



Structures of Education,
Initial Training
and Adult Education
Systems in Europe

GERMANY

1999

Information provided by:

Eurydice Unit

Informationsstelle beim
Bundesministerium für Bildung und Forschung
Heinemannstrasse 2
D-53175 Bonn

Informationsstelle der Länder
im Sekretariat der Kultusministerkonferenz
Lennéstraße 6
D – 53113 Bonn

Member of the CEDEFOP Documentary Network
BIBB-Bundesinstitut für Berufsbildung
Fehrbelliner Platz 3
D - 10707 BERLIN

If you wish to have more detailed information on education systems in Europe, we warmly recommend that you consult the EURYBASE database (<http://www.eurydice.org>) and the CEDEFOP monographs (<http://www.cedefop.gr>)

TABLE OF CONTENTS

INTRODUCTION.....	4
1. RESPONSIBILITIES AND ADMINISTRATION.....	8
1.1 Political background.....	8
1.2. Basis of the education system: principles and legislation.....	8
1.3 Distribution of responsibilities for the organisation and administration of the education and training system.....	8
1.4 Inspection/supervision/ guidance.....	10
1.5 Financing.....	11
1.6. Advisory and consultative bodies.....	12
1.7 Private education.....	13
2. PRE-PRIMARY EDUCATION.....	14
2.1 Organisation.....	15
2.2 Curriculum/assessment.....	15
2.3 Teachers.....	15
2.4 Statistics.....	16
3. COMPULSORY GENERAL EDUCATION (PRIMARY AND LOWER SECONDARY EDUCATION).....	16
3A PRIMARY EDUCATION.....	16
3A.1 Organisation.....	16
3A.2 Curriculum.....	17
3A.3 Assessment/certification/ guidance.....	17
3A.4 Teachers.....	18
3A.5 Statistics.....	18
3B SECONDARY EDUCATION.....	18
3B.1 Organisation.....	20
3B.2 Curriculum.....	20
3B.3 Assessment/certification/ guidance.....	21
3B.4 Teachers.....	21
3B.5 Statistics.....	22
4. POST-COMPULSORY SECONDARY EDUCATION.....	22
4A GENERAL UPPER SECONDARY EDUCATION (<i>gymnasiale Oberstufe</i>).....	23
4A.1 Organisation.....	23
4A.2 Curriculum.....	23
4A.3 Assessment/certification/ guidance.....	23
4A.4 Teachers.....	24
4A.5 Statistics.....	24
4B VOCATIONAL TRAINING IN FULL-TIME VOCATIONAL SCHOOLS.....	24
4B.1 Organisation.....	24
4B.2 Curriculum.....	25
4B.3 Assessment/certification/ guidance.....	25
4B.4 Teachers.....	26
4B.5 Statistics.....	26
5. INITIAL VOCATIONAL TRAINING.....	27
5.1 Organisation.....	27
5.2 Education/training establishments.....	28
5.3 Financing.....	28
5.4 Curriculum.....	28
5.5 Assessment/Qualifications/ Guidance.....	29
5.6 Trainers/teachers.....	29
5.7 Statistics.....	30
6. TERTIARY SECTOR.....	30
6A Non-university institutions.....	30

6B University education	31
6B.1 Admission requirements.....	32
6B.2 Fees/financial support for students	33
6B.3 Academic year	34
6B.4 Courses	34
6B.5 Assessment/qualifications	34
6B.6 Teachers	35
6B.7 Statistics	36
7. ADULT EDUCATION	36
7.1 Legislative framework.....	36
7.2 Administration.....	37
7.3 Funding	38
7.4. Organisation	39
7.5. Statistics	40

INTRODUCTION

Europe is characterized by a very wide variety of education and training systems. In order that this diversity should be fully appreciated, EURYDICE, the information network on education in Europe and the European Centre for the Development of Vocational Training (CEDEFOP) jointly published *Education and Initial Training Systems in the European Union* for the first time in 1990. This book was updated in 1995 and then again in 1999/2000. Given the number of countries it now covers¹ and the amount of data available, this most recent update has been placed for consultation on the EURYDICE Network website (<http://www.eurydice.org>), instead of being distributed in printed paper form. In this way, it may be accessed by a maximum number of readers and updated on a more regular basis.

Descriptions relating to individual countries in turn include basic information on the administration and structure of their systems of education and initial vocational training at all levels, as well as brief accounts of their higher education and systems for initial and in-service teacher training, and of the status of teachers. EURYDICE and CEDEFOP have also used this latest update to add a chapter on adult education, which is an important topic in relation to the development of lifelong learning in Europe.

As in the previous edition, the information is structured with respect to a common table of contents to facilitate inter-country comparisons while ensuring that special features peculiar to each system are duly emphasized.

The first chapter within each country section is devoted to a short presentation of the country concerned, together with the basic principles governing its education and training, the division of responsibilities and then more specific information (relating to administration, inspection, financing, private schooling and advisory bodies). The major reforms of education systems are also considered.

The other chapters deal in turn with pre-primary education, compulsory and post-compulsory education (general, technical and vocational), the initial vocational training of young people and higher education. Here also, the way these chapters are structured depends on each national context. Where pre-primary education is not in reality separate from primary education, or where compulsory education spans different levels, no artificial division has been created. In the case of all countries, a brief description of the aims and structure of the level of education concerned is followed by further headings devoted to the curriculum, assessment, teachers and statistics.

Initial vocational training is the subject of a chapter in its own right, as it is generally provided outside the ordinary education system, whether as part of schemes for apprenticeship, the special training of young people or vocational integration. This is followed by a chapter on higher education, in which a summary description is supplemented by sections on admission, fees, the academic year, courses, qualifications and assessment.

As indicated above, this latest updating also provides for the first time a general description of the way formal systems of general education and vocational training for adults are organized. The legislative framework and financing of this kind of education are also covered.

The situation regarding teachers is dealt with in a specific section for each level of education discussed. Also provided are statistics on the number of pupils, students, teachers and educational institutions and, where figures are available, on pupil or student/teacher ratios, attendance and attainment rates or, yet again, on the choice of branches of study or areas

¹ **The European countries taking part in the Community Programme in Education, Socrates.**

of specialization.

The description for each country is preceded by a diagram of its education system with explanatory notes. Here again, the way the diagrams are presented has, as far as possible, been standardized so that common – and differing – features of the various systems can be more easily identified and compared.

The National Units in the EURYDICE Network have drafted the descriptions for their countries, each using the same proposed outline of content as a common framework. The information on initial vocational training and on adult education has been prepared in close collaboration with members of the documentary information network of CEDEFOP (in the case of the European Union and EFTA/EEA countries) and the National Observatories of the European Training Foundation – ETF (as regards the ten countries of central and eastern Europe). We are extremely grateful to them and to all those who were involved in this project, both in the EURYDICE European Unit in Brussels and at CEDEFOP in Thessaloniki, for their invaluable contribution to this fundamental source of information which is vital to a better understanding of education and training systems in Europe.

Luce Pépin
Head of the European Unit
EURYDICE

Johan van Rens
Director of CEDEFOP

March 2000

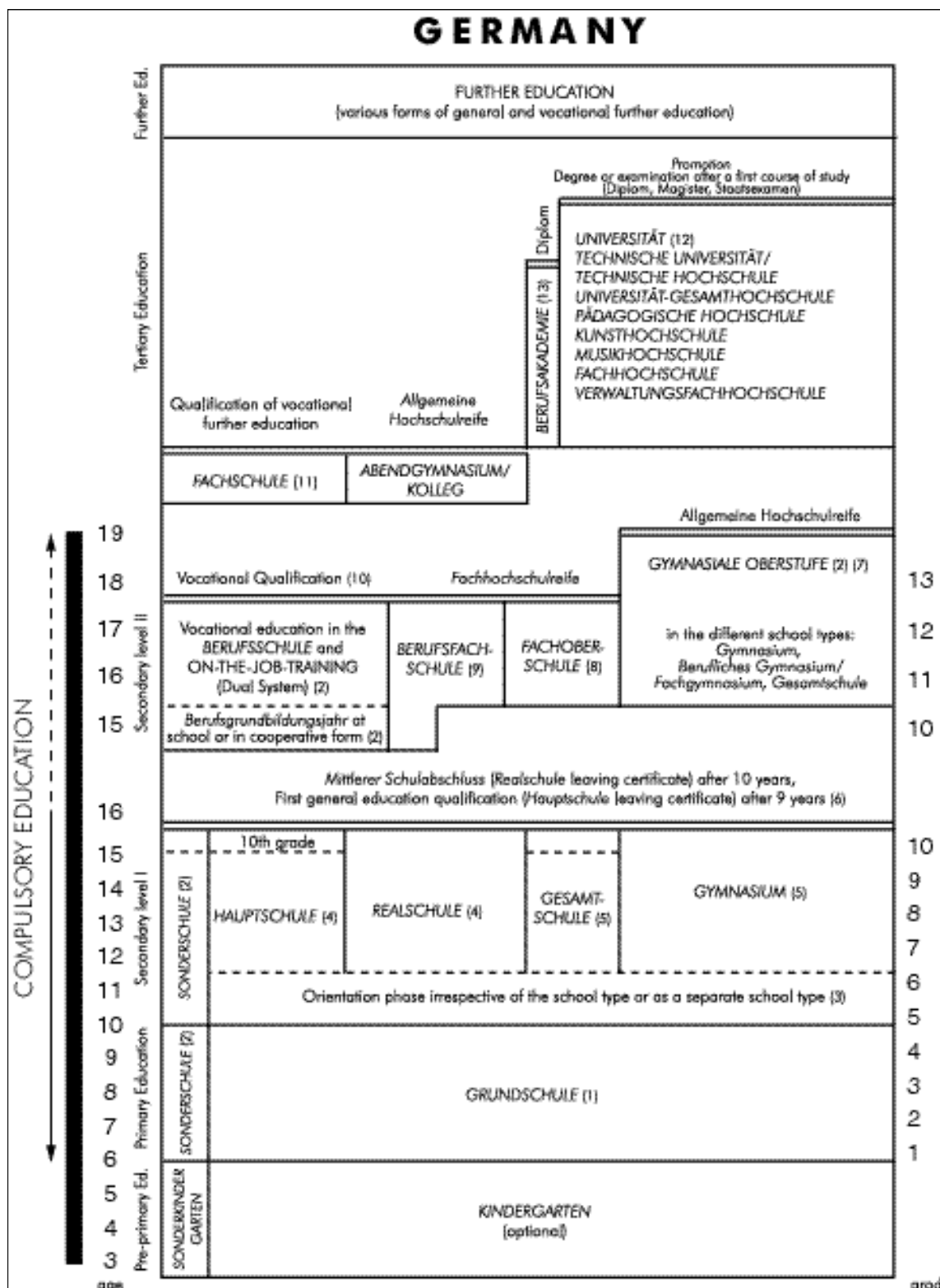


Diagram of the basic structure of the education system. Secondary level I is portrayed in line with the distribution of the school population in 1997: *Hauptschule* 23.4%, *Realschule* 25.9%, *Gymnasium* 28.9%, *integrierte Gesamtschule* 9.3%.

The ability of pupils to transfer between school types and recognition of school-leaving qualifications is basically guaranteed if the preconditions agreed between the *Länder* are fulfilled. The duration of full-time compulsory education (general compulsory education) is nine years (10 years in four of the *Länder*) and the subsequent period of part-time compulsory education (compulsory vocational education) is three years.

1. In some *Länder*, there are special types of transition from Kindergarten to primary education (*Vorklassen*, *Schulkindergärten*). In Berlin and Brandenburg, primary school comprises six years.
2. The disabled attend special forms of general education and vocational school types (in some cases integrated with non-handicapped pupils) depending on the type of disability. Designation of schools varies according to the law of each *Land* (*Sonderschule*, *Schule für Behinderte*, *Förderschule*).
3. Irrespective of school type, years 5 and 6 constitute a phase of particular support, supervision and orientation with regard to the pupil's future educational path and its particular focuses. The orientation stage is organised as a separate organisational unit independent of the standard school types in some *Länder*.
4. *Hauptschule* and *Realschule* courses of education are also offered in other types of school offering more than one educational path with different designations depending on the *Land*. These include *Mittelschule* (Sachsen), *Regelschule* (Thüringen), *Sekundarschule* (Sachsen-Anhalt), *Erweiterte Realschule* (Saarland), *Integrierte Haupt- und Realschule* (Hamburg), *Verbundene Haupt- und Realschule* (Hessen, Mecklenburg-Vorpommern), *Regionale Schule* (Rheinland-Pfalz) and *Gesamtschule*.
5. The *Gymnasium* course of education is also offered in the *Gesamtschule*. The *Kooperative Gesamtschule* and *Schulzentrum* (Bremen) combine three courses of education (those of *Hauptschule*, *Realschule* and *Gymnasium*) in terms of teaching and organisation. They constitute a teaching and organisational whole in the *integrierte Gesamtschule*. The creation of *Gesamtschulen* is regulated differently in accordance with the educational laws of each *Land*.
6. General education school-leaving certificates awarded at the end of the ninth and tenth school years have different names in the individual *Länder*. It is possible to obtain these certificates later from an *Abendschule* (evening school).
7. Admission to the *Gymnasiale Oberstufe* requires a formal entrance qualification, which can generally be obtained after year 10. The *Allgemeine Hochschulreife* is generally awarded after 13 consecutive school years. The *Allgemeine Hochschulreife* is awarded after 12 years of schooling in Sachsen and Thüringen.
8. The *Fachoberschule* is a school type lasting two years (11th and 12th years) which takes pupils who have completed the *Realschule* and qualifies them for *Fachhochschule*. Pupils who have successfully completed *Realschule* and have been through initial vocational training can also enter the 12th year of the *Fachoberschule* directly.
9. Full-time vocational schools differing in terms of entrance requirements, duration and leaving certificates. Certain two-year *Berufsfachschulen* requiring a *Realschule* certificate for admission lead to a state-recognised qualification as a technical assistant (*staatlich geprüfter Assistent*) and one- or two-year courses at *Berufsfachschule* offer basic vocational training. The *Fachhochschulreife* (*Fachhochschule* entrance qualification) can be awarded on certain conditions in connection with completion of a course of study lasting at least two years.
10. In addition to a certificate leading to a profession and in some cases the award of a *Hauptschulabschluss* or *Mittlerer Schulabschluss*.
11. *Fachschulen* provide continuing vocational training (lasting 1-3 years) and essentially require completion of a relevant vocational training course in a recognised training profession and a corresponding professional activity. Under certain conditions, it is also possible to obtain a *Fachhochschulreife*. *Fachschulen* are considered part of the post-secondary sector according to the International Standard Classification for Education (ISCED 97).
12. Including institutions of higher education offering specific subjects at university level (e.g. theology philosophy, medicine, administration studies and sport).
13. Tertiary sector institutions in seven *Länder* which combine theoretical vocational training in a study institution (*Studienakademie*) with practical vocational training in a firm within the framework of the dual system.

1. RESPONSIBILITIES AND ADMINISTRATION

1.1 Political background

The Federal Republic of Germany had a population of approximately 82 million in 1996 in a territory of 357,000 square kilometres, its size having increased on 3 October 1990 as a result of German unification based on a treaty between the Federal Republic of Germany and the German Democratic Republic.

Under the *Grundgesetz* (Basic Law), the *Bundestag* (Federal German Parliament) and *Bundesrat* (composed of members of government in the *Länder*) are the constitutional bodies with legislative authority. Executive functions in the field of home and foreign affairs are carried out mainly by the Federal Government, insofar as the Federation enjoys relevant competence for these fields of policy under the Basic Law. The Federal Government is headed by the Federal Chancellor and composed of 15 ministers (1999). The Federal President is the Head of State and is elected for a five-year term. The official language is German and teaching is provided primarily in the German language. The Basic Law guarantees freedom of creed, conscience, religion and ideological persuasion. There is no established State church, and the Basic Law guarantees individual religious freedom and tolerance.

