY EDUCATION

Upper secondary non-compulsory education is divided into *Lykeia* (three years) and *Technical Vocational Schools* (*TES*, two years). There are three types of *Lykeia*:

- General *Lykeia* (*GEL*);
- Technical and vocational *Lykeia* (*TEL*);
- Integrated *Lykeia* (*EPL*).

Special education

Pupils with special education needs are mainly integrated in the ordinary schools and receive special help according

to individual cases. Such help may be given individually, with ordinary classes, as additional help, or in special classes integrated in ordinary schools. There are special schools for severely handicapped pupils and for blind and deaf children.

Private education

Private education is regulated in all aspects by the Ministry of Education (curricula, building standards, etc.) and even the annual fees are subject to State control. The private education sector is steadily decreasing and only roughly 6 per cent of primary pupils attend private schools.

TERTIARY EDUCATION

Entrance examinations to higher education are divided into four groups according to the streams that students choose in their *Lykeia* studies.

There are special provision of training centres (*IEKs*) for *Lykeia* graduates who do not follow higher general education, and do not wish to enter the labour market immediately. They can acquire special professional and technical skills.

The higher education institutions (universities and technology institutions) are autonomous. The Ministry of Education finances their main current and capital expenditure, confirms their decisions, and supervises them in general.

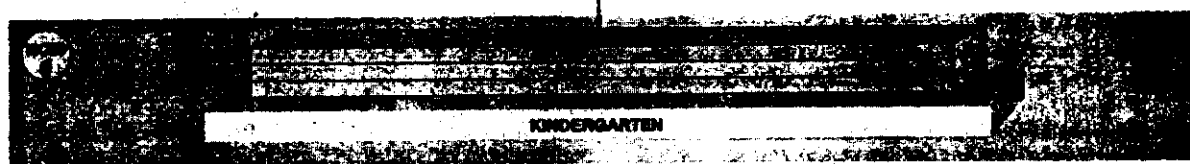
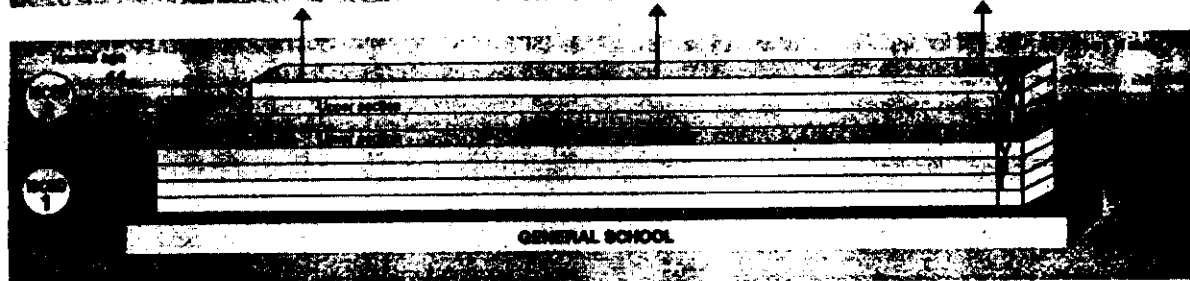
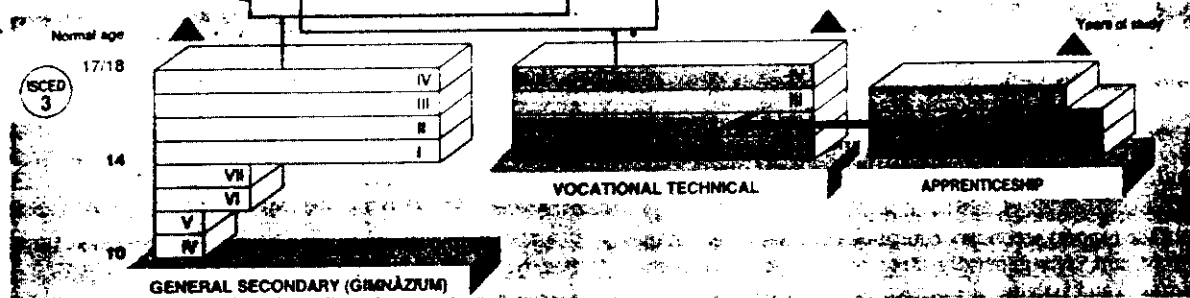
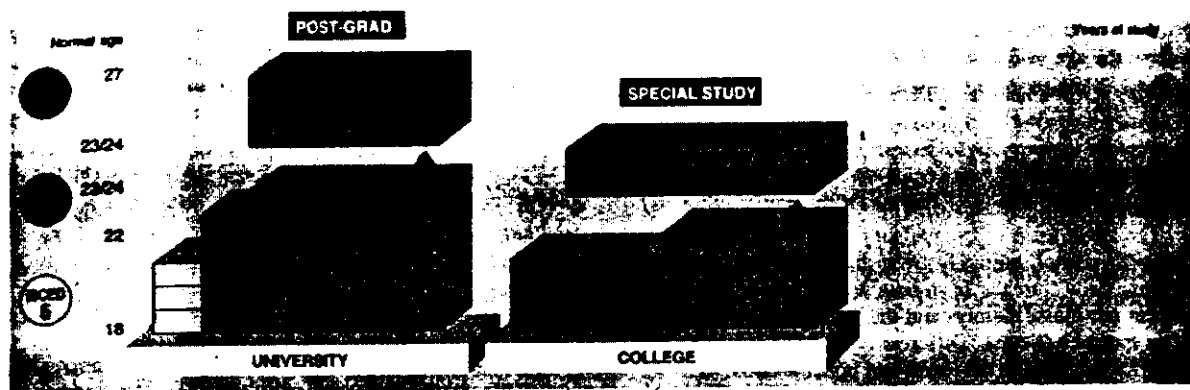
NON-FORMAL EDUCATION

Public

Non-formal education consists mainly of adult education which comprises programmes in literacy, vocational training, in-service training, etc. These programmes are sponsored by various agencies and institutions under the various ministries, organisations, associations, etc. Two of the most important of these agencies are the following: under the Ministry of Education, the General Secretariat of Adult Education and Services offering reception classes for immigrant children; under the Ministry of Agriculture, the Organisation for the Employment of the Labour Force (*OAED*).

Private

In the private sector there are a large number of institutes and schools for foreign languages, centres for liberal studies, special tuition (cramming) schools, music schools, dance schools, etc., which are mostly found in urban areas.



Hungary

PRE-PRIMARY EDUCATION

Kindergartens deal with children normally for three years, from the age of 3 to 6, but length and boundaries are not strict.

PRIMARY EDUCATION

The main form of compulsory schooling is the *eight-class general school*, normally from the age of 6 to 14. It is divided internally into the four-class lower section (based on one teacher per class, mainly) and the four-class upper section (based on special subjects). Different types of qualifications are necessary for teaching in the lower and upper section.

For the purpose of international comparison, the lower section has been reported as ISCED 1 and the upper section as ISCED 2. This division can be made exactly in enrolment data, but only by estimation in finance data.

SECONDARY EDUCATION

The (upper) secondary education begins normally at the age of 14 and lasts generally three or four years. General (*gimnázium*) and vocational-technical schools have four classes and after a final exam they give a certificate (*matura*), which is necessary for several jobs and for application for tertiary studies.

Apprenticeship means normally three years of study in a classroom and after a final exam it gives a qualification for skilled work. After apprenticeship it is possible to study in a vocational-technical school normally or on a part-time basis and to obtain a secondary certificate after two years.

As new developments, there are some 8-class and 6-class secondary schools (mainly general), which start as from the age of 10 or 12.

TERTIARY EDUCATION

Universities offer theory-based studies normally, for five years, giving a university diploma. Doctoral programmes were formerly organised by separate research institutes. Since 1993, they have been integrated into the universities. Universities offer special post-graduate programmes as further education, mainly on a part-time basis.

Colleges offer more practice-oriented studies for three or four years and deliver a college diploma. Colleges offer special supplemental courses, as well, normally for two years.

Three-year courses of colleges are reported as ISCED 5. Four-year courses and supplemental courses of colleges and university graduate programmes are reported as ISCED 6. Special part-time post-graduate programmes of universities are reported as ISCED 7.

Ireland

PRE-PRIMARY EDUCATION

Pre-primary education is provided in the same schools as primary level education. These schools are called National Schools. Pre-primary education in National Schools is defined to cover two grade-years - junior and senior infant classes.

National Schools (with a few exceptions) are privately owned and controlled but are publicly aided and are subject to public regulation and inspection. All National Schools at both this level and primary (ISCED 1) follow a national curriculum. Teachers in National School are employed by the School Board of Management of each school but are paid directly by the Department of Education.

PRIMARY EDUCATION

For the purposes of reporting data on ISCED level 1 (primary), pupils enrolled in all classes above infant classes in National Schools are included under this ISCED level. The only exception is special schools (which are in all cases counted as National Schools) where pupils aged 13 and over are allocated ISCED level 9. Corresponding amounts of expenditure and numbers of teachers in special schools are allocated to ISCED 9. There are six standards (or grade-years) corresponding to primary level within National Schools.

LOWER SECONDARY EDUCATION

This level corresponds to junior cycle of second level. Junior cycle consists of three years leading to the Junior Certificate examination taken usually at the age of 15 or 16. The Junior Certificate is a written public examination assessed by teachers outside the pupils' school.

The main types of second level schools are voluntary secondary, vocational, community and comprehensive schools. Despite the title of these schools, in recent years the range of subjects and curriculum provided at this level is broadly similar across the different school types. All of the above-mentioned types of schools are publicly aided. Voluntary secondary schools are privately owned and controlled although subject to similar regulations as other types of second level schools. Vocational schools are administered by local education authorities called Vocational Education Committees.

UPPER SECONDARY EDUCATION

This level corresponds to senior cycle of second level education. This level comprises two years of a Leaving Certificate programme preceded by an optional transition year which is also part of upper secondary education. The Leaving Certificate is a general programme leading to the Leaving Certificate examination, usually at the age of around 17 or 18. There are a number of vocational modules within the Leaving

Certificate programme as special pre-employment vocational programmes to facilitate transfer from senior cycle to the labour market. The latter are known as Vocational Preparation and Training Programmes (VPT1 and VPT2).

Also included in statistics of education at this level are courses in agricultural and second level private commercial colleges. In a limited number of cases, courses of second level standard are provided in third level institutions (for example apprenticeship training courses).

A small but growing number of the long-term unemployed aged 21 or over are availing of the Vocational Training Opportunities Scheme (VTOS) which covers studies at both lower and upper secondary level.

