The Education System in	tne Federal	Republic of	Germany	2019	/2020
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A description of the responsibilities, structures and developments in education policy for the exchange of information in Europe

- EXCERPT -

6. SECONDARY AND POST-SECONDARY NON-TERTIARY EDUCA-

6.1. Introduction

Secondary education breaks down into lower secondary level (*Sekundarstufe I*), which comprises the courses of education from grades 5/7 to 9/10 of school, and upper secondary level (*Sekundarstufe II*), which comprises all the courses of education that build on the foundations laid in the lower secondary level.

The function of all the courses of education at lower secondary level is to prepare pupils for courses of education at upper secondary level, at the end of which a vocational qualification or the right to access higher education is acquired. Accordingly, lower secondary education is predominantly of a general nature whereas upper secondary level includes the general course of education at the *gymnasiale Oberstufe* as well as vocational courses of education.

As a rule, lower secondary level is attended by pupils between 10/12 and 15/16 years of age and upper secondary level by pupils between 15/16 and 18/19 years of age. Both age groups are required to attend school: the former full-time, the latter, 15- to 19-year-olds, generally part-time for three years or until they have reached the age of 18, unless they are attending a full-time school.

Secondary level educational institutions do differ in terms of duration and school-leaving qualifications, but largely constitute an open system allowing transfer from one type of course to the other. The same qualifications can, as a rule, also be obtained subsequently in vocational education and training institutions as well as adult education institutions or through an external examination (see chapter 8.5.).

General objectives

General objectives - lower secondary education

The organisation of lower secondary level schools and courses of education is based on the principle of basic general education, individual specialisation and encouraging pupils according to their abilities. The schools endeavour to achieve these goals by:

- furthering the overall intellectual, emotional and physical development of pupils, teaching them to be independent, make decisions and bear their share of personal, social and political responsibility;
- providing instruction based on the state of academic knowledge that takes the pupils' age-related conceptual faculties into account in its organisation and in the demands made on them;
- gradually increasing the degree of specialisation in line with each pupil's abilities and inclinations;
- maintaining an open system allowing transfer from one type of school to the other after an orientation stage.

General objectives - upper secondary education - general education schools

The courses of education provided at general education schools within the upper secondary level lead to a higher education entrance qualification.

The aim of learning and work within the upper level of the *Gymnasium* is to obtain the *Allgemeine Hochschulreife*, which entitles the holder to enter any study course at

any institution of higher education and also enables them to commence a course of vocational education and training. The instruction at the *gymnasiale Oberstufe* provides an in-depth general education, general capacity for academic study and the propaedeutics of scientific work. Of particular importance are in-depth knowledge, skills and competences in the subjects German, foreign language and mathematics. The instruction is organised along specialist, multidisciplinary and interdisciplinary lines. It offers an introduction by example to academic issues, categories and methods, and provides an education which facilitates the development and strengthening of personality, the shaping of a socially responsible life, and participation in democratic society. Instruction at the *gymnasiale Oberstufe* includes appropriate information on higher education institutions, on vocational fields and on structures and requirements of higher education and of the professional and working world.

General objectives – upper secondary education – vocational schools and vocational training in the dual system

The courses of education provided at vocational schools within the upper secondary level lead to a vocational qualification for skilled work as qualified staff, e.g. in an anerkannter Ausbildungsberuf (recognised occupation requiring formal training) or in an occupation for which individuals can only qualify by attending school. Resolutions of the Standing Conference of the Ministers of Education and Cultural Affairs (Kultusministerkonferenz – KMK) ensure, moreover, that many professional qualification training courses can lead to the acquisition of a higher education entrance qualification.

The Berufliches Gymnasium provides a three-year course of education. Starting on the basis of a Mittlerer Schulabschluss satisfying the requirements for admittance to the gymnasiale Oberstufe or an equivalent qualification, the Berufliches Gymnasium leads, as a rule, to the Allgemeine Hochschulreife (a general entrance qualification for higher education). The Berufsfachschulen serve to provide an introduction to one or several occupations, provide part of vocational education and training in one or several recognised occupations requiring formal training or lead to a vocational education and training qualification in a specific occupation. At the same time, they expand the level of general education previously acquired. In the Berufsoberschule, the knowledge, capabilities and skills acquired by pupils during their initial vocational education and training are taken as the basis for an extended general and in-depth subject-related theoretical education, which shall enable pupils to pursue a course in higher education. The three- to four-year courses of education for double qualification provide both vocational qualification (e.g. the assistant occupations or vocational qualifications in a number of recognised occupations requiring formal training) and a higher education entrance qualification. The Berufsoberschule provides two years of full-time education and leads to the Fachgebundene Hochschulreife (qualification entitling holder to study particular subjects at a higher education institution). Pupils can obtain the Allgemeine Hochschulreife by proving their proficiency in a second foreign language. The Fachoberschule requires a Mittlerer Schulabschluss and leads as a rule in a two-year course of study up to the Fachhochschulreife, i.e. the higher education entrance qualification for the Fachhochschule. It equips its pupils with general and specialised theoretical and practical knowledge and skills. The Länder may also establish a grade 13, after successful completion of which pupils can

obtain the Fachgebundene Hochschulreife and, under certain conditions, the Allgemeine Hochschulreife.

Within the framework of vocational education and training within the *duales System* (dual system), the task of the *Berufsschule* is to teach practically-oriented and interdisciplinary competences with special consideration for the requirements of vocational education and training and at the same time to provide an educational programme that prepares pupils for vocational education and training or accompanies the professional activity. The *Berufsschule* can cooperate in tasks of further vocational and continuing education.

Specific legislative framework

Secondary schools providing general and vocational education

Based on the Education Acts (R85–102) and Compulsory Schooling Acts (R120) of the German Länder, ordinances for schools providing general and vocational education in particular contain detailed regulations covering the content of the courses as well as the leaving certificates and entitlements obtainable on completion of lower and upper secondary education.

Vocational training

The legal provisions for in-company vocational training and in handicrafts are contained and supplemented in the Vocational Training Act (Berufsbildungsgesetz – R81) of 1969 and the Handicrafts Act (Gesetz zur Ordnung des Handwerks – R82) of 1953, respectively. Among other issues, these two laws govern fundamental matters of the relationship between young people and companies that provide training (e.g. contracts, certificates, pay), in other words the rights and obligations of trainees and trainers. They also govern the regulatory aspects of vocational training (e.g. the suitability of training providers and instructors, the terms of the training regulations known as Ausbildungsordnungen, the examination system and supervision of training) and the organisation of vocational training (e.g. the function of the various chambers of industry and commerce as the competent bodies and of their vocational training committees).

The Protection of Young Persons at Work Act (*Jugendarbeitsschutzgesetz* – R6) lays down special provisions for the protection of young trainees.

6.2. Organisation of General Lower Secondary Education

Types of Institutions

Following the primary school stage at which all children attend mixed-ability classes (grades 1 to 4, in Berlin and Brandenburg grades 1 to 6) the structure of the secondary school system (grades 5/7 to 12/13) in the Länder is characterised by division into the various educational paths with their respective leaving certificates and qualifications for which different school types are responsible, either as schools offering one course of education or schools offering several courses of education.