Since 1990, the Federal Republic of Germany is made up of 16 *Länder* (states), including five which were reintroduced in the former German Democratic Republic on the basis of the Establishment of *Länder* Act of July 1990. Both the individual *Länder* and the Federation possess the quality of statehood. The predominant responsibility of the *Länder* for education, science and culture (so-called "cultural sovereignty" - *Kulturhoheit*) constitutes the key element of their individual statehood according to the constitutional order established by the Basic Law. Each Land has its own constitution and government. In 1997, the 16 *Länder* were subdivided administratively into 32 administrative regions, 439 districts and 14,308 municipalities.

1.2. Basis of the education system: principles and legislation

According to the Basic Law, Germany is a republic, a democracy, and a federal, constitutional and socially responsible State. As far as education is concerned, the Basic Law guarantees among other things the freedom of art and science, research and teaching, the freedom of creed and conscience, the freedom to profess a religion, the freedom to choose one's occupation and place of study or training, equality before the law and the natural right of parents to care for and bring up their children. According to the Basic Law, *Länder* are responsible for exercising State powers and fulfilling State obligations. The *Länder* are thus entitled to pass legislation where the Basic Law does not confer legislative power on the Federation (*Bund*). The legal framework conditions for the education system governing pre-primary institutions, the school system and higher education, adult education and continuing education are established in the constitutions and laws of the *Länder*.

1.3 Distribution of responsibilities for the organisation and administration of the education and training system

The responsibility for the organisation and administration of the education system is determined by the federal structure of government. Relevant legislation and administration of the education system are therefore primarily the responsibility of the *Länder*. This is especially true of the school system, higher education, and adult and continuing education.

The Basic Law defines the scope of the Federation's responsibilities in the field of education. These apply especially to the following areas in education, science and research: out-of-school vocational training and continuing education, framework legislation on the general principles of higher education, support for training, support for scientific research and technological development and training of the next generation of scientists, youth welfare, protection for participants in distance learning, access to the profession for lawyers and the medical and nursing professions, measures to promote employment, and research into the labour

market and professions. The Federation is also responsible for legal framework provisions on civil service employment generally and on the payment of salaries and benefits to civil servants (e.g. teachers and professors). The *Länder* then make these provisions more concrete by creating and implementing the relevant *Land* legislation.

In order to provide the necessary degree of shared characteristics and comparability in the education system, the *Länder* governments also cooperate amongst themselves, both in the area of education - for which responsibility falls entirely to the *Länder* - and in areas regulated by federal laws insofar as *Land* law is needed for their implementation and application. The Ministers and Senators responsible for education and training, higher education institutions, research, and cultural affairs in the *Länder* work together in the Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder* in the Federal Republic of Germany (*Ständige Konferenz der Kultusminister der Länder in der Bundesrepublik Deutschland*). The Conference of Ministers was established by an agreement among the *Länder* and deals with cultural and educational issues of supraregional significance with a view to reaching a joint position and attending to matters of common interest. Cultural policy is interpreted broadly to include the areas of education, higher education, research, cultural affairs and sport. This cooperation has led to joint and comparable developments in broad areas.

An agreement between the *Länder* of 1964, last amended in 1971, guarantees a uniform fundamental structure of the school system in Germany. Among other things, the agreement covers the beginning and duration of full-time compulsory education, the dates for the start and end of the school year, the duration of school holidays, the designation and organisation of the various types of educational institutions, the basic guarantee that pupils can transfer from one school type to another if certain preconditions are fulfilled, the beginning of foreign language courses and the sequence in which languages are learned, the recognition of leaving certificates and teaching qualifications, and the description of the marking system used for school reports and teacher training examinations. In subsequent resolutions, the Standing Conference has defined additional common features of the school system and contributed to the mutual recognition of qualifications awarded by general education and vocational training schools in all the *Länder*. During the 1990s, the Standing Conference has among other things dealt primarily with the equivalency of general education and vocational training and initiated a discussion process regarding further structural development of the dual system of vocational training.

In the area of higher education, the *Länder* have concluded an agreement on the standardisation

of the *Fachhochschule* system and have reached numerous further agreements concerning other higher education institutions. The fundamental reform of the structure of higher education has constituted an important topic in the Standing Conference of Ministers. Cooperation between the Standing Conference and the association of higher education institutions, as represented by their rectors and presidents (*Hochschulrektorenkonferenz*), has created a link between the government bodies which administer higher education in the *Länder*, on the one hand, and the self-administration of the institutions themselves, on the other. This cooperation has taken concrete form in agreements on the content and organisation of academic examinations (*Hochschulprüfungen*).

In addition to defining the division of responsibilities as described above, the Basic Law also makes provisions for the Federation to cooperate with the *Länder*, as in the joint task of the construction and expansion of higher education institutions and university clinics. In order to coordinate this properly, the Federal Government and the governments of the *Länder* form a planning committee for the construction of higher education institutions chaired by the Federal Minister for Education and Research and also involving the Federal Minister for Finance and one Minister from each of the *Länder*. The Federation (*Bund*) can also enter into agreements with the *Länder* to cooperate on educational planning and on the funding of academic and scientific research institutions and projects of supraregional significance. The forum for this cooperative activity is the *Bund-Länder* Commission for Educational Planning and Research Promotion, in which the Federal Government and the governments of all *Länder* are represented. In-company vocational training and vocational education in schools fall under separate jurisdictions. The Federal Government is responsible for drafting training regulations, while the *Länder* create framework curricula in a Federation - *Länder* Coordination Committee on the basis of a procedure agreed upon by the Federation and the *Länder* in 1972 to govern vocational training in the dual system.

1.4 Inspection/supervision/ guidance

Pre-primary education

Pre-primary education in *Kindergärten* comes mainly under child and youth welfare services. In most *Länder*, the Social Ministries bear legal responsibility, although in some *Länder* this falls

to borne the Ministries of Education and Cultural Affairs. The local Youth Welfare Offices (*Jugendämter*) bear overall responsibility for the operation of the institutions, and the Youth Welfare Offices of each *Land* (*Landesjugendämter*) are responsible for providing State supervision of public and private *Kindergärten*. Only *Vorklassen* (pre-primary classes) for five-year-olds who have not yet reached compulsory schooling age, and *Schulkindergärten* (school kindergartens) and *Vorklassen* for those six-year-olds who have not yet attained a sufficient level to attend school are supervised by the school authorities.

Schools

According to the Basic Law and *Länder* constitutions, the entire school system comes under the supervision and responsibility of the State. The *Länder* Ministries of Education and Cultural Affairs have ultimate authority in the supervision and administration of institutions providing general and vocational education. School supervision includes the mandate to plan and organise the entire school system. The authority of the *Länder* extends not only to the organisation of the schools themselves, the content of the courses and teaching objectives, but also to supervising the performance of teachers and other teaching staff. The educational goals set down in school laws are given concrete form in curricula, for which the *Länder* Ministries of Education and Cultural Affairs are responsible. The competent *Länder* ministries establish curricula for the subjects taught at the different types and levels of school. These curricula are usually developed in special curriculum planning commissions by teachers who are assisted by other specialists. Before a curriculum is implemented, there is a procedure, which assures the participation of associations and representatives of parents, pupils and teachers. In order to implement the curricula for the various subjects in the different types of school the respective textbooks are used as learning material in the classroom. These books must be approved by the Ministries of Education and Cultural Affairs and a list of approved books is published regularly.

The administration of schools generally has a two-tiered structure, in which the Ministries of Education and Cultural Affairs of the *Länder* form the upper tier and the schools' offices (*Schulämter*) at the local, district, or communal level the lower tier. As a rule, *Grundschulen* (primary schools), *Hauptschulen* (lower secondary schools providing fundamental general education) and special schools are supervised by the schools' offices and the other schools including vocational schools by the Ministries of Education and Cultural Affairs. In some *Länder*,

the schools' offices are responsible for all school types in this two-tiered system. In the city-states, the school administration sometimes has only one tier. In four *Länder*, school administration is organised in a three-tier system. In these cases, *Gymnasien* (lower and upper secondary schools providing intensified general education), vocational schools (*berufliche Schulen*) *Gesamtschulen* (comprehensive schools) and, in most cases, *Realschulen* (lower secondary schools providing extended general education) are usually supervised by middle-level authorities (regional governments or upper level schools' offices (*Oberschulämter*)) or by the highest level (Ministries of Education and Cultural Affairs) directly.

Private schools are also subject to state supervision. For their school-leaving certificates to be recognised, these schools must comply with the relevant state regulations concerning the courses taught, teacher qualifications, and examinations. Regulations of the *Länder* governing these schools take their special educational concerns into account.

In-company vocational training

Vocational education in schools is the exclusive responsibility of the *Länder*, while the Federal Government is responsible for in-company vocational training. Companies and vocational schools do not provide education and training in isolation from one another. The courses they offer are coordinated in terms of content and organisation within the framework of the dual system of vocational education and training. This cooperation, in which business and industry - including both employees and employers through their public-law self-administered organisations - also participate in vocational education and training, is institutionalised by law at the federal, *Land*, regional, and company levels.

At the federal level, the Federal Minister for Education and Research is responsible for coordination in the domain of in-company vocational training. Representatives of employer's associations, trade unions, *Länder* governments, and the Federal Government work together on an equal footing in the Federal Institute of Vocational Training (*Bundesinstitut für Berufsbildung*). The Institute advises the Federal Government on matters relating to vocational training. It also prepares training regulations for the in-company part of vocational training to be approved by the Federal Government. The Federation and the *Länder* coordinate the training regulations with the framework curricula for the vocational school (*Berufsschule*). At *Land* level, committees consisting of representatives of employers, trade unions, and *Länder* ministries are formed to deal with vocational education and training. They

advise *Land* governments in matters regarding vocational education. At regional level, the organisations for business self-administration (chambers of industry and commerce, chambers of handicrafts, chambers of agriculture, chambers of independent professions) are responsible for advising, supervising, and recognising in-company vocational training within the region on the basis of relevant legislation. In firms providing training, elected labour representatives have the right to participate in planning and implementing in-company vocational training and in the appointment of trainers (*Ausbilder*).

Higher education

As a rule, institutions of higher education have the status of a body corporate and are public institutions under the authority of the *Länder*. They have the right of self-administration within the framework of legal provisions. The higher education institutions draw up their own statutes, which then require the approval of the *Land*. Within the *Länder* governments, responsibility for higher education institutions falls to the ministries concerned with science and research. In addition to the usual higher education institutions that are open to all, the Federation and the *Länder* are also responsible for special higher education institutions which only admit certain groups. Among these institutions are the universities of the Federal Armed Forces (*Universitäten der Bundeswehr*) and those *Fachhochschulen* which train Federation and *Länder* civil servants. In addition, there are several church run institutions of higher education and some privately run higher education institutions.

The Higher Education Framework Act (*Hochschulrahmengesetz*) sets out the general principles governing the course of studies, teaching and research at higher education institutions, access to studies, the staff and legal status of higher education institutions. The *Länder* define the organisational and administrative details of higher education institutions in their areas of jurisdiction on this basis and in the context of the *Länder* laws governing higher education. Modifications of the Higher Education Framework Act in 1998 have further extended the freedom of the *Länder* to reform the organisation and administration. Modifications in laws governing higher education to implement such reforms are either in preparation or were already enacted in most *Länder* during 1999.

In administrative matters there is a cooperative relationship between the responsible *Land* ministry and the higher education institution. Within a single administration, the latter's functions include both academic matters and governmental matters such as personnel, economic, budgetary and financial administration. Independent of this, the

responsible *Land* minister or government retains legal supervision (*Rechtsaufsicht*; to some extent also academic supervision - *Fachaufsicht*), the power to establish and organise institutions, and the final authority in financial and personnel matters.

As regards supervision, institutions of higher education establish curricula for all study courses, which must be submitted along with new study courses to the responsible *Land* ministry. Examination procedures are handled in different ways: for courses leading to a state examination (*Staatsprüfung*), examinations are set by the minister responsible for the subject area. For regulations governing examinations set by the higher education institutions (*Hochschulprüfungen*), the institutions themselves issue the examination regulations as in the case of study regulations. These examination regulations then have to be approved by the competent *Land* ministry.

1.5 Financing

Public-sector (communal) *Kindergärten* are financed by the municipalities, the *Land* (grants for material and personnel expenses) and fees from parents. Private *Kindergärten* (such as church and parental initiatives) are also financed by the municipalities, the *Land* (grants for material and personnel expenses) and fees from parents in addition to the organising body's own funds (20% on average). The amount of parental contributions varies in proportion to parental income. The Youth Welfare Office (*Jugendamt*) pays such charges on behalf of the children of parents of low-income groups. Thus, unlike the school and higher education system, pre-primary education is not provided free of charge.

As a rule, public sector schools are run by local authorities (municipalities, districts, autonomous cities with the status of a district). This means that the local authorities are responsible for setting up and administering schools, which they must also fund. State responsibility for running schools (i.e. the responsibility of a *Land*) is, with some exceptions, limited to schools whose catchment area and significance stretches beyond the municipality, for example, schools with a particular emphasis on training in the arts or sport, certain technical schools (*Fachschulen*), institutions of general education preparing adults for higher education (*Kollegs*) and special schools run under the auspices of the *Land*. In addition to their responsibility for the schools' organisation and material needs, the organising body is responsible for administrative staff (i.e. non-teaching staff), while the *Länder* are generally responsible for the teaching staff.

In principle, attendance at all public sector schools is free of charge. The learning materials pupils need at school are either provided free of charge or can be borrowed from the school. In cases where pupils are given material to keep, parents may sometimes be required to pay some of the costs, depending on their income. For a discussion of the financing of vocational training in the dual system, see 5.3.

Higher education institutions receive the greater part of their resources from the *Länder*, which also essentially determine the allocation of the resources as state institutions of higher education are financed by the *Länder*.

The latter provide higher education institutions with the necessary resources to perform their tasks out of the budget of the Ministry of Education or Science. Budget resources from the *Länder* cover personnel and material expenses. They also include investments such as expenditure for plots of land, buildings, initial construction costs and major equipment. Where total costs for the extension of existing buildings or new construction of higher education institutions exceed a certain amount, the Federation will cover 50% of the costs. Members of higher education institutions are also entitled to carry out research projects in the context of their regular duties that are not financed out of the budget but with resources from third parties such as organisations for the promotion of research. For the discussion of fees in higher education, see 6B.2. The financing of training at professional academies (*Berufsakademien*) is divided between the *Land* and the training establishments. While the training establishments bear the cost of training in a business, the study institutions providing the theoretical part of the training are fully financed by the *Land*.

1.6. Advisory and consultative bodies

The *Länder* have defined the organisation and duties of the consultative bodies in primary, secondary and tertiary education extensively in keeping with the laws governing schools and higher education institutions (*Schulgesetze* and *Schulverfassungsgesetze*, and particularly *Schulmitbestimmungsgesetze*, *Hochschulgesetze*, *Berufsakademiegesetze* and *Ausführungsverordnungen* and *Wahlordnungen*).

The consultative bodies in the school system include teachers' conferences (*Lehrerkonferenzen*), in which teachers decide questions involving teaching and education. Decisions by the conference cannot, however,

limit teachers' freedom with respect to the methodological and teaching organisation of classes, in particular. The textbooks, which must be approved by the Ministry, are selected in teachers' conferences. Teachers' conferences also determine disciplinary measures up to the expulsion of a pupil from the school in conflict situations. In several *Länder*, representatives of parents (and pupils) have the right to observe or participate in teachers' conferences.

In addition to the teachers' conference, there is also usually a school conference (*Schulkonferenz*) to promote cooperation between the school management and teachers, pupils and parents. Teachers, parents and pupils are sometimes represented equally in a school conference, and teachers and/or parents sometimes have a stronger representation. The scope of the school conference's right to advise and participate varies from *Land* to *Land*. The school conference can usually participate in the following areas of the school: Organisation of school life and teaching, pupils' safety (e.g. through measures designed to prevent accidents) and school events.