TERTIARY EDUCATION

Sub-degree level

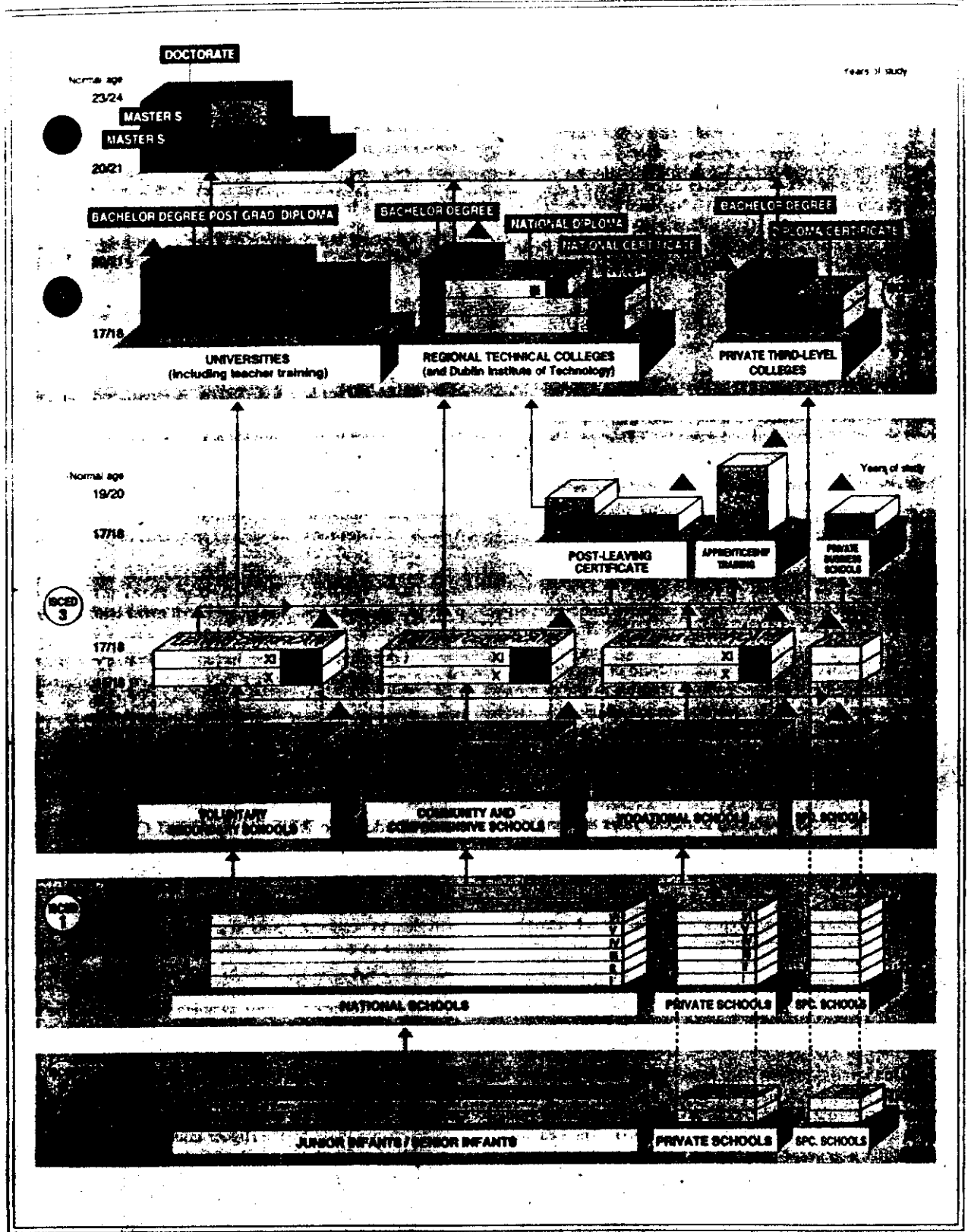
Education at the third level of a type that leads to an award not equivalent to a first university degree (ISCED 5) takes place mainly in Regional Technical Colleges and the Dublin Institute of Technology. These institutions are publicly controlled and financed. The National Council for Education Awards validates most sub-degree and some degree courses in the Technological Colleges.

Primary university degree level

Education at this level includes all Primary or Bachelor Degree programmes, whether they are taken in university or non-university institutions. All post-graduate diplomas or certificates (but not degrees) are classified under ISCED 6. All primary degrees take at least three years; many take four years; and certain disciplines such as medicine, architecture and engineering take longer. Post-graduate diplomas and certificates take one year.

Students in Regional Technical Colleges or in the Dublin Institute of Technology can obtain a Bachelor Degree in either of two ways - through following what is termed an *ab-initio* degree programme lasting for four years leading to a Bachelor Degree awarded by an external university. This is equivalent in academic terms to a three- or four-year Bachelor programme in a university institution. Alternatively, students may complete a three-year diploma course leading to a National Diploma after which they complete one further year of study leading to a Bachelor Degree awarded externally. The latter type of award is referred to as an "add-on" degree.

University institutions are publicly funded and are managed by governing bodies whose composition varies from institution to institution. All universities are influenced by public policy with regard to the numbers recruited. The total budget of the universities is set by the Higher Education Authority which is a public funding body for the universities. The universities are free to attract private sources of funding for research and teaching.



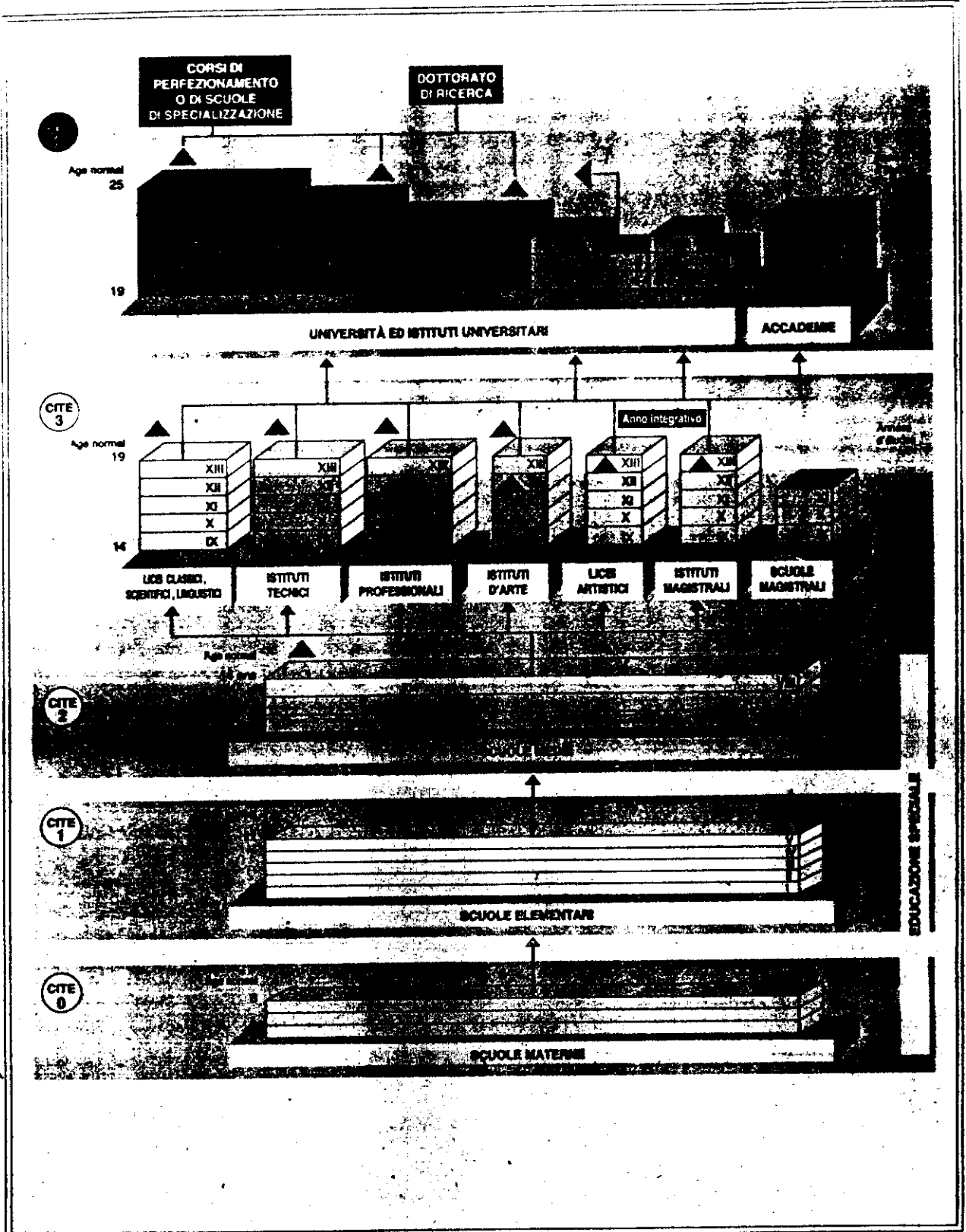
Ireland

Post-graduate degree level

Education at this level includes all Master's degree programmes as well as Ph.D. programmes. Master's degree programmes generally take one to two years on a full-time basis after completion of the Primary Degree or longer if taken on a part-time basis. Post-graduate diplomas or certificates are **not** classified under ISCED 7. A small number of Bachelor Degree graduates in Technical Colleges proceed to Master's degree programmes in these institutions.

ADULT EDUCATION

Adult education is defined in terms of second-chance education where an individual returns to education (full-time or part-time) after a break in studies since leaving school or college. The term includes both vocational education and training taking place in educational institutions and training centres as well as general courses of a short duration (such as personal development). In most cases adult education takes place in regular educational institutions (or centres attached to the regular school system). Most of adult education is allocated to ISCED levels 3, 5, and 6.



PRE-SCHOOL EDUCATION

Pre-schools accept all children between the ages of 3 and 6, including those with adjustment and learning difficulties. Children attending pre-school are organised into groups (sections), with a minimum of 14 and a maximum of 28 children. The sections can be comprised of children of the same age or of mixed ages. Attendance at State pre-schools is free of charge; a contribution is requested from families for transportation and meal services provided by the municipality.

PRIMARY EDUCATION

Between 1985 and 1990, primary education in Italy underwent a process of profound renewal which was completed by the *new programmes*, approved in 1985, and the *new system* set out in a 1990 law. Primary school attendance is compulsory for children aged between 6 and 11 years.

Primary schools are made up of five classes divided into two cycles according to the developmental levels of the children: the first cycle is comprised of the initial two classes in which basic skills predominate; the second cycle gradually introduces pupils to concepts. Classes are made up of no more than 25 pupils, with a limit of 20 pupils for classes containing a handicapped pupil for whom the presence of a support teacher is provided, in order to foster integration and learning.

With regard to organisation, a system of more than one teacher for each class is used according to a structure called a *module*. The law provides for the presence of three teachers for every two classes or four teachers for every three classes.

LOWER SECONDARY EDUCATION

The lower secondary school, or *scuola media*, is compulsory, free of charge and lasts three years. It represents the next step after primary education and is the only possible way of completing compulsory education. The requisite for admission is the possession of the primary school leaving certificate which is normally obtained at the age of 11.

The timetable of compulsory education is 30 hours a week (five hours each morning from Monday to Saturday), distributed among the various subjects of study; each lesson lasts 60 minutes.

UPPER SECONDARY SCHOOLS

After finishing the period of compulsory education and passing the lower secondary school examination, students may undertake courses of study lasting for five, four or three years. At the end of these courses they may go on to higher education or enter the job market.

All schools that offer post-compulsory instruction are part of upper secondary education and are comprised by the following categories:

- classical, scientific and primary and pre-school teacher training (commonly designated as the "Classical" category);
- artistic education: artistic *licei* and art schools;
- technical education: technical schools;
- vocational education: includes all vocational schools.

The classical *liceo* offers a course of humanistic study and aims to prepare students for university and other forms of higher education. It consists of five years of study divided into two cycles: one two-year period called *ginnasio* and another three-year period called *liceo*.

The scientific *liceo* develops and deepens the education of those intending to follow university studies in the faculties of science, medicine and surgery. Since 1969, the year which brought about the liberalisation of university admission, this *liceo*, like the "classical" one, gives access to all types of university training and higher education.

The primary teacher training school (*Istituto Magistrale*) and the pre-school teacher training school (*Scuola Magistrale*) prepares pre-school and primary teachers.

Technical education is directed towards students aged between 14 and 19 years. Technical schools aim to prepare students to practise professions, or technical or administrative services, in the agricultural, industrial and commercial sectors. The study programmes for technical schools include, in the first two-year period, cultural subjects which are common to all the sectors and specialisations.

Vocational schools accept students from 14 to 17 years of age, offering the possibility of extending studies until the age of 19 for those attending experimental five-year courses. Vocational schools were created in the 1950s in order to train qualified entry-level technicians.

At the end of the upper secondary school courses offered by the classical and artistic school categories, students must take the upper secondary school leaving certificate examination (*Maturità*). Only those who have received a positive assessment of their previous year's results are admitted to this examination. The examination is comprised of two written tests and an oral examination which is held before a Board of Examiners appointed by the Ministry of Education.

The final examinations for the two- or three-year courses offered by vocational schools are called qualification examinations and are held before commissions composed of teachers of cultural, technical and practical subjects from the school plus two external experts delegated by business and industry who have an interest in a particular school.

Artistic education is composed of schools belonging to the upper secondary school system as well as institutes of non-university higher education.

Italy

Art schools provide suitable cultural education in order to develop the creative qualities of students and to train them for employment and artistic production, while taking into account specific local traditions. The study programmes of these schools last for five years, divided into a three-year cycle followed by a two-year cycle.

The three-year study cycle ends with a final examination for obtaining the "Master of Art Diploma" and the following two-year cycle ends with a State examination for obtaining the "applied arts upper secondary school leaving certificate". Artistic *licei* aim to give students cultural training which is specifically oriented towards the sector of visual arts and relevant forms of expression.

