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A young girl with dark hair and bangs, wearing a white collared shirt and a dark vest, is looking down at a globe. The entire image has a blue tint. The globe is in the foreground, and the girl's face is in the upper half of the frame.

APPENDIX A

*The Education Systems of
the G-8 Countries*

THE EDUCATION SYSTEMS OF THE G-8 COUNTRIES

Reader's Guide: Education System Charts

Differences in the structure of countries' education systems often make international comparisons difficult. To improve the comparability of education indicators, the United Nations Educational, Scientific and Cultural Organization (UNESCO) created an internationally comparable method for describing levels of education across countries called the International Standard Classification of Education (ISCED97). Using the ISCED97 classifications as a starting point, NCES worked with education professionals in the G-8 countries to create an overview of each country's education system.

There are differences within the education systems of some G-8 countries because responsibilities and oversight for education take place at the regional or local level. However, the charts and accompanying text in this appendix are intended to give the reader a general overview of the education system of each G-8 country, from the preprimary to the doctoral level.

As indicated in the source note for each country chart, the information summarizing each country's education system comes largely from the previous *Comparative Indicators* report (2006). However, some modifications were made based on updated online resources and comments received from international reviewers.

The reader is encouraged to seek out additional resources to gain a fuller and deeper understanding of each country's education system. A list of websites with additional information is provided at the end of this Reader's Guide, and additional sources are cited after each country's education system is presented.

How to read the charts

Each of the charts on the following pages is a broad representation of the education system of a G-8 country. The charts are not intended to show all possible pathways that a student can take or the many configurations of grades that may be found within the same school. Rather, each chart is intended to provide a general description that is useful for comparison across the G-8 countries.

The colors on each chart correspond to ISCED97 levels (see next section). The ISCED97 term for each level of education is written within each block. The terms in italics in each block are a country's designation for that particular level (e.g., *high school* for upper secondary school). The left side of each chart is labeled with the typical ages corresponding to each level of education. The age labels represent the typical age at which a student begins the corresponding year of schooling; often, students are 1 year older at the end of the school year. Ages in bold text are the ages at which enrollment is universal, defined here as an enrollment rate of more than 90 percent. The rectangular box encasing some ages

represents the range of ages at which enrollment is compulsory, or required by law. (See also indicator 2 for information on the age range at which more than 90 percent of the population is enrolled in formal education and the ending age of compulsory education.) The expected duration of a first university degree program, a bachelor's degree program in the United States, is listed in the note below each chart. On the right side of each chart are the years of schooling ("grade," in the United States) corresponding to each level of education. The first year of schooling corresponds to the first year of compulsory education. The ages and years listed assume normal progress through the education system.

ISCED97 levels

The ISCED97 is a classification framework that allows for the alignment of the content of education systems using multiple classification criteria. The ISCED97 levels address the intent (e.g., to study basic subjects or prepare students for university) of each year of a particular education system, but do not indicate the depth or rigor of study in that year. Thus, the ISCED97 is useful when comparing the age range of students in upper secondary schools across nations; however, it does not indicate whether the curriculum and standards are equivalent within the same year of schooling across nations. The ISCED97 allows researchers to compile statistics on education internationally. The ISCED97 levels are as follows:

- ISCED97 level 0 is classified as preprimary education. This is defined as the initial stage of organized instruction, designed primarily to introduce very young children to a school-type environment. ISCED97 level 0 programs can either be center or school based. Preschool and kindergarten programs in the United States fall into the level 0 category, although kindergarten is typically considered an elementary grade in the United States.
- ISCED97 level 1 consists of primary education, which usually lasts 4 to 6 years. ISCED97 level 1 typically begins between ages 5 and 7, and is the stage where students begin to study basic subjects, such as reading, writing, and mathematics. In the United States, elementary school (grades 1 through 6) is classified as level 1.
- At ISCED97 level 2, or lower secondary education, students continue to learn the basic subjects taught in level 1, but this level is typically more subject specific than level 1 and may be taught by specialized teachers. ISCED97 level 2 usually lasts between 2 and 6 years, and begins around the age of 11. Middle school and junior high (grades 7 through 9) in the United States are classified as level 2.
- At ISCED97 level 3, or upper secondary education, student coursework is generally subject specific and often taught by specialized teachers. Students often enter upper secondary education at the age of 15 or 16 and attend anywhere from 2 to 5 years. ISCED97 level 3 can prepare students for university,

further schooling, or the labor force. Senior high school (grades 10 through 12) is considered level 3 in the United States.

- ISCED97 level 4 programs consist of postsecondary nontertiary programs. Postsecondary nontertiary programs are primarily vocational and are taken after the completion of secondary school, though the content is not more advanced than the content of secondary school courses. Although not included in the charts, postsecondary nontertiary programs are described in the text. ISCED97 level 4 programs in the United States are often in the form of 1-year certificate programs.
- Tertiary programs²⁹ are divided into ISCED97 levels 5A, 5B, and 6. ISCED97 level 5A refers to academic higher education below the doctoral level. Level 5A programs are intended to provide sufficient qualifications to gain entry into advanced research programs and professions with high skill requirements. The international classification includes programs of medium length that last less than 5 years and long programs that last 5 to 7 years. In the United States, bachelor's, master's, and first professional degree programs are classified as ISCED97 level 5A. ISCED97 level 5B refers to vocational higher education. Level 5B programs provide a higher level of career and technical education and are designed to prepare students for the labor market. In the international classification, these programs last 2 to 4 years. In the United States, associate's degree programs are classified at this level. ISCED97 level 6 refers to the doctoral level of academic higher education. Level 6 programs usually require the completion of a research thesis or dissertation.

Text format

The text accompanying each chart is meant to give the reader more detail on each country's education system. The bulleted format is designed to make quick comparisons more convenient, and the text is divided into sections corresponding to the ISCED97 levels. The "NOTE" heading in each section presents information that is important, but that may not be included in either the chart or the

bulleted text, including within-country variations or features of the education system that are unique to a particular country.

Websites with additional information

Canada: <http://www.statcan.ca/english/freepub/81-582-XIE/free.htm> (see appendix 1)

France: <http://www.eurydice.org>

Germany: <http://www.eurydice.org>

Italy: <http://www.eurydice.org>

Japan: <http://www.mext.go.jp/english/statist/05101901.htm>

Russian Federation: <http://www.euroeducation.net/prof/russco.htm>

United Kingdom:

England, Wales, and Northern Ireland: <http://www.eurydice.org>

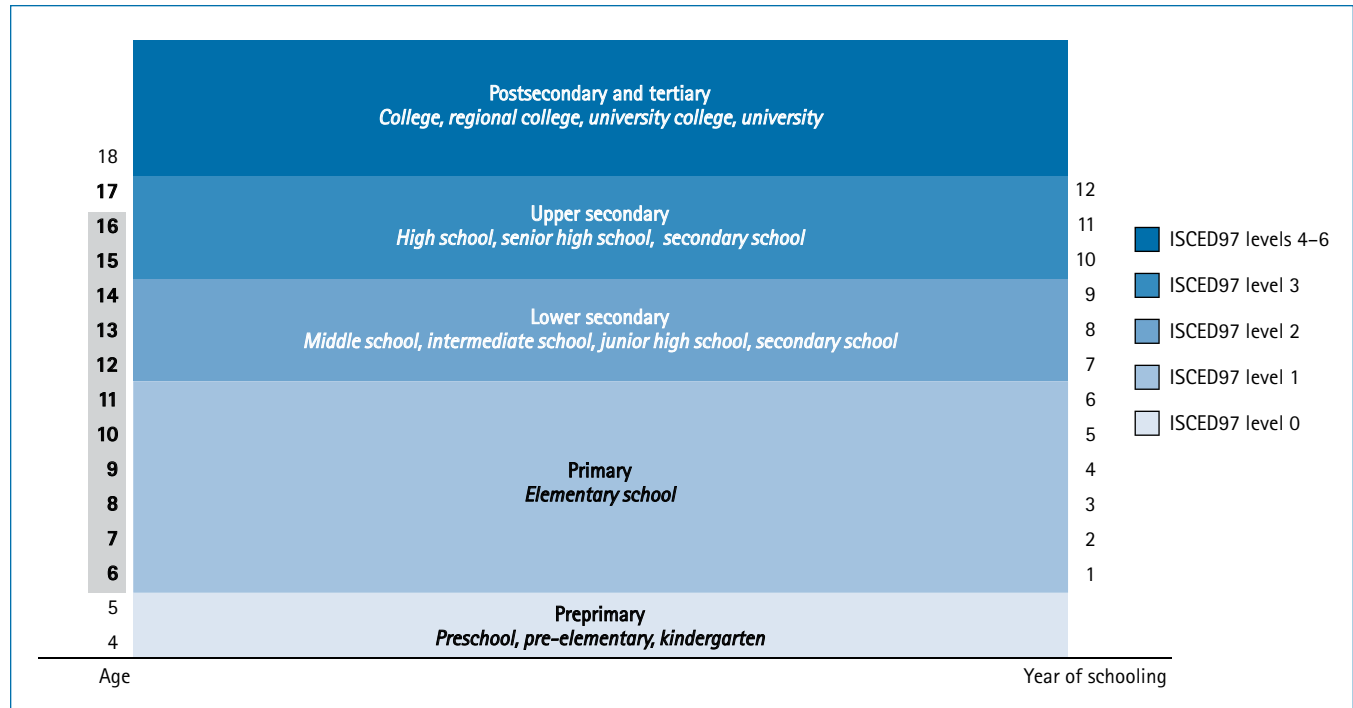
Scotland: <http://www.eurydice.org>

United States: www.ed.gov/international/edus

²⁹ In the international classification, more advanced postsecondary education (such as attending a 4-year college or university) is referred to as "tertiary education." In the current report, the term "higher education" is used because this term is more familiar to American readers.

The Education System in Canada

Figure A-1. Levels of education in Canada, by age and year of schooling: 2008



NOTE: Ages represent the typical age at the beginning of the school year. Numbers in bold print indicate ages of universal enrollment (i.e., an enrollment rate of more than 90 percent). Numbers shaded represent the age at which compulsory enrollment begins through the age at which compulsory enrollment ends. In some countries, enrollment rates may fall below universal before the ending age of compulsory education. No meaning should be inferred from width of subdivisions. Duration of first university degree program is generally 4 years in Canada. SOURCE: Miller, D.C., Sen, A., and Malley, L.B. (2007). *Comparative Indicators of Education in the United States and Other G-8 Countries: 2006* (NCES 2007-006). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC.