The school laws of the *Länder* recognise pupils' participation rights in principle and regulate the composition and duties of the pupils' representative body (*Schülervertretung*). To preserve their interests, pupils elect pupil representatives for each year group on the representative principle. The pupils' spokespersons (*Schülersprecher*) form city or district pupil councils (*Kreisschülerräte*) at city or district level and a *Land* pupil council (*Landesschülerrat*) at *Land* level. The rights of the pupils' spokespersons include primarily the presentation of common requests to their school, organisation of cultural, professional, social and sports events in the school area and participation in other consultative bodies.

Parents exercise their rights both individually on the basis of their right as parents (*Elternrecht*) and collectively through bodies representing parents (*Elternvertretungen*) and through representation in other school consultative bodies. It is generally true, however, that parents participate at two levels within the school: at the lower level through groups representing the pupil's own class (*Klassenelternversammlung*, *Klassenpflegschaft*), and at a higher level representing the school as a whole (*Schulelternbeirat*, *Elternvertretung*). In addition, they can participate at the regional level in individual *Länder* (parent councils (*Elternrat*) at the city, district and municipality level) and finally at *Land* level (*Landeselternbeirat*, and in some cases also in parent associations for specific types of school). At federal level, the parent councils at *Land* level (*Landeselternbeiräte*) combine to form the federal parent council (*Bundeselternrat*) to inform parents of developments in the area of education policy and advise parents on school questions.

No provisions are generally made to allow persons or institutions other than teachers, parents and pupils in consultative bodies to participate in schools, with the exception of vocational schools. Representatives of industry, the trade unions, churches, leading municipal associations, institutes of higher education, youth groups and individuals only have the right to participate at regional or *Land* level. At *Land* level, these representatives can participate in permanent consultative bodies (*Landesschulbeiräte*) or in legally regulated *ad hoc* surveys in school issues of general or fundamental significance. Local and school committees can also invite their representatives at the members' request to provide information or advice.

As bodies corporate under public law and at the same time State institutions, higher education institutions have the right of self-management. According to the federal Higher Education Framework Act (*Hochschulrahmengesetz*) and the laws governing institutions of higher education in the *Länder*, all members of a higher education institution, i.e. all those whose chief employment is with the higher education institution and enrolled students, are involved in the decision-making processes of the higher education institution. This principle was maintained in the modification of the *Hochschulrahmengesetz* in 1998 and the resulting modifications in the laws governing higher education institutions.

Up to now, two central collegiate bodies (*Kollegialorgane*) have usually been formed to establish cooperation between the management and members of the higher education institution. One of these collegiate bodies can be compared to the "Parliament" of the higher education institution (designated *Konzil*, *Konvent* or *Großer Senat* in the laws of the different *Länder*). Its most important duties include the election of the management of the higher education institution and deliberations about the basic constitution or statutes (*Grundordnung*) of the institution. The second collegiate body (*Senat*) is responsible for all of the institution's current activities that are of fundamental significance. Its most important duties including formulating resolutions about nominations for the election of the higher education institution's management and its draft budget, the number of students to be admitted to fields with restricted access, the creation of departments and scientific institutions, key issues in research and the field of young scientists and artists, examination regulations, and departmental recommendations for the appointment of professors. Despite the responsibility of the central collegiate bodies, the individual department carries out the higher education institution's duties in its subject area. The department council (*Fachbereichsrat*) is the body responsible for all issues involving research and teaching in the department. The

spokesperson for the department (*Fachbereichssprecher* or *Dekan*) who chairs the department council is a professor who is a member of the department council. Higher education institution laws of the *Länder* that were modified in 1998 and the modifications planned in certain *Länder* now call in some cases for only one collegiate body. The purpose of these modifications is above all to strengthen individual higher education institutions' ability to act by transferring responsibility for decision-making to the management of the higher education institution or the individual departments.

Students generally form student bodies (*Studentenschaften*) to handle matters involving university policy, social and cultural issues affecting students, to manage the students' supraregional and international relations and to safeguard student interests with regard to the duties of the higher education institution. Student unions are subject to the legal supervision of the management of the higher education institution.

1.7 Private education

There are private schools in all sectors of the education system, albeit to differing degrees. The Basic Law (Art. 7, paragraph 4) and in part the relevant provisions in the *Länder* constitutions explicitly guarantee the right to establish private schools. These state that private schools will be approved if their teaching goals and equipment and the academic training of their teaching staff are not inferior to that in public sector schools and they do not promote any separation of pupils based on the economic status of their parents.

In order to ensure a diversified provision, the child and youth welfare law gives non-public bodies (*freie Träger*) in pre-primary education priority over public organising bodies (municipalities). As a result, approximately 64% of *Kindergärten* in the old *Länder* were operated by voluntary organising bodies in 1994. By contrast, in the new *Länder*, voluntary organising bodies were for historical reasons only able to achieve an approximately 16% share by 1994.

In the primary sector, the creation of private schools is only possible subject to strict conditions (Art. 7, paragraph 5 Basic Law), i.e. when the school administration recognises a special pedagogical interest, when the school is to be created as a non-denominational school (*Gemeinschaftsschule*), denominational school (*Bekanntnisschule*) or school pursuing a certain ideology (*Weltanschauungsschule*) and no public school of this type already exists in the municipality. Private primary schools (*Grundschulen*) are therefore the exception. In the

secondary sector, a distinction must be made between two categories of private schools:

- alternative schools (*Ersatzschulen*) – the entire purpose of these schools should be to substitute for public schools that already exist or are planned in principle in the *Land*. Compulsory schooling can be fulfilled in these schools.
- complementary schools (*Ergänzungsschulen*) – these schools supplement the public education on offer by providing training courses primarily in the vocational sector that are not usually offered in public sector schools.

The most important legal regulations are special private school laws and financial aid regulations (*Finanzhilferegulungen*) in the form of laws and rulings by the *Länder*. An "Agreement concerning the private school system" by the Standing Conference of the Ministers of Education and Cultural Affairs (*Kultusministerkonferenz*) of 1951 guarantees common framework conditions in the *Länder*. There were 2,203 private general education schools in 1997, which were attended

by 5.1% of pupils.

The higher education sector also consists primarily of the State higher education institutions of the *Länder*. The creation of higher education institutions by non-State organising bodies is not regulated explicitly by the Basic Law. Authority to do so can, however, essentially be derived from the general guarantee of the freedom of art, science, research and teaching anchored in the Basic Law. The Higher Education Framework Act (*Hochschulrahmengesetz*) and the laws governing higher education in the *Länder* establish the minimum requirements that must be met by non-State higher education institutions seeking State recognition. The decisive factor is evidence that the private higher education institution is equivalent in value (not in kind) to State higher education institutions. Of 337 higher education institutions, only 78 – in most cases small institutions – were private in 1997. They were attended by 2.3% of all students.

2. PRE-PRIMARY EDUCATION

Pre-primary education includes all institutions of the non-public and public youth welfare services which cater for children from the time they reach the age of three until they begin school. Pre-primary education comes before the start of compulsory education, and is therefore not a part of the statutory school system. In Germany, attendance of pre-primary education institutions is entirely voluntary.

Kindergarten is the traditional form of institutionalised pre-primary education for children between the ages of three and admission to school, which usually occurs at the age of six. Since 1 January 1996, every child of *Kindergarten* age has a legal claim to a place in a *Kindergarten*. There are also other institutions besides *Kindergärten* in the field of pre-primary education, but these are of only minor importance in terms of the number of children attending.

For six-year-olds, who have reached compulsory school age but whose level of development does not yet allow them to cope with the challenges of the *Grundschule*, institutions of various names – school kindergartens (*Schulkindergärten*) in some

Länder and pre-primary classes (*Vorklassen*) in others – have been established, which are attended by 3.2% and 2.5% of six-year-olds respectively. In most *Länder*, the school authorities are authorised by law to require that six-year-olds attend *Schulkindergarten* or pre-primary classes. These institutions, like the *Vorklassen* for five-year-olds, have organisational links to *Grundschulen*.

For children aged five, who are not yet of school age and whose parents wish to provide them with special assistance and preparation for primary school (*Grundschule*), so-called preparatory classes (*Vorklassen*) are provided in individual *Länder*. *Vorklassen* in *Grundschulen*, which are attended by 1.7% of children aged five, are not compulsory.

2.1 Organisation

In 1994, approximately 64% of *Kindergärten* were operated privately by child and youth

welfare organisations (primarily belonging to churches and welfare associations, but also to clubs and parent groups) and approximately 36% were operated by public organising bodies (municipalities, districts or cities) in the old *Länder*. Approximately 16% of *Kindergärten* were operated by private and the remainder by public organising bodies in the new *Länder* in 1994, as up to 1990 *Kindergärten* were in principle operated by the State or municipalities in the GDR.

Groups are of mixed ages for children of three to six years. As a rule, supervision in the old *Länder* is provided in the morning five days a week; in some cases *Kindergärten* are also open in the afternoon. As *Kindergärten* remained open all day in the GDR up to 1990, continuous all-day care is now also provided in the new *Länder*.

2.2 Curriculum/assessment

Under the Child and Youth Welfare Act of 1990, institutions providing pre-primary education are called upon to encourage the child's development into an individually responsible and socially competent person. Their function includes the care, education and general up-bringing of the child. *Kindergärten* are responsible for supporting and supplementing the education provided in the family and for compensating for developmental deficiencies in order to provide children with the best possible opportunity for development and education. Children are encouraged through play and other activities suited to their age to develop their physical and mental faculties, to learn to live in society and in the *Kindergarten* group, and to become used to following a regular daily routine and basic rules of hygiene. *Kindergärten* also have the function of facilitating children's transition to school by ensuring an appropriate level of development.

No curricula in the scholastic sense of the word are developed for the *Kindergarten* sector. Instead, the basic pedagogical concepts are derived from the personal ideological, religious or pedagogical orientations of the organising bodies responsible for the *Kindergärten*. The teaching staff observe the children's development and report any problems that arise in the group to the parents.

2.3 Teachers

Children in institutions of pre-primary education are looked after primarily by state-recognised *Erzieher* (qualified youth or child care workers) and *Kinderpflegerinnen* (children's nurses). *Kindergärten* are often managed by state-recognised *Sozialpädagogen* (qualified youth and community workers).

The state-recognised teachers (*Erzieher/Erzieherinnen*) are trained in *Fachschulen für Sozialpädagogik* (technical schools providing specialised vocational training for professions in educational social work) at upper secondary level. Those wishing to enter this training course must hold at least the *Realschulabschluss* or equivalent, and have completed a relevant vocational training course of at least two years' duration or at least two years of work experience. Training lasts three to four years with full-time training at the *Fachschule*, and one practical year in a pre-primary education institution, supervised by the *Fachschule*. To carry out functions in *Kindergärten*, state-recognised *Sozialpädagogen* must have received training in *Fachhochschulen* leading to a diploma examination (*Diplomprüfung*). The training, which includes one year of practical training, lasts a total of four years.

2.4 Statistics

Number and percentage of the population of the same age.

	3 years old	4 years old	5 years old
number	346,000	636,000	688,000
Rates	45.7%	78.1%	87.8%

Source: *Grund- und Strukturdaten 1998/99*

3. COMPULSORY GENERAL EDUCATION (primary and lower secondary education)

The Basic Law and *Länder* constitutions include certain fundamental provisions regarding the education system. The *Länder* establish specific legal regulations in a variety of laws (*Schulgesetze*, *Schulverwaltungsgesetze*, *Schulpflichtgesetze* and *Schulordnungen*) governing general education and vocational schools.

Compulsory schooling begins for all children at age six. It usually lasts nine years of full-time schooling (10 years in Berlin, Brandenburg, Bremen and Nordrhein-Westfalen). After completing general compulsory education, young people in upper secondary school who do not attend a full-time general education or vocational school are subject to part-time compulsory education (*Berufsschulpflicht*). This usually lasts three years of part-time schooling according to the duration of training in a recognised occupation requiring formal training. For young people, who neither attend a school to continue their general education nor enter into the dual system of vocational training, individual *Länder* impose regulations to extend their compulsory schooling in some type of full-time vocational school. Moreover, most *Länder* allow pupils who opt for a voluntary 10th year of education to acquire a secondary school qualification giving them access to further education.

3A PRIMARY EDUCATION

Primary education is provided at primary schools (*Grundschulen*) from the first to the fourth school year (in Berlin and Brandenburg, the first to the sixth year). In the context of general compulsory schooling, all children attend *Grundschule* together. Children are usually enrolled in the first year at age six and usually transfer to a secondary school after the fourth year (in Berlin and Brandenburg after the sixth year). The tasks and objectives of the *Grundschule* are determined by its position in the school system. The *Grundschule* is meant to carry children forward from learning by playing at pre-primary level to more systematic forms of school learning, and seeks to adapt the subject matter taught and methods employed to

the pupils' requirements and capabilities. The *Grundschule* lays the foundations for education in secondary schools. It endeavours to provide pupils with a structured understanding of the impressions they gain from the world around them and to develop their psychomotor abilities and patterns of social behaviour.

3A.1 Organisation

Teaching provision in schools is usually based on classes organised by age group. The number of weekly class hours increases at rates which vary, depending on the *Land*, from approximately 20 hours in the first year to up to 27 hours per week in the fourth year. One lesson usually lasts 45 minutes.

The school year begins on 1 August and ends on 31 July in the following year. The actual beginning and end depend on the dates of the summer holidays. The total annual duration of school holidays is 75 working days, plus about 10 public or religious holidays. Teaching usually takes place five days a week, Monday to Friday, in the morning. Since there are lessons on two or three Saturdays a month in some *Länder*, the actual number of school days will increase accordingly. The total number of weekly lessons, however, will be the same with a five- or six-day week, as lessons which are not taught on Saturdays are distributed over the other class days in the week.

3A.2 Curriculum

The acquisition of reading, writing, and arithmetic skills plays a central role in initial teaching at *Grundschulen*. Education is provided both in lessons focused on particular disciplines and subject areas as well as in interdisciplinary lessons. The subjects taught at this level include German, mathematics, *Sachunterricht* (which provides an introduction to social studies, history, geography, biology, physics and chemistry), art, music, sport, and religion. Increasingly, an opportunity for a first encounter with a foreign

language is offered from the third year. These first steps in the learning of a foreign language are characterised primarily by learning through play. Priority is given to the spoken use of language and there is no assessment of achievement.

3A.3 Assessment/certification/guidance

In *Grundschule*, as in all other types of schools and at all levels, each pupil's achievement is continuously monitored by means of written tests and an assessment of the pupil's oral and practical work. A summary of each pupil's achievement is evaluated in the form of mid-year and year-end reports. Before moving up to the next year, a pupil must fulfil certain minimum requirements in all relevant subjects. A marking system is used to assess achievement.

The Standing Conference of the Ministers of Education and Cultural Affairs has agreed to define the marks as follows:

- *sehr gut* (1) The mark *sehr gut* (very good) should be given for performance which is well above the required standard.
- *gut* (2) The mark *gut* (good) should be given for performance which fully meets the required standard.
- *befriedigend* (3) The mark *befriedigend* (satisfactory) should be given for performance which generally meets the required standard.
- *ausreichend* (4) The mark *ausreichend* (adequate) should be given for performance which, although showing deficiencies, on the whole still meets the required standard.
- *mangelhaft* (5) The mark *mangelhaft* (poor) should be given for performance which does not meet the required standard, but suggests that the basic knowledge is there and that the deficiencies could be made up in a reasonable period of time.
- *ungenügend* (6) The mark *ungenügend* (very poor) should be given for performance which does not meet the required standard and where even the basic skills are so incomplete that the deficiencies could not be made up in a reasonable period of time.

During the first two years of *Grundschule*, pupils are assessed on the basis of a report in which the pupil's progress, strengths and weaknesses in each subject area are described in detail. From the end of the second year at the earliest, pupils receive certificates with marks, which allow the pupil's performance to be measured against the class average and therefore permits a

comparative assessment. There are also clear signs of a growing trend towards assessing learning and performance in report form in the third and fourth years. All children progress automatically from the first to the second year. From the second year of *Grundschule*, however, pupils are placed in the class appropriate to their level of attainment by being promoted to the next class or asked to repeat.