Courses normally last four years and are divided into one two-year cycle which is common to both sections, followed by another two-year period which differs for each section. At the end of these four years, students take a State examination in order to obtain the artistic upper secondary school leaving certificate (*Maturità Artistica*).

TERTIARY EDUCATION

Article 33 of the Italian Constitution recognises the right of universities and academies to act autonomously within the limits set by law. Both public and private organisations have the right to establish schools and educational institutes. Therefore, institutes of higher education are divided into State and non-state establishments.

It is also possible to distinguish between universities and non-university institutes. In the former category, for example, in addition to universities, there are the Institutes of Higher Physical Education and special types of Institutes of Higher Education including the *Istituto Orientale*, the *Istituto superiore navale* of Naples and the *Scuola normale superiore* of Pisa.

Artistic higher education institutes belong instead to the non-university higher education category.

The *Ministry of Universities and Scientific and Technological Research* has general responsibility for university education. It also distributes available funds among State universities and those private universities that have conformed to the structure of the public sector and that have obtained the authorisation to issue legally recognised qualifications. Private universities, moreover, also receive financial resources from local organisations, associations or foundations. In the context of university autonomy, State universities are allowed to accept financing and contributions for research and activities for different users. Additional income for the university comes from contributions paid by students for services (laboratories and libraries).

Universities issue the following qualifications:

- university diploma (*laurea breve*);
- degree certificate (*laurea*);
- specialisation certificate;
- research doctorate (*dottorato di ricerca*).

Scuola materna
Scuola elementare
Scuola media
Liceo classico
 scientifico
 linguistico
Licei artistici
Istituti tecnici
Istituti professionali
Istituti d'arte
Istituti magistrali
Scuole magistrali
Anno integrativo
Università ed Istituti universitari
Corsi de laurea
Corsi di diploma universitario
Scuole dirette a fini speciali
Accademie di belle arti
Dottorato di ricerca
Corsi di perfezionamento o Scuole di specializzazione

Pre-school education
 Primary education
 Lower secondary education
 Classical high school
 Scientific
 Language
 Art high schools
 Technical institutes
 Professional institutes
 Art institutes
 Teacher training institutes
 Pre-school teacher training institutes
 Additional complementary year
 University and higher education centres
 Master's degree programmes
 Higher education degree programmes
 Specialised schools
 Fine arts academies
 Ph.D. degree
 In-service training centres

It is compulsory to attend both an elementary school and lower secondary school or to attend a special education school for a period of nine years, from the age of 6 to 15.

Private education. There are national, local public and private institutions at all levels of education. The percentage of enrolments in private educational institutions at each level of education is as follows:

Pre-primary education (kindergartens):	about 80%
Compulsory education (elementary and lower secondary schools):	less than 1%
Upper secondary education (upper secondary schools):	about 30%
Higher education (universities):	about 70%
(junior colleges):	about 90%
(colleges of technology):	about 5%
Others (special training colleges):	about 95%
(miscellaneous schools):	about 98%

PRE-PRIMARY AND PRIMARY EDUCATION (*Yochien*)

Kindergartens cater for children aged 3, 4 and 5 and provide them with one- to three-year courses. Elementary schools (*Shogakko*) aim at giving children between the ages of 6 and 12 elementary general education suited to the stage of their mental and physical development.

SECONDARY EDUCATION

Lower secondary schools (*Chugakko*) give children between the ages of 12 and 15 general secondary education suited to the stage of their mental and physical development, continuing on the basis of work done in elementary school. Upper secondary schools (*Koto gakko*) offer, in addition to full day courses (*Zennichisei katei*), day/evening (*Teijisei katei*) and correspondence courses (*Tsushinsei katei*). Full-day courses last three years, while both day/evening and correspondence courses last three years or more. The latter two courses are mainly intended for young workers who wish to pursue their upper secondary studies in a flexible manner. All these courses lead to a certificate of upper secondary education. Upper secondary school courses may be classified into two categories: general and specialised (vocational) courses.

Special education schools (*Tokushu-kyoiku-gakko*) exist for the blind, deaf and otherwise handicapped. They are divided into four levels: kindergarten, elementary, lower secondary and upper secondary departments. In addition, special classes in ordinary elementary and lower secondary schools cater for children with less severe handicaps.

TERTIARY EDUCATION

Institutions of higher education include universities, junior colleges and colleges of technology. In addition, special training colleges offering post-secondary courses may be regarded as another type of higher education institution.

Universities (*Daigaku*) require for admission the completion of upper secondary schooling or its equivalent, and offer courses of at least four years leading to a Bachelor degree (*Gakushi*). Universities may set up a graduate school offering advanced studies in a variety of fields leading to Master's (*Shushi*) and doctoral (*Hakushi*) degrees. Graduate schools normally last five years, consisting of the first two-year courses leading to a Master's degree and the following three-year courses leading to a doctoral degree.

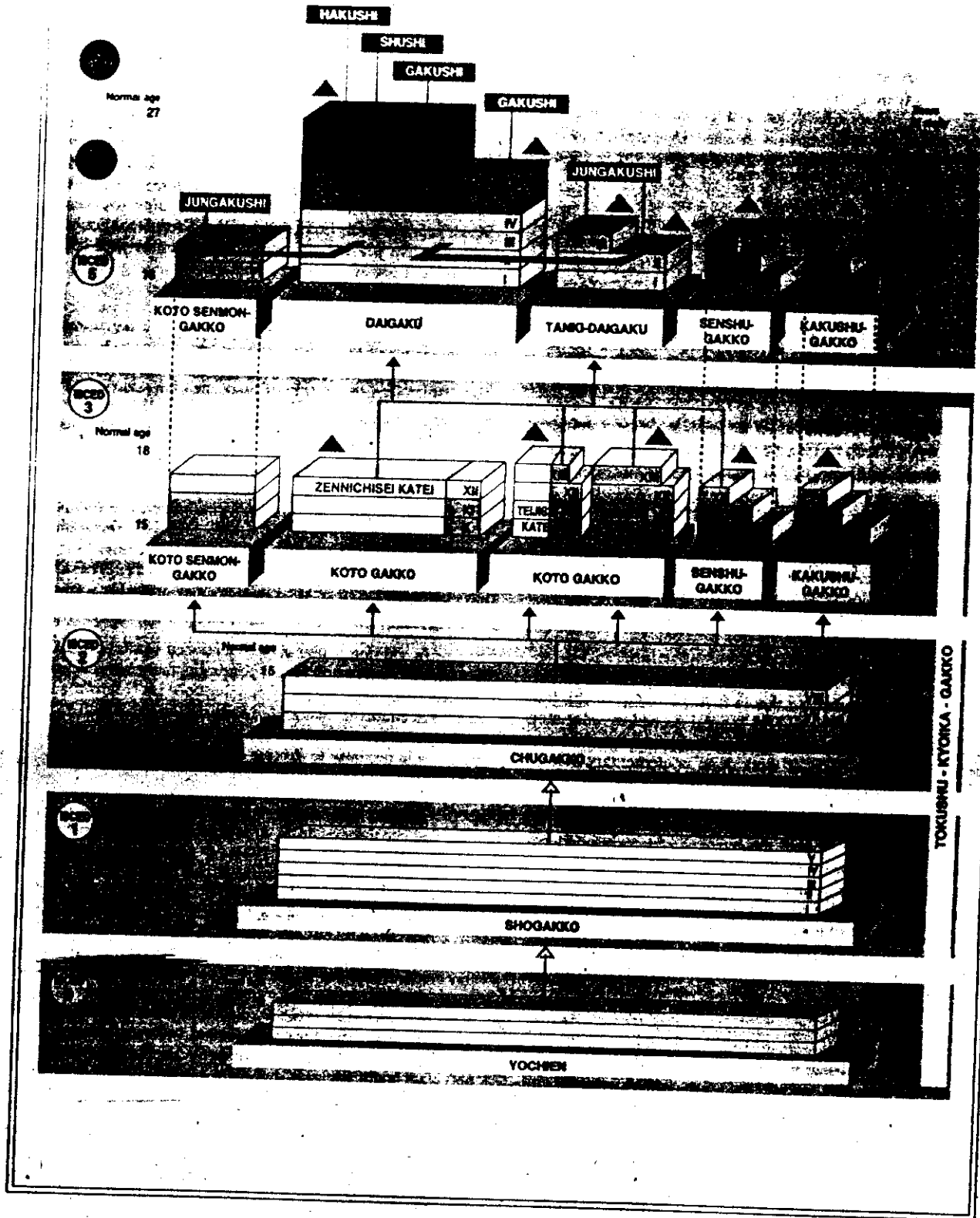
Junior colleges (*Tanki-daigaku*) require for admission the completion of upper secondary schooling or its equivalent, and offer two- or three-year programmes in different fields of study which lead to the title of associate (*Jungakushi*). Those who have completed junior college may go on to university and their credits acquired at junior college may be counted as part of the credits leading to a Bachelor's degree.

Colleges of technology (*Koto senmongakko*) unlike universities or junior colleges, accept those who have completed lower secondary schooling, and offer five-year programmes leading to the title of associate. They teach specialised subjects in depth and prepare students for vocational life. Those who have completed college of technology may apply for admission to the upper division of university.

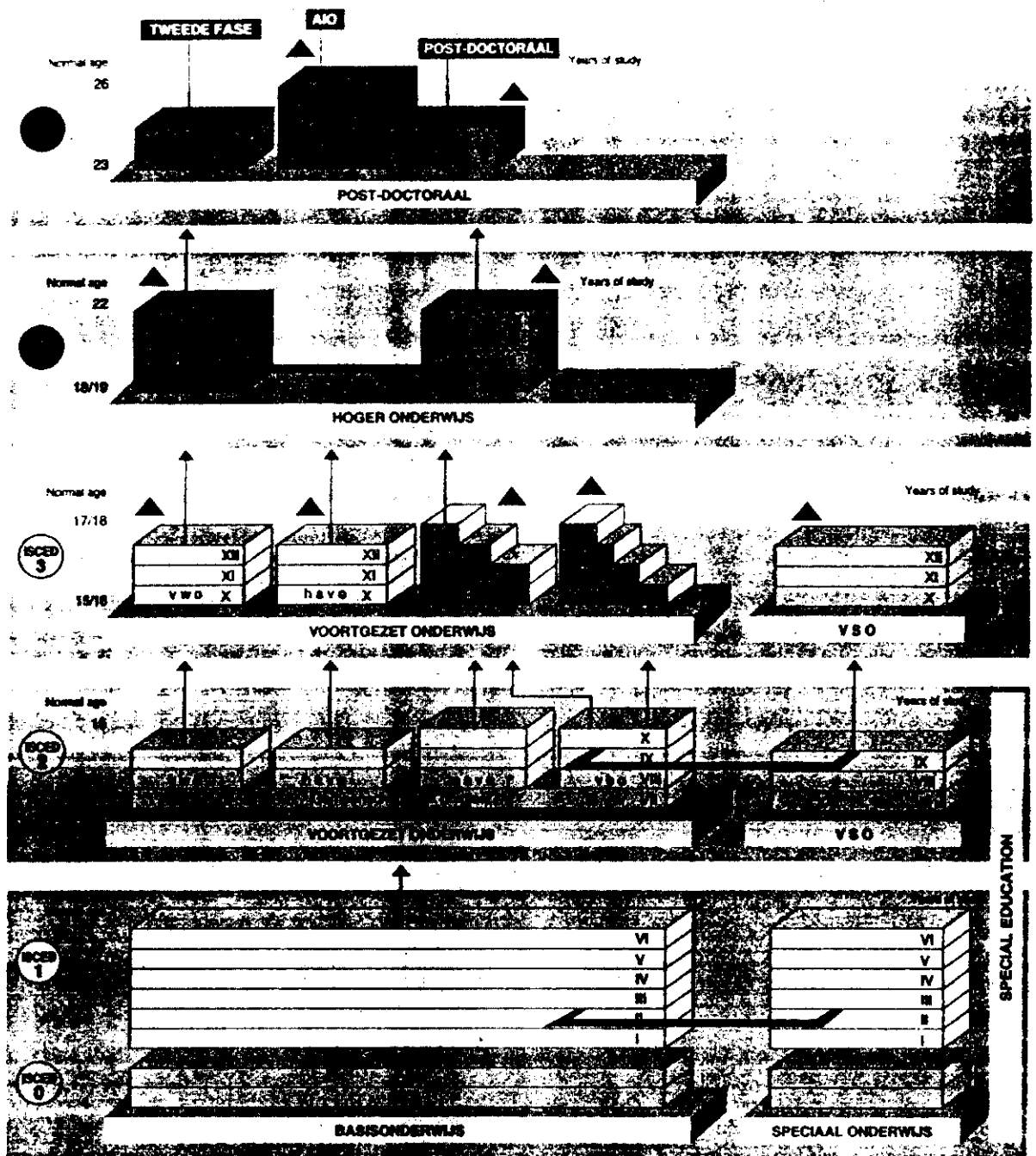
In addition to the above-mentioned institutions of elementary, secondary and higher education, there are educational institutions known as "special training colleges" (*Senshugakko*) and "miscellaneous schools" (*Kakushugakko*) which offer a variety of practical vocational and technical education programmes in response to diverse demands of people. The great majority of these schools are privately controlled.