NOTE: There are differences within the education system of Canada because responsibilities and oversight for education take place at the regional or local level. However, the purpose of this document is to present a brief, general summary of education in Canada. The sources cited at the end of this section provide more specific details about education in Canada.

Preprimary:

- Common name: *Preschool, pre-elementary, kindergarten*
- Ages of attendance: As early as age 4 to age 5
- Number of years: 1 to 2
- Start of universal enrollment: Does not begin in preprimary; see below
- Compulsory: Generally no, but yes in some provinces

NOTE: One-year pre-elementary programs are available to Canadian children in all provinces. In some provinces, an additional 1 or 2 years of pre-elementary programs are offered.

Primary:

- Common name: *Elementary school*
- Ages of attendance: 6 to 11
- Number of years: 6

- Start of universal enrollment: Age 6
- Universal enrollment: Yes
- Compulsory: Yes

NOTE: Elementary school can begin at age 6 or 7 in Canada, depending on the jurisdiction. Based on the ISCED97, the first 6 years of formal schooling are considered primary school, although in some jurisdictions primary school can last for up to 8 years.

Lower secondary:

- Common name: *Middle school, intermediate school, junior high school, secondary school*
- Ages of attendance: 12 to 14
- Number of years: 2 to 3
- Universal enrollment: Yes
- Compulsory: Yes
- Entrance/exit criteria: No

NOTE: Based on the ISCED97, the 2 to 3 years of schooling following primary school are classified as lower secondary school in Canada. Students may attend 2- or 3-year junior high schools or middle schools, or they may go directly to a secondary school that includes both lower and upper secondary school.

Upper secondary:

- Common name: *High school, senior high school, secondary school*
- Ages of attendance: 15 to 17 (graduation generally at age 18)
- Number of years: 3
- Universal enrollment: Through age 17
- Compulsory: Until age 16 in most jurisdictions; until 18 or graduation in New Brunswick
- Entrance/exit criteria: Some provinces have what could be considered an exit exam (e.g., Ontario administers a grade 10 literacy test, and Quebec requires that students take core subject exams, which are a significant part of the graduation requirements).

NOTE: Based on the ISCED97, the last 3 years of schooling prior to receiving a high school diploma are classified as upper secondary school in Canada. Senior high schools may be up to 4 years in length, and many students attend secondary schools that include both lower and upper secondary school programs.

Postsecondary and tertiary:

- Common name: *College, regional college, university college, university*
- Ages of attendance: Varies
- Number of years: Varies according to degree
- Universal enrollment: No
- Entrance criteria: Graduation from a secondary school academic or university preparatory program—or, in the case of Quebec, completion of a 2-year pre-university program—is typically the minimum requirement to be eligible for admission to undergraduate degree programs. However, most institutions and/or departments set their own admissions standards, often with more rigorous requirements.

Common degree programs:

- **Pre-university programs:** 2-year programs that students in Quebec are generally required to complete before they are eligible to attend university.

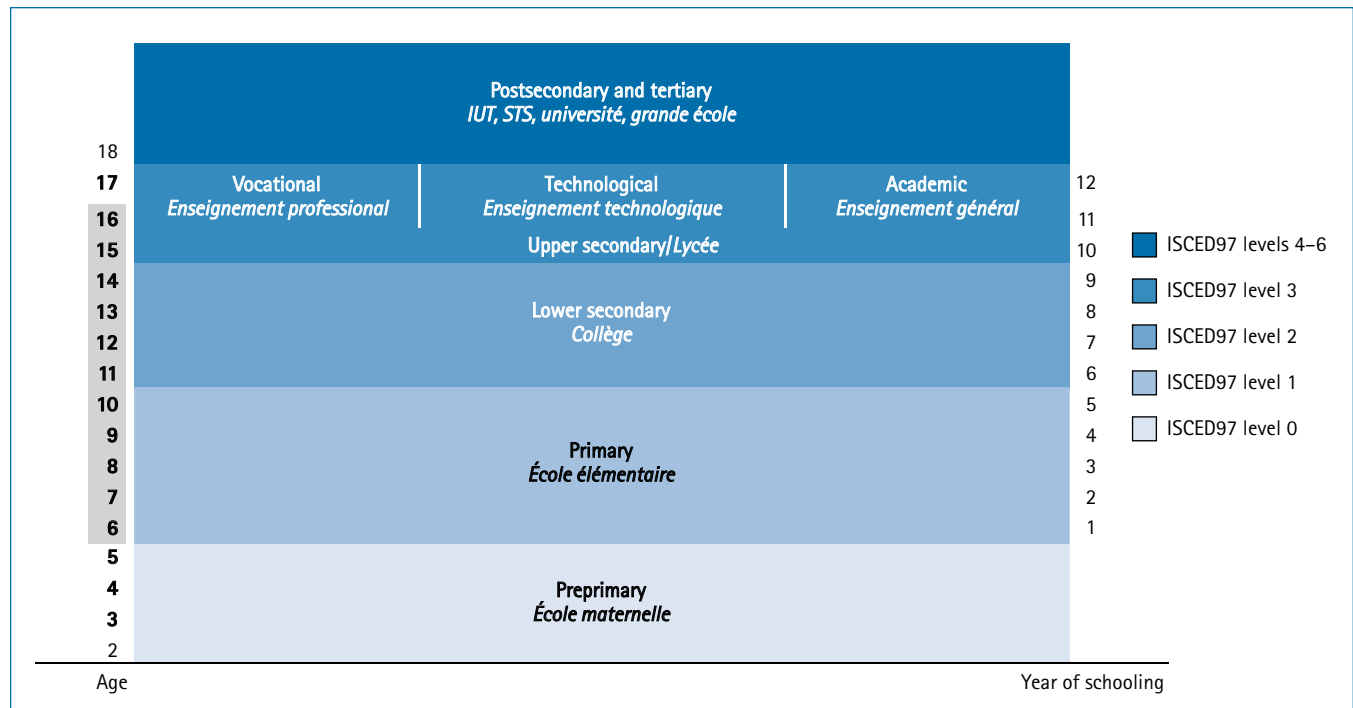
- **Certificate:** 1-year programs offered at colleges, regional colleges, community colleges, institutes, and colleges of applied arts and technology (the name depends on the jurisdiction). These programs are vocational and are oriented toward preparing students for the labor force in semiprofessional and technical fields.
- **Diploma:** 2- to 3-year programs offered at community colleges, regional colleges, etc. These programs are vocational and are oriented toward preparing students for the labor force in semiprofessional and technical fields.
- **Bachelor's degree:** 3- to 4-year academic programs at a university college or university. (University bachelor's degree programs are usually 4 years, while university college programs can be 3 or 4 years.)
- **Master's degree:** Graduate programs at a university requiring 1 to 2 years beyond the bachelor's degree. This degree is designed to prepare students for professional careers.
- **Doctorate:** Academic graduate programs at a university requiring 3 to 5 years after the bachelor's degree. Doctoral programs prepare students for careers in research.

Sources:

- Canadian Education Statistics Council. (2003). *Report of the Pan-Canadian Education Indicators Program, appendix 1*. Ontario, Canada: Statistics Canada. Retrieved October 31, 2006, from <http://www.cesc.ca/pceip/PCEIP2003en.pdf>.
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The Education System in France

Figure A-2. Levels of education in France, by age and year of schooling: 2008



NOTE: Ages represent the typical age at the beginning of the school year. Numbers in bold print indicate ages of universal enrollment (i.e., an enrollment rate of more than 90 percent). Numbers shaded represent the age at which compulsory enrollment begins through the age at which compulsory enrollment ends. In some countries, enrollment rates may fall below universal before the ending age of compulsory education. No meaning should be inferred from width of subdivisions. Duration of first university degree program is generally 4 years in France.

SOURCE: Miller, D.C., Sen, A., and Malley, L.B. (2007). *Comparative Indicators of Education in the United States and Other G-8 Countries: 2006* (NCES 2007-006). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education, Washington, DC.

Preprimary:

- Common name: *École maternelle*
- Ages of attendance: As early as age 2 to age 3
- Number of years: 1 to 4
- Start of universal enrollment: Age 3
- Compulsory: No

Primary:

- Common name: *École élémentaire*
- Ages of attendance: 6 to 10
- Number of years: 5
- Universal enrollment: Yes
- Compulsory: Yes

Lower secondary:

- Common name: *Collège*
- Ages of attendance: 11 to 14
- Number of years: 4
- Universal enrollment: Yes
- Compulsory: Yes

- Entrance/exit criteria: Yes; *brevet des collèges* is the exit exam for lower secondary. It is a national examination, which determines whether or not students will be able to attend *lycée*.

Upper secondary:

- Common name: *Lycée*
 - *Enseignement professionnel*—Vocational upper secondary school
 - *Enseignement technologique*—Technological upper secondary school
 - *Enseignement général*—Academic upper secondary school
- Ages: 15 to 17 (graduation generally at age 18)
- Number of years: 3
- Universal enrollment: Through age 17 (most students turn 18 during the last year of upper secondary school)
- Compulsory: Until age 16
- Entrance/exit criteria: In order to enter upper secondary education, students must pass the *brevet des collèges*. Students take a national examination, the *baccalauréat*, during the last year of secondary school, which determines entrance to university.

NOTE: All three types of upper secondary school (*enseignement professionnel, technologique, and général*) qualify a student to

enter university, although certain tracks are more likely to lead to university: the academic branch (*enseignement général*) typically leads to university and other forms of higher education; the technological branch (*enseignement technologique*) may also lead to specialized technological or professional forms of higher education; and the vocational branch (*enseignement professionnel*) more often leads to the labor force and/or job training.

Postsecondary and tertiary:

- Common name: *IUT, STS, université, grande école*
- Ages of attendance: Varies
- Number of years: Varies according to degree or program
- Universal enrollment: No
- Entrance criteria: In order to enter into higher education programs in France, students are required to have passed the *baccalauréat* or an equivalent. Entrance to the university is nonselective, meaning that students who have passed the *baccalauréat* are entitled to enter. There are, however, competitive entrance exams for the *grandes écoles*.