All the courses at schools offering a single course of education are related to a certain leaving certificate. Traditionally these are the *Hauptschule*, the *Realschule* and the *Gymnasium*. Furthermore, integrated or cooperative secondary schools exist in most Länder. The cooperative secondary school brings together the *Hauptschule*, *Realschule* and *Gymnasium* under one pedagogical and organisational roof. The integrated

Gesamtschule forms a pedagogical and organisational unit covering the three educational programmes of lower secondary level, irrespective of the number of levels of proficiency when differentiating between the performance in specific subjects. Schools offering several courses of education combine two or three courses of education under one roof. In the meantime, they have led to the abolition of the Hauptschule and Realschule in most Länder. The names for the types of schools in the Länder with the educational programmes described here are the following:

Baden-Württemberg: Werkrealschule

Gemeinschaftsschule

Bayern: Mittelschule

Berlin: Integrierte Sekundarschule

Brandenburg: Oberschule
Bremen: Sekundarschule

Oberschule

Hamburg: Stadtteilschule

Hessen: Verbundene Haupt- und Realschule

Mittelstufenschule

Förderstufe

Mecklenburg-Vorpommern: Regionale Schule

Niedersachsen: Oberschule
Nordrhein-Westfalen Sekundarschule
Rheinland-Pfalz: Realschule plus

Saarland: Gemeinschaftsschule

Sachsen: Oberschule
Sachsen-Anhalt: Sekundarschule

Gemeinschaftsschule

Schleswig-Holstein: Gemeinschaftsschule

Regionalschule

Thüringen: Regelschule

Gemeinschaftsschule

Schools offering two courses of education include the Regelschule, the Sekundarschule (Bremen, Sachsen-Anhalt), the Verbundene or Zusammengefasste Haupt- und Realschule, the Regionale Schule, the Realschule plus, the Regionalschule, the Oberschule (Brandenburg, Sachsen) and the Mittelstufenschule. Schools offering three courses of education include the Integrierte Gesamtschule, the Kooperative Gesamtschule, the Gemeinschaftsschule (Baden-Württemberg, Saarland, Sachsen-Anhalt, Schleswig-Holstein, Thüringen), the Integrierte Sekundarschule, the Oberschule (Bremen, Niedersachsen), the Stadtteilschule and the Sekundarschule (Nordrhein-Westfalen).

Grades 5 and 6 of all general education schools constitute a phase of particular promotion, supervision and orientation with regard to the pupil's future educational path and its particular direction.

A description of the special educational support available at general education schools and sonderpädagogische Bildungseinrichtungen (special schools, e.g. Förderschulen, Förderzentren, Schulen mit sonderpädagogischem Förderschwerpunkt, Sonderpädagogische Bildungs- und Beratungszentren), may be found in chapter 12.3.

Common principles for lower secondary education were laid down by the Standing Conference of the Ministers of Education and Cultural Affairs (Kultusministerkonferenz – KMK) in the Agreement on types of school and courses of education at lower secondary level (Vereinbarung über die Schularten und Bildungsgänge im Sekundarbereich I) of December 1993 as periodically amended.

Schools offering one single course of education at lower secondary level

Hauptschulen (in Bayern the Mittelschule), Realschulen and Gymnasien are schools offering one single course of education. All the instruction at such schools is geared to the attainment of one specific leaving certificate. Hauptschule and Realschule only exist in any appreciable numbers in five Länder (Baden-Württemberg, Bayern, Hessen, Niedersachsen, Nordrhein-Westfalen). The Gymnasium exists in all Länder.

Hauptschule

The *Hauptschule* provides its pupils with a BASIC GENERAL EDUCATION which enables them, according to their performance and preferences, through specialisation, and subject to their qualifications, to continue their education, above all, in courses leading to a vocational qualification but also in courses leading to a higher education entrance qualification. It normally covers grades 5–9. With ten years of compulsory full-time education, the *Hauptschule* also includes grade 10.

As a rule, the subjects taught at *Hauptschulen* include German, a foreign language (usually English), mathematics, physics/chemistry, biology, geography, history, *Arbeitslehre* (i.e. pre-vocational studies, also called economics-work-technology or work-economics-technology, economics and profession or profession and economics) and social studies, music, art, sport, religion and, in some Länder, domestic science and economics and other vocationally-oriented subjects. In some Länder subjects have been combined into subject groups. In some Länder mathematics and foreign language lessons are taught in sets according to the pupils' aptitude. The aim of this is to better accommodate pupils' different abilities, to enable them to obtain the qualifying or extended *Hauptschulabschluss* and to facilitate their transition to other types of secondary school.

Länder in which full-time school attendance is compulsory for nine years offer pupils an opportunity to attend the *Hauptschule* for a tenth year, if they wish, in order to obtain another leaving certificate, e.g. the qualifying or extended *Hauptschulabschluss*. As a secondary school, the *Hauptschule* also affords particularly able pupils an opportunity to obtain a more advanced qualification under certain conditions such as the *Mittlerer Schulabschluss*, either in a 10th year or in a subsequent vocational education. See chapter 6.4. for more information about qualifications.

Realschule

The *Realschule* provides its pupils with a MORE EXTENSIVE GENERAL EDUCATION which enables them, according to their performance and preferences, through specialisation, and subject to their qualifications, to continue their education in courses leading to a vocational qualification and in courses leading to a higher education qualification. The standard *Realschulen* cover grades 5 to 10.

As a rule, the subjects taught at *Realschulen* include German, a foreign language (usually English), mathematics, physics, chemistry, biology, geography, history, politics,

music, art, sport and religion. In some Länder subjects have been combined into subject groups. In addition to compulsory courses, pupils are generally required to take three to six hours a week of compulsory electives as from grade 7 or 8. According to their personal inclinations and abilities, the pupils may take additional classes in certain compulsory subjects or choose new subjects, including, among others, a second foreign language (usually French) as from grade 7 or 8. Some Länder provide the option of choosing a second foreign language from as early as grade 6.

A *Realschule* leaving certificate (*Mittlerer Schulabschluss*) qualifies a pupil to transfer to a school that provides a vocational or, under certain conditions, a higher education entrance qualification (see also chapter 6.4.).

Gymnasium

Gymnasien provide an INTENSIFIED GENERAL EDUCATION. The course of education in the standard Gymnasium comprises both the lower and upper secondary level and covers grades 5 to 12 or 5 to 13 (or years 7 to 12 following a six-year primary school). Apart from standard Gymnasien, there are special types of Gymnasium into which Hauptschule and Realschule pupils can transfer following grade 6 or 7, as well as special courses for particularly able Realschule and vocational school leavers.

In grades 5–10 or 5–9 of the *Gymnasium*, which comprise the lower secondary level there, the main subjects taught are: German, at least two foreign languages, mathematics, physics, chemistry, biology, geography, history, politics, music, art, sport and religion.

Schools offering several courses of education in lower secondary level

Schools offering several courses of education provide instruction in certain subjects and grades either in classes organised according the desired qualification or – in some subjects – in courses divided up into two or more two levels of proficiency defined in terms of the curriculum covered. Instead of courses, in order to avoid excessively long ways to school and to test special pedagogical concepts, in-class learning groups may be formed in all grades for German and the natural sciences, and in grade 7 only for mathematics.

The following applies for schools offering several courses of education: teaching at various levels of proficiency begins in mathematics and in the first foreign language in grade 7, in German usually in grade 8, at the latest in grade 9, in at least one scientific subject (physics or chemistry) at the latest in grade 9.

For demographic reasons or due to school structure in-class learning groups may be extended to other grades.

Geographical Accessibility

For the geographical accessibility of schools in the secondary sector, see chapter 5.2. on the organisation of primary education.

Admission Requirements and Choice of School

In terms of the choice of school, a distinction must first of all be made between the choice of a particular school type and the pupil's acceptance into a specific school establishment.

Choice of school within the differentiated school system

The Länder have different regulations governing the transition from primary into secondary education. In some instances, a binding decision on the choice of school attended and/or course of education pursued in lower secondary education (Sekundarstufe I) is made in grade 4, and in others during grades 5 and 6, while in others still this decision is only made at the end of grade 6. No such decision has to be made if the pupil is entering an Integrierte Gesamtschule (integrated comprehensive school) or another school offering several courses of education.

During grade 4 or grade 6 in the primary school, a vote is taken by the school which the pupil is leaving that contains general information about the pupil's progress in primary school and concludes with an overall assessment of her or his aptitude for certain types of secondary schools. This is accompanied by detailed consultations with parents. The vote of the primary school is either the basis for the decision or an aid in the decision regarding the pupil's future school career. Depending on Land legislation, various methods can be used to assess the pupil's suitability for a future school career at the *Realschule* or *Gymnasium* (trial half-year, trial lessons, entrance examination). The final decision is taken either by the parents or by the school or school supervisory authority. An overview of the regulations of the individual Länder regarding the transition from primary to lower secondary education is available on the website of the Standing Conference.