The transfer from *Grundschule* to one of the different lower secondary school types which pupils must attend at least until the completion of their full-time compulsory education (generally until age 15), is dealt with differently depending on *Land* legislation. Decisions regarding the pupil's future school career are taken on the basis of the recommendation of the *Grundschule* which the pupil is leaving. This is in any case accompanied by detailed consultations with the parents. The final decision is taken either by the parents or by the lower secondary school or school supervisory authority.

3A.4 Teachers

Teacher training for all school types and teaching careers is organised in two phases:

1. A course of study at a higher education institution, e.g. university, technical university (*Technische Hochschule / Technische Universität*), comprehensive university (*Universität-Gesamthochschule*), college of education (*Pädagogische Hochschule*), college of art or music (*Kunsthochschule, Musikhochschule*), which is geared to the requirements of the teaching profession and the required certificates, and includes student-teacher practical training components as an integrated part of the course;
2. A pedagogical-practical training programme in the form of a *Vorbereitungsdienst* (preparatory service) at teacher training colleges and training schools.

This course of study leads to the First State examination (*Erste Staatsprüfung*) which serves as an entrance qualification for the preparatory service. Depending on laws specific to each *Land*, appropriate *Diplom* examinations can take the place of the First State Examination in some cases (e.g. for teachers in certain subject areas at vocational schools).

Representing the second phase of teacher training, the preparatory service (*Vorbereitungsdienst*) serves as practical teacher training. This phase usually lasts two years and includes, depending on the *Land* and type of teaching career, the sitting in on lessons (*Hospitation*), guided and independent teaching at training schools, and studies in educational

theory and subject-related didactics at teacher training colleges where the experience gained in practical situations is discussed and analysed in greater detail. The preparatory service leads to the Second State Examination (*Zweite Staatsprüfung*), which is the prerequisite – but not a guarantee – for finally obtaining a teaching position. Issues involving remedial instruction should also be included in the training provided to teachers.

Training for teaching careers at *Grundschulen*, like all other teaching careers, is divided into two training phases. The first phase comprises a seven-semester course of study, which emphasises both educational science and practical teaching experience. Specifically, students must study primary school didactics or two subjects with an optional or major subject (including didactics). Possible options and specialisations are determined by the *Länder*.

Teachers at public sector schools in the Federal Republic of Germany are usually civil servants (*Beamte*). Their legal status is defined by the Civil Service Code in the particular *Land*, which are in turn based on the Civil Service Framework Act (*Beamtenrechtsrahmengesetz*). In the new *Länder*, teachers usually have the status of employees.

All teachers are required to undergo in-service training, the intention being to ensure that teachers keep abreast of developments in their fields and to offer them an opportunity to obtain additional qualifications. The In-Service Training Institutes for the Teaching Profession established by the Ministries of Education and Cultural Affairs offer a wide range of courses which address problems specific to individual types of school and class levels, as well as those of more general significance, including legal matters and school administration.

The children usually have only one teacher during the first two years, but from the third year pupils are increasingly taught by other subject teachers, in order to prepare pupils for secondary school where they will have a different teacher for each subject.

3A.5 Statistics

Pupils, teachers and schools in the primary sector, 1997.

<i>Grundschulen</i>	Pupils	Teachers*	Schools
1997	3,697,800	170,916	17,829

* Full-time equivalents

Source: Statistische Veröffentlichungen der Kultusministerkonferenz, Nr. 147, and Grund-

und Strukturdaten, 1998/99.

Primary schools are attended by all children in the relevant age group. The average number of pupils in each *Grundschule* class for all of the Federal Republic came to 22.7 in 1997. The pupil/teacher ratio in *Grundschulen* came to 21.6 pupils per teacher in 1997.

3B SECONDARY EDUCATION

General lower secondary schools build on the primary education provided at *Grundschulen*. In most *Länder*, these are the *Hauptschule*, *Realschule*, *Gymnasium*, and *Gesamtschule*. In recent years, some *Länder* have introduced new types of school with different names depending on the *Land*. These new school types combine the educational paths of the *Hauptschule* and the *Realschule* in one organisational and educational unit. Depending on the *Land* they are called either the *Mittelschule*, the *Sekundarschule*, the *Regelschule*, the *Integrierte Haupt- und Realschule*, the *Verbundene Haupt- und Realschule*, the *Regionale Schule* and the *Erweiterte Realschule*.

The principle underlying the different types of lower secondary school and the courses they teach is to give pupils a basic general education, combined with an element of individual specialisation in line with the support and advancement of the pupil according to his or her performance. In the fifth and sixth years, regardless of how the school is organised, there is a phase of particular support, observation and orientation towards a further choice of educational path with its own subject specialisations. In some *Länder*, this orientation phase in the fifth and sixth years is established as a separate stage independent of the different school types. From the seventh year, the different types of schools and educational paths are increasingly differentiated in terms of which subject areas are offered, what is required in terms of specialisation, and which certificates are sought. In more advanced classes, the form each educational path takes and the acquisition of the proper skills for a particular certificate become increasingly important in shaping the individual pupil's school career.

a) School types offering one educational path

School types offering one educational path are the *Hauptschule*, the *Realschule* and the *Gymnasium*.

Hauptschule

The *Hauptschule* provides pupils with a fundamental general education. In its normal form, it comprises the fifth to the ninth year. In *Länder* where the *Grundschule* lasts six years or with an orientation stage independent of the type of school, it begins in the seventh year. In *Länder* with ten years of compulsory schooling, the *Hauptschule* includes the tenth school year.

In *Länder* where compulsory education covers nine years, pupils have the option of attending a voluntary tenth year at the *Hauptschule* to acquire a further qualification (e.g. the extended *Hauptschulabschluss*). The *Hauptschule* also offers particularly able pupils the possibility, under certain conditions, of attaining the *Mittlerer Schulabschluss* at the end of this tenth year.

Realschule

The *Realschule* offers pupils an extended general education. The normal form of *Realschule* covers the fifth to tenth year of school (in *Länder* where *Grundschule* lasts six years or with an orientation stage independent of the type of school, the seventh to tenth year). In addition, there is a three- or four-year *Realschule* course for pupils who, after the sixth or seventh year at a *Hauptschule*, wish to transfer to *Realschule*.

The *Realschule* leaving certificate permits a transition to training courses resulting directly in vocational qualifications or to school types providing a higher education entrance qualification, as described below within the context of the different school-leaving qualifications awarded at the end of lower secondary school (see 3B.3).

In three *Länder* (Sachsen, Sachsen-Anhalt, and Thüringen), the *Realschule* as such is not offered in the lower secondary school system, but the *Realschule* leaving certificate can be chosen alongside the *Hauptschule* leaving certificate at *Mittelschulen* (in Sachsen), *Sekundarschulen* (in Sachsen-Anhalt), and *Regelschulen* (in Thüringen).

Gymnasium

Gymnasien offer pupils an intensified general education. *Gymnasien* normally cover the 5th to the 13th year, or – where *Grundschule* lasts for six years or there is an orientation stage independent of the school type – the 7th to the 13th year. In Sachsen and Thüringen, *Gymnasien* cover the 5th to the 12th year. Pupils usually obtain the general higher education entrance qualification (*allgemeine Hochschulreife*) by passing the *Abitur* examination at the end of 13

school years.

At the end of the tenth year of *Gymnasium*, pupils who have achieved at least pass marks in all relevant subjects obtain the entitlement to proceed to the upper level of *Gymnasium* (*Berechtigung zum Übergang in die gymnasiale Oberstufe*).

b) School types offering more than one educational path

The school types offering more than one educational path differ from Land to Land and include the *Gesamtschule*, the *Schulzentrum*, the *Mittelschule*, the *Regelschule*, the *Sekundarschule*, the *Verbundene Haupt- und Realschule*, the *Integrierte Haupt- und Realschule*, the *Regionale Schule* and the *Erweiterte Realschule*. Described below are the *Gesamtschule* and, by way of example, a school type offering both *Hauptschule* and *Realschule* paths which was created after the restoration of German unity in 1990 in one of the new *Länder* (Sachsen).

Gesamtschule

Alongside the *Hauptschule*, the *Realschule* and the *Gymnasium*, there are *Gesamtschulen* in all *Länder* with one exception, although they are rare in some *Länder*. The *kooperative Gesamtschule* (cooperative type) and the *Schulzentrum* (a school complex in Bremen) combine *Hauptschule*, *Realschule* and *Gymnasium* education in one organisational and educational unit. Pupils are streamed according to their intended final qualification (*Hauptschulabschluss*, *Mittlerer Schulabschluss*, entitlement to proceed to the *gymnasiale Oberstufe*).

Integrierte Gesamtschulen (integrated type) constitute an educational and organisational entity. In some subjects, pupils are taught in sets on at least two different levels that are defined with reference to the curriculum of the chosen course. *Integrierte Gesamtschulen* can also award lower secondary school certificates and entitlements after the ninth and tenth school years (see 3B.3).

Mittelschule

The *Mittelschule* in Sachsen is a differentiated lower secondary school type, which offers general and vocationally oriented courses and provides the prerequisites for vocational qualifications. The subjects taught are described in the curricula for the *Hauptschule* and the *Realschule* (see 3B.2). The fifth and sixth school years are organised as an orientation stage. As from the beginning of

seventh school year, different paths are followed with a view to qualifications and performance development. Teaching at different levels, depending on performance and qualifications aimed at, is received in a fixed set of subjects (mathematics, first foreign language, German, physics and chemistry). In addition to this, at the beginning of the seventh school year pupils are required to choose specific options. These options (technical, economic, social/home economics, language, music, sport) each occupy three teaching hours a week. All pupils also begin to receive one class hour in applied computer science each week in the seventh school year. After the successful completion of the ninth school year, pupils acquire the *Hauptschulabschluss*, and if they perform particularly well they may be awarded the *qualifizierende Hauptschulabschluss* (qualifying *Hauptschule* leaving certificate). Upon successful completion of the tenth year and the final examination the pupil acquires the *Realschulabschluss*.

3B.1 Organisation

Teaching provision in schools is usually based on classes organised by age group. In certain subjects and types of school offering more than one educational path, lessons can also be taught in sets on the basis of ability – especially in years 7 to 10.

As a rule, pupils attend a total of 28 hours of lessons in compulsory subjects and compulsory options in the years 5 to 6, and 30 hours in years 7 to 10 irrespective of school type. The duration of one lesson, the distribution of class time into weeks of five or six days and the beginning and end of the school year can be seen in the description of the *Grundschule* (see 3A.1).

3B.2 Curriculum

Subjects taught at the *Hauptschule* include German, a foreign language, mathematics, physics, chemistry, biology, geography, history, *Arbeitslehre* (pre-vocational studies) and social studies, music, art, sport, religion and, in some *Länder*, domestic science and economics. Mathematics and foreign language (usually English) courses are frequently taught in sets according to the pupil's aptitude. The aim of this is to better accommodate differences in pupil learning ability, making it possible for more pupils to gain a further qualification (e.g. the qualified *Hauptschulabschluss*), as well as to facilitate their

transition to other types of secondary school.

Subjects at *Realschulen* include German, foreign language (usually English), mathematics, physics, chemistry, biology, geography, history, politics, music, art, sport, and religion. In the seventh or eighth year, pupils must take from three to six hours per week of optional courses in addition to the compulsory subjects. According to their personal inclination or aptitude, pupils can choose these courses to strengthen their knowledge of certain compulsory subjects or can choose new subjects, such as a second foreign language (usually French) from the seventh or eighth year.

Subjects at *Gymnasium* in the fifth to tenth years of *Gymnasium* – which form part of lower secondary education – include German, at least two foreign languages, mathematics, physics, chemistry, biology, geography, history, politics, music, art, sport and religion. In the ninth and tenth years, pupils usually receive two to five hours each week of teaching the subjects in the compulsory elective field (e.g. a third foreign language, sciences, artistic subjects).

Teaching in *integrierte Gesamtschulen* combines the three educational paths of the *Hauptschule*, the *Realschule* and the *Gymnasium*. Setting of pupils on the basis of ability levels begins in mathematics and first foreign language in year 7, in German usually in year 8 or, at the latest, in year 9 and in at least one science subject (physics or chemistry) in year 9 at the latest. All pupils usually continue to be taught together in social science subjects, art, music, sport and religious instruction. *Gesamtschulen in kooperativer und integrierter Form* (cooperative and integrated comprehensive schools) can award all lower secondary school leaving certificates at the end of years 9 and 10 (see 3B.3).

3B.3 Assessment/certification/guidance

For a description of assessment in the form of a continuous assessments, mid-year and year-end reports and the system of marks, see chapter 3A.3 on the *Grundschule*.

Qualification at the end of year 9

At the end of year 9, pupils in all *Länder* have the option of acquiring a first general qualification, called a *Hauptschulabschluss* (*Hauptschule* leaving certificate) in most *Länder*. As a rule this certificate is granted after year 9 if at least a sufficient standard has been reached in all

subjects. In the types of school in lower secondary education where courses are organised over more than 9 years, a corresponding qualification can be obtained in most of the *Länder* if the pupil has reached a certain standard. This first general qualification is primarily used as a basis for vocational training in the dual system. In addition, under certain circumstances it is the requirement for admission to *Berufsfachschulen* and to the *Berufsgrundbildungsjahr* (basic vocational training year). It is, moreover, the requirement for later admission to certain *Fachschulen* (technical schools providing advanced vocational training) and to institutions offering secondary education for adults (*Zweiter Bildungsweg*).

Qualification at the end of year 10

The so-called *Mittlere Schulabschluss* can be obtained in all *Länder* at the end of year 10. In most *Länder* this qualification is called the *Realschulabschluss* (*Realschule* leaving certificate). This leaving certificate can be obtained at the *Realschule* (and at the *Wirtschaftsschule* in Bayern) if pupils have achieved at least a sufficient standard in all subjects at the end of the 10th year. Subject to the satisfaction of certain performance criteria, the *Mittlerer Schulabschluss* can also be obtained at the end of year 10 at other lower secondary schools and, given appropriate records and marks, at the *Berufsschule*. It entitles the holder to proceed to further full-time courses in upper secondary education, e.g. special *Berufsfachschulen* and the *Fachoberschule* and is also used to grant admission to vocational training in the dual system.

Entitlement to proceed to the *gymnasiale Oberstufe*

Pupils at *Gymnasien* or at *Gesamtschulen* who have followed a *Gymnasium*-type course are entitled to proceed to the *gymnasiale Oberstufe* if they attain a certain standard in all subjects usually at the end of the 10th year of the *Gymnasium* or of the *Gesamtschule*. An entrance qualification required for transfer to the *gymnasiale Oberstufe* can, however, also be obtained by way of a *Mittlerer Schulabschluss* (*Realschulabschluss*) of a certain merit or, under certain circumstances, via qualifications from an upper secondary vocational school.

3B.4 Teachers

Teacher training for a teaching career in lower secondary schools is provided, as for all teaching careers, in two training phases (see 3A.4.). The first phase usually comprises a seven to nine semester course of study of at least two subject areas, educational sciences and subject-oriented didactics. In addition, students must participate in a practical training period in a school lasting several weeks; the course of study should also include a guided didactic or subject-oriented didactic practical training period.

The professional status of teachers and in-service teacher training are also described in section 3A.4.

3B.5 Statistics

Pupils, teachers and schools in the lower secondary sector, 1997.

Lower secondary education	Pupils	Teachers *	Schools
Orientation stage, independent of school type	394,836	22,986	2,352
<i>Hauptschule</i>	1,110,615	73,799	5,932
School types with more than one educational path	383,999	24,351	1,345
<i>Realschule</i>	1,225,101	67,547	3,468
<i>Gymnasium</i>	1,555,313	89,516	3,164
Integrated <i>Gesamtschule</i> including independent Waldorf schools	491,985	35,093	980

* Full-time equivalents.