Common programs (short fields):

- **DUT (University degree in technology):** Taken at the University Institute of Technology (IUT). Two-year program in mostly vocational subjects. Student may choose to continue on toward a *license* (see section below).
- **BTS (Higher technical diploma):** Two-year program taken in higher education departments of *lycées (STS, Institute for Higher Technical Studies)*; more specialized than degrees from IUT, but also in mostly vocational subjects.
- **DEUG (General university studies degree):** Academic degree received after completion of 2 years of university.

Common degree programs (long fields):

- **License:** *DEUG* (see above) plus 1 additional year at university.
- **Maîtrise:** Degree following the *license*. Requires 1 additional year at university.

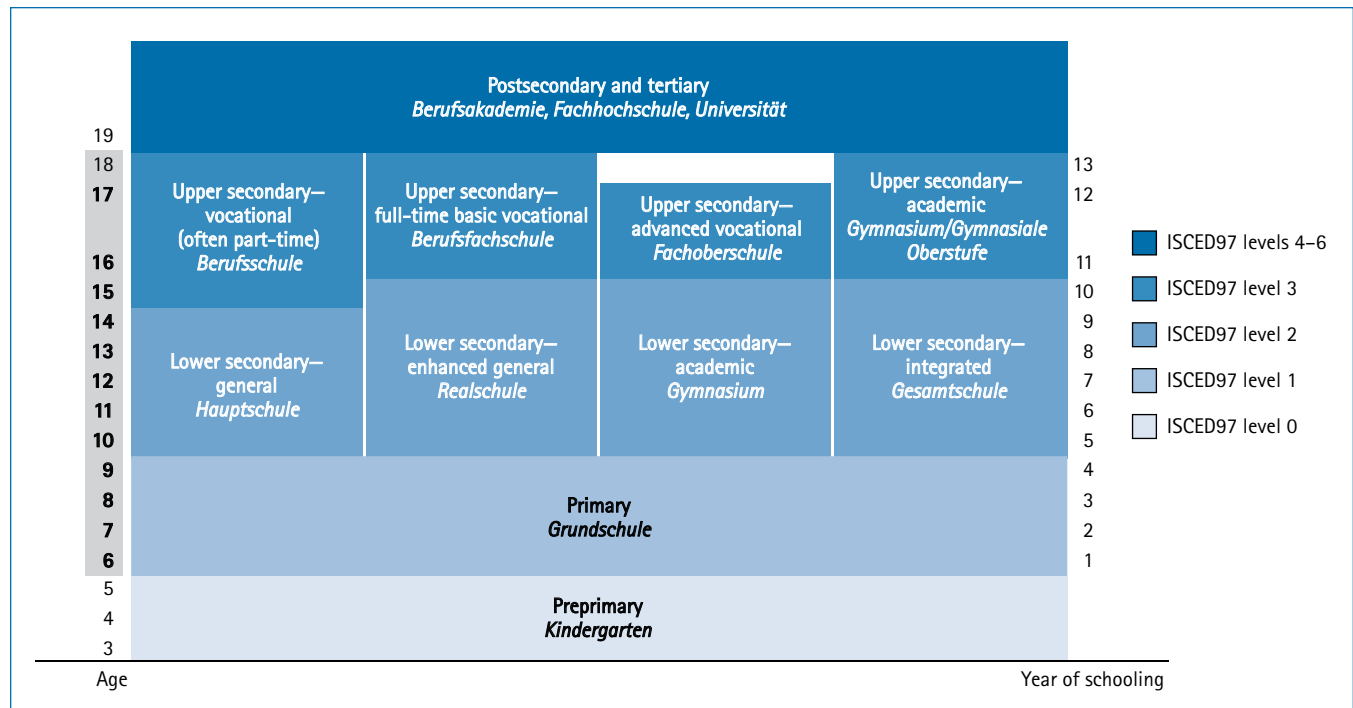
- **DESS (Diploma of specialized higher studies):** Follows the *maîtrise*; 1-year professional course involving a required internship.
- **DEA (Diploma of advanced studies):** Follows the *maîtrise*; 1-year program designed to prepare students for doctoral research. Involves the preparation of a research project.
- **Medical doctor/dental/pharmacy:** Degree programs taken at the university. Length of program varies and can lead to degrees such as the *doctorat de médecine spécialisé, doctorat de médecine générale, and doctorat pharmacie*.
- **Doctorat:** Research-based graduate degree program at a university, leading to a doctorate. Usually requires 5 years of study beyond the *maîtrise*.
- **Diplôme grande école:** Competitive degree programs (students must pass a selective entrance exam) in academic subjects, science, commerce, management, engineering, business, and architecture. These are typically 5-year programs and are taken at the *grandes écoles*.

Sources:

- Eurybase. (2008). The Information Database on Education Systems in Europe: The Education System in France, 2007/2008. Brussels: Eurydice. Retrieved December 15, 2008, from http://eacea.ec.europa.eu/ressources/eurydice/eurybase/pdf/O_integral/FR_EN.pdf.
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The Education System in Germany

Figure A-3. Levels of education in Germany, by age and year of schooling: 2008



NOTE: Ages represent the typical age at the beginning of the school year. Numbers in bold print indicate ages of universal enrollment (i.e., an enrollment rate of more than 90 percent). Numbers shaded represent the age at which compulsory enrollment begins through the age at which compulsory enrollment ends. In some countries, enrollment rates may fall below universal before the ending age of compulsory education. No meaning should be inferred from width of subdivisions. Duration of first university degree program is generally 4 years in Germany.
SOURCE: Miller, D.C., Sen, A., and Malley, L.B. (2007). *Comparative Indicators of Education in the United States and Other G-8 Countries: 2006* (NCES 2007-006). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education, Washington, DC.

NOTE: There are differences within the education system of Germany because responsibilities and oversight for education take place at the regional or local level. However, the purpose of this document is to present a brief, general summary of education in Germany. The sources cited at the end of this section provide more specific details about education in Germany.

Preprimary:

- Common name: *Kindergarten*
- Ages of attendance: As early as age 3 to age 5
- Number of years: 1 to 3
- Start of universal enrollment: Does not begin in preprimary; see below
- Compulsory: No

NOTE: Students may attend preprimary programs in a few schools at age 2.

Primary:

- Common name: *Grundschule*
- Ages of attendance: 6 to 9
- Number of years: 4

- Start of universal enrollment: Age 6
- Compulsory: Yes

NOTE: In some *Länder* (the German equivalent of states), *Grundschule* lasts 6 years.

Lower secondary:

- Common name:
 - *Hauptschule*—General secondary school
 - *Realschule*—Enhanced general education secondary school
 - *Gymnasium*—Academic secondary school
 - *Gesamtschule*—Integrated secondary school, meaning that students are not split into separate general education and academic tracks
- Ages of attendance: 10 to 15
- Number of years: 5 to 6
- Universal enrollment: Yes
- Compulsory: Yes
- Entrance/exit criteria: In some *Länder*, admissions tests determine if a student can take the education tracks of *Realschule* or *Gymnasium*.

NOTE: There are different types of secondary schools, some combining *Hauptschule* and *Realschule*. The secondary school a student in Germany attends is determined by a combination of factors, depending on the *Länder*: admissions tests, previous grade point average, teacher recommendations, and parents' wishes. The degree of flexibility that parents have in choosing which educational track their child enters also varies between regions.

However, the type of school a student attends is sometimes less important than the chosen track: at the end of lower secondary, all students who meet the requirements receive a leaving certificate. At the *Hauptschule* it is generally the *Hauptschulabschluss*, but students who excel may receive a *Realschulabschluss* (called the *Mittlere Schulabschluss* in some *Länder*). At the *Realschule*, students typically receive the *Realschulabschluss*; at the *Gesamtschule*, both types of diplomas are offered. All students attending *Gymnasium* who advance to the upper secondary level automatically receive the *Realschulabschluss*.

Some *Länder* also have an orientation phase during the first 2 years of lower secondary school, which gives parents and teachers 2 more years to decide a child's educational path. In *Länder* with a 6-year primary school, lower secondary school is 2 years shorter.

Upper secondary:

- Common name:
 - *Berufsschule*—3- to 4- year vocational school, which often includes an apprenticeship; many students at this school attend part time while also doing an apprenticeship.
 - *Berufsfachschule*—1- to 3-year full-time basic vocational school
 - *Fachoberschule*—2-year advanced vocational school
 - *Gymnasium/Gymnasiale Oberstufe*—Academic upper secondary school. *Gymnasium* continues from lower secondary school. *Gymnasiale Oberstufe* follows the same curriculum as the *Gymnasium*, but comes after *Gesamtschule*.
- Ages: Generally 16 to 18 (graduation generally at 19 for academic programs; 18 or 19 for others)
- Number of years: 1 to 4
- Universal enrollment: Through age 17 (most students in long programs turn 19 during the last year of upper secondary school)
- Compulsory: Until age 18
- Entrance/exit criteria: Students must pass the *Abitur* in order to enter university and other forms of higher education.

NOTE: *Gymnasium* and *Gesamtschule* are generally combined lower and upper secondary schools, although students concentrate their studies on fewer subjects during the last years of *Gymnasium*. Some *Länder* offer fast tracks, where students can graduate from *Gymnasium* a year early. Additionally, a few *Länder* offer the *Berufsoberschule*, a vocational upper secondary school for those who have completed vocational training or have 5 years of work experience.

Postsecondary and tertiary:

- Common name: *Berufsakademie*, *Fachhochschule*, *Universität*
- Ages of attendance: Varies
- Number of years: Varies according to degree
- Universal enrollment: No
- Entrance criteria: Students must pass the *Abitur* in order to enter university. Students must have at a minimum a *Fachhochschulreife* (vocational upper secondary diploma) in order to enter the tertiary sector.