Choice of a specific school establishment

The right of parents to choose a school for their children does not mean that a pupil has the right to be accepted by a specific school. The right to a free choice of the place of training which is laid down in the Basic Law (*Grundgesetz* – R1) does not refer to acceptance into a specific school. As a result, as long as attendance of another school of the same type is possible and can reasonably be expected, some Länder rule out a legal right to acceptance into a specific school in their Education Acts.

Pupils wishing to complete their compulsory schooling at the *Hauptschule* or *Berufsschule* must always attend the local school. This rule also applies to pupils at other types of secondary school if school catchment areas have been fixed for the type of school they have chosen. However, parents may choose a school other than that which is responsible for the local area and apply to the school authority to admit their child to that school. The school authority then decides on the merits of each particular case, following consultations with the parents and the authority maintaining the school, with the well-being of the pupil concerned being the decisive factor.

If no catchment areas have been fixed for a type of secondary school, parents have in principle the option to freely choose which school their child attends. As a rule, in this case the capacity of the chosen school is the only limiting factor affecting the pupil's right to admission.

Age Levels and Grouping of Pupils/Students

At schools offering one course of education, pupils aged 10 to 16 are taught by subject teachers in classes made up of children of the same age group. *Schularten mit mehreren Bildungsgängen* (schools offering several courses of education) provide instruction in certain subjects and grades in classes organised, as a rule, either according to the desired qualification or to the required performance at a minimum of two levels of proficiency.

At any school at lower secondary level grades 5 and 6 constitute, irrespective of their organisational allocation, a period of special promotion, observation and orientation to determine a child's subsequent educational path and its specialist focus. Beginning in grade 7, the school types and courses of education increasingly diverge in terms of the subjects offered, the requirements with regard to individual specialisation and the qualifications being aimed at.

Organisation of the School Year

For the organisation of the school year in the secondary sector, see chapter 5.2. on the primary sector.

Organisation of the School Day and Week

At lower secondary level (*Sekundarstufe I*), core lesson times are generally laid down from 7.30/8.30 a.m. to 1.30 p.m. (Monday to Friday). With the exception of the eight-year *Gymnasium*, pupils generally have 28 to 30 weekly periods in compulsory and optional subjects in grades 5 and 6 of all types of school, and 30 to 32 periods in grades 7 to 10. Each period is 45 minutes.

For general information about the daily and weekly timetable and the five-day or six-day week see chapter 5.2.

All-day education and supervision offers

Education and care outside morning lessons is provided to lower secondary level pupils at Ganztagsschulen (all-day schools) and extended Halbtagsschulen (half-day schools), via all-day offers in schools, as well as in programmes run in cooperation with providers of child and youth welfare services or cultural education, sports clubs, parents' initiatives or other external cooperation partners. All Länder have signed cooperation agreements with education providers outside the school sector. Currently these offers are, with particular emphasis depending on the respective Land, being developed in many Länder. Both concepts strengthen education and individual support as compared to the aspect of mere supervision. The objectives of the expansion of all-day offers include a sustainable improvement of the quality of schools and teaching as well as a decoupling of social background and competence acquisition. In detail, the new all-day facilities are aimed at creating the prerequisites for improved individual promotion, closer linkage between the education available in schools and out-of-school educational facilities and the stronger participation of parents and pupils. The schools and the Schulträger (school-maintaining bodies) were supported from 2004 to 2015 by a range of accompanying measures within the framework of the programme "Ideas for more! All-day learning" ('Ideen für mehr! Ganztägig Lernen') through the Federation and the Länder. The accompanying measures have been continued at the responsibility of the Länder since 2016.

In all-day schools, an all-day option is provided for pupils pursuant to the nationwide definition of the Standing Conference on the primary or lower secondary level on at least three days a week, comprising at least seven hours daily. More detailed information on the definition of all-day schools is available in chapter 5.2.

The sharp rise in the number of schools offering all-day schooling is reflected in the report Allgemein bildende Schulen in Ganztagsform in den Ländern in der Bundesrepublik Deutschland – Statistik 2013 bis 2017 – that is available on the website of the Standing Conference. The internet portal www.ganztagsschulen.org provides

information on the development of all-day offers in the Länder and on current empirical accompanying research.

In Germany there is also traditionally a variety of institutions, both public and private, that are active in youth, culture and education work and that offer pupils opportunities for extracurricular education and recreational activities or that help with homework. Out of the large choice available, special mention should be made of the concerted cooperation of schools with sports clubs and associations, with youth centres and bodies maintaining Vocational Orientation (*Berufliche Orientierung*), youth music schools, youth art schools and other bodies maintaining cultural education as well as maintaining bodies of child and youth welfare.

6.3. Teaching and Learning in General Lower Secondary Education

Curriculum, Subjects, Number of Hours

The agreement reached in December 1993, as periodically amended, by the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder (Kultusministerkonferenz – KMK) concerning the types of schools and courses of education in lower secondary level ('Vereinbarung über die Schularten und Bildungsgänge im Sekundarbereich I') lays down a framework schedule for grades 5–9/10, requiring certain core subjects in every type of school and course of education: German, mathematics, the first foreign language, natural and social sciences. Music, art and sport, at the very least, have to be among the other compulsory or elective subjects offered.

A second foreign language is mandatory at *Gymnasium* in grades 7 to 10. In the course of the expansion of foreign language lessons in the primary sector, at the *Gymnasium* lessons in a second foreign language are often given from as early as grade 6. At other types of school, a second foreign language may be offered as an elective course.

An introduction to the professional and working world is a compulsory component of every course of education and is provided either in a special subject such as *Arbeitslehre* (pre-vocational studies, also called Economics-Work-Technology or Work-Economics-Technology) or as part of the material covered in other subjects or subject groups.

Religion is subject to the respective regulations in each Land, according to which religion is a standard subject in nearly every Land (see also chapter 1.4.). For the situation of Protestant and Catholic religious education, see the reports of the Standing Conference of 2002. An amended version of the report on the teaching of ethics was published in February 2008.

Where courses are taught according to level of proficiency at *Schularten mit mehreren Bildungsgängen* (schools offering several courses of education), this teaching begins in grade 7 in the case of mathematics and the first foreign language, in grade 8 for German, as a rule, and in grade 9 at the latest, and from grade 9 onwards in at least one natural science subject (physics or chemistry).

With regard to the curricula or education plans, generally the remarks in chapter 5.3. for the primary level apply, according to which the Ministries of Education and Cultural Affairs of the Länder are principally responsible for developing the curricula. As a consequence of the results of international comparative studies, the curricula have been thoroughly revised over the past years. In most Länder the revision focused on the following main areas:

- in the *Hauptschule* course of education: acquisition of basic competences in German and mathematics, orientation towards professional practice and promotion of social competence
- definition of compulsory key areas of learning, provision of scope for measures to activate pupils and inspire problem-solving thought processes
- development of educational standards binding for all Länder, which are based upon the areas of competence for the individual subject or subject group, that determine the capabilities, skills and knowledge students should dispose of at a certain stage of their school career

To implement the *Bildungsstandards* (educational standards) of the Standing Conference for the *Hauptschulabschluss* and the *Mittlerer Schulabschluss*, the subjects in the curricula have been adapted accordingly. The educational standards binding for all Länder specify the goals themselves, whilst the curricula of the Länder describe and structure the way to achieve these goals. For further information on quality development and assurance through educational standards, see chapter 11.2.