Source: *Statistische Veröffentlichungen der Kultusministerkonferenz, Nr. 147, and Grund- und Strukturdaten, 1998/99.*

The following overview shows the proportion of pupils in the eighth year in each of the various types of general lower secondary school existing in the majority of *Länder* in 1997:

<i>Hauptschulen</i>	23.4%
School types with more than one educational path	7.1%
<i>Realschulen</i>	25.9%
<i>Gymnasien</i>	28.9%
Integrated <i>Gesamtschulen</i>	9.3%

There were an average of 24.7 pupils in each class in the entire Federal Republic in 1997. The pupil-teacher ratio in lower secondary schools came to 16.5 pupils per teacher in 1997.

4. POST-COMPULSORY SECONDARY EDUCATION

The education available for 16- to 19-year-olds at upper secondary level includes:

- general education;
- vocational education and training;
- mixed general and vocational education.

Most young people attending the upper secondary level follow vocational education and training courses, and most of these through the dual system of vocational training as described in Chapter 5.

Developments in general education courses at this level include the reorganisation of the *gymnasiale Oberstufe*, based on an agreement of the Standing Conference of Ministers of Education and Cultural Affairs reached in 1972. The underlying educational principle of this reform was to encourage pupils to engage in independent learning and scientific propaedeutic work and to foster their character development. The 1972 Agreement, as amended in 1997, and subsequent relevant resolutions of the Ministers' Conference on further development have upheld the principle that the *Abitur* examination grants access to all subject areas higher education (*allgemeine Hochschulreife* – general higher education entrance qualification).

The agreements reached also provide for courses within a *Gymnasium*-type education leading to double qualifications, i.e. the right to pursue higher education (*Hochschulreife* or *Fachhochschulreife*) and a vocational qualification. Such courses are held mainly at the upper level of the *Gymnasium* with a technical bias (*berufliche Gymnasien* or *Fachgymnasien*) and lead both to the *Abitur* and to a final vocational examination after three to four years.

In the area of vocational education and training, the 1991 and 1992 framework agreements between the *Länder* make it possible that, alongside the vocational qualification, pupils can acquire an entitlement to proceed to a higher level within the education system. In this respect the *Mittlerer Schulabschluss* and the *Hochschulreife* are of primary importance. The purpose of such measures is to put vocational education on a

par with general education.

4A GENERAL UPPER SECONDARY EDUCATION (*gymnasiale Oberstufe*)

4A.1 Organisation

The *gymnasiale Oberstufe* covers years 11-13 (or 10-12 or 11-12 in two *Länder*) and is usually subdivided into a one-year introductory phase and a two-year qualification phase. Admission to this level requires the entitlement to proceed to the *gymnasiale Oberstufe*, which may normally be acquired at the end of the 10th year of the *Gymnasium* or through comparable qualifications acquired at other types of lower secondary schools. Building on lessons taught in lower secondary education, after an introductory phase, half-year courses take the place of the former process of unitary class teaching in the qualification phase.

Courses are categorised as basic or intensified (*Grundkurse* and *Leistungskurse* respectively) and structured according to level. Basic courses (usually 2-3 teaching hours a week) are designed to ensure that all pupils acquire a broad general education; intensified courses (at least five teaching hours a week) are designed to offer additional, intensified knowledge and serve as an in-depth introduction to academic study.

4A.2 Curriculum

Within certain requirements for individual subjects or subject groups, pupils in the

gymnasiale Oberstufe have considerable opportunity to make an individual decision concerning what topics to concentrate on. Related school subjects are grouped together into three main areas:

- language, literature and arts;
- social sciences;
- mathematics, natural sciences and technology.

Each of these three subject areas must be represented in the school record of each pupil up until the end of the upper secondary level of the *Gymnasium* and in the *Abitur* examination. Religious education and sport are usually added to the compulsory subjects. German, a foreign language and mathematics must always be taken throughout the qualification period, and the results achieved must be taken into account in the *Allgemeine Hochschulreife* certificate. To a limited extent, these three subject areas can be replaced by courses with related contents.

Up to two-thirds of the teaching takes place in basic courses. Pupils are required to choose at least two intensified courses, one of which must be either German, continuation of a foreign language, mathematics, or a natural science. If German is the first intensified course, mathematics or a foreign language must be included among the four subjects taken in the *Abitur* examination. New subjects offered at the upper level of the *Gymnasium*, among them foreign languages and vocational subjects, may be offered as the second intensified course. Some *Länder* restrict the choice of intensified courses to certain subject combinations.

In some *Länder*, integrated comprehensive schools (*integrierte Gesamtschulen*) include the 11th to 13th years in addition to lower secondary level which are organised along the same lines as the *gymnasiale Oberstufe*.

4A.3 Assessment/certification/guidance

At the *gymnasiale Oberstufe*, performance is assessed using a points system, which in turn corresponds to the conventional six-mark scale.

Mark 1 corresponds to 15/14/13 points, depending on the trend of marks.

Mark 2 corresponds to 12/11/10 points, depending on the trend of marks.

Mark 3 corresponds to 9/8/7 points, depending on the trend of marks.

Mark 4 corresponds to 6/5/4 points, depending on the trend of marks.

Mark 5 corresponds to 3/2/1 points, depending on the trend of marks.

Mark 6 corresponds to 0 points.

The upper level of the *Gymnasium* ends with the *Abitur* examination. Candidates are examined in four subjects, namely the two intensified ones and another in which they take written and, in some cases, oral examinations, as well as a fourth subject which is examined only orally. All three subject areas mentioned above must be represented on the examination. German or a foreign language is a compulsory examination subject. Depending on the laws of each *Land*, a particular learning achievement (*besondere Lernleistung*), which must be documented in writing, can also be included in the *Abitur* examination. The particular learning achievement is supplemented by a colloquium. Candidates who are successful in the *Abitur* are awarded a general higher education entrance qualification (*allgemeine Hochschulreife*). The *allgemeine Hochschulreife* is generally awarded after 13 years of schooling. It can also be awarded after 12 years of schooling if the lower secondary and *gymnasiale Oberstufe* document a total of at least 265 class hours per week. This certificate documents the results from the qualification phase in addition to the *Abitur* examination. The various certificates and qualifications granting their holders access to higher education are described in detail in section 6B.1. on higher education admission requirements.

4A.4 Teachers

Training for teaching careers in general education subjects at the upper secondary level or at *Gymnasien* is provided, as for all teaching careers, in two training phases (see 3A.4). The first phase usually comprises a nine semester (in an artistic subject area, sometimes 12-semester) study course comprising at least two subject areas including subject-oriented didactics. The course includes at least one practical placement in a school lasting several weeks, and at least one didactic or subject-specific teaching placement.

The professional status of teachers and in-service teacher training are also described in section 3A.4.

4A.5 Statistics

In 1997, approximately 25.9% of all pupils were engaged in education at the upper secondary level. Of these, about 23% attended a school providing general education, 22% a full-time vocational school and 55% a part-time vocational school (see Chapter 5). The distribution of pupils among the general education schools in 1997 is shown below:

Pupils, teachers and schools in general education schools in the upper secondary sector during 1997

General education schools	Pupils	Teachers*	Schools
<i>Gymnasien</i>	644,727	53,677	3,164
<i>Integrierte Gesamtschulen</i>	56,231	4,742	980
Total	700,958	58,419	4,144

* Full-time equivalents

Source: *Statistische Veröffentlichungen der Kultusministerkonferenz, Nr. 147, and Grund- und Strukturdaten, 1998/99.*

4B VOCATIONAL TRAINING IN FULL-TIME VOCATIONAL SCHOOLS

4B.1 Organisation

***Berufsfachschule* (Full-time vocational school)**

Berufsfachschulen are full-time schools which prepare pupils for employment or provide them with vocational education and at the same time further general education. They offer a very wide range of courses. There are *Berufsfachschulen*, amongst others, for business occupations, occupations specialised in foreign languages, crafts industry occupations, home-economics-related and social-work-related occupations, artistic occupations, health sector occupations. In cases where such schools do not provide a full career qualification, the period of attendance may – under certain conditions – be recognised as equivalent to the first year of vocational training in the dual system for the training in a recognised occupation.

Depending on the training objective, *Berufsfachschulen* require their pupils to have a *Hauptschule* or *Realschule* leaving certificate or

a *Mittlerer Schulabschluss*. Education at *Berufsfachschulen* varies in duration depending on the intended career specialisation from one to three years.

***Fachoberschule* (Technical secondary school)**

The *Fachoberschule* covers the two successive years, 11th and 12th, and builds on a *Realschule* leaving certificate or a qualification recognised as equivalent (*Mittlerer Schulabschluss*). It equips its pupils with general and specialised theoretical and practical knowledge and skills and leads to the *Fachhochschule* entrance qualification (*Fachhochschulreife*).

***Berufliches Gymnasium / Fachgymnasium* (Upper level of the Gymnasium with a vocational bias)**

This type of school is called *Berufliches Gymnasium* in some *Länder* and *Fachgymnasium* in others. Unlike the *Gymnasium*, which as a rule provides continuous education from the 5th to the 12th or 13th year, the *Gymnasium* with a vocational bias offers no lower or intermediate level. In some *Länder*, this kind of school takes the form of a *gymnasiale Oberstufe* (upper level of the *Gymnasium*) with career-oriented specialisations and offers a three-year course of education.

***Fachschule* (Technical school providing advanced vocational training)**

Advanced vocational training at *Fachschulen* is designed to enable specialised personnel with work experience to carry out functions with a medium level of responsibility, i.e. to manage enterprises independently in their chosen fields (e.g. agriculture or domestic science), to train junior personnel or to assume major responsibilities within clearly defined areas. Graduates of a *Fachschule* perform mid-level functions on a level between tasks carried out by higher education graduates and those performed by qualified employees. In order to be admitted to the *Fachschule*, pupils must normally have completed pertinent vocational training in a recognised occupation requiring formal training and have practical work experience in the field they wish to study.

4B.2 Curriculum

Teaching in vocational schools is provided in a general subject area that transcends the specialisation and in a subject area focusing on the specialisation. Teaching in both subject areas involves at least 30 hours per week.

There are *Fachoberschulen* for technology, business and administration, nutrition and domestic science, agriculture, social work, design, nautics, etc. Practical training in the subject of specialisation takes place in the 11th year, i.e. in the first year of this school type, on four days a week for the whole year. Alongside this, pupils are expected to spend at least eight periods per week in class. Completed relevant vocational training can serve as a substitute for the 11th year of the *Fachoberschule*, so that pupils with such qualifications can proceed directly to the 12th year. The 12th year (second year of the *Fachoberschule*) comprises at least 30 periods per week of general and specialisation-related instruction. The compulsory subjects are German, social studies, mathematics, natural sciences, one foreign language and sport. Classes addressing general subjects take 18 - 20 hours per week and are the same for all specialisations.

At a *Berufliches Gymnasium*, vocational subjects and specialisations such as business, technology, nutrition, domestic science and agriculture are added to the ones addressed by general education *Gymnasien*. They replace general education subjects as the second intensified course and constitute examination subjects on the *Abitur* examination.

Fachschulen offer one, two and three-year courses. *Fachschulen* providing training lasting two years offer courses in about 90 different specialisations from the fields of technology, business and design and lead to a final examination recognised by the State. The most strongly represented subjects include electrical engineering, mechanical engineering, business management, construction engineering and chemical engineering. There are also other two-year *Fachschulen* for domestic science and for geriatric nursing and special paediatric nursing (*Heilerziehungspflege*), as well as one-year *Fachschulen* (e.g. in agriculture). Technical schools for educational social work (*Fachschulen für Sozialpädagogik*) train state-recognised youth and child care workers (*Staatlich anerkannte Erzieher*), amongst others for *Kindergärten*, in three to four-year courses.

4B.3 Assessment/certification/

guidance

On the assessment of pupils in full-time upper secondary vocational schools, see section 3A.3. where the principles involved in assessment and marking are explained for all types of school.

Training in *Berufsfachschulen* normally leads to a final examination. *Berufsfachschulen* which have courses lasting at least two years and to which pupils are admitted with *Hauptschule* leaving qualifications also offer an opportunity to obtain a leaving certificate equivalent to the *Realschule* leaving certificate, the so-called *Mittlerer Schulabschluss*. The two-year *Berufsfachschulen* requiring a *Realschule* leaving certificate offer courses in a variety of subject areas leading to a qualification as *Staatlich geprüfter technischer Assistent* (state-certified technical assistant) specialising in, for example, biochemistry, garment making, information technology, mechanical engineering, or *Staatlich geprüfter kaufmännischer Assistent* (state-certified business assistant), specialising in data processing, foreign languages and secretarial skills. In addition to vocational qualifications, *Berufsfachschulen* can also award the *Fachhochschulreife*.

Training at a *Fachoberschule* leads to a final examination at the end of year 12. It covers the three subject areas of general education (German, mathematics, a foreign language) and the individual subjects of specialised training (e.g. in the field of technology, business or administration). Pupils who pass the final examination receive the *Fachhochschulreife* (certificate giving access to the *Fachhochschule*).

The *Berufliche Gymnasium/Fachgymnasium* with career-oriented specialisations builds on a *Realschulabschluss* with particular merit, which gives access to the *gymnasiale Oberstufe*, or equivalent certificate and usually leads to a general higher education entrance qualification (*allgemeine Hochschulreife*).

As mentioned above in Chapter 4, it is possible to acquire more than one qualification at the same time (double qualification courses) in the *Berufliches Gymnasium* or *Fachgymnasium*. This is usually a combination of a certificate qualifying for entry to higher education (*Hochschulreife/Fachhochschulreife*) and a vocational qualification (e.g. for assistant occupations: physical or technical assistant or commercial assistant). A vocational education of this kind may also be obtained at institutions combining *Gymnasien* and vocational schools (e.g. *Oberstufenzentren*) or in a particular type of school, such as the *Berufskolleg* in Nordrhein-Westfalen. Courses for double qualifications which lead to the *Hochschulreife*

take three to four years. They involve two separate examinations (the school examination and a final examination for a vocational qualification).

Persons who have successfully completed courses at *Fachschulen* are entitled depending on the specialisation to use a professional title such as *Staatlich geprüfter Techniker* (state-certified engineer), *Staatlich geprüfter Betriebswirt* (state-certified business manager), "*Staatlich geprüfter Wirtschaftler*" (state-certified accountant), "*Staatlich anerkannter Erzieher*" (state-recognised youth and child care worker), etc. It is also possible to earn a *Fachhochschulreife* at a *Fachschule*.

4B.4 Teachers

The first phase of training for teachers with a teaching qualification for subject areas offered at vocational schools for teaching in vocational theory and general education subjects usually involves a nine-semester course of study. It calls for:

- relevant vocational training lasting at least 12 months;
- advanced study of a field in vocational education;
- education studies, study of an interdisciplinary or general education subject; or a second vocational subject or special education subject
- subject-specific didactics, practical teaching experience.

Data on the second phase of training for the teaching profession in vocational schools, and on the professional status of teachers and in-service teacher training can be found in section

3A.4.

4B.5 Statistics

In 1997, approximately 25.9% of all pupils were engaged in education at the upper secondary level. Of these, about 23% attended a school providing general education, 22% a full-time vocational school and 55% a part-time vocational school (see Chapter 5). The distribution of pupils among full-time vocational schools in 1997 is shown below:

Pupils, teachers and schools in full-time vocational schools in the upper secondary sector during 1997

Full-time vocational schools	Pupils	Teachers*	Schools
<i>Berufsfachschulen</i>	366,648	26,697	3,123
<i>Fachoberschule</i>	82,371	4,729	759
<i>Fachgymnasien</i>	91,999	7,211	513
<i>Fachschulen</i>	147,594	9,910	1,624
Other	102,152	5,307	302
Total	790,764	53,854	6,321

* Full-time equivalents

Source: Statistical Publication of the Standing Conference of the Ministers for Education and Cultural Affairs, No. 147, and Grund- und Strukturdaten, 1998/99.