Common degree programs:

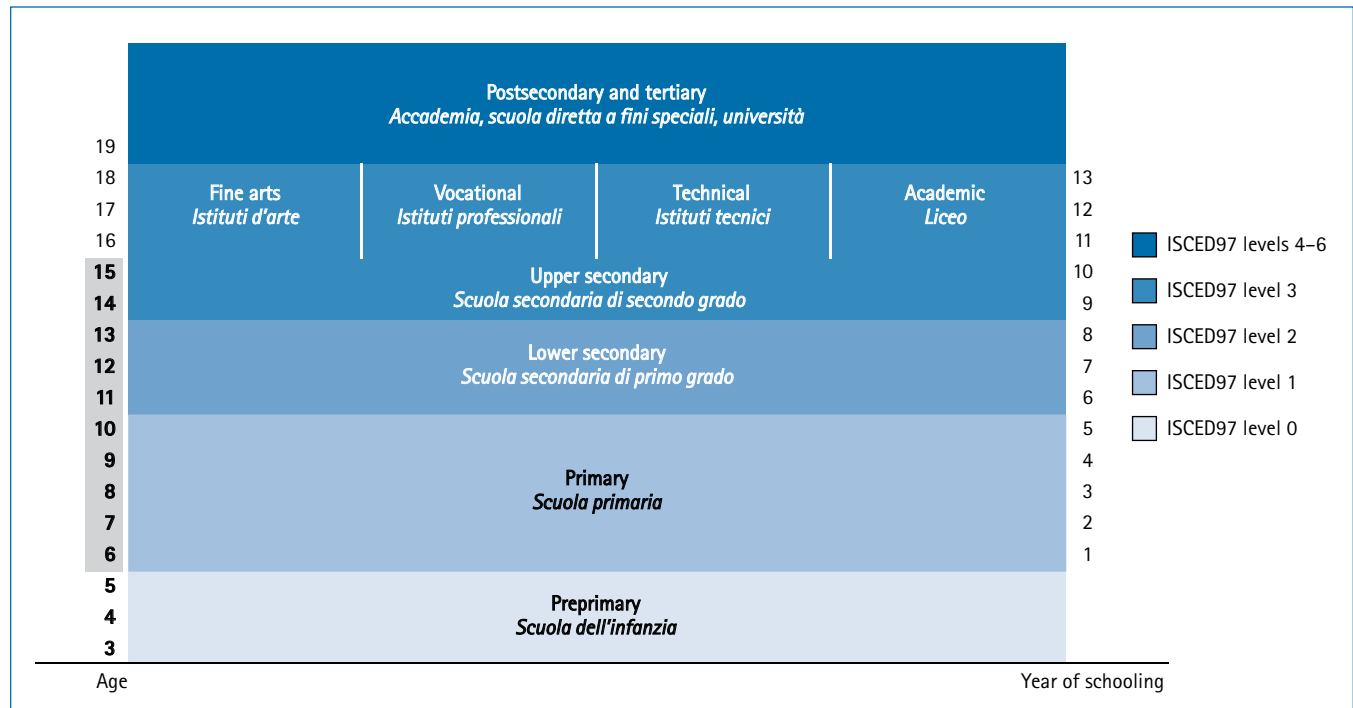
- *Diplom Fachhochschule—FH*: 4-year degree program in applied fields such as engineering, administration, social services, and design. Admission to a *Fachhochschule* is competitive because of restricted numbers of available spaces.
- *Diplom Berufsakademie—BA*: 3-year program of academic training combined with work experience. Offered at a *Berufsakademie*.
- *Diplom*: Master's degree equivalent usually requiring a minimum of 4 years of study. *Universität* offers this degree in academic fields as well as scientific, technical, and engineering fields.
- *Magister*: Usually requires 2 years beyond the *Diplom*, taken at *Universität*.
- *Doktorgrad*: Doctoral degree program, focused on research and taken at *Universität*. Normally requires at least 2 years beyond the *Magister*, but some students attend after receiving a *Diplom*.

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The Education System in Italy

Figure A-4. Levels of education in Italy, by age and year of schooling: 2008



NOTE: Ages represent the typical age at the beginning of the school year. Numbers in bold print indicate ages of universal enrollment (i.e., an enrollment rate of more than 90 percent). Numbers shaded represent the age at which compulsory enrollment begins through the age at which compulsory enrollment ends. In some countries, enrollment rates may fall below universal before the ending age of compulsory education. No meaning should be inferred from width of subdivisions. Duration of first university degree program is generally 5 years in Italy.
SOURCE: Miller, D.C., Sen, A., and Malley, L.B. (2007). *Comparative Indicators of Education in the United States and Other G-8 Countries: 2006* (NCES 2007-006). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC.

Preprimary:

- Common name: *Scuola dell'infanzia*
- Ages of attendance: As early as age 3 to age 5
- Number of years: 1 to 3
- Start of universal enrollment: Age 3
- Compulsory: No

Primary:

- Common name: *Scuola primaria*
- Ages of attendance: 6 to 10
- Number of years: 5
- Universal enrollment: Yes
- Compulsory: Yes

Lower secondary:

- Common name: *Scuola secondaria di primo grado*
- Ages of attendance: 11 to 14
- Number of years: 3
- Universal enrollment: Yes
- Compulsory: Yes

- Entrance/exit criteria: Yes, there is a national exit examination, which students must pass to obtain the *diploma di esame di stato conclusivo del primo ciclo di istruzione* and enter into upper secondary school.

Upper secondary:

- Common name: *Scuola secondaria di secondo grado*
 - *Istituti d'arte, liceo artistico*—Fine arts schools and institutes
 - *Istituti professionali*—Vocational schools
 - *Istituti tecnici*—Specialized technical schools
 - *Liceo classico, scientifico, linguistico, socio-psico-pedagogico*—Academic upper secondary schools
- Ages of attendance: 14 to 18 (graduation generally at age 19)
- Number of years: 5
- Universal enrollment: Through age 15
- Compulsory: Beginning in the 2004–05 school year, upper secondary education was classified as a “right and a duty.” This terminology is used to indicate that completing upper secondary education is expected, although not required by law.

- Entrance/exit criteria: Students must possess the *diploma di esame di stato conclusivo del primo ciclo di istruzione* from lower secondary school to enter upper secondary school. At the end of 5 years of instruction, students must pass a national examination in order to obtain a *diploma di superamento dell'esame di stato*.

NOTE: Every student who has completed 5 years of upper secondary school and has obtained a *diploma di superamento dell'esame di stato* may attend university and other forms of higher education. Students are tracked in academic as well as technical and vocational schools in Italy. Students in Italy may attend specialized art schools, such as *istituti d'arte* and *liceo artistico* at the upper secondary level. Students attending vocational schools may attend 3- or 5-year training or apprenticeship programs in applied fields, after which they often enter the labor force. *Liceo linguistico* focuses on modern foreign languages and cultures. The *liceo classico* and *scientifico* prepare students for university studies. *Liceo classico* focuses on literature, philosophy, and Latin and Greek languages. *Liceo scientifico* focuses on mathematics and science. *Liceo socio-psico-pedagogico* has a sociological, psychological, and pedagogical orientation.

Postsecondary and tertiary:

- Common name: *Accademia, scuola diretta a fini speciali, università*
 - *Alta formazione artistica e musicale*—Arts and music
 - *Scuole superiori per la mediazione linguistica*—School for interpreters
 - *Istruzione e formazione tecnica superiore*—Technical education and training
 - *Laurea, laurea specialistica, dottorato di ricerca, diploma di specializzazione*—Academic higher education, university
- Ages of attendance: Varies
- Number of years: Varies according to degree program
- Universal enrollment: No
- Entrance criteria: In order to enter university, students must possess a *diploma di superamento dell'esame di stato*, a secondary school diploma obtained after passing a national exam. Some students may also enter university with a regional certificate, which is issued on the basis of professional experience in a vocational field.

NOTE: The higher education system in Italy underwent a reform process in order to make it more compatible with the higher education systems of other European countries. Universities are now based on two main cycles (the 3-year foundation degree, or *laurea*, followed by a 2 year specialist degree, or *laurea specialistica/magistrale*), with third-cycle degree options (*dottorato di ricerca, diploma di specializzazione*) that are similar to a doctorate in the United States. These changes were made to increase educational exchange between Italy and other European Union countries.

Common degree programs:

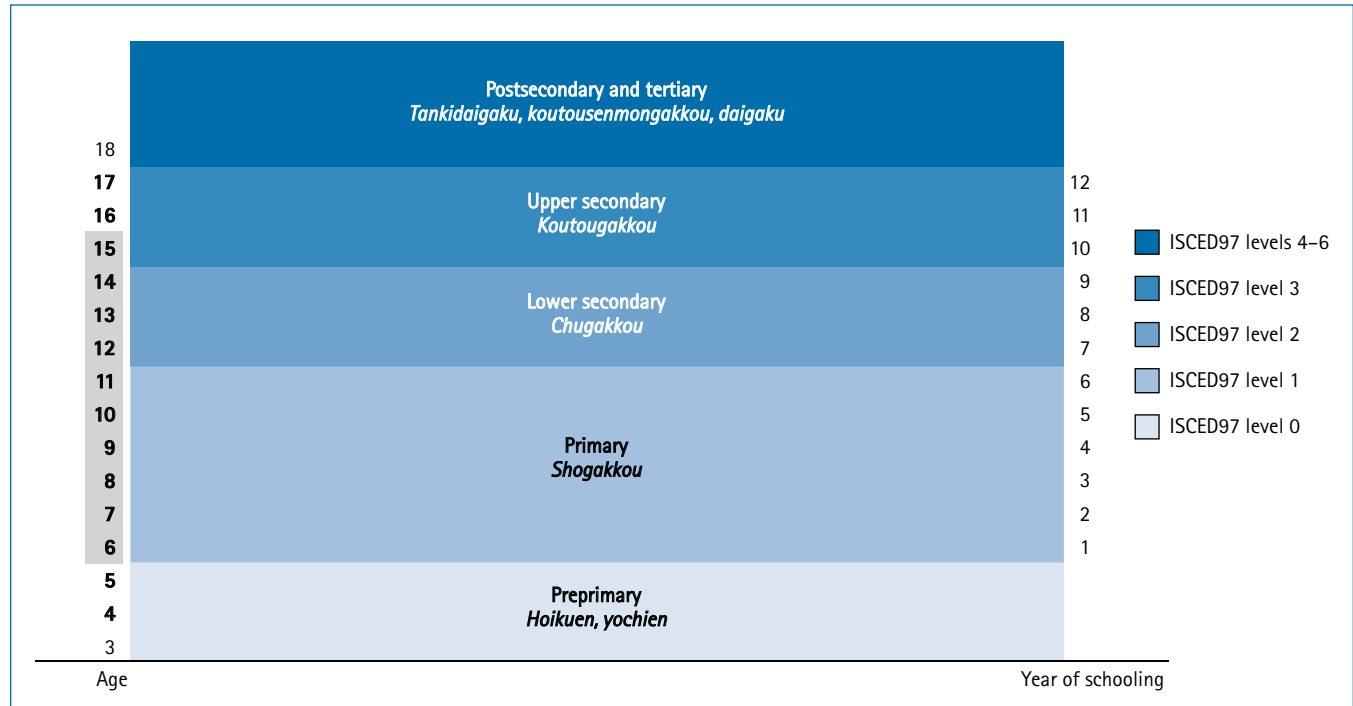
- **Accademia degrees:** Fine arts, restoration, and music degrees. Accademia degrees have been divided into two cycles according to the recent reforms, the first one taking 3 years to complete and the second one taking 2 years to complete. The *diploma accademico di primo livello* is awarded after the first cycle, and the *diploma accademico di secondo livello* is awarded after the second cycle.
- **Laurea:** A first-level university degree taking 3 years from university entry to complete. It is characterized by both theoretical and applied studies, similar to a bachelor's degree in the United States.
- **Laurea specialistica/magistrale:** Graduate specialized degree requiring 2 years of university study after a first-level degree, similar to a master's degree in the United States.
- **Master universitario di primo livello:** A professional graduate program requiring at least 1 year of study after obtaining a *laurea*.
- **Master universitario di secondo livello:** A professional graduate program requiring at least 1 year of study after obtaining a *laurea specialistica/magistrale*.
- **Dottorato di ricerca:** Doctoral degree program focusing on research and taken at a university. Typically requires 3 years of instruction after the *laurea specialistica/magistrale*.
- **Diploma di specializzazione:** Doctoral degree program for a specialized professional degree, such as medicine or law. Typically requires 2–6 years after the *laurea specialistica/magistrale*.