The courses in German, mathematics and the first foreign language take up three to five periods each per week, natural and social sciences two to three periods each. As of grade 7, at the latest, another three to five periods per week are spent on a second foreign language as a compulsory or elective subject, depending on the type of school. The amount of time devoted to other compulsory or elective subjects (music, art, sport, pre-vocational studies) and religious education varies depending on the subjects and type of school the total of weekly instruction being 28-32 periods. At lower secondary level of the eight-year *Gymnasium*, the number of weekly periods is generally increased by two to four weekly periods (cf. chapter 6.2.).

Foreign language teaching

Foreign language teaching is an integral part of basic general education at all lower secondary level schools as from grade 5 and a core element of individual specialisation as from grade 7. On transition to lower secondary level, foreign language learning connects with sound competences acquired in the primary sector and continuously expands on them. The prerequisite for this is institutionally guaranteed cooperation between the primary and secondary sectors. Foreign language lessons in lower secondary level are characterised by systematic learning and a higher level of abstraction. They also aim at increasingly independent and autonomous management of and reflection on learning. Compulsory and elective foreign language offers take account of differences in aptitudes and biographies, and the interests of pupils. The development of foreign language competence up to the end of the lower secondary level is geared to competence level B1 of the Common European Framework of Reference for Languages (CEFR). The objective of functional multilingualism requires that pupils be given the opportunity to acquire fundamental knowledge in at least another foreign language. Language lessons that have been continuously attended since lower secondary level may be supplemented by bilingual teaching and learning in other subjects. More information can be found in the KMK resolution "Recommendations of the Standing Conference of Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany on strengthening foreign language competence" ('Empfehlungen der Kultusministerkonferenz zur Stärkung der Fremdsprachenkompetenz') of December 2011 and the report "Concepts for bilingual teaching" ('Konzepte für den bilingualen Unterricht') of October 2013.

Teaching in MINT subjects

At all levels of the education system the strengthening of natural science and technical education (MINT — mathematics, information technology, natural sciences, technology) is currently of particular importance. The Standing Conference has repeatedly addressed the development of school teaching in MINT subjects. By introducing educational standards in this area, it has facilitated the description of demanding and achievable objectives in the form of competences. Against the background of the predicted need for specialists in mathematics and natural sciences, the Standing Conference adopted "Recommendations to strengthen mathematics, natural sciences and technical education" ('Empfehlungen zur Stärkung der mathematischnaturwissenschaftlich-technischen Bildung') in May 2009.

Cross-curricular topics

The Standing Conference emphasises the significance of these topics in schools through resolutions and recommendations on individual lesson contents. These are generally interdisciplinary lesson contents that relate mainly to questions of historical-political, economic and cultural education. Apart from this, it is also about topics such as health education, media education and vocational guidance:

- Vocational Orientation
- Sustainable development education
- Democracy education
- Educating about Europe
- Health education
- National Socialism and the Holocaust
- Intercultural education
- Jewish history, religion and culture
- Cultural education
- Media education
- Human rights education
- Road safety education
- Economic education and consumer education
- Digital education
- Gender-sensitive education

In addition, the Länder set their own priorities.

Vocational Orientation

In the "Recommendation on Vocational Orientation at schools" ('Empfehlung zur Beruflichen Orientierung an Schulen') from December 2017, the Länder advocate a curricularly anchored and individual vocational orientation in all lower and upper secondary education programmes in order to set the course for a viable career choice decision at an early stage and thus for a successful transition to training, study and occupation. For the Standing Conference and the Länder, a successful transition is of central importance for the educational and vocational biographies of young people. The activities for Vocational Orientation in the Länder are published in the "Documentation on Vocational Orientation in general education schools" ('Dokumentation zur Beruflichen Orientierung an allgemeinbildenden Schulen').

Education for sustainable development

Within the scope of the United Nations' World Decade of "Education for Sustainable Development", the Standing Conference and the German Commission for UNESCO (Deutsche UNESCO-Kommission – DUK) in June 2007 adopted a joint recommendation with regard to "Education for sustainable development at school" ('Bildung für nachhaltige Entwicklung in der Schule'). Also, in June 2007 the Standing Conference and the Federal Government published a Cross-Curricular Framework for Global Development Education (Orientierungsrahmen für den Lernbereich Globale Entwicklung). The cross-curricular framework can be taken as a basis for the development of the curricula, teacher training and work in schools. The revised version of the cross-curricular framework from June 2015 provides concrete recommendations for the inclusion of sustainable and global development topics in the curricula of almost all subjects (natural sciences, foreign languages, mathematics, German, art, music, sports, politics, economics, religion, ethics, geography) and shows what pupils can learn in class if these topics are dealt with. The cross-curricular framework hereby aims at empowering the individual to play an independent and responsible role in shaping the individual and social challenges of the future.

Democracy education

In October 2018, the Länder published the recommendation "Democracy as an objective, subject and practice of historical-political education and upbringing in schools" (*Demokratie als Ziel, Gegenstand und Praxis historisch-politischer Bildung und Erziehung in der Schule*') in a fundamentally revised form. In the future, the KMK will continue to promote democratic school and teaching development and encourage all participating institutions and people to assume responsibility and participate in shaping schools and civil society. In order to further strengthen the commitment of teachers, specialists and pupils to democratic development at school and in society, the Länder have agreed to support various measures. These include, among other things, expanding the anchoring of democracy education in the guidelines and curricula of all subjects and developing democratic bodies and forms of work in order to enable real participation by pupils. It is seen as the task of school and teaching development and of all subjects as well as extracurricular activities to strengthen pupils' commitment to the democratic rule of law and to resolutely oppose anti-democratic and inhumane attitudes and developments.

Media education

With its resolution on "Media education in schools" ('Medienbildung in der Schule') in March 2012 the Standing Conference reacted to the new technological developments and their impact on society and on every individual. The attainment of media competence through media education in schools includes the constructive and critical examination of the media world on the one hand, and the sensible use of the possibilities it offers for individual learning processes on the other. Young people should be put in a position where they can handle media autonomously, correctly, in a socially responsible, communicative and creative way, use these for their own education processes and to extend their scope of action, to find their way around in media and non-media environments and to take value-based decisions.

Human rights education

In October 2018, countries adopted a revised version of the "Recommendation on human rights education in schools" ("Menschenrechtsbildung in der Schule"). According to this recommendation, addressing and implementing human rights, and thus also children's rights, is part of sustainable and comprehensive education and school development. This is regarded as a task for all teachers and all professionals working in schools and as an important object in the cooperation between schools and the domestic environment. As a cross-cutting theme for the entire school life, human rights education is also the subject of interdisciplinary teaching. Although subjects such as history, politics/business/social studies/professional knowledge, languages, biology, religion and ethics/philosophy have a special potential for value creation oriented towards human rights, all other subjects are also called upon to make their contribution. The Länder have agreed on measures to implement and further develop these recommendations.

Education in the digital World

Against the background of the possibilities and challenges that the progressive digitisation of all fields of life entails, the Standing Conference resolved the "Education in the digital world" strategy ('Bildung in der digitalen Welt') in December 2016. This strategy formulates clear goals for digital education and specifies the content orientation. In addition to the pedagogically sound inclusion of digital teaching and learning materials, the Standing Conference formulates the goal of incorporating the competences for the digital world described in the strategy into the curricula of the individual subjects. The strategy also describes the opportunities offered by digital educational media for creating multimedia learning worlds. For teachers, this opens up new possibilities for the provision of learning media suitable for the target group in increasingly heterogeneous learning groups. Digital educational media can be individually adapted to the level of competence achieved and can be put together specifically on the basis of the learners' interests. For the school sector, teaching and learning in the digital world have to follow the primacy of the pedagogical – in other words the educational mission. This means that a consideration of digital changes serves the objective of supplementing the current educational policy guidelines and of encouraging independence through changes in the content-related and formal organisation of learning processes and of allowing a better development of individual potentials within inclusive education through the use of digital learning environments too.