5. INITIAL VOCATIONAL TRAINING

Following full-time compulsory education, two-thirds of young people leaving general education schools in Germany go on to gain vocational qualifications in a two to three-and-a-half year vocational training programme in the dual system (for more on part-time compulsory education, see Chapter 3). The

system is described as a "dual" system because training is carried out in two places of learning, i.e. at the workplace and in the *Berufsschule*. The aim of the dual system is to provide a broadly based basic vocational education and the necessary skills and knowledge required to practise an occupation in a properly structured course of training. Those successfully

completing the training are entitled to practise their occupation as qualified employees in one of the state-recognised occupations for which formal training is required.

5.1 Organisation

Responsibility for vocational training is distributed between the Federation, the *Länder* and the chambers, as regional and sectoral self-governing business organisations, and individual training providers (firms, *Berufsschulen*). The Ministry of Education and Research is, among other things, responsible for the improvement and further development of vocational training in the dual system, for providing sufficient supply of training positions for all young people, if possible, and for providing special assistance for handicapped young people. The Ministers for Education and Cultural Affairs in the 16 *Länder* are responsible for training in the *Berufsschulen* and meet to vote in their Standing Conference. At regional level, the responsible authorities in the chambers handle issues involving accreditation, examinations and supervision.

Initial training in the workplace is governed primarily by the relevant regulations of the Federation (the *Berufsbildungsgesetz* and *Handwerksordnung*). Training is provided on the basis of a civil-law contract between the business providing training and the young person concerned. The vocational training contract covers all important aspects of the vocational training. In particular it defines the training objective (skills profile for the respective occupation), the duration of training, the amount of time devoted to training every day, the mode and level of payment of the trainee wage and the duties of trainee and trainer (training business). This includes, for example, the duty of the trainee to learn, both in the workplace and the *Berufsschule*, and the duty of the business to provide training. Under the terms of the contract, the business must provide training materials and trainers free of charge, allow the trainee time from work to attend the *Berufsschule* and monitor attendance at the *Berufsschule*. The school laws of the individual *Länder* set the framework for vocational education at the *Berufsschule*.

Both places of learning jointly fulfil the educational assignment of the system of dual vocational training. Before beginning training, the compulsory period of full-time education must have been completed. Apart from this, however, there are no further admission requirements for dual vocational training. Those who have completed education at a general

education school and those who have completed education at a *Berufsfachschule* are accepted on equal terms. Trainees spend three to four days a week at the workplace and up to two days a week at the *Berufsschule*.

5.2 Education/training establishments

In the context of the dual system of vocational education and training, the *Berufsschule* is an autonomous place of learning. It collaborates on an equal footing with the others engaged in vocational training. Its function is to provide pupils with general and vocational education, giving special attention to meeting the requirements of vocational training. *Berufsschulen* are also expected to offer courses preparing for vocational education or accompanying occupational activities. *Berufsschulen* provide their pupils with a basic and specialised vocational training, while permitting them to continue their general education. Its purpose is to enable them to carry out their occupational duties and to help shape the world of work and society as a whole by giving them a sense of social and ecological responsibility.

On the basis of training regulations, the businesses teach specialist and general qualifications tailored to occupational practice. The specialised theoretical knowledge acquired from the *Berufsschule* is combined with occupational practice and applied in concrete situations. Since adherence to the training regulations is obligatory, a uniform national standard is guaranteed which meets the requirements of each occupation, so that trainees will not be tied to the immediate needs of a particular business. Training may only take place in businesses which are able to provide training personnel with proven capabilities who can pass on the skills required under the training regulations. The suitability of the training businesses and their training personnel is ascertained and constantly monitored by the competent self-governing bodies of industry (the chambers). The chambers also control that the proper training is being given.

In order to maintain the available number of training places, those businesses which, either due to their size, structure or facilities, are less able to provide all the required training elements can still be involved in the training scheme thanks to the provision of complementary training measures at inter-company training centres (*überbetriebliche Berufsbildungsstätten*). With their modern facilities, these inter-company training centres are able to cover those aspects of training which small businesses are not usually able to provide

for reasons of cost or lack of capacity.

Due to the restructuring problems still facing industry in the new *Länder*, young people there who are unable to find a training place in the market can receive occupational vocational training at a vocational training centre not attached to any business (*außerbetriebliche Berufsbildungsstätte*). The practical aspects of training programmes normally covered in a business are covered in training workshops and learning offices set up by the bodies responsible for training. The connection with occupational practice is provided by periods of work experience.

5.3 Financing

The businesses assume the costs of vocational training and pay trainees a wage, which is subject to a contractual collective bargaining agreement. The wages rise with each year of the traineeship. It comes on average to about one third of the salary of a trained employee. Training at the *Berufsschule* is financed using public funds, usually from the *Land* or the local authority.

Under paragraphs 235, 240-247 of the Social Code III (*Sozialgesetzbuch III*), public funds are also available to support the training of those young people who are socially disadvantaged due to learning difficulties, or of foreigners who, because of insufficient proficiency in German, require special help to start and successfully complete a course of training.

5.4 Curriculum

The State-recognised occupations for which formal training is required under the dual system cover a broad spectrum of skilled occupations in industry, commerce, crafts, the independent professions, public service, agriculture and shipping.

On the basis of consultations with all those responsible for vocational training and, in particular, with the involvement of employers and trade unions, training regulations are drawn up at the federal level which establish minimum course content for 358 recognised trades and occupations. These regulations apply to the whole country. Thus, there is a proper procedure for drawing on the experience from occupational practice, the findings of labour-market and occupational research and the

results of pilot projects and tests carried out by the Federal Institute for Vocational Training (*Bundesinstitut für Berufsbildung*). This allows the training regulations also to be brought up to date whenever this is necessitated by changes in the economic structure, the organisation of labour or technology.

The skills and knowledge which are to be gained in the course of training in the workplace are laid down in training regulations for the trade or occupation and the structure, in terms of time and content, in a framework plan. The training business then incorporates this into its own individual training plan. The occupational subject matter to be taught at the *Berufsschule* for each training trade or occupation is stipulated in a framework curriculum that is consistent with the training regulations.

The framework curricula for career-related courses at *Berufsschulen* and the training regulations for vocational training in the various state-recognised occupations are worked out jointly by federal and *Länder* authorities in a coordinated procedure which also involves the agreement of the employers and trade unions. The *Länder* either adopt the framework curriculum as it is or convert its provisions into their own curricula. About a third of total teaching time at the *Berufsschule* is taken up with general education subjects, namely German, social studies, economics, religion and sport. Foreign languages are included in vocational education when they are likely to be of importance in the pupils' future occupation, e.g. office jobs. The remaining two-thirds are used for career-related training.

Pupils attend the *Berufsschule* on a part-time basis and usually have at least 12 lessons per week. In some cases instruction takes the form of coherent blocks (*Blockunterricht*).

It is also possible to receive basic vocational training during a year of full-time schooling or in the form of cooperation (between a business and the school). The purpose of the basic vocational training year (*Berufsprüfungsjahr*) is to provide general knowledge and skills (not limited to one specific career area), as well as theoretical and practical education within the scope of a given career area. Pupils may choose one of the 13 currently existing career areas (business and administration; metallurgical engineering; electrical engineering; construction engineering; woodworking techniques; textiles and garment making; chemistry, physics and biology; printing technology; paint technology; interior design; physical hygiene; health, nutrition and home economics; agronomy). Successful completion of the basic vocational training year can be counted as the first year of vocational training in the specific recognised occupation associated with the chosen career area.

5.5 Assessment/Qualifications/Guidance

At the end of vocational training the trainees sit the final examination with the "authorities responsible for vocational training" (regional and sectoral self-governing organisations from the various branches of industry and commerce, e.g. the chambers of industry and commerce, the chambers of crafts and trades, the chambers of the independent professions or of agriculture, all of whom perform functions on behalf of the State in the area of vocational training). The final examination consists of a practical (oral) section and a theoretical (written) section. The examination committees include representatives of the businesses themselves and employees, as well as teachers from the *Berufsschule*. By passing the final examination, trainees prove that they have achieved the objective of the dual training in the workplace and at the *Berufsschule*. This entitles them to practise their occupation immediately. Successful examination candidates are awarded a certificate showing proficiency as a skilled worker (*Facharbeiterbrief*) (e.g. for young people seeking employment in the technical industry), commercial assistant (*Kaufmannsgehilfenbrief*) or journeyman (*Gesellenbrief*) in the crafts sector. The *Berufsschule* also awards pupils a leaving certificate that depending on their performance will be recognised as a *Hauptschule* or *Realschule* leaving certificate. Together with the certificate proving that they have successfully completed the requisite vocational training in a company and have appropriate professional experience, the leaving certificate issued by *Berufsschulen* entitles its holders to admission to advanced vocational training at a *Fachschule*.

5.6 Trainers/teachers

According to the Vocational Training Act (*Berufsbildungsgesetz*), only personally and professionally trained individuals can train trainees in businesses. The law requires all teachers to possess the necessary job-specific skills and knowledge as well as the relevant didactic knowledge and ability. Trainers must demonstrate their professional and pedagogical aptitude in a trainer aptitude examination (*Ausbildereignungsprüfung*). Courses and

examination outlines are developed on the basis of framework plans common to the entire Federation. The examination is taken before examination boards comprising representatives of the authorities responsible for dual vocational training. For further information concerning training of teachers at *Berufsschulen*, see section 4B.4.

5.7 Statistics

In 1997, 587,000 young people began a training course in the dual system of vocational training, which corresponds to approximately 66% of the age group. The number of young people is expected to rise to 600,000 in 1998 in response to demographic trends. By far the majority of young people who began their training also earned a qualification (89% in 1997). Five percent terminated their training prematurely and six percent did not pass the examination. Most of those who successfully completed their training entered the job market. Approximately one third of graduates, who had already passed the *Abitur* as the highest general education school certificate before beginning their vocational training in the dual system (approximately 16%), are continuing their training in a higher education institution.

Pupils, teachers and *Berufsschulen*, 1997

	Pupils	Teachers*	Schools
<i>Berufsschulen</i> (part-time)	1,663,763	43,116	1,839
<i>Berufsschulen</i> (full-time)	95,314	9,420	
Of which: basic vocational training year	40,230	3,797	1,433

* Full-time equivalents

Source: *Statistische Veröffentlichungen der Kultusministerkonferenz, Nr. 147, and Grund- und Strukturdaten, 1998/99.*

Trainers in the dual system of vocational training, 1997

Industry and commerce	359,552	48%
Agriculture	21,067	3%
Public service	30,967	4%
Independent professions	112,045	15%
Home economics	4,415	0.5%
Crafts (at least master craftsman level)	223,386	30%
Total	751,432	100%

Source: *Grund- und Strukturdaten, 1998/99, and Vocational Training Report, 1999*

6. TERTIARY SECTOR

Tertiary sector education essentially includes the various types of university and, to a limited degree, non-university institutions. Some *Länder* offer professional academies (*Berufsakademien*) alongside higher education institutions. They offer upper secondary school graduates, who are entitled to attend higher education, training courses leading to a profession as an alternative to university studies.

6A Non-university institutions

Berufsakademien are part of the tertiary education sector in seven *Länder* which combine theoretical training in a study institution (*Studienakademie*) with practical vocational training in a business as part of the dual system framework. These colleges were first tested in Baden-Württemberg in 1974 and currently exist as State institutions in Baden-Württemberg, Berlin, Sachsen and Thüringen, as State-recognised institutions under private management in Schleswig-Holstein, Niedersachsen and the Saarland. *Berufsakademien* offer primarily courses in the fields of business, engineering and social sciences.

Depending on the laws in each *Land*, students must hold a general or subject-restricted higher education entrance qualification or a *Fachhochschule* entrance qualification to be admitted to a *Berufsakademie* as well as a training contract with an appropriate company training centre. After concluding a training contract, the training business registers applicants at the *Studienakademie*.

Students in *Berufsakademien* simultaneously maintain training relationships with a business firm, comparable institutions outside business, particularly in the independent professions, as well as with institutions established by social service providers. The businesses assume the costs of vocational training and pay trainees a wage, which is also paid during the theoretical portion of the training at the *Akademie*. The training follows academic and training curricula established in agreements between the

Akademien, the businesses and social institutions and laid down by the responsible ministry in a legal decree.

Training in a *Berufsakademie* is usually divided into basic studies (*Grundstudium*) lasting two years and advanced studies lasting one year. Each semester of studies is divided into a 12-week practical phase in the business and a 12-week theoretical phase at the *Studienakademie*. The study courses do not call for any semester breaks. Instead, students receive about four weeks of annual holidays in keeping with their training contacts.

Students who successfully pass the examination for a diploma (*Diplomprüfung*) receive a certificate qualifying them for a profession (*Diplom-Ingenieur*, *Diplom-Sozialpädagoge*, *Diplom-Betriebswirt* with the addition of BA for *Berufsakademie*). Students often find employment in the training business itself after they receive their professional qualification.

The teaching staff in the *Studienakademien* is made up of full- and part-time teachers. No specialised training exists for teachers at a *Berufsakademie*. Applicants must fulfil the employment conditions required by the demands of the position to be filled in terms of university training, certification and practical professional activities. In Baden-Württemberg, Berlin, Thüringen and Sachsen, the same qualifications are required for full-time staff in State *Studienakademien* as are required for the appointment of professors in *Fachhochschulen*.

6B University education

Germany has a differentiated system comprising higher education institutions of various types. There were a total of 337 institutions of higher education in Germany during the winter semester 1997/98. Among these were 75 non-State higher education institutions.

Universities

Universities and equivalent higher education institutions (*Technische Universitäten / Technische Hochschulen, Universitäten-*

Gesamthochschulen and institutions which only offer certain university departments) are responsible for conducting research, teaching and studies as well as for promoting highly qualified young scientists and academics. Universities and equivalent higher education institutions are entitled to award doctorates (*Promotionsrecht*) and a post-doctoral teaching qualification (*Habilitationsrecht*). They usually offer a range of subjects from theology and the humanities to law, economic and social sciences, natural sciences, engineering, agriculture and medicine.

The *Universitäten-Gesamthochschulen* (comprehensive universities) in Hessen and Nordrhein-Westfalen bring together under one roof research, teaching and study functions otherwise carried out by universities, *Fachhochschulen* and sometimes also *Kunsthochschulen* and *Musikhochschulen* (colleges of art and music). The distinguishing feature of *Universitäten-Gesamthochschulen* is that they offer integrated study programmes (*integrierte Studiengänge*) combining, within a tiered system in terms of content and duration, the educational objectives of university courses and the degree programmes of *Fachhochschulen*. The *Universitäten-Gesamthochschulen* run study programmes of varying duration leading to different degrees.

Universities which only offer certain departments include institutions specialising in medicine, veterinary medicine, administration and sports sciences as well as two *Bundeswehr* universities for officers in the federal armed forces. Apart from the theological departments/faculties at public universities, the churches maintain a number of institutions of higher education and departments/faculties of their own for the training of their theologians.

Some university study programmes lead to academic examinations or *Hochschulprüfungen* (*Bachelorprüfung*, *Masterprüfung*, *Diplomprüfung*, *Magisterprüfung*, or *Promotion*); others lead to state examinations (*Staatsprüfungen*) or in theology also to church examinations (*kirchliche Prüfungen*). By decree, studies usually last from eight to ten semesters. For further details see section 6B.5.

Pädagogische Hochschulen (colleges of education)

Most *Pädagogische Hochschulen* were integrated into the universities during the 1970s and only continue to exist as independent institutions in Baden-Württemberg. They train teachers for *Grundschulen* and certain types of lower-level secondary school as well as *Sonderschulen* (special schools). There is also a course leading to a *Diplom* in education

sciences (*Diplom-Pädagoge*). All other types of teachers are trained at universities, *Technische Universitäten/Technische Hochschulen*, *Universitäten-Gesamthochschulen* as well as *Kunsthochschulen* and *Musikhochschulen* (colleges of art and music).