Sources:

- Eurybase. (2007). The Information Database on Education Systems in Europe: The Education System in Italy, 2006/2007. Brussels: Eurydice. Retrieved December 15, 2008, from http://eacea.ec.europa.eu/ressources/eurydice/eurybase/pdf/O_integral/IT_EN.pdf.
- Marlow-Ferguson, R. (Ed.) (2002). *World Education Encyclopedia: A Survey of Educational Systems Worldwide, Vol. 1* (2nd ed.). Farmington Hills, MI: Gale Group.
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The Education System in Japan

Figure A-5. Levels of education in Japan, by age and year of schooling: 2008



NOTE: Ages represent the typical age at the beginning of the school year. Numbers in bold print indicate ages of universal enrollment (i.e., an enrollment rate of more than 90 percent). Numbers shaded represent the age at which compulsory enrollment begins through the age at which compulsory enrollment ends. In some countries, enrollment rates may fall below universal before the ending age of compulsory education. No meaning should be inferred from width of subdivisions. Duration of first university degree program is generally 4 years in Japan.
SOURCE: Miller, D.C., Sen, A., and Malley, L.B. (2007). *Comparative Indicators of Education in the United States and Other G-8 Countries: 2006* (NCES 2007-006). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC.

Preprimary:

- Common name: *Hoikuen, yochien*
- Ages of attendance: As early as age 3 to age 5
- Number of years: 1 to 3
- Start of universal enrollment: Age 4
- Compulsory: No

NOTE: Around 60 percent of 5-year-old students attend *yochien* (kindergarten), while others attend *hoikuen* (child care centers).

Primary:

- Common name: *Shogakkou*
- Ages of attendance: 6 to 11
- Number of years: 6
- Universal enrollment: Yes
- Compulsory: Yes

Lower secondary:

- Common name: *Chugakkou*
- Ages of attendance: 12 to 14
- Number of years: 3
- Universal enrollment: Yes

- Compulsory: Yes
- Entrance/exit criteria: No

NOTE: Recently, unified lower and upper secondary schools (*chutoukyoikugakkou*) have been introduced in Japan.

Upper secondary:

- Common name: *Koutougakkou*
- Ages of attendance: 15 to 17 (graduation generally at age 18)
- Number of years: 3
- Universal enrollment: Through age 17
- Compulsory: No
- Entrance/exit criteria: Yes, students in Japan are placed into upper secondary schools based on test scores and school report cards from lower secondary school. Scoring well influences students' chances of attending the most prestigious upper secondary schools in their area.

NOTE: *Juku* refers to "cram school" or night school, which prepares students for upper secondary school entrance exams. Students may also choose to attend vocational/technical institutes (*koutousenmongakkou*), which combine upper secondary school with vocational higher education leading to the associate's degree. See below for details on *koutousenmongakkou*.

Postsecondary and tertiary:

- Common name: *Tankidaigaku*, *koutousenmongakkou*, *daigaku*
- Ages of attendance: Varies
- Number of years: 2 (*tankidaigaku*), 3 (*koutousenmongakkou*), 4 (*daigaku*, excluding medical and dental degrees), 6 (*daigaku*, medical and dental degrees)
- Universal enrollment: No
- Entrance criteria: To enter national universities, most of the students take an entrance examination offered by the National Center for University Entrance Examinations and an examination conducted by the university itself. For some universities, entrance examinations are very competitive, while others are not so competitive.

Common degree programs:

- **Jun-gakushi (at vocational and technical institutes):** 5-year programs for students to combine upper secondary school with vocational training. The first 3 years of these programs are spent at the upper secondary level and the last 2 earning a *jun-gakushi* (associate's degree). These programs are given at *koutousenmongakkou*, in subjects like public works, mechanical engineering, and information technology.
- **Jun-gakushi (at junior college):** Programs normally requiring 2 years of study, taken at junior colleges (*tankidaigaku*), that prepare students for a career in fields like home economics, humanities, education, and social science. Junior colleges have traditionally enrolled mostly women.
- **Gakushi:** Academic degree normally requiring 4 years of study that is similar to a bachelor's degree. Given at a *daigaku* (college

or university). Preprofessional programs in medicine, dentistry, and veterinary medicine take 6 years.

- **Shushi:** Graduate program taken at a *daigaku* that normally requires 2 years of study beyond the bachelor's degree. Equivalent to a master's degree in the United States.
- **Professional degree programs:** Medical, dental, and veterinary graduate programs taken at *daigaku* that last 4 years beyond the bachelor's degree.
- **Hakushi:** Academic graduate program at a *daigaku* requiring at least 5 years beyond the bachelor's degree. This degree is the equivalent of a doctorate in the United States.

Sources:

Marlow-Ferguson, R. (Ed.) (2002). *World Education Encyclopedia: A Survey of Educational Systems Worldwide, Vol. 1* (2nd ed.). Farmington Hills, MI: Gale Group.

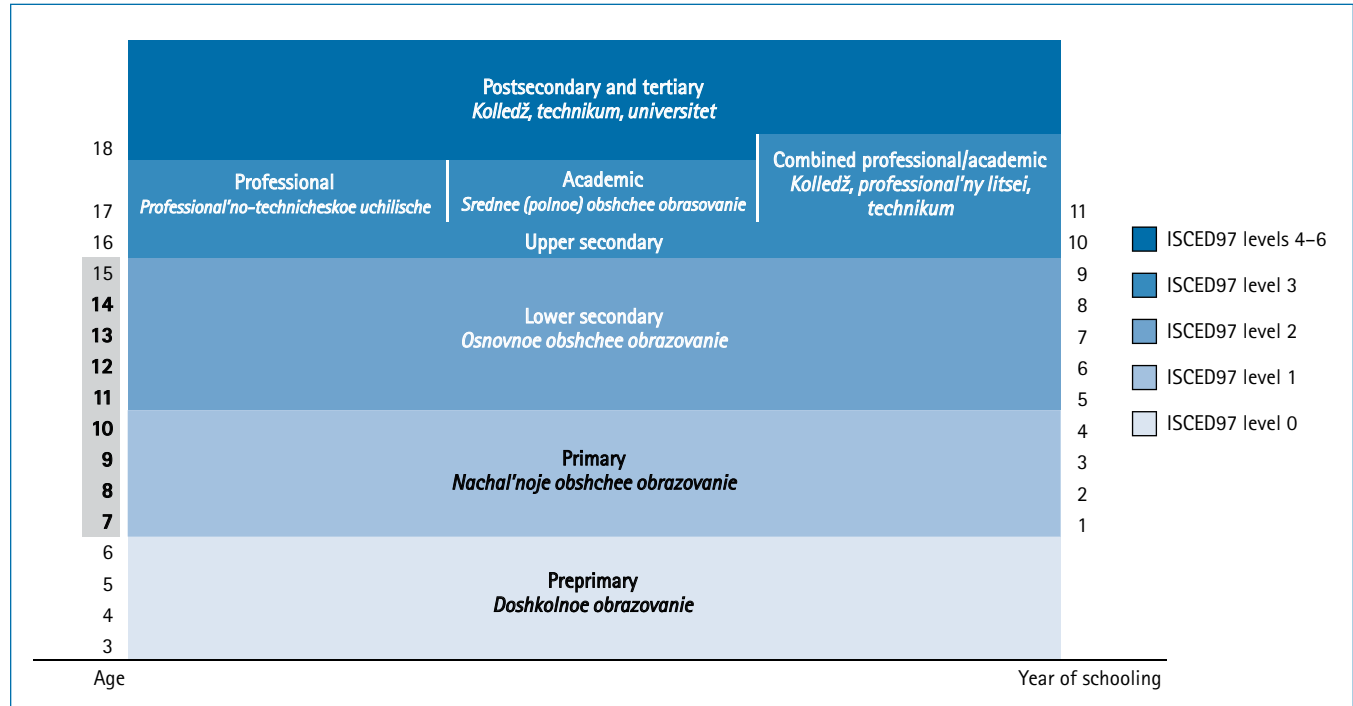
Ministry of Education, Culture, Sports, Science and Technology (MEXT). *Japan's Education at a Glance 2005*. Tokyo: Author. Retrieved October 31, 2006, from <http://www.mext.go.jp/english/statist/05101901.htm>.