Cultural eduation

Cultural education as a key prerequisite for cultural participation has been firmly anchored in the everyday life of schools and cultural establishments for years now. With its February 2007 "Recommendation on cultural education for children and young people" ('Empfehlung zur kulturellen Kinder- und Jugendbildung') and the choice of this subject area for the feature chapter in the 2012 Education Report, the Standing Conference underlined its importance for education in schools. In October 2013 the Recommendation was amended. As a result of more recent developments, subjects such as the expansion of all-day schools, inclusion, interculturalism and participation, further education or anchoring cultural education as an interdisciplinary topic are paid more attention in the curricula. The aspect of collaboration

between schools, cultural establishments and extracurricular education for children and young people is emphasised more clearly.

Health education

Building on its recommendations on "Health education in schools" ('Gesundheitserziehung in der Schule') of June 1979 and on "Addiction and drug prevention" ('Sucht und Drogenprävention') of July 1990, in November 2012 the Standing Conference adopted the "Recommendation on health promotion and prevention in schools" ('Empfehlung zur Gesundheitsförderung und Prävention in der Schule'). The updated recommendations on health promotion and prevention are consistent with the advanced understanding of modern addiction and the interaction of behavioural and relationship facets, and take up the key aspects of school prevention work such as strengthening pupils' life skills and the interprofessional networking of all stakeholders involved in health promotion and prevention.

Consumer education

Consumer education at schools aims to develop responsible consumer behaviour, by informing about consumption-related content and developing competences with respect to a reflected and empowered consumer behaviour. In September 2013 the Standing Conference adopted a recommendation on "Consumer education at schools" ('Verbraucherbildung an Schulen') which focuses on the following topics:

- finances, market activity and consumer rights
- nutrition and health
- media and information
- sustainable consumption.

The content of the recommendation includes central targets and general principles of consumer education at schools, measures for educational administration and education policy, advice for implementation in school, support and advisory systems and cooperation with non-school partners.

Intercultural education

In a globalised world, intercultural competences are increasingly important as key qualifications for all children and young people. The Standing Conference therefore emphasised, in its December 2013 amended recommendation "Intercultural education at school" ('Interkulturelle Bildung und Erziehung in der Schule') the potentials of cultural diversity, and developed cornerstones for the work at schools which are rounded out by suggestions for educational administrations and for cooperation with non-school partners. Intercultural competence here is understood to not simply mean engaging with other languages and cultures but most of all the ability to consider one's own perceptions of other people and to put them in context, and being aware of and reflecting on the social framework conditions in which these perceptions have developed.

Culture of Remembrance

In December 2014, the Standing Conference resolved "Recommendations on a culture of remembrance to form an object of historical-political education in schools" ('Empfehlungen zur Erinnerungskultur als Gegenstand historisch-politischer Bildung in der Schule'). The recommendations take up earlier resolutions on individual topics from the field of political education and have been developed with the involvement

of relevant institutions and associations. The aim of a common "culture of remembrance" in schools is to enable young people to describe and evaluate historical developments and to understand that they have the ability to shape and change our world with their own actions. The recommendations are directed at teaching staff, at those with management responsibility in education, in teacher-training, further training of teachers or extracurricular education, training and learning venues.

Teaching of Jewish history, religion and culture in school

The "Joint declaration of the Central Council of Jews in Germany and the Standing Conference on the teaching of Jewish history, religion and culture in school" ('Gemeinsame Erklärung des Zentralrats der Juden in Deutschland und der Kultusministerkonferenz zur Vermittlung jüdischer Geschichte, Religion und Kultur in der Schule') of December 2016 aims to present Judaism in schools in its diversity and authenticity, and to provide students with a lively and differentiated picture of Judaism. According to the declaration, awareness and recognition of the diversity and complexity of Judaism are key steps toward gaining understanding and reducing prejudice. The manifold perspectives of historical and contemporary Judaism should be discussed in as many grades and subjects as possible. A special responsibility is attached to subjects and projects of historical and political education. The analyses of current political developments and past events and processes are inseparable in this regard.

In April 2018, the Standing Conference and the Central Council of Jews in Germany (*Zentralrat der Juden in Deutschland*) presented an annotated collection of material on the teaching of Judaism in schools at a joint symposium to support teachers. The collection of didactically prepared teaching materials on all the topics listed in the above-mentioned joint declaration can be found at www.kmk-zentralratderjuden.de.

Gender-sensitive education

The guidelines adopted by the Standing Conference and the Conference of Ministers for Gender Equality and Women's Affairs of the Länder (Konferenz der Gleichstellungs-und Frauenministerinnen und -minister, -senatorinnen und -senatoren der Länder – GMFK) in October 2016 on securing equal opportunities through gender-sensitive school education and upbringing ('Leitlinien zur Sicherung der Chancengleichheit durch geschlechtersensible schulische Bildung und Erziehung') give concrete form to the mandate of Article 3 of the Basic Law (Grundgesetz – R1) for the effective enforcement of equal rights for women and men and the elimination of gender-related disadvantages in the school sector. Among other things, curricula and textbooks are increasingly raising awareness of the need to break down restrictive gender role models and behavioural attributions with the aim of personality development according to individual abilities and inclinations.

More information on "Educating about Europe in schools" ('Europabildung in der Schule') may be found in chapter 13.4. Preparation for working life is addressed in chapter 12.5.

Teaching Methods and Materials

Teaching in schools in Germany is governed by regulations of various kinds laid down by the Länder. The prescribed curricula include guidelines on the treatment of the various topics of instruction, distribution of materials and various didactic approaches. Of increasing importance are interdisciplinary coordination of material taught and teaching objectives as well as interdisciplinary activities in such areas as

health education, vocational orientation, computer literacy, environmental education and the treatment of European topics.

In almost all Länder, measures for the promotion of a professional approach to the increasing heterogeneity of learning groups in terms of pre-conditions and performance have been brought on the way. Such measures include, without limitation:

- the internal differentiation of learning groups (Binnendifferenzierung)
- self-regulated learning
- pupil-oriented instruction

The measures aim at enhancing individual promotion on all performance levels, in particular of pupils with migrant backgrounds or from difficult social backgrounds but also of particularly gifted pupils. In the further development of in-service training for teachers, the approach to heterogeneous learning groups also plays an important part (see chapter 9.3.).

The use of digital media (multimedia) is becoming increasingly important not only as a subject of teaching and learning, but also as a digital environment for teaching. In March 2019, as part of the DigitalPact School 2019–2024 (DigitalPakt Schule 2019–2024), the Federal Government and the Länder agreed, among other things, to strengthen the digital infrastructure of schools across the board. The latest information about the use of new media can be found on the Education Servers provided by the Länder Ministries and is also available on the information portal maintained centrally by the federal and Länder authorities, the German Education Server (www.eduserver.de).

6.4. Assessment in General Lower Secondary Education

Pupils/Students Assessment

The evaluation of a given pupil's performance is based on all the work he/she has done in connection with the class in question, specifically written, oral and practical work. Papers and written exercises are spread evenly over the school year. The requirements in this work are gauged to meet the standards laid down in the curricula. Oral work refers to oral contributions made by pupils and evaluated in class. Practical achievements serve as the basis of evaluation particularly in such subjects as sport, music, and arts and crafts.

As a rule, performance is assessed according to a six-mark system adopted by the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder (*Kultusministerkonferenz* – KMK):

•	very good	= 1
•	good	= 2
•	satisfactory	= 3
•	adequate	= 4
•	poor	= 5
•	very poor	= 6

Each pupil's performance is set out on a school report or a learning development report twice a year in the middle and at the end of the school year. In Bayern, in grades 5–8 the intermediate report can under certain conditions be replaced by at least two or more written notices detailing marks. During the school year, each

assignment is marked by the respective subject teacher. On the report, the marks for each subject are given either by the subject teacher or, on the subject teacher's recommendation, by a teachers' conference known as the *Klassenkonferenz*. In addition to the marks in the various subjects, the report may contain comments or marks on class participation and social conduct at school.