Courses provided in special training colleges may be classified into three categories: upper secondary, post secondary and general courses. From 1986, on students who have completed an upper secondary course lasting three years or more in special training colleges designated by the Minister are entitled to apply for a university place.

Miscellaneous schools provide people with vocational and practical training in such fields as dress-making, cooking, book-keeping, typing, automobile driving and repairing, computer techniques, etc. Most courses in miscellaneous schools require for admission the completion of lower secondary schooling. These courses normally last one year or more with at least 600 class hours per year, but there are also shorter courses of three months or more.



<i>Kindergarten</i>	Kindergarten
<i>Shuugaku</i>	Elementary school
<i>Dai-ni-jūgaku</i>	Lower secondary school
<i>Kō-ni-jūgaku</i>	Upper secondary school
<i>Zennin-hisetsu katei</i>	Full day course
<i>Tei-isei katei</i>	Day-evening course
<i>Isashinsei katei</i>	Correspondence course
<i>Dai-daigaku</i>	University
<i>Gakushi</i>	Bachelor
<i>Dai-gakutin</i>	Graduate school
<i>Shushi</i>	Master
<i>Hakushi</i>	Doctor
<i>Tanki-dai-gaku</i>	Junior college
<i>Jungakushi</i>	Associate
<i>Koto senmon-gakko</i>	College of Technology
<i>Jungakushi</i>	Associate
<i>Senshu-gakko</i>	Special Training College
<i>Kakushin-gakko</i>	Miscellaneous school
<i>Tokushu-kōseika-gakko</i>	Special education schools



The Netherlands

Freedom of education, which is laid down in the Constitution, finds expression in virtually all facets of the Dutch education system. The threefold freedom – to found schools, to organise them and to determine the principles on which they are based – is the reason for the wide variety of schools in the Netherlands. Under the terms of the Constitution, the government funds public and private schools on an equal basis. Freedom of education is subject to restrictions laid down in the Compulsory Education Act, which stipulates that, until they reach the age of 16, children must attend an educational establishment which complies with statutory requirements.

The diagram reflects the situation in 1992.

PRIMARY EDUCATION

Primary education (*basisonderwijs*) caters for children from 4 to about 12 years of age and provides in principle 8 consecutive years of schooling. All children must attend school from the first day of the month following their 5th birthday. However, almost all children attend primary school from the age of 4.

SPECIAL EDUCATION

Special and secondary special education is intended for children who require extra educational help beyond what normal education can offer. To provide such students with a suitable education, there are various types of (secondary) special education. Each type specialises in education for specific types of students, such as those with hearing, visual or physical handicaps, or those with (severe) learning difficulties or maladjusted children.

In principle, special education (*SO*) aims at the same age group as normal primary education. The age at which children may enter special education differs, varying from 3 to 6 years, depending on the type of school. Secondary special education (*VSO*) is for children starting at age twelve. There is a maximum of twenty years of age for special education. After following special education, students usually move to secondary special education or to one type of individual vocational education. Students may also pursue a *VWO*, *HAVO*, *MAVO* or *VBO* education.

SECONDARY EDUCATION (*voortgezet onderwijs*)

General secondary education follows on from primary education and caters for pupils from 12 to about 18 years of age. Secondary education is provided in the following forms:

- pre-vocational education (*VBO*) for age 12 to 16, a four-year course;
- junior general secondary education (*MAVO*) for age 12 to 16, a four-year course;

- senior general secondary education (*HAVO*) for age 12 to 18, a five-year course;
- pre-university education (*VWO*) for age 12 to 18, a six-year course.

Most secondary school pupils spend one or more years in a transition class (*gemeenschappelijke brugklas*), after which they are referred to the type of schools best suited to their needs.

VBO, *MAVO*, and the first three years of *HAVO* and *VWO* are part of the first phase of secondary education. The fourth and fifth years of *HAVO* and the fourth to sixth year inclusive of *VWO* belong to the second phase. Schools for secondary education start with a basic education period, effective for the 1993/94 school year. This is a three-to-five-year period. It concerns substantive innovation within existing types of schools.

Senior secondary vocational education (*MBO*) currently falls under the Secondary Education Act. In future, however, these forms will be incorporated in the Education and Vocational Education Act (*WVBO*). *MBO* is vocationally oriented, leading to middle management positions in industry, service industries and government. *MBO*, for age 16 to 18-20, is a continuation of *VBO* or *MAVO* and lasts a maximum of four years. Longer courses (three and four years) lead to middle management jobs and are contiguous to *HBO*. Interim courses (maximum three years) lead to an independent profession and short training courses (maximum two years) lead to a starting profession, possibly moving on to the long *MBO*.

The apprenticeship system (*LLW*) is general vocational training under the joint responsibility of education, government and the social partners. Following one or two days at school, the other days comprise practical training in industry or trainee workshop. This combination of practical and theoretical training forms the basis of the apprenticeship system. It is for young people from 16 years of age, with or without *VBO* or *MBO* certificates. It lasts one to three years. The Ministry of Education and Science provides the financing.

The apprenticeship system has three levels: *primary training* leads to a starting profession, linked to *MAVO* and *VBO*; it lasts two to three years; *secondary training* leads to an independent profession, linked to primary apprenticeship system training and to the short *MBO* training, duration one to two years; *tertiary training* leads to specialists profession, linked to secondary apprenticeship system training and to the interim *MBO* training, duration one to two years.

TERTIARY EDUCATION

Tertiary education comprises higher professional education (*HBO*) university education (*WO*) (universities). As of 1993, these sectors are part of a single law, the Higher Education and Research Act (*WHW*). *HBO* and *WO* have a two-tier system. The first phase, or undergraduate level, may last up to four years, the propaedeutic stage of which lasts no longer than one year.

The Netherlands

Higher professional education (HBO) provides theoretical and practical training for occupations which require a higher vocational qualification and is taught at HBO colleges. It follows on from the higher types of secondary education (i.e. HAVO, VWO and MBO). Besides initial education directly related to secondary education, the HBO also provides – in its second phase – several secondary training courses, among others for the arts. To follow a secondary training course, students must have higher educational training. HBO colleges can carry out research to the extent that it relates to the institutions' training courses. Graduates of a four-year technical or agricultural course earn the title of *ingenieur* (ing.), for the other branches of study, the title is that of *baccalaureus* (bc). Internationally, the title of Bachelor (B) may be used.

University education (WO) comprises training in the independent pursuit of scholarship and preparation of positions in the community for which a university degree is required. A university also has the function of transmitting the knowledge obtained in the pursuit of scholarship for the benefit of the community, as a service to society. A VWO-certificate, a special entrance examination or a foundation course from a higher professional course provides admission to university studies.

Following the undergraduate exam, one earns the title of *doctorandus* (drs.), *meester* (mr. law) or *ingenieur* (ir. science). The title of Master may be used internationally.

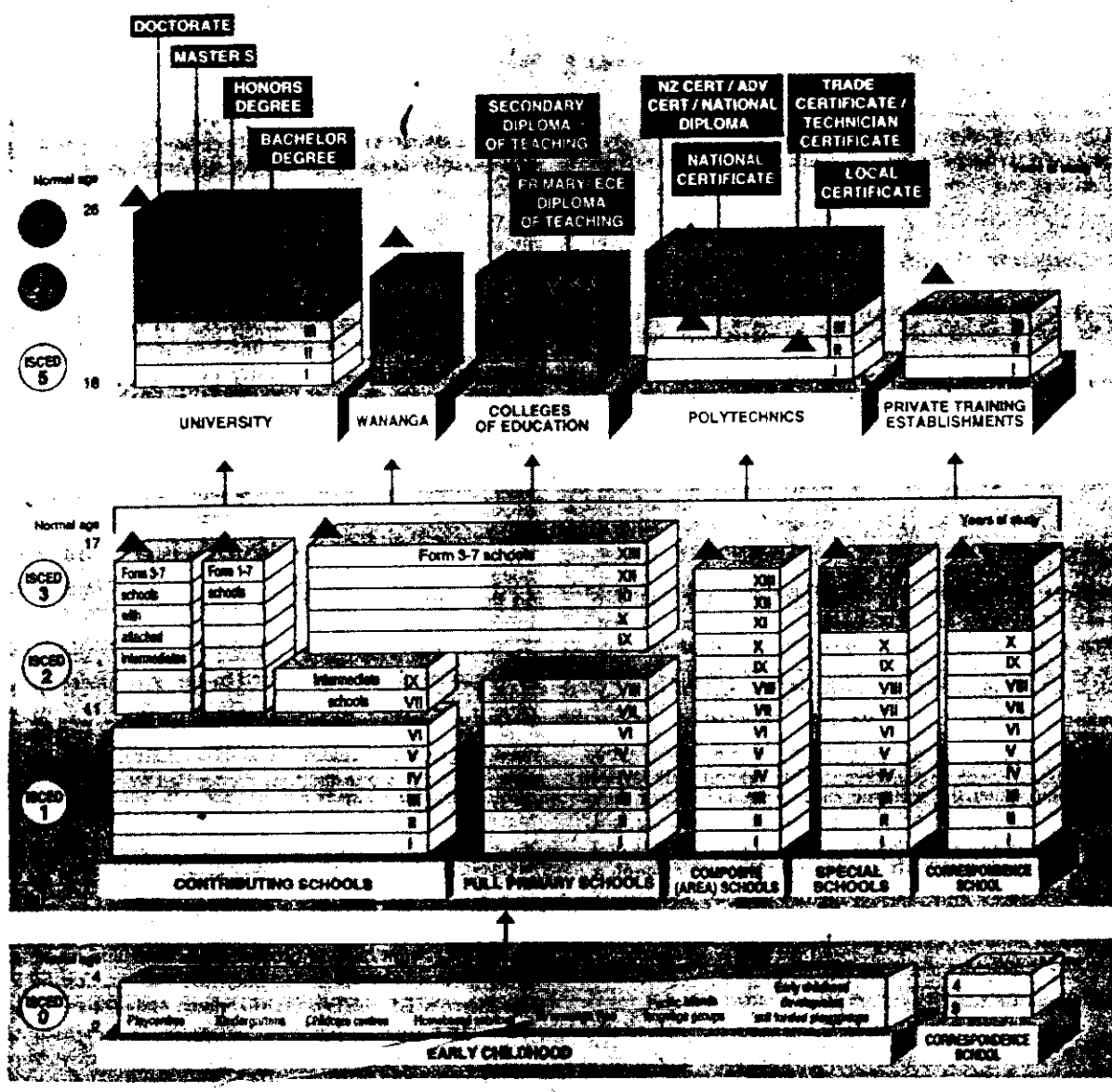
The second stage, to which a limited number of students is admitted, provides academic training at post-graduate level. Students in these courses, who are known as trainee research assistants or AIOs, are trained as researchers or design engineers. The courses vary in length from 1 to 4 years and are open

to HBO as well as university graduates. In addition, universities provide post-graduate vocational courses, including for example those for doctors, veterinary surgeons and dentists.