Kunsthochschulen and Musikhochschulen

Kunsthochschulen and *Musikhochschulen* (colleges of art and music) offer courses of study in the visual, design and performing arts and in musical disciplines, some of them even in the related academic disciplines (science of art, history of art, musicology, history of music, music education). They also provide courses of study for art and music teachers in the schools.

It is one of the main distinguishing features of a *Kunsthochschule* or *Musikhochschule* that the artistic training takes the form of individual instruction or instruction in small groups (classes).

Fachhochschulen

Fachhochschulen (universities of applied sciences) serve a purpose of their own in the context of the task, common to all higher education institutions, of providing independent vocational training. The bulk of their courses of study are in the engineering sciences, economics and business studies, social sciences, information science and communications. The courses of study themselves and the organisation of teaching and study are particularly application-oriented and geared to the demands of professional practice. The one or two practical semesters integrated into the programme constitute a further characteristic of these courses of study. The research and development work carried out at the *Fachhochschulen* is similarly aimed at specific applications and is complemented by scientific consultancy work and organised technology transfer activities.

Courses at *Fachhochschulen* lead to a *Diplom* examination (*Diplomprüfung*). Degrees granted by *Fachhochschulen* include the abbreviation *FH* (*Fachhochschule*). By regulation, studies usually last eight semesters including the semesters spent doing practical work.

Distance-learning courses

Distance-learning courses provide an alternative to higher education institutions that require the

physical presence of the student. The *Fernuniversität-Gesamthochschule* in Hagen, for instance, runs undergraduate courses in six subject areas leading both to the *Diplom* and *Magister* degrees and postgraduate courses. The *Fernuniversität-Gesamthochschule* in Hagen maintains study centres in several cities throughout the Federal Republic of Germany and abroad to provide local academic advice services and to carry out various activities requiring the presence of students. Private distance-learning *Fachhochschulen* and increasingly also higher education institutions that require the presence of students offer both undergraduate and advanced distance-learning courses. Several higher education institutions work together in distance-learning associations to develop distance-learning courses.

6B.1 Admission requirements

Pupils who have attended general or vocational secondary schools, have chosen the appropriate courses, and have passed the necessary leaving examinations are entitled to attend higher education institutions.

A school-leaving certificate qualifying pupils for higher education (*Hochschulreife* or *Fachhochschulreife*) is required for admission to any course of study at this level. There are three different types of qualifications for admission to higher education:

- the general higher education entrance qualification (*allgemeine Hochschulreife*) entitles its holder to study at any higher education institution without restriction as to the subjects or subject areas;
- the subject-restricted higher education entrance qualification (*fachgebundene Hochschulreife*) gives its holder access to specific courses of study at universities or equivalent institutions of higher education, and usually at *Fachhochschulen*;
- *Fachhochschule* entrance qualification (*Fachhochschulreife*) allows its holder to enrol at a *Fachhochschule* and for integrated courses of study at *Universitäten-Gesamthochschulen* (comprehensive universities).

The *allgemeine Hochschulreife* or *fachgebundene Hochschulreife* (general or subject-restricted *Hochschulreife*) is generally obtained on completion of the 13th year at school at the end of the *gymnasiale Oberstufe*, or at the end of vocational upper secondary courses also leading to general *Hochschulreife*.

Some *Länder* already award the *allgemeine Hochschulreife* generally or in the form of pilot projects after 12 years. To do so, these *Länder* must provide a total number of school hours of at least 265 class hours per week in lower secondary and in the *gymnasialen Oberstufe*.

Evening school courses at *Abendgymnasien* for those in employment and day school courses at *Kollegs* for pupils with work experience also lead to the general higher education entrance qualification. Additional opportunities are offered for "non-pupils" wanting to acquire the *Abitur* in the form of the *Nichtschülerprüfung* and of the *Begabtenprüfung* leading to higher education admission for gifted applicants who are in work.

The *Fachhochschulreife* is normally awarded at a *Fachoberschule* after 12 consecutive years of schooling. It is also possible to obtain the *Fachhochschulreife* through special additional courses offered, for instance, at *Berufsfachschulen* and *Fachschulen*.

In almost all *Länder*, pupils who hold a vocational qualification but do not have the entrance qualification for higher education have several options if they still wish to pursue their studies. They must demonstrate the knowledge and the ability necessary for their studies under an entrance procedure (e.g. by enrolling temporarily on a trial basis) or by passing an entrance examination of an institution of higher education (e.g. placement or aptitude test, interview).

Prospective students at *Kunsthochschulen* and *Musikhochschulen* (art and music colleges) are not only expected to have the requisite formal qualifications (*Hochschulreife*) but also to demonstrate their artistic aptitude. In most of the *Länder*, exclusively artistic courses of study (i.e. not those courses qualifying candidates for the teaching profession) also accept students without the *Hochschulreife*, as long as they can demonstrate exceptional artistic talent. Another exception are the practical aptitude tests for sport study programmes. These tests, however, are not required by all institutions offering training as a sports instructor or sports scientist. In addition to this, in some *Länder* candidates are required to take an aptitude test before being accepted for particular courses of study at *Fachhochschulen* (e.g. design, architecture).

Applicants for various courses of study, technical ones in particular, are required to meet additional requirements, such as having completed subject-related practicals before starting their course of study, in addition to the qualifications entitling them to admission to an institution of higher education.

Article 12 of the Basic Law guarantees the right in the Federal Republic of Germany for all Germans to freely choose their occupation or

profession, their place of employment and their place of study or training. In principle, anyone with the *allgemeine Hochschulreife* or *fachgebundene Hochschulreife* (general or subject-restricted higher education entrance qualification) is entitled to embark on a course of higher education. As a result of the high numbers of applicants and the insufficient number of study places, there are currently (summer semester 1999) restrictions throughout Germany on admission to university courses in the following subject areas: architecture, business administration, biology, food and home economics, food chemistry, medicine, pharmacy, psychology, law, veterinary medicine, and dentistry. The places available to students in these subjects are allocated in a central selection procedure. The courses included in the nation-wide selection procedure may vary from semester to semester. There are no restrictions on admission to the vast majority of courses. Several higher education institutions also restrict admission locally, or in particular subject areas that are not included in the nation-wide selection procedure. In these cases, the institution decides whether or not to admit a candidate. Selection, both in the central and the local selection procedures, is based primarily on the average marks received by the applicant in the *Abitur* and the length of time between taking the *Abitur* and applying to the higher education institution and social criteria.

6B.2 Fees/financial support for students

German and foreign students attending undergraduate courses at higher education institutions in the Federal Republic of Germany are generally not required to pay any application, tuition or examination fees. Instead, students are required to pay a small contribution for the use of the social facilities. If the institution in question has an *Allgemeiner Studentenausschuss* (AStA - general student committee) as a student self-governing body, students also have to pay a *Studentenschaftsbeitrag* (contribution to the student body).

Students who have no other means (mainly from parents' income) of maintenance and finance for a course of study in higher education can receive financial assistance under the terms of the Federal Training Assistance Act (*Bundesausbildungsförderungsgesetz* - BAföG). The duration for which assistance is payable under BAföG varies according to the study course taken and the longest allowable period of assistance established either in the Federal

Training Assistance Act or by decree. The monthly amount depends on the students' own income and personal circumstances as well as those of their spouses and parents. Assistance, which is also paid during semester breaks, is provided half as a grant and half as an interest-free loan. The schedule for loan repayment takes into account the student's social status and income. In addition to the direct support for students from low-income families, all students receive support in the form of tax deductions and child support (*Kindergeld*) to their parents through age 27.

6B.3 Academic year

The academic year is divided into semesters. At universities, the summer semester runs from April to September (at *Fachhochschulen* from March to August) and the winter semester from October to March (at *Fachhochschulen* from September to February). Lectures in the winter semester at universities and *Fachhochschulen* are usually held from late September/early October until mid/late February. In the summer semester, lectures at universities are from mid-April to mid-July and at *Fachhochschulen* from mid-March to mid-July. A period of three months without lectures at *Fachhochschulen* and five months at other higher education institutions allows students time for individual study and time to prepare for lectures and seminars, complete assignments, undergo practical training and sit examinations.

6B.4 Courses

Students may receive instruction in the form of lectures, introductory and advanced seminars (*Proseminare*, *Hauptseminare*), exercises, practical work, or excursions. Lectures are designed first and foremost to provide students with the general and background knowledge they need for their courses. Seminars provide an opportunity to investigate a defined topic more intensively. Topics are often chosen because they are the focus of considerable research in the field or by the department.

For every course of studies, the examination regulations establish guidelines for the time in which the course and the corresponding examination can be completed. For university courses that lead to a *Diplom* or *Magister* degree or state examination (*Staatsexamen*), this standard period of study (*Regelstudienzeit*) is

usually between eight and ten semesters; the *Regelstudienzeit* for medicine is six years and three months. At *Fachhochschulen*, the standard period of study is at least eight semesters, including practical semesters. The actual amount of time spent studying at a university is, in many cases, one to two-and-a-half years longer on average than the standard period of study, and at *Fachhochschulen* about one year longer. The total amount of time allowed for the relatively new consecutive Bachelor and Masters studies courses should be a maximum of five years. This means that the standard period of study is three to at most four years for the Bachelor studies and one to at most two years for the Masters studies. The undergraduate courses are complemented by postgraduate further study, supplementary and follow-up courses (*Aufbau-, Zusatz- or Ergänzungsstudien*) that build on a first higher education degree and provide further vocational qualification, specialisation or advanced study or can also be taken alongside another course of study. They are generally designed to take three to four semesters.

6B.5 Assessment/qualifications

To acquire achievement certificates (*Scheine*), students are required to do oral or written work. These certificates are required for admission to examinations and are the basis for assessing the students' performance during the course of study. In the experimental sciences, the practical exercises students carry out in connection with lectures, notably compulsory laboratory work, provide a basis for continuous assessment of performance.

Studies at institutions of higher education are generally divided into a first stage, with the *Grundstudium* (at university, usually four semesters) leading to an intermediate examination, and a second stage or *Hauptstudium* ending with the final degree examination.

A distinction is made between academic examinations, state examinations and church examinations. Success in the final examination usually qualifies the candidate for a particular profession.

Higher education institutions are authorised by law to hold academic examinations (*Hochschulprüfungen*). These examinations, on the basis of which academic degrees are conferred, include:

- the *Diplomprüfung* (*Diplom examination*), which leads to the *Diplomgrad* (*Diplom degree*), e.g.

Diplom-Ingenieur (awarded by a university), or *Diplom-Ingenieur* (FH) (awarded by a *Fachhochschule*);

- the *Magisterprüfung* (*Magister examination*), leading to the *Magistergrad* (*Magister degree*), *Magister Artium*;
- the *Promotion* (doctorate), leading to the *Doktorgrad* (doctoral degree), e.g. *Doctor philosophiae*.

The *Bachelor/Bakkalaureus* certificate, awarded after three to four years and *Master/Magister* certificate awarded following a further one to two years of study are relatively new at German universities and *Fachhochschulen*.

The certificate awarded at the end of a first degree course of study (*grundständiger Studiengang*) in the arts is usually the *Diplom*. Postgraduate courses at art and music colleges lead for example to the nomination as Master student (*Meisterschüler*) or a concert examination (*Konzertexamen*).

Some courses leading to professions in which there is a particular public interest end with a *Staatsprüfung* (state examination). This is especially the case for courses in medicine, dentistry, veterinary medicine, pharmacy, law, food chemistry, and for teacher training courses. The standard of performance required for the *Staatsprüfung* is the same as that for the *Hochschulprüfung*. For the most part, there is only a formal difference between the two kinds of examination. Representatives of the state examining authorities (*Staatliche Prüfungsämter*) in the *Länder* participate alongside professors as examiners in state examinations.

Law students and future teachers in particular who have passed the First State Examination (*Erste Staatsprüfung*) move on to a preparatory service (*Vorbereitungsdienst*), leading to a Second State Examination (*Zweite Staatsprüfung*). They must pass this second examination to enter their profession, for example as a judge or a teacher.

Postgraduate courses lead to a certificate of achievement (*Zertifikat*) or a further higher education degree (*Diplom, Magister*).

6B.6 Teachers

The full-time academic and artistic staff can be divided into the following groups: professors, academic and artistic assistants (*Assistenten*), *Oberassistenten* (senior assistants) and *Oberingenieure* (senior engineers), university lecturers (*Hochschuldozenten*), academic and

artistic staff, and teaching staff for special tasks.

Applicants for employment as professor or *Hochschuldozent* must have completed a course of study at an institution of higher education, and demonstrate an aptitude for teaching and a special ability for academic or artistic work. Additional academic (such as a *Habilitation* or equivalent academic achievement) or artistic achievements will also be required depending on the nature of the position. Professors and *Hochschuldozenten* at *Fachhochschulen* can substitute particular achievements in the application or development of academic knowledge and methods in practical vocational experience lasting at least five years for these additional qualifications.

A qualified doctorate (*qualifizierte Promotion*) or second state examination (*Zweite Staatsprüfung*) is required for appointment as a *wissenschaftlicher Assistent*; a qualified graduation certificate is required in the engineering sciences; in addition to a doctorate, a qualified State examination following studies or training is required in the academic medical professions. A *Habilitation* or equivalent academic achievements are required for employment as *Oberassistent*, and a qualified doctorate or second state examination for employment as *Oberingenieur*. Graduation from a course of higher education is a requirement for employment as a *wissenschaftliche Mitarbeiter*.

The Ministry of Science usually appoints professors with the status of civil servants for a limited period of time or for life, but it can also engage them as salaried employees. The rest of the teaching staff at higher education institutions is usually employed for a limited period and can be appointed as temporary civil servants or hired on an employee basis.

Professors can be granted leaves of absence at specified time intervals and usually for one semester to carry out a research project, implement or test scientific knowledge and methods in professional practice or to gain practical vocational experience outside the university. Professors' teaching obligations are otherwise organised so as to leave them sufficient time to do research or develop their teaching and studies. Continuing education for the staff in higher education institutions thus forms an integral part of their professional obligations.

Certain higher education institutions offer continuing education courses in the field of didactics in higher education for the teaching staff. Participation in such courses is voluntary.

6B.7 Statistics

Institutions of higher education by type of institution and *Land* (Winter semester 1997/98)

Institutions of higher education	
Universities and equivalent institutions of higher education	113
Art and music colleges	46
<i>Fachhochschulen</i> including <i>Fachhochschulen</i> for administrative studies	178
Total	337

Source: *Grund- und Strukturdaten*, 1998/99

Students by type of higher education institution (Winter semester, 1997/98)

Students	
Universities and equivalent institutions of higher education	1,364,400
Art and music colleges	29,900
<i>Fachhochschulen</i> including <i>Fachhochschulen</i> for administrative studies	438,400
Total	1,832,800 (29%)

¹ as a percentage of the 19- to under 26-year-old age group

Source: *Grund- und Strukturdaten*, 1998/99

Full-time academic and artistic staff¹ at institutions of higher education, 1996

	Total	Of whom professors
Universities and art and music colleges	137,718	24,569
<i>Fachhochschulen</i> including <i>Fachhochschulen</i> for administrative studies	16,730	13,020
Total	154,448	37,589

¹ Professors, academic and artistic employees and teaching staff for special tasks

Source: *Grund- und Strukturdaten*, 1998/99

7. ADULT EDUCATION

7.1 Legislative framework

In Germany, the State regulates continuing education less fully than other areas of education. The reason given for this is that the many and rapidly changing demands on continuing education can best be met by a structure characterised by diversity and competition among organising bodies and services. The large number of organising bodies makes it possible to meet the diverse interests of participants in continuing education. Voluntary participation is the guiding principle governing continuing education.

The State limits its involvement to establishing principles and regulations concerning organisation and support in the area of continuing education. These are laid down in the laws of the Federation and the *Länder*.

The *Länder* are responsible for regulating the organisation of and support for:

- general continuing education,
- continuing education leading to school-leaving certificates,
- academic continuing education in higher education institutions, and
- sub-areas of political and vocational continuing training.