The evaluation of a pupil's performance is a pedagogical process; but it is also based on legal and administrative regulations, whereby the teachers and the teaching staff as a whole are given some scope for discretion.

In December 2012 the Standing Conference adopted a "Recommendation on the recognition and evaluation of extracurricular learning outcomes in lower secondary level" ('Empfehlung zur Anerkennung und Bewertung einer außerunterrichtlich erbrachten Lernleistung in der Sekundarstufe I'). Learning outcomes achieved by pupils outside lessons, particularly in work placements and competitions, are in future to be given greater recognition and evaluated also. Recognition can take the shape of a supplement to the certificate, a partial credit towards a subject mark or, under certain conditions, a separate mark.

To ensure the comparability of the pupils' performances, increasingly orientation and comparative tests are being held in the Länder. As for the use of quality assurance procedures and the introduction of *Bildungsstandards* (educational standards) binding for all Länder, see chapter 11.2.

Progression of Pupils/Students

Promotion of a pupil to the next grade depends on his/her level of achievement at the end of the school year as documented in the report received in the middle and at the end of the school year. An adequate mark (mark 4 or *ausreichend*) or better is generally required in each of the subjects that have a bearing on promotion. As a rule, poor or very poor marks in one subject can be offset to a certain extent by at least satisfactory marks in others.

Whether or not to promote the pupils in a given grade is generally decided by the *Klassenkonferenz*, which is attended by all the teachers who have taught those pupils, and, sometimes, also by the teachers' conference (*Lehrerkonferenz*), which is attended by all teachers of a particular school. The decision is noted on the report issued at the end of the school year. In some Länder, pupils who initially have not been promoted to the next grade may, in certain school types and in certain grades, at the beginning of the next school year be granted a probationary promotion by the teachers' conference and/or take a re-examination in order to be subsequently promoted, in each case provided that certain conditions are fulfilled. A pupil who has not been promoted must repeat the last year attended. Depending on the type of school, in the school year 2017/2018, 0.7 per cent to 5.2 per cent of pupils in lower secondary level repeated a year. If a pupil's performance is far superior to that of the rest of the class, it is possible to skip a year according to the regulations of the Länder.

If there is a risk of a pupil's not being promoted, in the majority of Länder the school must report this to the parents by noting it in the mid-year report or sending a written notice prior to the date on which the decision is to be taken. Some Länder introduced an obligation of the school to provide assistance in cases of a pupil's promotion being at risk. In such Länder, pupils at risk of not being promoted are for example supported through individual assistance programmes or holiday classes.

Generally speaking, it is possible to transfer between courses of education or school types.

In some Länder, depending on the type of school or in all types of school at lower secondary level, there is no repetition of grades. Pupils generally move up to the next grade at the start of the new school year.

Certification

On completion of the courses of education in lower secondary level, the pupils receive a leaving certificate, provided that they have successfully completed grade 9 or 10. In most of the Länder pupils are required to sit central examinations at Land level in order to obtain the leaving certificate. As a rule, pupils at the *Gymnasium*, which also comprises the upper secondary level, are not issued leaving certificates at the end of the lower secondary level, but a qualification to attend the *gymnasiale Oberstufe*, the upper level of the *Gymnasium*. Pupils who have not achieved the goal of the course of education they were pursuing receive a school-leaving report (*Abgangszeugnis*) instead. The forms for leaving certificates are prescribed by the Ministry of Education and Cultural Affairs of each Land. School-leaving certificates and reports are issued by each school and signed by the head teacher and class teacher. The stages of education successfully completed and the qualifications acquired for continued education are noted on the leaving certificates.

Qualification after grade 9

At the end of grade 9, it is possible in any Land to obtain a first general education qualification, which is traditionally called the *Hauptschulabschluss*. A leaving certificate is issued after grade 9 if adequate marks (mark 4 or *ausreichend*) or better are received in every subject or on total average. In some Länder, the certificate is attained by successfully completing grade 9 and/or passing a final examination. At lower secondary level schools that go beyond grade 9, a corresponding qualification can be obtained in most Länder if certain marks are achieved. This first leaving certificate in general education is usually used for admission to vocational education and training in the so-called *duales System* (dual system). In addition, it qualifies a pupil, under specific conditions, for admission to certain *Berufsfachschulen* (a certain type of full-time vocational school). Moreover, it is a prerequisite for subsequent admission to certain *Fachschulen* (schools for continued vocational training) and institutions offering secondary education for adults known as *Zweiter Bildungsweg*.

In some Länder, it is possible to obtain a qualifying *Hauptschulabschluss* testifying to an above-average performance. At the end of grade 10, in some Länder, an extended *Hauptschulabschluss* may be acquired which, under certain conditions, allows admission to further *Berufsfachschulen*.

Qualification after grade 10

At the end of grade 10, it is possible in any Land to obtain a *Mittlerer Schulabschluss*, which is traditionally called *Realschulabschluss*. In the majority of Länder, this certificate is issued after successful completion of grade 10 and after passing a final examination. The *Mittlerer Schulabschluss* can be obtained after grade 10 at other types of lower secondary schools as well if certain standards of achievement are met, and also at the *Berufsschule* with the requisite achievement level and average mark. It qualifies a pupil for admission to courses of upper secondary education, e.g. at special

Berufsfachschulen and at the Fachoberschule, and is also used for entering a course of vocational education and training within the duales System (dual system).

Entitlement to proceed to the gymnasiale Oberstufe

The entitlement to attend the *gymnasiale Oberstufe* (upper level of the *Gymnasium*) is obtained, as a rule, if certain standards of achievement are met, at the end of grade 9 or grade 10 at the *Gymnasium*. An entrance qualification required for transfer to the *gymnasiale Oberstufe* may also be obtained on the basis of a *Mittlerer Schulabschluss* obtained at the *Hauptschule*, *Realschule* or a *Schulart mit mehreren Bildungsgängen* (school offering more than one type of course of education) if certain performance requirements are fulfilled.

Mutual recognition of leaving certificates and qualifications

Qualifications and entitlements obtained after grades 9 and 10 are mutually recognised by all the Länder provided they satisfy the requirements stipulated by the Standing Conference. The requirements are laid down in the 1993 "Agreement on types of schools and courses of education at lower secondary level" ('Vereinbarung über die Schularten und Bildungsgänge im Sekundarbereich I') as periodically amended and in the agreements on educational standards for the Hauptschulabschluss (grade 9) and the Mittlerer Schulabschluss (grade 10) in 2003 and 2004.

6.5. Other organisational models and alternative structures

Pupils who are not ready to go back to school following hospital treatment may receive lessons at home. Teachers of the school type which the pupil is to attend after his or her convalescence are employed to this end, thus effectively working towards the pupil's reintegration.

Pupils who cannot attend school for a longer period or even permanently, due to illness, without requiring hospitalisation, should also be taught at home. This depends on their ability to follow lessons. This, and the pupil's physical capacity, is certified by a doctor.

As a rule, International Schools in Germany cater for primary as well as secondary school pupils. There are also three European Schools, which offer bilingual lessons in various languages.

6.6. Organisation of General Upper Secondary Education

Types of Institutions

Gymnasiale Oberstufe

In almost all of the Länder the *Allgemeine Hochschulreife* (general entrance qualification for higher education) is obtained after the successful completion of 12 (eight-year *Gymnasium*) or 13 consecutive school years.

At *Schularten mit drei Bildungsgängen* the *Gymnasium* course of education is not, as a rule, reduced to eight years.

Common principles for upper secondary education were laid down by the Standing Conference of the Ministers of Education and Cultural Affairs (Kultusministerkonferenz – KMK) in the "Agreement on the structure of the gymnasiale Oberstufe in the upper secondary level" ('Vereinbarung über die Gestaltung der gymnasialen Oberstufe in der Sekundarstufe II') of July 1972, as periodically amended.