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Robitaille, D.F. (1997). *National Contexts for Mathematics and Science Education: An Encyclopedia of the Education Systems Participating in TIMSS*. Vancouver, Canada: Pacific Educational Press.

The Education System in the Russian Federation

Figure A-6. Levels of education in the Russian Federation, by age and year of schooling: 2008



NOTE: Ages represent the typical age at the beginning of the school year. Numbers in bold print indicate ages of universal enrollment (i.e., an enrollment rate of more than 90 percent). Numbers shaded represent the age at which compulsory enrollment begins through the age at which compulsory enrollment ends. In some countries, enrollment rates may fall below universal before the ending age of compulsory education. No meaning should be inferred from width of subdivisions. Duration of first university degree program is generally 4 years in the Russian Federation. SOURCE: Miller, D.C., Sen, A., and Malley, L.B. (2007). *Comparative Indicators of Education in the United States and Other G-8 Countries: 2006* (NCES 2007-006). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC.

Preprimary:

- Common name: *Doshkolnoe obrazovanie*
- Ages of attendance: As early as age 3 to age 6
- Number of years: 1 to 4
- Start of universal enrollment: Does not begin in preprimary; see below
- Compulsory: No

Primary:

- Common name: *Nachal'noje obshchee obrazovanie*
- Ages of attendance: 7 to 10
- Number of years: 4
- Start of universal enrollment: Age 7
- Compulsory: Yes

NOTE: There are no formal divisions between primary, lower secondary, and upper secondary schools in the Russian Federation. Primary, lower secondary, and upper secondary schools are generally located in the same buildings except in rural areas.

Lower secondary:

- Common name: *Osnovnoe obshchee obrazovanie* (Basic school)
- Ages of attendance: 11 to 15
- Number of years: 5
- Universal enrollment: Yes, through age 14 (most students turn 16 during the last year of lower secondary school)
- Compulsory: Yes, until age 15
- Entrance/exit criteria: Yes, in order to graduate from basic school, students must pass four written examinations: one in Russian language, one in algebra, and two in other subjects chosen by the student.

NOTE: Basic general education includes primary and lower secondary school. Graduates of lower secondary school may either continue their education at upper secondary school to receive secondary complete general education, go to vocational schools to receive professional training, or go to secondary vocational schools to receive a combination of academic and vocational education.

Upper secondary:

- Common name: *Professional'no-technicheskoe uchilische; kolledž, professional'ny litsei, or technikum; srednee (polnoe) obshchee obrazovanie*
- Ages of attendance: 16 to 17 (graduation generally at age 18)
- Number of years: 2
- Universal enrollment: No
- Compulsory: No
- Entrance/exit criteria: Students in the Russian Federation must pass five written exams at the end of secondary school in order to obtain the Certificate of Secondary Complete General Education. These exams include Algebra and Calculus, Literature, and three other subjects chosen by the student.

NOTE: Students who have graduated from lower secondary school have the option to continue in three types of upper secondary schools:

- **Professional'no-technicheskoe uchilische:** These schools provide professional education only in a program that usually lasts 2 years.
- **Srednee (polnoe) obshchee obrazovanie:** Students who wish to continue their academic training enter these upper secondary schools, which last for 2 years and provide students with a Certificate of Secondary Complete General Education. This certificate qualifies students to apply for entrance into higher education. Graduates may also continue their study in initial and secondary vocational schools.
- **Kolledž, professional'ny litsei, or technikum:** These schools provide combined professional and academic programs that lead to a diploma (Certificate of Secondary Complete General Education). The programs are usually 3 or 4 years.

Postsecondary and tertiary:

- Common name: *Kolledž, technikum, universitet*
- Ages of attendance: Varies
- Number of years: Varies according to degree
- Universal enrollment: No
- Entrance criteria: There are entrance exams, called *vstupitel'noe ispytanie*, to be accepted into university. The number of exams and the subject varies according to the department a student wishes to attend, although all students must take an exam in Russian language.

Common degree programs:

- **Nonuniversity-level diploma:** Obtained from *kolledž* (colleges) and *technikum* (technical colleges). These diplomas are in applied or vocational fields and require 2 years of study after

secondary school. Students may be able to enter university-level institutions after completing this degree and transfer some or all credits toward a *bakalavr*.

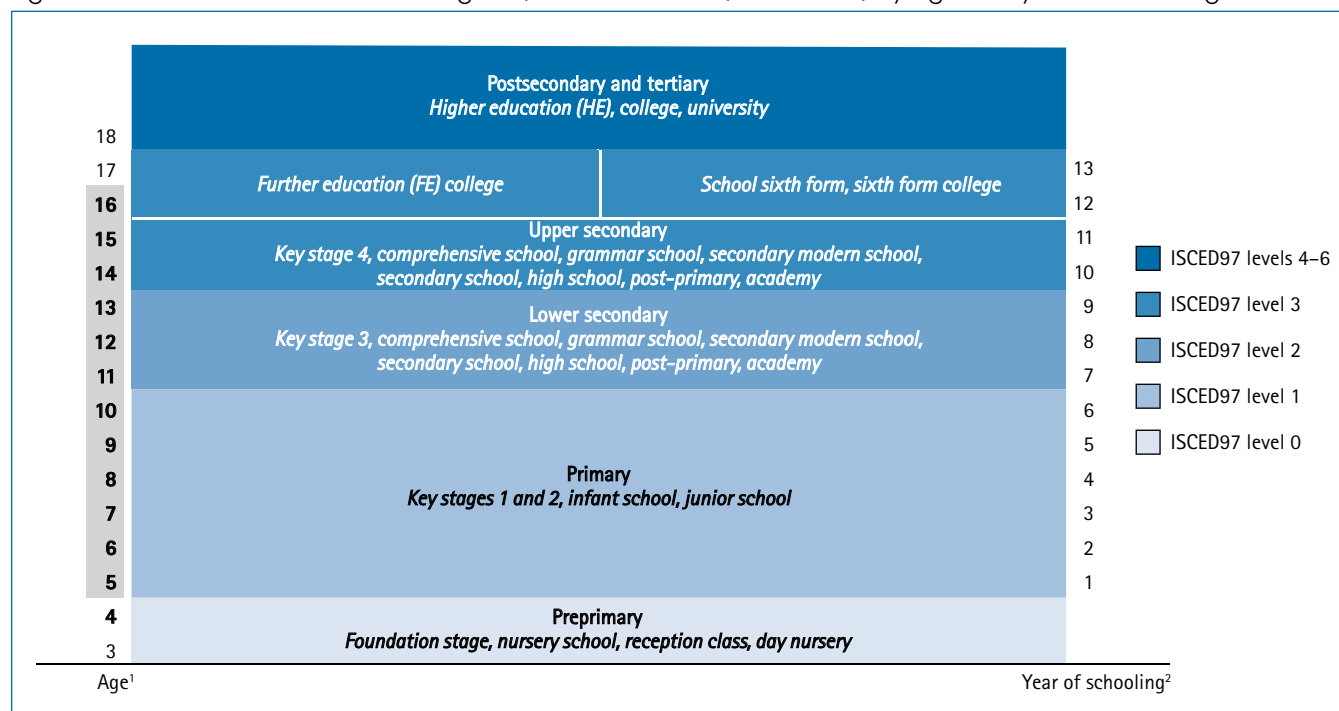
- **Diploma o nepolnom vysshem obrazovanii (diploma of incomplete higher education):** If students leave university after at least 2 years of study, they may ask for this diploma, which allows them to work in certain jobs that require some university experience but not a degree.
- **Bakalavr (bachelor's degree):** Program requiring 4 years of university study.
- **Magistr (master's degree):** Competitive 2-year program for students who have completed their *bakalavr's* degree. Most require a year of research and a thesis.
- **Diplom:** This specialized diploma can be obtained either by completing 1 year of study beyond the *bakalavr* or by completing 5 to 6 years of continuous study after upper secondary school.
- **Kandidat nauk:** Students who hold a *diplom* or *magistr* are eligible to apply for these programs, which typically last for 3 years and require students to carry out independent research and defend a dissertation in public. Equivalent of a doctorate in the United States.
- **Doktor nauk:** This is the highest possible academic degree in the Russian Federation, for which there is no U.S. equivalent. This degree requires that a *kandidat nauk* gain reputation in his or her field of study, publish independent research, and have experience supervising undergraduates. A 3-year sabbatical is often taken to prepare research for the degree, although there is no specified length of time required to obtain it. The *doktor nauk* requires a public dissertation defense (in addition to the defense completed to obtain a *kandidat nauk*).

Sources:

- EuroEducation Net (2006). Education Systems in Europe: Russia. London: EuroEducation. Retrieved December 12, 2008, from <http://www.euroeducation.net/prof/russco.htm>.
- Marlow-Ferguson, R. (Ed.) (2002). *World Education Encyclopedia: A Survey of Educational Systems Worldwide, Vol. 2* (2nd ed.). Farmington Hills, MI: Gale Group.
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The Education System in the United Kingdom: The Education System in England, Northern Ireland, and Wales

Figure A-7. Levels of education in England, Northern Ireland, and Wales, by age and year of schooling: 2008



¹ In Northern Ireland, however, compulsory enrollment begins at age 4.

² In Northern Ireland, however, there are 14 years of schooling, with year 1 beginning at the preprimary level (age 4).

NOTE: Ages represent the typical age at the beginning of the school year. Numbers in bold print indicate ages of universal enrollment (i.e., an enrollment rate of more than 90 percent). Numbers shaded represent the age at which compulsory enrollment begins through the age at which compulsory enrollment ends. In some countries, enrollment rates may fall below universal before the ending age of compulsory education. No meaning should be inferred from width of subdivisions. Duration of first university degree program is generally 3 years in England, Northern Ireland, and Wales.

SOURCE: Miller, D.C., Sen, A., and Malley, L.B. (2007). *Comparative Indicators of Education in the United States and Other G-8 Countries: 2006* (NCES 2007-006). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC.

NOTE: There are differences within the education system of the United Kingdom because responsibilities and oversight for education take place at the regional or local level. However, the purpose of this document is to present a brief, general summary of education in the United Kingdom. The sources cited at the end of this section provide more specific details about education in the United Kingdom.