The requirements and principles underlying support and financing for continuing education are set out in the laws governing continuing education and educational leave. The continuing education or adult education laws describe continuing education as an independent area of education providing continuing general, political and vocational training and make their organisation a public duty. The laws governing continuing education guarantee a diversity of institutions by different organising bodies and establish a state recognition procedure for such institutions. The laws of all *Länder* contain regulations regarding the freedom to organise curricula and independence in the selection of staff. Most laws, however, also include stipulations on the qualifications that teaching staff must hold.

The school laws contain regulations that

supplement the continuing education laws with respect to continuing education activities in the school system (e.g. the award of school-leaving certificates), and the higher education laws regulate the development of academic continuing education.

The laws in 11 of 16 *Ländern* currently allow employees to participate in continuing education programmes for several (usually five) working days each year under certain conditions and continue to receive their salaries (educational leave).

The Federation is responsible in particular for:

- non-school continuing vocational training;
- principles governing continuing academic training in higher education institutions;
- framework regulations for the protection of participants in distance-learning courses offered on a private basis;
- some areas of political continuing education;
- research and pilot schemes in the context of education planning – in part together with the *Länder* – in all areas of continuing education;
- issues related to continuing education statistics;
- issues related to international cooperation in continuing education, in the European Union in particular.

Regulations concerning the field of continuing education are covered at federal level by a set of legal acts: *Aufstiegsfortbildungsförderungsgesetz* (Career Advancement Training Promotion Act), *Berufsbildungsgesetz* (Vocational Training Act), *Gesetz zur Ordnung des Handwerks* (Handicrafts Code), *Hochschulrahmengesetz* (Higher Education Framework Act), *Bundesausbildungsförderungsgesetz* (Federal Training Assistance Act) and *Fernunterrichtsschutzgesetz* (Distance-Learning Protection Act).

The *Sozialgesetzbuch III* (Social Code III) makes the Federal Employment Agency (*Bundesanstalt für Arbeit*) responsible for the promotion of continuing vocational training. According to the Social Code III, support involves, among other things, the following measures:

- Further vocational training: measures for assessing, maintaining, extending or adapting vocational knowledge and skills for adults who have completed a vocational training programme or possess appropriate professional experience.
- Vocational retraining leading to a certificate in a recognised occupation requiring formal training: the target groups primarily include unemployed individuals with no vocational certificate.

The *Aufstiegsfortbildungsförderungsgesetz*, which took effect on 1 January 1996, established a comprehensive new instrument to finance career advancement through further training throughout the Federation. It was designed to promote further vocational training beyond a certificate from an initial vocational training programme in the dual system or at a *Berufsfachschule*. This would include, for example, further training to allow skilled workers (*Gesellen* and *Facharbeiter*) to become master craftsmen and qualified foremen (*Handwerksmeister* and *Industriemeister*).

The *Berufsbildungsgesetz* and *Handwerksordnung* attribute responsibility for vocational training and further training examinations to the "responsible authorities", which are usually the chambers (e.g. chambers of handicrafts and chambers of industry and commerce). The contents of the examinations are established in regulations by the "responsible authorities" or legal regulations of the Federation.

7.2 Administration

Continuing education, more than any other area of education, has required State and private, non-profit and profit-making, business and public training institutions and services to work side by side – but also together by necessity. The independence of the institutions and freedom to organise their own curricula and to select their own staffs are granted as the basic preconditions for a continuing education structure oriented to accommodate the interests of citizens.

Germany's federal structure means that primarily the *Länder* are responsible for organising and supporting general continuing education, continuing education based on school-leaving certificates, scientific continuing education and

aspects of political and vocational continuing training.

With laws and implementation decrees governing continuing education, the Ministries of Education and Cultural Affairs of the *Länder* determine the most important principles and conditions regarding support for continuing education institutions and organisations.

The Basic Law provides for a special form of cooperation between the Federation and the *Länder*. As in other areas of education, they work together in the field of continuing education in the *Bund-Länder* Commission for Educational Planning and Research Promotion (*Bund-Länder-Kommission für Bildungsplanung und Forschungsförderung*), and the *Länder* negotiate together in the Standing Conference of the Ministers for Education and Cultural Affairs (Further and Continuing education Committee).

Municipalities and districts play a special role as public organising bodies and supporters of continuing education: in the context of their concern for the well-being of their citizens, they are responsible for ensuring that adequate continuing education programmes are offered for the inhabitants of their areas. They act on this responsibility primarily by supporting their *Volkshochschulen* (local adult education centres).

The Social Code III makes the Federal Employment Agency (*Bundesanstalt für Arbeit*) responsible for supporting continuing vocational training.

The *Aufstiegsfortbildungsförderungsgesetz* provides a comprehensive instrument at federal level to finance further vocational training for career advancement.

The Concerted Action for Continuing education (*Konzertierte Aktion Weiterbildung, KAW*), founded in 1987, provides a "platform" at federal level for those bearing responsibility for continuing education. The members of this overarching communication forum include, among others, representatives of the Federation, the *Länder*, the municipalities, the social partners, the various continuing education associations and organising bodies, the higher education institutions and the media. Current issues relating to continuing education are discussed in the KAW, which has prepared and published some 60 recommendations and reports since it was founded.

7.3 Funding

Citizens, the public sector, business, social

groups, continuing education institutions and public broadcasting companies bear responsibility for continuing education.

This common responsibility is also reflected in the principle underlying funding, whereby all participants are obliged to contribute their share towards funding continuing education in accordance with their means. Public sector funding (from municipalities, *Länder* and the European Union), for example, covers the following areas:

- institutional support by the *Länder* for recognised continuing education institutions on the basis of the laws governing continuing education;
- institutional support by the municipalities for *Volkshochschulen* in the municipalities and support for activities related to continuing education in cultural areas;
- individual support for students who return to education to earn a school-leaving certificate in keeping with the *Bundesausbildungsförderungsgesetz* and for further vocational training for career advancement in keeping with the *Aufstiegsfortbildungsförderungsgesetz*;
- continuing education for employees of the Federation, *Ländern* and municipalities.

To a decisive extent, the business community finances the provision and further development of vocational skills and qualifications. Businesses expend considerable sums for the further development of their staff. According to an economic study, this support came to approximately DM 34 billion in 1996. Firms have invested on average DM 1,670 for each employee. This amount includes both direct expenditure of DM 603 and indirect expenditure of DM 1,067.

The continuing education required by the labour market targeting the unemployed and those at risk for unemployment in particular is provided in keeping with the *Arbeitsförderungsgesetz* out of funds from unemployment insurance. In 1996, a total of DM 15.6 billion were expended out of these funds for further training, retraining and finding employment in a firm.

In the context of the support programme for the vocational training of gifted students (*Begabtenförderung berufliche Bildung*), the foundation *Stiftung Begabtenförderungswerk berufliche Bildung GmbH* provides grants for the continuing education of talented young workers who have completed a recognised vocational training programme according to the *Berufsbildungsgesetz* or *Handwerksordnung* and who are under the age of 25 when accepted into the

support programme. In 1997, the foundation had available a total of DM 26 million from the Ministry of Education and Research.

The Federation and *Länder* made approximately DM 200 million available in 1998 to support further vocational training in keeping with the *Aufstiegsfortbildungsförderungsgesetz* (Federation 78%, *Länder* 22%), which served, among other things, to support further training for individuals seeking to become mastercraftsmen and qualified foremen.

For their own continuing education, participants also pay a contribution which can be supported by tax deductions, support regulations in favour of lower income groups and special offers. For example, *Volkshochschulen* (in particular, general continuing education programmes) receive 30 to 50% of their financing out of fees from participants. In continuing vocational training, participants in further training for career advancement, in particular, pay most of their continuing education costs. In 1994, for example, participants receiving continuing vocational training spent approximately DM 10 billion for this purpose.

The different social groups (churches, businesses, trade unions, etc.) also bear a portion of the cost of continuing education institutions. By setting the fees appropriately, they make possible the broadest possible access to continuing education.

Participants finance academic continuing education at institutions of higher education through tuition payments and fees.

Public broadcasting companies finance their own contribution to continuing education, which is part of their legal obligation, through subscription fees.

Altogether, more than DM 70 billion are spent on continuing education in Germany each year. A large part of this expenditure does not show up in the public education budget.

7.4. Organisation

Continuing education programmes account for a broad range of measures in general, vocational and political continuing education, which are provided through the combined and parallel efforts of State and private, non-profit and profit-making, business and public training institutions and institutions of the Protestant and Catholic Churches, the trade unions and other social groups. Radio and television also fulfil tasks in the field of continuing education.

According to the laws governing continuing education in some *Länder*, *Volkshochschulen* are responsible for providing continuing

education programmes in the field of general continuing education and for making a regular and comprehensive range of programmes available to meet the most diverse social demands and individual needs.

School-leaving certificates can usually be made up in evening institutes or *Abendschulen* (*Abendhauptschulen*, *Abendrealschulen*, *Abendgymnasien*) and *Kollegs*. *Abendhauptschulen* prepare adults to earn a *Hauptschule* leaving certificate in a one-year course of study (two semesters). *Abendrealschulen* prepare adults in evening classes (four semesters) for a *Realschule* leaving certificate. *Abendgymnasien* make it possible for qualified adults to earn a higher education entrance qualification in a time period usually lasting three years. Applicants must demonstrate that they have completed vocational training or at least three years of regular employment. They must be at least 19 years old and must usually complete a six-month introductory course (*Vorkurs*) before embarking on the main course. Participants must be employed with the exception of the last three semesters. *Kollegs* are full-time schools that award a higher education entrance qualification. They have the same admission requirements as *Abendgymnasien* (evening *Gymnasien*). Students attending a *Kolleg* may not engage in any vocational activity.

Fachschulen offer continuing vocational training in study courses lasting one to three years (see section 4B. for a more detailed description of this school type).

Distance-learning courses (*Fernunterricht*) provide flexible continuing education for employed adults alongside their employment. Since 1977, distance-learning courses offered by private providers (distance learning institutes) must be approved by the State on the basis of the law for the protection of participants in distance-learning programmes (*Fernunterrichtsschutzgesetz*). The Central State Office for Distance Learning in the *Länder* of the Federal Republic of Germany (*Staatliche Zentralstelle für Fernunterricht der Länder der Bundesrepublik Deutschland - ZFU*) determines whether a distance-learning course should be approved. In an approval procedure, it examines the theoretical and didactic quality of the learning materials with respect to the goals of the course, the advertising and the form and content of the distance-learning contract to be signed by course participants and the distance-learning institute. The introduction of new information and communications technologies as an effective means of providing distance learning is becoming increasingly important in adult education and continuing education. There are numerous initiatives and projects that promote the introduction of these technologies.

In 1997, approximately 118,000 people participated in distance-learning programmes. Courses focussing on "business and commercial practice" accounted for 43.3% of all participants.

Where allowed by the relevant laws of the *Länder*, *Berufsakademien* can also provide continuing education programmes.

According to article 2 of the *Hochschulrahmengesetz*, higher education institutions are responsible for providing academic and artistic continuing education. Continuing education courses are designed either to provide specialisation and further education or lead to an additional vocational qualification. Required for admission is usually a higher education degree, but continuing education programmes are sometimes available to applicants who have acquired the aptitude necessary for participation through their professional activity or in some other way. Programmes can last anywhere from several weeks or months to several semesters. They lead to certificates (*Zertifikate*) and occasionally to higher education degrees. By providing scientific continuing education, higher education institutions – working in cooperation with business partners – also provide a contribution to regional development.

Vocational continuing training targets groups with highly diverse educational backgrounds, from unemployed individuals who hold no school-leaving or vocational certificates through to executives. The goals, contents and duration of the training measures vary accordingly. Only some of them are designed to prepare for certificates that are legally regulated or awarded by self-governing organisations in the business community (chambers). In recent years, demand for business and professional continuing training designed to adjust employees' qualifications and skills has increased significantly in response to economic change. The focus here is on "learning in the work process".

Various forms of cooperation between continuing education institutions, organising bodies and partners in the social context (local authorities and *Länder* authorities, businesses, employer associations and workers' representations, chambers of industry and commerce, chambers of handicrafts and other self-governing business organisations) have been formed. The freedom of institutions to make decisions about their programmes and the choice of teaching staff remains unaffected by this.

7.5. Statistics

There are no comprehensive statistics on all fields of continuing education and taking into account all organising bodies in Germany. Statistics are therefore only available for specific subsectors.

The representative survey carried out once every three years for the Ministry of Education and Research in the context of the "continuing education reporting system" (*Berichtssystem Weiterbildung*) shows that demand for continuing education has increased significantly in the last few years. Whereas only 25% of the citizens of the Federal Republic aged 19 to 65 took part in continuing education programmes in 1985, that number had already risen to 48% in 1997.

Participation in vocational continuing training has increased most, growing from 12% in 1985 to 30% in 1997. Participation in general and political continuing education increased from 16% to 31% in the same time period. Participation in continuing education depends on the following factors in particular:

- School-leaving qualifications: Individuals who have received higher-level schooling are significantly more likely to participate in continuing education than individuals who have received lower-level schooling. In 1997, 65% of the individuals who had received higher-level schooling participated in continuing education and only 34% of those who had received lower-level schooling (in continuing vocational training, the same ratio is 41% to 19%).
- Vocational qualification: Participation increases among individuals with higher vocational qualifications. In 1997, 68% of the individuals holding a higher education degree participated in continuing education as opposed to 24% of individuals questioned who had received no vocational training (in continuing vocational training: 48% and 9%).
- Professional position: Individuals in a higher professional position are more likely to participate in continuing education. In 1997, only 17% of unskilled and semi-skilled workers participated in continuing vocational training and 56% of managerial staff.
- Age: Younger individuals participate in further training more often than the older ones. The overall number of participants among under-35-year-olds in 1997

came to 54% as compared to 36% individuals aged 50 to 64 (for continuing vocational training: 33% to 20%).

Statistics presented by the Deutscher Volkshochschulverband for the 1997 working year show that the 1,002 *Volkshochschulen* offered 516,509 courses and programmes, which were attended by approximately 6.4 million people. This corresponds to a total of 14.5 million class hours of continuing education. To provide these were approximately 197,000 teachers, full- and part-time course leaders and administrative staff.

The continuing education survey by German business in 1995 reveals a significant increase in the number of participants in the area of business and vocational continuing training. Of every 100 employed individuals, 75.4 took part as participants. That is almost 10 percentage points more than three years earlier. With 52.7 participants (as opposed to 42.8 in 1992) per 100 employed individuals, the focus here is clearly on internal training courses.

Participants in continuing education measures by field and subject area, 1997¹

Continuing education fields/subject areas	As a percentage of the population in the age group from age 19 to under 65 years
Vocational continuing training	30
General and political continuing education	31
Resumed training	3
Total number of participants	48

¹ Each participant is only counted once in each subject area regardless of how often he or she participated.

Source: Grund- und Strukturdaten, 1998/99

Participants in distance-learning courses by subject area, 1997

Subject area	Participants ¹	
	Number	Percent -age
Social sciences	4,697	4.0
Issues involving education and school	3,187	2.7
Humanities	4,091	3.5
Languages	9,281	7.9
Business and commercial practice	50,983	43.3
Mathematics, natural sciences, technology	10,967	9.3
Leisure, health, household management	16,000	13.6
School-based and other courses of study	6,581	5.6
Business administrators, technicians and translators	12,092	10.3
Total	117,879	100.0

¹ Approximately 96.5% of all participants in distance-learning courses were taken into account

Source: *Grund- und Strukturdaten, 1998/99*

Abendschulen (evening schools) and Kollegs, 1997

Schools	296
Total no of pupils	45,400
in <i>Abendhauptschulen</i>	1,100
in <i>Abendrealschulen</i>	14,100
in <i>Abendgymnasien/Kollegs</i>	30,200
Total number of teachers	3,280
in <i>Abendhauptschulen</i>	62
in <i>Abendrealschulen</i>	656
in <i>Abendgymnasien</i>	1,288
in <i>Kollegs</i>	1,274

Source: *Grund- und Strukturdaten, 1998/99*