The *gymnasiale Oberstufe* is divided up into a one-year introductory phase and a two-year qualification phase. Grade 10 may have a dual function as the final year of schooling in lower secondary education and the first year of schooling in the *gymnasiale Oberstufe*. At the eight-year *Gymnasium*, successful completion of grade 10 will entitle the pupil to enter the qualification phase of the *gymnasiale Oberstufe*. At the nine-year *Gymnasium*, successful completion of grade 10 will entitle the pupil to enter the introductory phase of the *gymnasiale Oberstufe*.

Building on the foundations laid at lower secondary level, the classes in the qualification phase are usually structured in relation to half-year terms. Whilst still required to take certain subjects or subject combinations during the qualification phase, they now have scope for individual specialisation.

Related subjects are grouped together under main areas. The three main areas with examples of subjects they include are listed below:

- languages, literature and the arts (e.g. German, foreign languages, fine art, music)
- social sciences
 (e.g. history, geography, philosophy, social studies/politics, economics)
- mathematics, natural sciences and technology (e.g. mathematics, physics, chemistry, biology, information technology)

Each of the three areas has to be represented right up to the *gymnasiale Oberstufe* and in the *Abitur* examination. Religion in line with the provisions of the Land and sport are also compulsory. German, a foreign language, mathematics and physical education as well as, as a rule, history and one of the natural sciences must be taken throughout the qualification phase of the upper level of the *Gymnasium* and results must be indicated and taken into account in the certificate of the *Zeugnis der Allgemeinen Hochschulreife*. For more information on leaving certificates see chapter 6.10.

The comparability of the examination procedures and examination requirements is guaranteed for all Länder by the Uniform Examination Standards in the Abitur Examination (Einheitliche Prüfungsanforderungen in der Abiturprüfung – EPA) or the educational standards for the Allgemeine Hochschulreife. By the end of 2008, the Standing Conference had passed 41 subjects for the Uniform Examination Standards in the Abitur Examination, which have, in part, been revised against the background of the results of international comparisons of school performance and on the basis of experts' reports.

In October 2012 the Standing Conference has resolved educational standards for the *Allgemeine Hochschulreife* in German and Mathematics and in follow-on courses in the foreign languages English and French which replace the Uniform Examination Standards. Based on the educational standards a pool of *Abitur* examination tasks was developed which the Länder could draw on in 2017 for the first time. The development of educational standards for the *Allgemeine Hochschulreife* in the natural science subjects biology, chemistry and physics has been initiated in 2017. More detailed information on the development of educational standards is available in chapter 11.2.

The subjects at the *gymnasiale Oberstufe* are taught at different levels of academic standards in accordance with the Uniform Examination Standards in the *Abitur* Examination and, in the subjects German, mathematics and follow-on courses in the foreign languages, the educational standards for the *Allgemeine Hochschulreife*. They

are divided in courses at a basic level of academic standards and courses at an increased level of academic standards. The courses at a basic level of academic standards teach the propaedeutics of scientific work, and the courses at an increased level of academic standards provide in-depth teaching of the propaedeutics of scientific work by way of specific examples.

The courses at a basic level of academic standards in the subjects German, mathematics and foreign language comprise three or four weekly periods, two or three weekly periods in all other subjects. The pupils are required to choose two to four subjects at an increased level of academic standards. The subjects at an increased level of academic standards are taught for at least four hours, and in the case of two subjects at an increased level of academic standards, for at least five hours. At least one of the subjects German, mathematics, a foreign language or a natural science must be taken at an increased level of academic standards.

Generally, the pupils are required to take two foreign language courses during the introductory phase. Pupils who have not or not continuously been taught a second foreign language before entering the *gymnasiale Oberstufe* are required to take a second foreign language course throughout the *gymnasiale Oberstufe*.

The four or five subjects of the Abitur examination must include:

- at least two subjects at an increased level of academic standards
- two of the following three subjects: German, foreign language or mathematics
- at least one subject from every main area of compulsory subjects (the Länder may decide at their own discretion whether or not religion can represent the social sciences area)

In some Länder, lessons in the core subjects are only taught at an increased level of academic standards.

The *gymnasiale Oberstufe* has also been established in other types of school in addition to the *Gymnasien*. In some Länder, these include the *kooperative Gesamtschule*, integrierte Gesamtschule and the Berufliches Gymnasium.

Geographical Accessibility

For the geographical accessibility of schools in the secondary sector, see chapter 5.2. on the organisation of primary education.

Admission Requirements and Choice of School

Admission to courses of general education at upper secondary level is based on leaving certificates and qualifications acquired at the end of lower secondary level (see chapter 6.4.). For the possibility of gaining admission into a specific school, see chapter 6.2. The admission requirements for the *gymnasiale Oberstufe* are set forth above.

Age Levels and Grouping of Pupils/Students

At the latest upon entrance into the *gymnasiale Oberstufe*, the pupils are, as a rule, no longer taught in annual classes. The class unit is replaced by a system of compulsory and elective subjects, with the possibility of individual specialisation. Within the scope of the relevant agreement of the Standing Conference (*Kultusministerkonferenz* – KMK), the responsibility for the organisation of lessons and for the design of the compulsory and elective subjects with the possibility of individual specialisation lies

with the Länder. The above explanations regarding the *gymnasiale Oberstufe* equally apply to the *Berufliche Gymnasien*.

Organisation of the School Year

For the organisation of the school year in the secondary sector, see chapter 5.2. on the primary sector.

Organisation of the School Day and Week

There is no fixed end to teaching times at upper secondary level (*Sekundarstufe II*). The weekly instruction time at the *gymnasiale Oberstufe* usually is also 30 weekly periods which are completed within the framework of courses at a basic level of academic standards and of courses at an increased level of academic standards.

At the eight-year *Gymnasium*, the number of weekly periods at lower and upper secondary level is generally increased by two to four periods. To guarantee the mutual recognition of the *Abitur*, all Länder have to ensure teaching of a total of at least 265 weekly periods in the lower secondary level and the *gymnasiale Oberstufe* to which up to five hours in elective subjects may be added.

For general information about the daily and weekly timetable and the five-day or six-day week see chapter 5.2.

6.7. Teaching and Learning in General Upper Secondary Education

Curriculum, subjects, number of hours

The range of subjects offered in the GYMNASIALE OBERSTUFE (upper level of the *Gymnasium*) is described in chapter 6.5., as are the requirements for certain subjects and subject groups and the opportunities for individual specialisation. As a rule, classes take up at least 30 periods a week. Whilst the compulsory courses are designed to ensure that all the pupils receive a common general education, electives, in conjunction with the compulsory curriculum, are intended to enable pupils to develop an area of specialisation. In the *gymnasiale Oberstufe* of the eight-year *Gymnasium*, the number of weekly periods is generally increased by two to four.

Foreign language lessons in the upper secondary level build on the competences acquired in lower secondary level. The focuses of teaching and learning are in-depth intercultural understanding, written language in terms of competences involving different text types, corresponding oral discourse abilities and language awareness. These competences are based on the educational standards for the Allgemeine Hochschulreife or the Uniform Examination Standards in the Abitur Examination (Einheitliche Prüfungsanforderungen in der Abiturprüfung – EPA) and aim to achieve at least reference level B2 in the Common European Framework of Reference for Languages (CEFR) for languages that have been studied since lower secondary level, and reference level B1 for new foreign languages started at the end of the upper level of the Gymnasium. Languages lessons attended throughout the upper secondary level may be replaced by bilingual teaching and learning in other subjects. More information can be found in the KMK resolution "Recommendations of the Standing Conference of Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany on strengthening foreign language competence" ('Empfehlungen der Kultusministerkonferenz zur Stärkung der Fremdsprachenkompetenz') of December 2011 as well as the report "Concepts for bilingual teaching" ('Konzepte für den bilingualen Unterricht') of October 2013.

The comments in chapter 6.3. apply to cross-curricular topics addressed in upper secondary education.