Teacher training courses for the various fields of education form part of higher education and can be subdivided into:

- Teacher training for full competence in primary education in all subjects and for all age groups (HBO).
- General teacher training for a second degree and a first degree qualification in secondary education. Second degree teachers may give lessons in the first three years of HAVO and VWO and in all years of VBO, MAVO or MBO, first degree teachers in the complete secondary education system. Full-time training for second-degree qualification lasts four years, with special training in a single subject. A first degree can then be attained by taking three-year, part-time training (HBO).
- Teacher training in the technical subjects for a second-degree qualification at the Netherlands Pedagogic Technical College. The course lasts five (full-time) or seven (part-time) years (HBO).
- Teacher training for physical education for a first-degree qualification, at five colleges. The course lasts four years (HBO).
- University teacher training for a first-degree qualification in secondary education in the subject completed at the university. It is a one-year course. Passing an undergraduate exam, in which a two-month orientation towards the teaching profession is part of the study programme, is a requirement for admission (WO).

	<i>Basisonderwijs</i>	
O	<i>Speciaal onderwijs</i>	Pre-primary education
VO	<i>Voortgezet onderwijs</i>	Special education
VSO	<i>Voortgezet speciaal onderwijs</i>	Secondary education
	<i>Gemeenschappelijk brugjaar</i>	Secondary special education
VBO	<i>Vorbereidend beroepsonderwijs</i>	Transition class
MAVO	<i>Middelbaar algemeen voortgezet onderwijs</i>	Pre-vocational education
HAVO	<i>Hoger algemeen voortgezet onderwijs</i>	Junior general secondary education
VWO	<i>Vorbereidend wetenschappelijk onderwijs</i>	Senior general secondary education
MBO	<i>Middelbaar beroepsonderwijs</i>	Pre-university education
LLW	<i>Leerlingwezen</i>	Senior secondary vocational education
HO	<i>Hoger onderwijs</i>	Apprenticeship system
WO	<i>Wetenschappelijk onderwijs (universiteiten)</i>	Higher education
HBO	<i>Hoger beroepsonderwijs (Hogescholen)</i>	University education
	<i>Post-doctoraal</i>	Higher professional education
	<i>Tweede fase</i>	Post-graduate level
AIO	<i>Assistent-in-opleiding</i>	Second-phase courses
		Trainee research assistant



New Zealand

PRE-PRIMARY EDUCATION

Early childhood care and education are available to children under 6 years of age through home-based services and through a wide range of centre-based services which provide both sessional and full-day programmes. These are administered by a variety of groups including community and church groups, voluntary agencies (such as playcentre and kindergarten associations) and commercial operators. *Kohanga reo* have been established by New Zealand's Maori people to provide a language immersion educational early childhood environment in which children can learn Maori language and culture. Pacific Island communities are also establishing early childhood centres where their own languages are used. All early childhood care and education services must meet minimum requirements laid down by government. To be eligible for a government general funding grant, services must also have a negotiated charter.

PRIMARY AND SECONDARY EDUCATION

The Education Act (1989) provides for free education in State primary and secondary schools, and attendance is compulsory from the age of 6 until the age of 16. However, almost all children start formal schooling at the age of 5. The final two years of primary schooling, forms 1 and 2 (ages 11 and 12), may be taken at full primary school (ages 5 to 12), an intermediate school (which caters for those two years only), an area school (which caters for all students ages 5 to 17), or a form 1-7 school, depending on the schools available within the child's neighbourhood or district. The majority of children begin secondary school at age 13 (form 3). A smaller number (about 12 per cent) remain within either the area school or form 1-7 school they have been attending. Maori medium education in the school sector is supported through the provision of bilingual and immersion programmes in mainstream schools or through a small number of schools (currently 34) which are specifically designated Maori medium schools (*kura kaupapa Maori*).

TERTIARY EDUCATION

Beyond secondary school level, which may be completed at either forms 5, 6 or 7 (ages 15 to 17), students may

undertake further education and training in a polytechnic, university, college or in education, a private training establishment or with an employer in industry.

Polytechnics provide a diverse range of vocational education. Programmes are generally concentrated at ISCED levels 3 and 5, although a broad range of personal growth, community and general, bridging and professional skills enhancement programmes are also catered for. Courses span from certificate to degree level. Subjects range from trade training, in areas such as plumbing and carpentry, to secretarial and business courses and training for nurses.

Universities in New Zealand offer education ranging from ISCED level 3 (a very small number of programmes) through ISCED 7. The majority of programmes are at the degree or postgraduate level (ISCED 6 and 7). All universities offer arts, science and commerce, while others offer specialist degrees in law, music, veterinary science, medicine, dentistry, agriculture, horticulture, architecture, planning, engineering, optometry and fine arts.

Teacher training (ISCED 5) is provided through colleges of education, although teacher education is also offered in a small number of universities and polytechnics.

Wananga are tertiary education providers, set up by tribal authorities, that are recognised by the government for funding purposes. They provide polytechnic and university level programmes specifically for Maori and with an emphasis on Maori language and culture. This is a relatively new development with only two institutions recognised to date and student numbers are still small.

Education and training are also provided through a range of private and commercial training establishments, through government training establishments and by industry. The largest group of private training establishments are fully funded by government to provide education and training for school leavers with low or no qualifications and for the long-term unemployed with low qualifications. Other private training providers are privately funded and offer courses in a broad range of specialist fields. Some industries may also receive support from government for the provision of training.

PRE-PRIMARY, PRIMARY AND LOWER SECONDARY EDUCATION

At present Norwegian children start school during the calendar year they reach the age of 7. From 1997 they will start at the age of 6 and compulsory education will be extended from nine to ten years. Today voluntary pre-school education at school or at a child-care institution is available to 90 per cent of all 6 year-olds.

Handicapped children are, as far as possible, integrated into regular classes. However, for certain groups of severely handicapped pupils, national centres of competence assist municipalities and schools.

Compulsory education consists of primary school, grades 1-6 (age 7 to 13) and lower secondary school, grades 7-9 (age 13 to 16). Compulsory education is completely comprehensive. The aim is to offer all children an education which is adapted to the individual's abilities. Each class is kept together as a heterogeneous unit, at least from the first to the sixth grade. During the eighth and ninth grades, students can choose electives in addition to the required studies, but class units remain unchanged except for the elective courses. There is no repeating of grades.

UPPER SECONDARY EDUCATION

In the school year beginning August 1994, great changes are being introduced in upper secondary education. The reform (Reform '94) gives all young people aged 16 to 19 years the legal right (but not an obligation) to three years' full-time upper secondary education, extended to five years for disabled pupils. The regional authorities have to provide the adequate number of places to guarantee this right. The training will qualify for higher education or lead to a craft or journeyman's certificate or other occupational qualification. It will be easier for pupils with vocational training to qualify themselves for entry to a college or university.

During the first year of upper secondary education there are now 13 foundation courses to choose from. The new foundation courses have a more general educational content, leaving specialisation to the level of the advanced courses and/or apprenticeship training.

Training in trades that come under the Vocational Training Act takes the form of two years of vocational education at school followed by an apprenticeship period in an enterprise. The year of apprenticeship may be extended to two years if combined with actual participation in the work of the enterprise, in which case the apprentice is considered an employee and receives wages for the work. In special cases, all training may take place in working life. State grants are given to the enterprise to cover the cost of instruction.

In recent years, around 95 per cent of the 16 year-olds have continued their education after compulsory education. Although typically attended by students in the 16-19 age group,

there has been a recent increase in the enrolment of older students who either wish to complete or continue their education. Today, approximately 25 per cent of the pupils in upper secondary education are more than 20 years old.

TERTIARY EDUCATION

A general qualification has been introduced for all higher education. The minimum qualification is as follows:

- completed three years' upper secondary education, including foundation course and advanced courses I and II, with pass marks or a craft or journeyman's certificate, and
- a specified level of knowledge in the subjects Norwegian, English, social studies, mathematics and natural sciences/environmental studies.

Reform '94 will provide better opportunities for recruitment to higher education from vocational training at school and in working life.

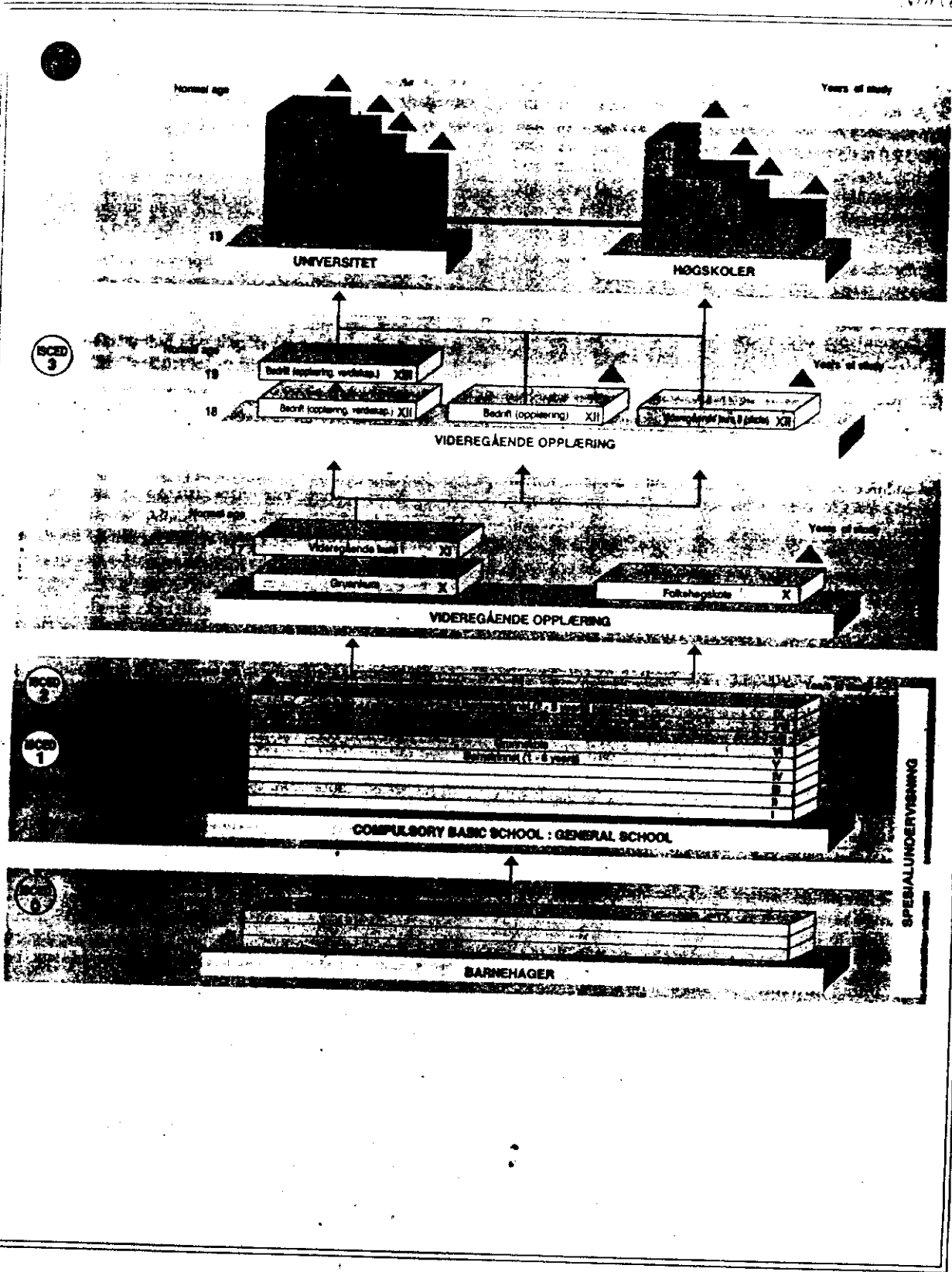
Norway has four universities and six specialised colleges at university level. These institutions offer degrees at several levels, requiring courses of study lasting four to seven years.

In 1994 the existing 98 public colleges were reorganised into 26 colleges. The basic idea was to link institutions of higher education together in an integrated "Norway Network" in order to create a structural framework for increased co-operation and communication among the institutions. These institutions offer programmes running for one to three years and, at some institutions, longer courses and graduate programmes of four to six years have also been introduced.

Degrees offered by the universities and other institutions of higher education may vary from one institution to the next. Questions concerning degrees, exams and normal time of study are to be decided by the government. Decisions on subject areas which could be included in an exam are taken by the Ministry.

Most programmes at the colleges are oriented towards specific professions, their graduates becoming professional or para-professional personnel in areas such as teaching in pre-schools and at the compulsory school level, engineering, social work, administration, economics, electronic based data, health professions, libraries, journalism, etc.