Preprimary:

- Common name: *Foundation stage/phase, nursery school/class, reception class, day nursery*
- Ages of attendance: 3 to 4
- Number of years: 1 to 2
- Start of universal enrollment: Age 4
- Compulsory: No

NOTE: Within the foundation stage/phase, some students attend a "reception class" in primary school. This is comparable to kindergarten in the United States, with academic activities, and

provides a "bridge" between nursery school and key stage 1 for students who will achieve compulsory school age later in that academic year.

Primary:

- Common name: *Key stages 1 and 2, infant school, junior school*
- Ages of attendance: 5 to 10 (England and Wales), 4 to 10 (Northern Ireland)
- Number of years: 6 (England and Wales), 7 (Northern Ireland)
- Universal enrollment: Yes
- Compulsory: Yes

NOTE: The primary school years are divided into stages. In England, these are key stage 1 and key stage 2. In Wales, from 2008, they will be known as the foundation phase and key stage 2. In Northern Ireland, from 2008, they will be known as the foundation stage, key stage 1 and key stage 2.

Lower secondary:

- Common name: *Key stage 3, comprehensive school, grammar school, secondary modern school, secondary school, high school, post-primary, academy*
- Ages of attendance: 11 to 13
- Number of years: 3
- Universal enrollment: Yes
- Compulsory: Yes
- Entrance/exit criteria: No (except for grammar schools in England and Northern Ireland, which set entrance criteria)

NOTE: Although lower and upper secondary school are typically combined in the United Kingdom, the first 3 years of secondary school are classified as lower secondary under the ISCED and are commonly referred to as "key stage 3." Some areas have grammar schools and secondary modern schools, which enroll children with higher and lower achievement, respectively.

Upper secondary:

- Common name: *Key stage 4, key stage 5, comprehensive school, grammar school, secondary modern school, secondary school, high school, post-primary, academy, school sixth form, sixth form college, further education college*
- Ages of attendance: 14 to 17 (graduation generally at age 18)
- Number of years: 4
- Universal enrollment: Through age 16
- Compulsory: Until age 16
- Entrance/exit criteria: In order to obtain the General Certificate of Secondary Education (GCSE), students take a series of single-subject examinations after the first 2 years of upper secondary school (at age 15/16). The General Certificate of Education (GCE) Advanced levels (A levels) and the GCE Advanced Subsidiary examinations (AS levels) are similar tests taken in the sixth form (described below).

NOTE: After the first 2 years of upper secondary school, students take General Certificate of Secondary Education qualifications (GCSEs), typically at age 16. They then have the option of continuing school for 2 years, often called the sixth form. Some schools do not offer the sixth form, in which case students can transfer to a sixth form college (which is similar but in a separate school) or go to a further education college. Sixth forms usually offer General Certificate of Education Advanced Subsidiary qualifications (GCE AS levels) at age 17 and General Certificate of Education Advanced level examinations (GCE A levels) at age 18. GCE A levels are usually required for entry to higher education. An increasing range of GCSEs, A levels, and AS levels in applied (vocational) subjects is also being offered, along with a developing range of 14–19 Diplomas. Such 14–19 Diplomas involve part-time or full-time programs that combine vocational and academic studies in broad subject areas. They are suitable for 16- to 19-year-old adult learners or upper secondary students. Students are increasingly able to enter higher education with these parallel GCSE, A level, AS level, and 14–19 Diploma vocational qualifications. If students choose not to enter sixth form, their options are the labor force (often through apprenticeships or youth training courses) or a further education sector college. Further education sector colleges

have traditionally offered vocational courses, but increasingly have academic programs.

Postsecondary and tertiary:

- Common name: *Higher education (HE), college, university*
- Ages of attendance: Varies
- Number of years: Varies according to degree
- Universal enrollment: No
- Entrance criteria: GCE Advanced levels (A level) or equivalent, such as A levels in applied subjects or the new 14–19 Diplomas, are required for admittance into the tertiary sector.

Common degree programs:

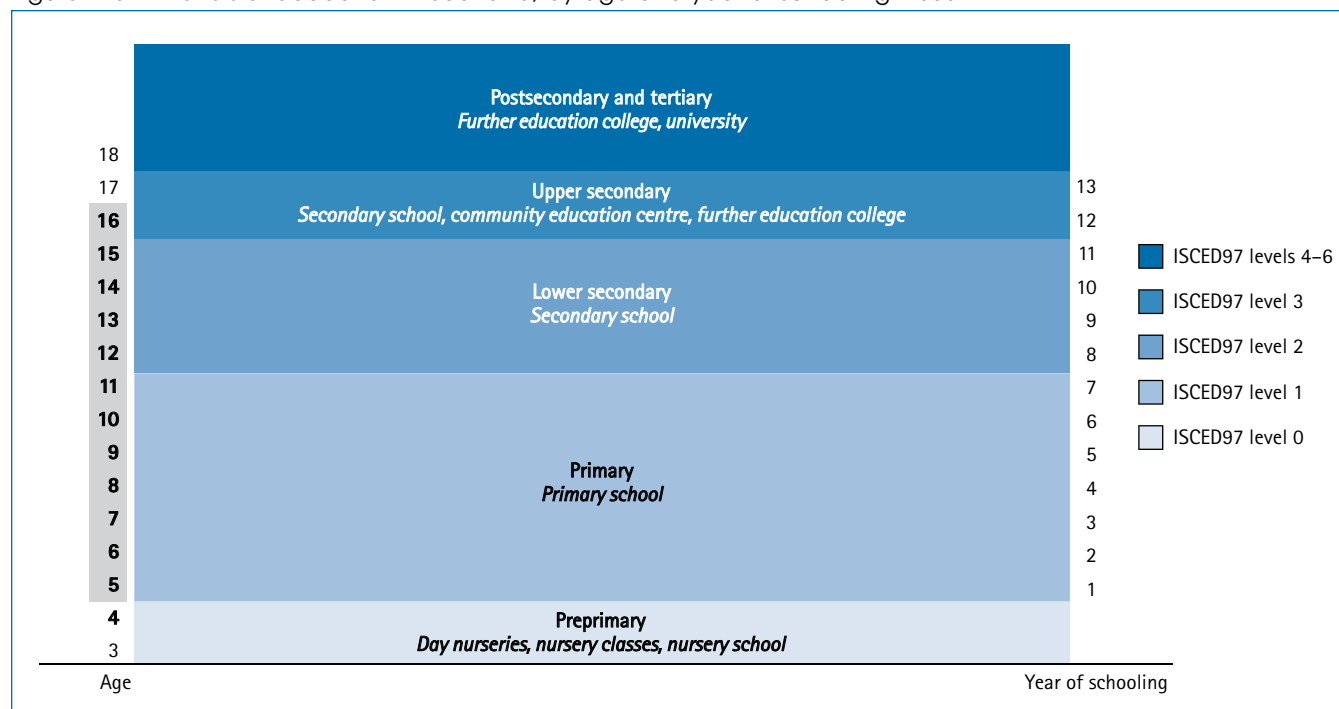
- **Certificates of higher education:** 1-year vocational courses.
- **Diploma:** Short undergraduate programs, which vary in length, offered at colleges and universities. (Not to be confused with the 14–19 Diplomas which are being introduced at the upper secondary level).
- **Foundation degree:** Employment-related higher education qualification taking 2 years to complete and offered at colleges and universities.
- **Bachelor's degree:** 3- to 4-year academic programs at colleges or universities. Most students opt for an honors degree, the requirements of which are specific to schools and departments. Honors degrees are an entrance requirement for most graduate programs.
- **Advanced short degree:** Short programs, which vary in length, for students who have already acquired a bachelor's degree, for example, the postgraduate certificate of education. Courses offered are often professional development-oriented.
- **Master's degree:** A taught or research postgraduate degree offered at colleges and universities. One year or more beyond an honors bachelor's degree.
- **Professional degrees:** Advanced or extended programs in professional fields such as engineering, accounting, medicine, and information science. Number of years required to complete varies.
- **Doctorate:** Research-oriented postgraduate degree. Minimum of 3 years in duration.

Sources:

- Eurybase. (2008). *The Information Database on Education Systems in Europe: The Education System in the United Kingdom (England, Wales, and Northern Ireland), 2007/08*. Brussels: Eurydice. Retrieved December 15, 2008, from http://eacea.ec.europa.eu/ressources/eurydice/eurybase/pdf/0_integral/UN_EN.pdf.
- Marlow-Ferguson, R. (Ed.) (2002). *World Education Encyclopedia: A Survey of Educational Systems Worldwide, Vol. 1* (2nd ed.). Farmington Hills, MI: Gale Group.
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- Robitaille, D.F. (1997). *National Contexts for Mathematics and Science Education: An Encyclopedia of the Education Systems Participating in TIMSS*. Vancouver, Canada: Pacific Educational Press.

The Education System in the United Kingdom: The Education System in Scotland

Figure A-8. Levels of education in Scotland, by age and year of schooling: 2008



NOTE: Ages represent the typical age at the beginning of the school year. Numbers in bold print indicate ages of universal enrollment (i.e., an enrollment rate of more than 90 percent). Numbers shaded represent the age at which compulsory enrollment begins through the age at which compulsory enrollment ends. In some countries, enrollment rates may fall below universal before the ending age of compulsory education. No meaning should be inferred from width of subdivisions. Duration of first university degree program is generally 3 or 4 years in Scotland.
SOURCE: Miller, D.C., Sen, A., and Malley, L.B. (2007). *Comparative Indicators of Education in the United States and Other G-8 Countries: 2006* (NCES 2007-006). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC.

NOTE: The education system in Scotland is different from that which exists in the rest of the United Kingdom. The Scottish Parliament is responsible for the overall supervision and development of the education system, while Scottish Government Education and Training has day-to-day responsibility for education, training, and life-long learning.