Many of the undergraduate programmes offered by the colleges and other non-university institutions of higher education can easily be transferred to undergraduate degree programmes at the universities. At the colleges, one-year programmes usually correspond to "foundation studies" at the universities. The more specialised "intermediate studies" also correspond to university programmes. The two- and three-year programmes give right to the title *Hogskole-kandidat* (college graduate). The *cand.mag.* degree may be conferred to students who, according to certain regulations, have successfully completed at least four years of study.



Norway

Graduate degree studies may be expanded into a further study programme, which is not normally permitted. *Spesialundervisning* is provided over a three to four year study period. This presupposes the successful submission of an application to the doctoral programme, which is essentially a research training programme. In addition to completing a doctoral thesis under contract bound supervision, the candidate has to undergo obligatory training in scientific theory and method.

Adult education

The responsibility for adult education is divided between the authorities and the adult education associations, which have been jointly organised by non-government organisations with adult education as their main objective, such as *Ervervsutdanningen* and the Workers' Educational Association. The State subsidises adult education in accordance with the provisions of the Adult Education Act.

The municipalities are responsible for adult education at primary and lower secondary level and the counties for the upper secondary level. The adult education associations and distance learning institutions also provide courses at this level, as well as courses in higher education and courses that are not offered by the public institutions.

The courses normally with half-year and one-year courses as well as shorter courses provide education for young people and adults, primarily of 17-22 years, do not result in formal qualifications.

Labour market courses provide occupational qualifications. They are part of the government's labour market strategy and are fully financed by the State. The courses take place at upper secondary schools, in separate centres attached to the schools or in enterprises. They are run by the labour market authorities, the adult education associations and the school authorities in co-operation.

Private schools

There are few private schools in Norway. By the Act of State Grants to Private Schools implemented in 1985, the government established the conditions under which private schools can obtain public financing. About 98 per cent of all children in compulsory school and 96 per cent of those at upper secondary school attend State schools.

Barnhager

Grunnskole

Obligatorisk skole

Barnetrinnet

Ungdomstrinnet

Spesialundervisning

Videregående opplæring

Grunnkurs

Videregående kurs I

Folkehøgskole

Videregående kurs II (skole)

Bedrift (opplæring)

Bedrift (opplæring, verdiskaping)

Høgskole

Universitet

Kindergartens

Compulsory school

Compulsory school

Primary school

Lower secondary school

Education for handicapped pupils

Upper secondary school

Foundation course

Advanced course I

Folk high school

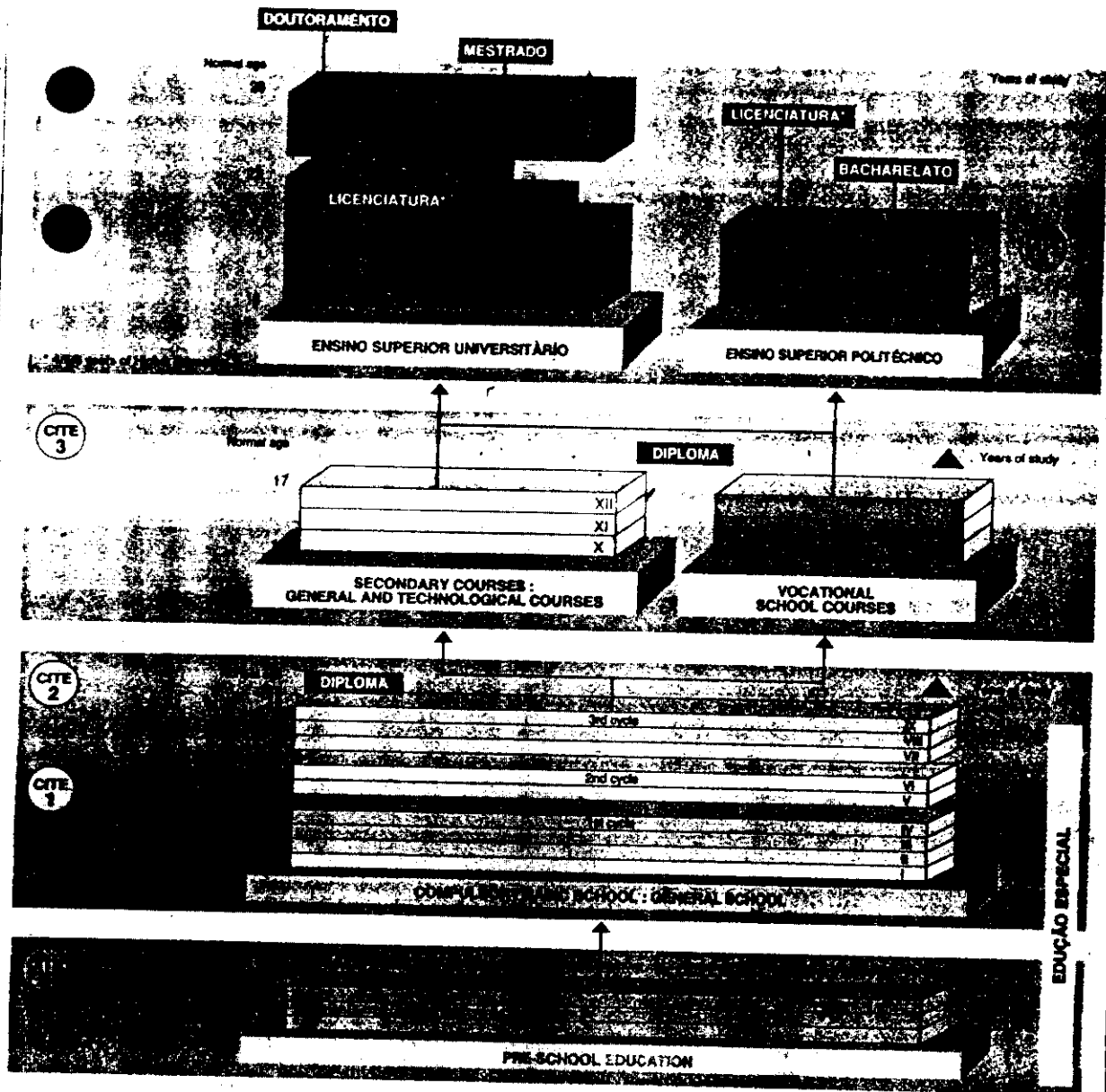
Advanced course II (school)

At the workplace (training)

At the workplace (training and productive work)

College

University



Portugal

The Comprehensive Law on Education (Law 46/86) establishes the general framework for the education system, covering pre-schooling education, schooling education and non formal schooling education. The education system, which covers all Portuguese territory – mainland and autonomous regions – and, in a flexible and diversified form, the needs of the Portuguese communities living abroad, comprises a set of facilities that ensure the right to education and guarantee equal opportunities to both access to schooling and success at school.

The State is responsible for the democratisation of education, but is not entitled to direct education and culture according to any philosophical, aesthetic, political or religious orientation. State education is not confessional, but the right to create private and co-operative schools is guaranteed.

PRE-PRIMARY EDUCATION

Pre-schooling education is not compulsory. The government's priority is to attain an enrolment rate of 90 per cent at this level by the end of the century.

PRIMARY AND LOWER SECONDARY EDUCATION

Universal, free and compulsory basic education lasts nine years. It comprises three cycles: the first cycle (four years) covers general education, taught by one teacher in first cycle schools (former primary schools).

The second cycle (two years) is organised as a basic introduction to interdisciplinary subject areas, usually with one teacher per area. It is taught in second cycle schools (former preparatory

"C" schools, in comprehensive "C+S" preparatory and secondary schools and in the experimental Basic Comprehensive Schools (EB 1, 2, 3).

The third cycle (three years) is taught according to a standard curriculum, covering different technological subject areas, with one teacher per subject or group of subjects. It is taught in third cycle schools, in comprehensive "C+S" schools, in secondary schools and in the experimental Basic Comprehensive Schools (EB 1, 2, 3).

UPPER SECONDARY EDUCATION

Upper secondary education is optional and consists of a single cycle of three years (the 10th, 11th and 12 years), comprising both general courses leading to the further pursuit of studies, and technological courses geared more to vocational preparation. Transferability between the two types of courses is guaranteed. In secondary education students have several teachers, each teacher being responsible for one subject area. Secondary education is taught in secondary schools.

TERTIARY EDUCATION

Higher education includes university and polytechnic higher education. The private sector in higher education is more important than in basic and secondary education. Forty-five per cent of students are enrolled in private tertiary institutions against 6 per cent at primary and secondary levels.

Educação pré-escolar

Educação especial

Ensino secundário

Cursos de carácter geral

Cursos tecnológicos

Escolas profissionais

Ensino superior universitário

Ensino superior politécnico

Bacharelato

Licenciatura

Mestrado

Doutoramento

Pre-school education

Special education

Secondary courses

General courses

Technological courses

Vocational school courses

University higher education

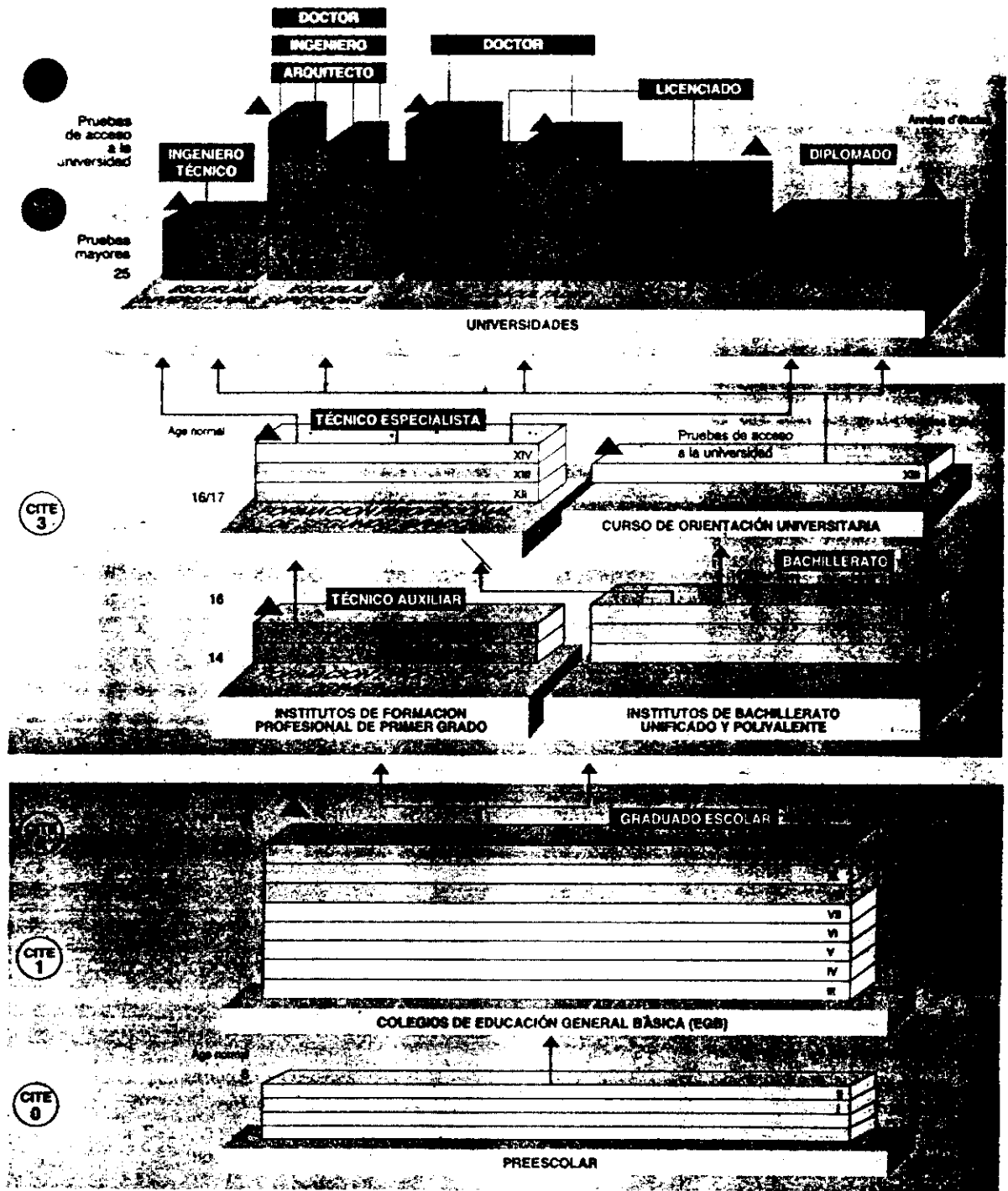
Polytechnic higher education

Bachelor degree

4/5/6 years of higher education

Master's degree

Ph.D.



The structure of the Spanish education system was recently reformed by the Organic Act on General Management of the Education System (*LOGSE*), passed in October 1990. A ten-year period is provided for full implementation of the new Act, and at the majority of educational levels, the structure laid down by the earlier General Education Act (*LGE*) of 1970 remains in force to be progressively replaced as the new levels and cycles are brought into effect. So, the diagram reflects the structure of the Spanish education system according to the 1970 Act, as it was the rule in 1992.

The structural system under the General Education Act (*LGE*) consists of four educational levels: pre-school, basic general education (*EGB*, equivalent to the new primary education and lower secondary stages), the Baccalaureate (*Bachillerato Unificado Polivalente, BUP, or Bachillerato*) and university education. Vocational training, although not included in the 1970 Act as an "educational level" in the strict sense (as it is specifically concerned with job training), forms part, together with the *Bachillerato*, of what is known in Spain as "middle level education" (equivalent to upper secondary education in other countries).

PRE-PRIMARY EDUCATION

Pre-school education is the first stage of the education system mapped out by the *LGE* and is not compulsory. It is divided into two stages: kindergarten, for children aged two and three years, and infant school, for four and five-year-olds.

PRIMARY AND LOWER SECONDARY EDUCATION

General basic education (*EGB*) is eight-year, compulsory, basic education for all pupils aged between 6 and 14 years. At its end, pupils who satisfactorily achieve the stipulated objectives are awarded the *Graduado Escolar* and may go on to both vocational training (*FP*) and the *Bachillerato*. Pupils who do not achieve the objectives receive the *Certificado de Escolaridad*, which means that the only option open to them is vocational training. *EGB* is divided into three cycles: lower, intermediate and higher.

UPPER SECONDARY EDUCATION

The *Bachillerato (BUP)* is composed of two core courses and a third in which pupils opt for the "sciences" or the "arts". Pupils who wish to go on to higher education after the Baccalaureate have to complete the *Course of University Guidance (COU)* in one of the four possible areas: science and technology, biology and health, social sciences and the human-

ities, and languages. Once they have passed *COU*, pupils may take university entrance examinations.

Vocational training is divided into two levels: first-grade and second-grade. First-grade vocational training (*FP I*) is a two-year course and is compulsory and free for all pupils who do not take the Baccalaureate. There are more than 20 different branches, divided in turn into specialities. Pupils who complete *FP I* or have the *Bachillerato* can go on to second-grade vocational training (*FP II*) which lasts two or three years, depending on how the courses are structured, and there are more than 60 specialities.

TERTIARY EDUCATION

Higher education is organised in three cycles (first and second ISCED 6 and third ISCED 7). It may be completed at university schools, faculties and higher technical schools. University schools offer first-cycle (3-year) studies and award the degrees of *Diplomado, Arquitectural Technician and Engineering Technician*. Courses at faculties and higher technical schools offer first and second cycles (5 or 6 years) studies. These institutions award the degrees of *Licenciate, Architect or Engineer*, after completion of second-cycle courses. The third cycle leads to a doctorate degree, after the doctorate courses (usually two years) have been completed and a Ph.D. dissertation has been passed.

OTHER EDUCATION

The General Education Act also referred to alternative types and kinds of education to be encompassed by the continuing education system which the Act aimed to establish: *Lifelong adult education*, providing people who, for one reason or another, were unable to complete the different educational levels at the right time with the chance to do so, and giving them the opportunity of further training and to build on their culture at different levels, etc.; *specialised education*, encompassing arts and language teaching which are not, due to their characteristics, integrated into the levels, cycles and grades of the regular system; *distance education and special education*. There have been profound changes in the structure of *special education* over recent years, as the scheme for integrating pupils with special needs into regular schools was introduced.

The system laid down by the *LOGSE* provides for a general education system with the following educational levels: infant education, primary education, secondary education (made up of the compulsory secondary education (*ESO*), the Baccalaureate and medium level vocational training), higher level vocational training and university education.

General timetable for implementing the LOGSE

Academic Year	New System	Replacing
1991-1992	Infant education	
1992-1993	1st and 2nd primary	1st and 2nd EGB
1993-1994	3rd and 4th primary	3rd and 4th EGB
1994-1995	5th primary	5th EGB
1995-1996	6th primary	6th EGB
1996-1997	1st ESO	7th EGB
1997-1998	2nd ESO	8th EGB
1998-1999	3rd ESO 1st Baccalaureate	1st BUP 1st FPI 3rd BUP 1st FP II (specialised studies system)
1999 - 2000	4th ESO 2nd Baccalaureate specific vocational training at middle level	2nd BUP 2nd FPI COU (university preparatory year) 1st FP II (general system) 2nd FP I (specialised studies system)
2000-2001		2nd FP II (general system) 3rd FP II (specialised studies system)

Note: Specific vocational training at higher level (ISCED 5) will be progressively brought in throughout this period and is therefore not included in the table.

Early implementation of some levels in a specific number of schools has been planned in parallel with the gradual

implementation of the system. This is the case for compulsory secondary education and Baccalaureate.

Pre-escolar

Educación general básica

Institutos de formación profesional de primer grado

Institutos de Bachillerato Unificado y polivalente

Bachillerato

Técnico auxiliar

Curso de orientación universitaria

Técnico especialista

Universidades

Escuelas universitarias

Escuelas superiores

Facultades

Colegios universitarios

Diplomado

Licenciado

Doctor

Ingeniero técnico

Arquitecto

Pre-primary education

General basic education

Vocational training schools

Baccalaureate schools

Baccalaureate

Technician

University guidance course

Specialist technician

Universities

University schools

Higher technical schools

University faculties

University colleges

Diploma

Licentiate

Doctorate

Technical engineer

Architect

BASIC PRINCIPLES

Compulsory school and upper secondary school are both comprehensive schools, designed to accommodate all members of the rising generation. All schools are co-educational and free of charge. Education for adults equivalent to the education conferred by the compulsory and upper secondary school is part of the public school system. Swedish education is thus a structurally uniform education system from elementary level via upper secondary schooling to adult education.

The government lays down national curricula and syllabi for the school system. Since 1991 municipalities and county councils have an undivided responsibility for organising and implementing school activities. Since 1993 the role of the State has been further limited by a radical reform of the higher education system.

Another guiding principle of the education policy is to create scope for diversity within the education system. The percentage of private compulsory and private upper secondary schools is 1.5 per cent. There are very few private institutions within higher education.

PRE-SCHOOL EDUCATION

Child-care services mainly take the following forms:

- day-care centres (*daghem*) for children aged 1-6 years;
- open pre-school (*öppen förskola*) targeted on pre-school children without any other kind of pre-school place.

Pre-school teachers co-operate in various ways with teachers at the lower level of compulsory school. By 1991 all pre-school children over the age of 18 months would be provided for.

COMPULSORY SCHOOLING - PRIMARY AND LOWER SECONDARY EDUCATION

The compulsory school system comprises compulsory school (*grundskolan*), special schools (*specialskolan*) for children with certain handicaps and compulsory school for the mentally disabled (*särskola*). There is also a Sami school for Sami-speaking children in the north of the country. Almost all pupils (over 98 per cent) attend schools run by the municipalities.

Compulsory school is divided into three levels:

- *Lågstadium*
(lower level) 1st-3rd year (ISCED 1)
- *Mellanstadium*
(intermediate level) 4th-6th year (ISCED 1)
- *Högstadium*
(upper level) 7th-9th year (ISCED 2)

Education at lower and intermediate levels could be classified as primary education and upper level education as lower secondary education.

The curriculum lays down goals and guidelines of a more general nature. It also includes time-schedules specifying the number of periods per week (lessons) at each three-year level for each subject. The curriculum puts a great deal of emphasis on training the pupils in basic skills - reading, writing and arithmetic - all the way through school. Similarly, a great deal of attention has to be paid to supplying the pupils with a basic knowledge of civics, natural science and technology. At lower and intermediate levels all pupils take the same subjects. Pupils at the upper level have a certain choice in optional courses.

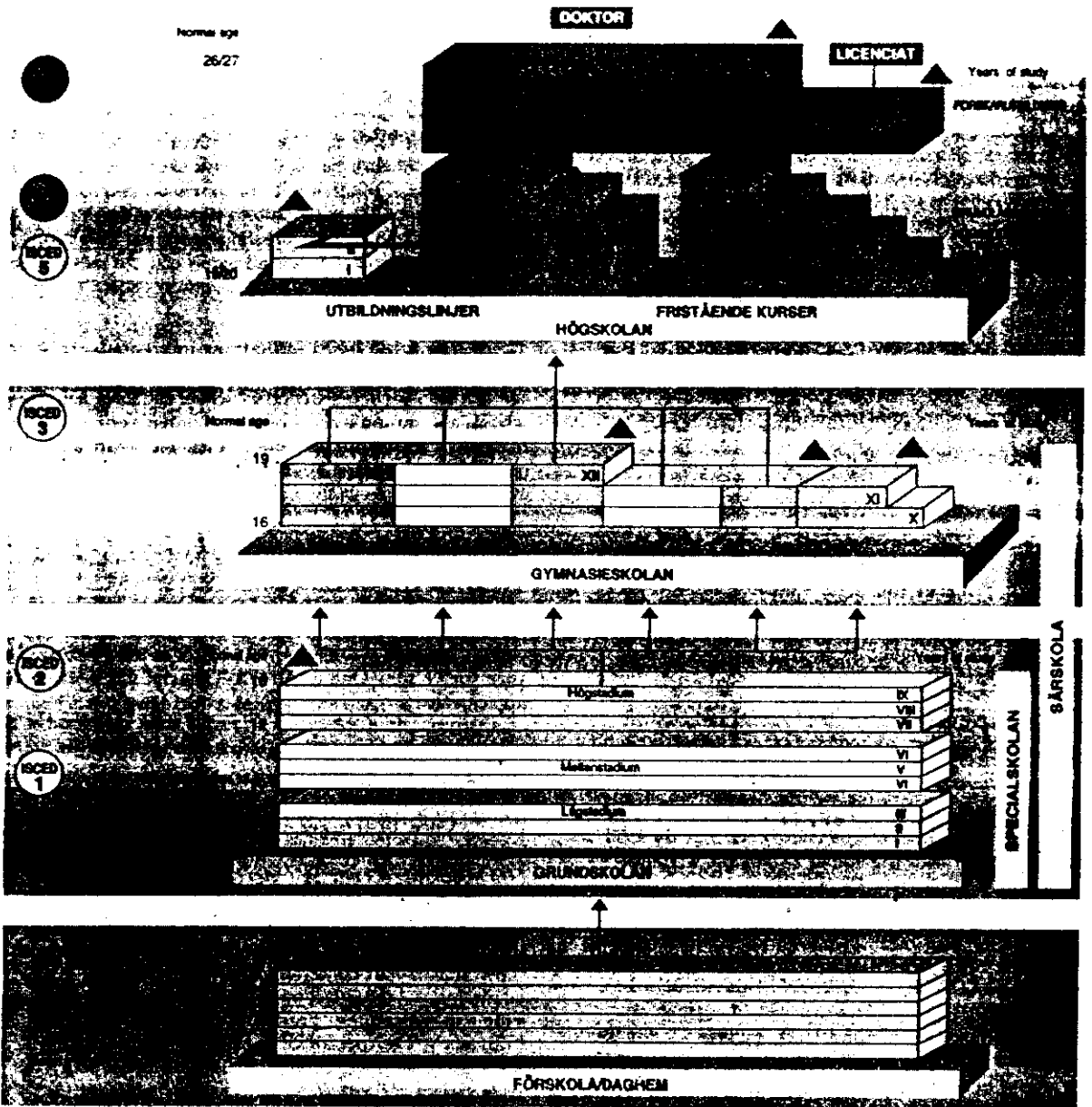
There are no examinations in compulsory school. Marks are awarded in Grades Eight and Nine, as information and as a basis for upper secondary school entrance. Compulsory schools also inform parents of their children's progress and difficulties by means of interviews. A leaving certificate on completion of nine years compulsory education confers general eligibility for upper secondary education.