Preprimary:

- Common name: *Day nurseries, nursery classes, nursery school*
- Ages of attendance: As early as age 3 to age 4
- Number of years: 1 to 2
- Start of universal enrollment: Age 4
- Compulsory: No

Primary:

- Common name: *Primary school*
- Ages of attendance: 5 to 11
- Number of years: 7
- Universal enrollment: Yes
- Compulsory: Yes

Lower secondary:

- Common name: *Secondary school*
- Ages of attendance: 12 to 13
- Number of years: 2
- Universal enrollment: Through age 14 (most students turn 14 during the last year of lower secondary school)
- Compulsory: Yes
- Entrance/exit criteria: No

Upper secondary:

- Common name: *Secondary school, community education center, further education college*
- Ages of attendance: 14 to 17 (graduation generally at age 18)
- Number of years: 4
- Universal enrollment: Through age 16
- Compulsory: No
- Entrance/exit criteria: A unified system of National Qualifications exams has been introduced for students in secondary schools, further education colleges, and training centers. At the end of upper secondary education, students generally take the

examinations for the Scottish Qualifications Certificate (SQC) at Standard Grade or National Qualifications courses/units. These examinations are intended to be taken by the whole school population. Students who plan to go into higher education take the higher level examinations of the SQC.

NOTE: During upper secondary school, students in Scotland have the option to continue in a traditional secondary school or to attend further education colleges. There are also nationally funded training and apprenticeship programs in which students can participate if they choose not to attend upper secondary school.

Postsecondary and tertiary:

- Common name: *Further education college, university*
- Ages of attendance: Varies
- Number of years: Varies according to course/degree
- Universal enrollment: No
- Entrance criteria: The usual entry requirements for university are the higher or advanced higher level examinations of the SQC (see above). Further education colleges admit students who have just left school at age 16, students who have left school at age 17 or 18 with and without formal certification, and are now admitting an increasing number of older students. Admission requirements at further education colleges are decided by the institution.

Common degree programs:

- **Certificates of higher education:** 1-year vocational courses.
- **Diploma:** Short undergraduate programs, which vary in length, offered at colleges and universities.
- **Bachelor's degree:** Courses leading to an ordinary bachelor's degree last 3 years, while courses leading to a degree with honors are typically 4 years. There are also some courses where the first award is a master's degree.

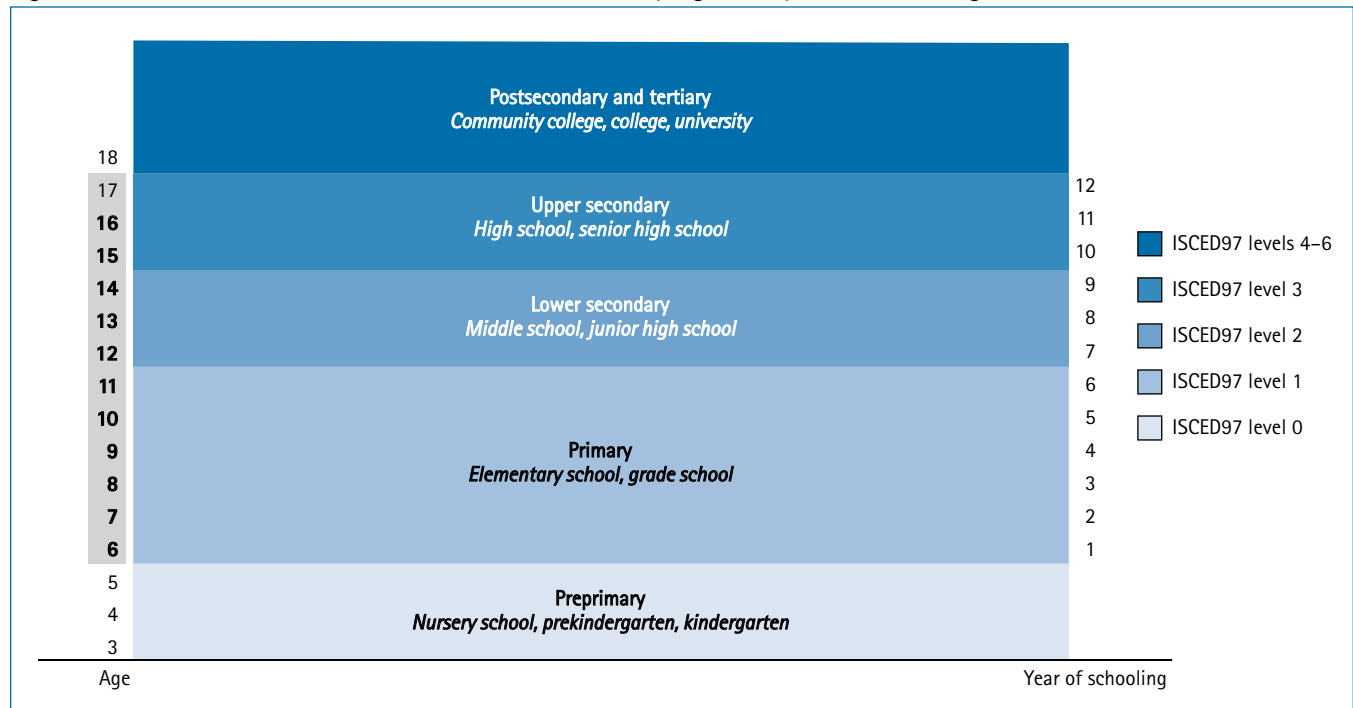
- **Advanced short degree:** Short programs, which vary in length, for students who have already acquired a bachelor's degree; for example, the postgraduate diploma of education. Courses offered are often professional development-oriented.
- **Master's degree:** Taught master's degrees are typically 1-year programs, but research master's degrees are generally longer. Entrance into a master's program generally requires a bachelor's degree.
- **Professional degree programs:** Advanced or extended programs leading to professional registration as a doctor, dentist, etc. that typically require 5 years beyond the bachelor's degree.
- **Doctorate:** A doctorate generally requires 3 years of full-time study or 4 to 6 years if part time.

Sources:

- Eurybase. (2008). *The Information Database on Education Systems in Europe: The Education System in the United Kingdom (Scotland), 2007/08*. Brussels: Eurydice. Retrieved December 15, 2008, from http://eacea.ec.europa.eu/ressources/eurydice/eurybase/pdf/0_integral/SC_EN.pdf.
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The Education System in the United States

Figure A-9. Levels of education in the United States, by age and year of schooling: 2008



NOTE: Ages represent the typical age at the beginning of the school year. Numbers in bold print indicate ages of universal enrollment (i.e., an enrollment rate of more than 90 percent). Numbers shaded represent the age at which compulsory enrollment begins through the age at which compulsory enrollment ends. In some countries, enrollment rates may fall below universal before the ending age of compulsory education. No meaning should be inferred from width of subdivisions. Duration of first university degree program is generally 4 years in the United States. SOURCE: Miller, D.C., Sen, A., and Malley, L.B. (2007). *Comparative Indicators of Education in the United States and Other G-8 Countries: 2006* (NCES 2007-006). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC.

NOTE: There are differences within the education system of the United States because responsibilities and oversight for education take place at the regional or local level. However, the purpose of this document is to present a brief, general summary of education in the United States. The sources cited at the end of this section provide more specific details about education in the United States.

Preprimary:

- Common name: *Nursery school, prekindergarten, kindergarten*
- Ages of attendance: As early as age 3 to age 5
- Number of years: 1 to 3
- Start of universal enrollment: Does not begin in preprimary; see below
- Compulsory: Generally no, but yes in some states

Primary:

- Common name: *Elementary school, grade school*
- Ages of attendance: 6 to 11
- Number of years: 6
- Start of universal enrollment: Age 6
- Compulsory: Yes

NOTE: Based on the ISCED97, the first 6 years of schooling are classified as primary in the United States. Students may attend 5- or 6-year elementary schools. Some students also attend elementary schools that include eight grades.

Lower secondary:

- Common name: *Middle school, junior high school*
- Ages of attendance: 12 to 14
- Number of years: 3
- Universal enrollment: Yes
- Compulsory: Yes
- Entrance/exit criteria: No

NOTE: Based on the ISCED97, the 3 years of schooling following primary school are classified as lower secondary in the United States. Students may attend 2- or 3-year junior high schools or middle schools. Some students also attend combined junior-senior high schools.

Upper secondary:

- Common name: *High school, senior high school*
- Ages of attendance: 15 to 17 (graduation generally in the year of

the student's 18th birthday, though this can vary depending on a student's birth date and the state's kindergarten cut-off date)

- Number of years: 3
- Universal enrollment: Through age 16 (most students turn 18 during the last year of upper secondary school)
- Compulsory: The average ending age of compulsory education in the United States is 17. This age varies across states, ranging from 16 to 18; the modal age is 16
- Entrance/exit criteria: There are not generally entrance exams, although some states have begun instituting exit examinations that are required to receive a diploma. College-bound students usually take the Scholastic Aptitude Test (SAT) or ACT Assessment (ACT), privately administered standardized tests that partly determine college admittance. Admittance is also affected by previous grades, coursework, and other factors such as teacher recommendations and extracurricular participation.

NOTE: Based on the ISCED97, the last 3 years of schooling prior to receiving a high school diploma are classified as upper secondary in the United States. Senior high schools may be 3 or 4 years in length. Some students attend combined junior-senior high schools.

Postsecondary and tertiary:

- Common name: *Community college, college, university*
- Ages of attendance: Varies
- Number of years: Varies according to degree
- Universal enrollment: No
- Entrance criteria: Varies according to degree. Students in the United States usually take the SAT or ACT (see above) as part of the entrance requirements for higher education. Most colleges and universities set their own admissions standards, so the requirements vary substantially from institution to institution.

Common degree programs:

- **Certificate programs:** Vocational programs of 6 months to 1 year offered in public community colleges and private for-profit trade schools.
- **Associate's degrees:** 2-year programs offered in fields of study that prepare students for the labor force or entry into a 4-year college or university. Granted at vocational and technical institutes as well as community colleges.

- **Bachelor's degrees:** 4-year academic programs at a college or university that prepare students for the labor force or graduate study.
- **Master's degrees:** Graduate program at a university that requires 2 years of study beyond the bachelor's degree and leads to a master's degree.
- **Professional degrees:** Graduate programs such as medicine or law taken at a university medical or law school. Typically require 3 or more years beyond the bachelor's degree and result in specialized degrees such as the Medical Doctorate (M.D.) or Juris Doctor (J.D.).
- **Doctorate:** Academic graduate program at a university typically requiring a minimum of 3 or 4 years of study and research beyond the bachelor's degree.

Sources:

- Marlow-Ferguson, R. (Ed.) (2002). *World Education Encyclopedia: A Survey of Educational Systems Worldwide, Vol. 1* (2nd ed.). Farmington Hills, MI: Gale Group.
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