In 1993 Parliament adopted legislation laying down new curricular guidelines for the whole school system, geared to the new goal and result-related governing system for schools. This will mean extensive changes in the curriculum, syllabi and time-schedules as well and in the marking system in the next few years. The new system will take effect in the 1995/96 school year for Grades One to Seven. The reform will be fully implemented as from the 1997/98 school year.

UPPER SECONDARY EDUCATION

Since 1970 upper secondary school (*gymnasieskolan*) was divided into about 25 different lines (*linjer*) and some 500 specialised courses (*specialkurser*). Most lines were practical/vocational lines of two years' duration (*2-åriga linjer*). Five three-year lines (*3-åriga linjer*) were in principle preparatory for university level studies. The one and only four-year line (now abandoned) conferred, after three years, eligibility for admission to higher technical studies. The lines were subdivided in subsequent grades into several "branches" and "variants". The specialised courses ranged in duration from a week to a couple of years, providing vocational education in a wide variety of fields.

All lines and specialised courses had their own time-schedules and syllabi. Swedish, English, physical education and civics or working-life orientation were compulsory in all study programmes. The two-year vocational lines had only a few general subjects. There were no examinations and students were awarded marks for all subjects every term. Centrally compiled achievement tests were used in order to achieve a nation-wide uniformity in the marking system. An upper secondary school leaving certificate after at least two years of study including a specified amount of Swedish and English conferred general eligibility for tertiary education.



From 1 July 1992 municipalities are obliged to provide upper secondary schooling for all pupils leaving compulsory school. The new system of upper secondary education will be fully implemented by the school year 1995/96. In the new upper secondary school, all education is organised in 16 national study programmes (*program*) of three years' duration, 14 of which are primarily vocationally oriented and two preparing primarily for university studies. Students who have requirements other than those provided for within the national programmes can opt to follow a specially designed programme, an individual programme or apprenticeship training. In all programmes, time is set aside for local supplements or practical work connected with subjects, as well as for individual choice to allow students to choose additional subjects and courses within the national programmes. The new curriculum came into effect 1 July 1994. Marks will be awarded on a four-category scale: Failed, Passed, Passed with distinction and Passed with exceptional distinction. The criteria for awarding marks will be specified in the different syllabi. All three-year programmes will meet with the general eligibility requirements for pursuing tertiary education.

TERTIARY EDUCATION

Tertiary education is divided into undergraduate studies (*Grundläggande högskoleutbildning* - ISCED 5 and 6) and post-graduate studies and research (*Forskarutbildning* - ISCED 7). All tuition within tertiary education is free of charge.

To be admitted to tertiary education, a student must first fulfil the general eligibility requirements which are common to all programmes or courses, and then meet the specific eligibility requirements which are usually imposed on applicants by the individual university or university college. For the selection of students one or more of the following criteria are applicable:

school marks, results on the university aptitude test (a national, non-compulsory test which is common for all institutions of higher education), or a special test (e.g. interviews), or previous education and work experience.

Roughly 30 per cent of young persons go on to tertiary education after completion of their upper secondary schooling. Apart from students coming straight from school, the tertiary student population includes a relatively large proportion of mature students, i.e. students who have previously acquired various amounts of work experience.

Students are able freely to choose their study route and to combine different subject courses into a degree. All courses and educational programmes have to follow curricula, established by the individual university or university college. First degree programmes (*utbildningslinjer*) will generally take between two and five years to complete. The separate courses (*fristående kurser*) usually vary in length from five weeks to one-year-and-a-half.

All courses include continuous examination, written and/or oral. There are, however, no final examinations which cover an entire three- or five-year programme. Marks are generally awarded on a three-level scale: Fail, Pass and Pass with distinction.

In 1991 a major reform was initiated, aiming at a deregulation of the unitary system of higher education and greater autonomy for the individual institutions of higher education. In 1993 a new Higher Education Act came into effect. The dimensioning of different programmes and the allocation of grants between institutions has been made more dependent than before on the requirements of the individual students and the achievements of the individual institutions. The organisation of study and range of courses on offer are determined locally and students have been given increased freedom of choice over study route.

Förskola/daghem

Grundskolan

Lågstadium

Mellanstadium

Högstadium

Specialskolan

Särskola

Gymnasieskolan

Linjer

Specialkurser

Högskolan

Grundläggande högskoleutbildning

Forskarutbildning

Utbildningslinjer

Fristående kurser

Open pre-school/day-care centre

Compulsory school

Lower level

Intermediate level

Upper level

Special school

School for mentally disabled

Upper secondary school

Lines (streams)

Specialised courses

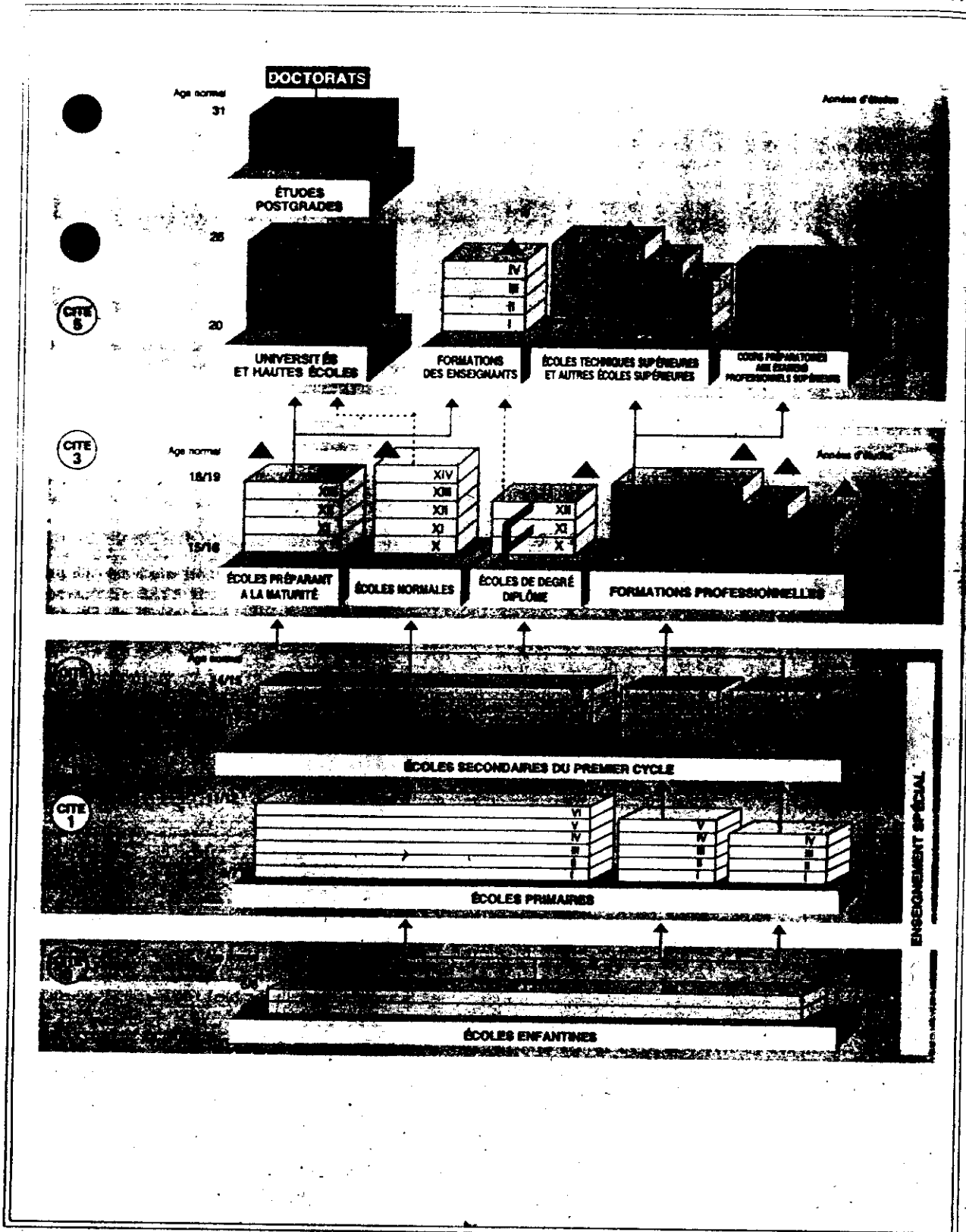
Universities

Undergraduate studies

Post-graduate and research studies

First-degree programmes

Separate courses



Switzerland

The diagram outlines the situation of institutionalised education in 1992. It includes the many different structures and channels at secondary and higher levels as well as the specific features of the 26 cantonal education systems. It sets out the major training paths followed by the vast majority of students. Nevertheless, the various forms of training are not necessarily available in all cantons and their relative weights may differ.

There is no Federal Ministry of Education. Cantons are mainly responsible for education. However, the Confederation controls the organisation of compulsory and free education. It also controls vocational training and approves leaving certificates under an ordinance originally adopted for regulating access to polytechnical schools and medical faculties. Both at federal and at cantonal levels, powers are shared among various government departments (ministries). The Department of the Interior (federal level) and public education departments (cantonal level) have the responsibility for the compulsory, general and university education; the Departments of Economic Affairs, for vocational training.

PRE-SCHOOL EDUCATION

Pre-school attendance varies from one to three years. In most cantons, the duration is two years. Although pre-primary education is optional, 98 per cent of children receive it for at least one year.

FIRST LEVEL EDUCATION

In 1992, the duration of primary education was six, five and four years in eighteen, four and four cantons, respectively. Since then, reforms have been or are to be undertaken in several cantons to extend the period from four to six years. The aim of the reforms is to postpone school selection and to improve co-ordination among the various cantonal systems.

SECONDARY EDUCATION, FIRST CYCLE

The duration is three to five years and there are two or three types of requirements depending on the cantons. The duration of compulsory education, covering first level education and the first cycle of secondary education, is nine years in all cantons.

SECONDARY EDUCATION, SECOND CYCLE

The *écoles de maturité* lead to the award of school leaving certificates (*baccalauréat* or *maturité*) which give access to higher education.

The *écoles normales* train teachers for the pre-primary, primary and secondary-first cycle, levels in some cantons. The diploma awarded also gives access – subject to certain restrictions – to higher education. In 1995 a reform will introduce generalised intercantonal recognition of primary education diplomas, which will mean that all primary teachers will be

allowed to teach in different cantons from where they actually graduated.

The *écoles de degré diplôme* provide general education. They prepare students for vocational training at secondary-second cycle, or higher education levels, especially in teaching, paramedical, social and administrative fields and the performance and visual arts.

Vocational training accounts for over two-thirds of students in the second cycle of secondary education. It includes full-time vocational schools and apprenticeships. In the latter case, full-time training is shared between vocation schools and the place of work (where apprentices are trained by official instructors). This dual system is supplemented by preparatory courses organised by trade associations. Federal certificates of aptitude are awarded following examinations. It is envisaged to introduce a vocational *baccalauréat*, which will give access to future specialised higher education establishments without entrance examinations.

HIGHER EDUCATION

ISCED 5

The *écoles supérieures* and *écoles techniques* are open to holders of a federal certificate of aptitude provided they have passed the entrance competitive examination for the purpose of further studies. These are sanctioned by a diploma. A reform is planned to convert some *écoles supérieures* into specialised *hautes écoles*. Access will be open without restriction for those holding the vocational *baccalauréat*.

Preparatory courses for vocational examinations and higher vocational examinations are open to holders of a federal certificate of aptitude with several years of work experience. The education is provided in parallel with occupational activity. It is organised by trade associations to develop further skills and train future managers. After passing an examination, course participants are awarded a federal certificate or diploma.

Teacher training at tertiary level in some cantons is given at a teacher training school or an institution attached to the university. However, the certificate awarded is not regarded as a university degree.

ISCED 6

Switzerland has two federal institutes of technology and eight cantonal universities. These are public institutions. Students enrolling at a Swiss university must hold a school-leaving certificate or a recognised equivalent diploma. The training is sanctioned by a first university degree, either a diploma or an actual degree.

ISCED 7

This education level concerns the holders of a university degree who are preparing a doctorate or following post-graduate courses.