Teaching methods and materials

Based on the curricula, which also contain some guidance on teaching methods, the teachers take responsibility for teaching in their classes, taking the background and aptitude of each pupil into consideration. Use is made of digital media (multimedia, electronic dictionaries, graphing calculators) and telecommunications (Internet etc.) in the classroom both as teaching aids and as the subject of teaching and learning. By utilising new resources and methods and by strengthening the individualist character of teaching, the aim is to promote creativity and independent learning skills. More detailed information on the use of digital media in teaching is available in chapter 6.3.

6.8. Assessment in General Upper Secondary Education

Pupils/students assessment

At the GYMNASIALE OBERSTUFE (upper level of the *Gymnasium*), performance is assessed on a scale of 15 to 0, which correlates with the usual scale of 1 to 6 as follows:

- Mark 1 is equivalent to 15/14/13 points depending on the trend of marks.
- Mark 2 is equivalent to 12/11/10 points depending on the trend of marks.
- Mark 3 is equivalent to 9/8/7 points depending on the trend of marks.
- Mark 4 is equivalent to 6/5/4 points depending on the trend of marks.
- Mark 5 is equivalent to 3/2/1 points depending on the trend of marks.
- Mark 6 is equivalent to 0 points.

Progression of pupils/students

In the GYMNASIALE OBERSTUFE the last two grades are known as the qualification phase. Marks obtained in this phase are used to calculate a pupil's total marks, composed of marks received in courses taken in these two years and the marks achieved in the *Abitur* examination. There is no procedure for promotion during the qualification phase, however, it is possible to repeat a year if the marks required for entrance to the *Abitur* examination have not been attained. In school year 2017/2018, 3.2 per cent of pupils at the nine-year *Gymnasium* and 2.6 per cent of pupils at the eight-year *Gymnasium* repeated a grade.

Certification

School-leaving certificates may be acquired at the end of upper secondary level courses of education subject to the same basic conditions as described for lower secondary level in chapter 6.4.

The GYMNASIALE OBERSTUFE (upper level of the *Gymnasium*) concludes with the *Abitur* examination. The tasks are set state-wide in almost all Länder by the ministry of education and cultural affairs, whereby teachers or the candidates or both in some cases can make a choice. Tasks from the joint pool of tasks of the Länder were included amongst the tasks in the subjects German, mathematics and follow-on courses in the foreign languages English and French for the first time in 2017. In order to be admitted to the examination, certain requirements have to be met in the qualification

phase. The Abitur examination covers four or five examination subjects, which must include at least two subjects at a level of increased academic standards and two of the following three subjects: German, foreign language and mathematics. Additionally, all three subject areas (languages, literature and the arts; social sciences; mathematics, natural sciences and technology) must be included in the examination. The required minimum three written examinations must cover at least two subjects at an increased level of academic standards, which must include at least one of the following subjects: German, foreign language, mathematics or a natural science. The oral *Abitur* examination is taken in a subject which has not been examined in written form. As a rule, written and possibly oral examinations are taken in three subjects, whilst in the fourth subject, only an oral examination is taken. Depending on the legislation of a Land, a fifth subject can be examined in either oral or written form, or a particular achievement (besondere Lernleistung) which has been performed over at least two half-year terms (e.g. a year paper, the results of a multi-disciplinary project or the performance in a recognised competition) may be incorporated in the Abitur examination. The particular achievement is to be documented in written form, and is complemented by a colloquium. Upon passing the Abitur examination, a Zeugnis der Allgemeinen Hochschulreife (general higher education entrance qualification) is acquired, which also includes two thirds of the academic performance in the qualification phase. The Allgemeine Hochschulreife is awarded if the total marks attained are at least adequate (average mark 4 or a minimum of 300 of 900 possible points).

The Zeugnis der Allgemeinen Hochschulreife is issued in the Länder between mid-June and mid-July. An exception is Rheinland-Pfalz where the general higher education entrance qualification is issued before March 31.

Upon transition to vocational education and training and to higher education study, to document foreign language competences on the leaving certificate the level descriptions of the Common European Framework of Reference for Languages (CEFR) are documented alongside the grades. Coordinated European documentation of foreign language, bilingual and intercultural competences is offered, for instance, by Europass and by the CertiLingua label of excellence.

6.9. Other organisational models and alternative structures

The description of other organisational models and alternative structures in the primary sector explanations in Chapter 5.5. also apply to secondary education.

6.10. Organisation of Vocational Upper Secondary Education

Types of institutions

Full-time vocational schools

Full-time vocational schools include the *Berufsfachschule*, the *Fachoberschule*, the *Berufliches Gymnasium*, the *Berufsoberschule* and other types of schools that exist only in certain Länder or are of marginal importance due to their small numbers. According to the International Standard Classification of Education (ISCED), continuing vocational training at the *Fachschule* is part of the tertiary sector. The *Fachschule* is thus described in chapter 7.

Berufliches Gymnasium

This course of education is called *Berufliches Gymnasium* in most of the Länder and *Fachgymnasium* in two Länder. In contrast to the *Gymnasium* providing general education, which normally offers a continuous period of education from grade 5/7 to grade 12 or 13, the *Berufliches Gymnasium*, as a rule, has no lower and intermediate level (grades 5–10). This type of school exists in almost all Länder in the form of the *gymnasiale Oberstufe* with career-oriented specialisations and comprises a three-year course of education. Starting on the basis of a *Mittlerer Schulabschluss* satisfying the requirements for admittance to the *gymnasiale Oberstufe* or an equivalent qualification, the *Berufliches Gymnasium* leads, as a rule, to the *Allgemeine Hochschulreife* (a general entrance qualification for higher education). In addition, the Länder can offer double qualification courses of education (see Chapter 6.10.).

Berufsfachschule

Berufsfachschulen are full-time schools which aim to teach and deepen the basics for pupils to acquire vocational skills, either to provide them with basic vocational qualifications for one or more recognised training occupations or to lead them to a vocational training qualification in one occupation. Berufsfachschulen extend the previously acquired general education and can lead to a school-leaving qualification that is above this level.

Berufsfachschulen generally include upper secondary education, and no vocational training or activity is required for attendance. Full-time courses (standard form) last at least one year, part-time courses accordingly longer.

Pupils can obtain a vocational qualification in accordance with Land regulations. The qualifications of the *Berufsfachschulen* acquired in accordance with Land law as well as additional school entitlements are mutually recognised by the Länder provided that the courses comply with the agreed framework conditions. Additional school qualifications acquired at *Berufsfachschulen* for the professions in the health care system regulated by federal law are also mutually recognised by the Länder. Under certain conditions, it is also possible to obtain the *Fachhochschulreife* at vocational schools.

In cases where such schools do not provide a full career qualification, the successful completion of the *Berufsfachschule* may, under certain conditions, be credited as part of the training period in occupations requiring formal training (Art. 7 of the Vocational Training Act – *Berufsbildungsgesetz* – R81). In order to prove the equivalence of a vocational qualification at a *Berufsfachschule* with dual vocational education and training, successful graduates can sit an examination before the competent authority. Admission to this so-called chamber examination is possible if the Land in question has adopted appropriate regulations pursuant to Article 43, Paragraph 2 of the Vocational Training Act or if there are arrangements to this end between the vocational schools and the competent authorities.

Depending on the training objective, *Berufsfachschulen* require their pupils to have a *Hauptschulabschluss* (first general education school leaving certificate) or a *Mittlerer Schulabschluss*. The duration of training at *Berufsfachschulen* varies from one to three years, depending on the intended career specialisation.

Fachoberschule

As a rule, the Fachoberschule covers grades 11 and 12 and requires a Mittlerer Schulabschluss. It equips its pupils with general and specialised theoretical and practical knowledge and skills and leads up to Fachhochschulreife, i.e. higher education entrance qualification for the Fachhochschule. The Länder may also establish a grade 13. After successful completion of grade 13, pupils can obtain the Fachgebundene Hochschulreife and, with sufficient competence in a second foreign language, the Allgemeine Hochschulreife. The Fachoberschule is divided into the fields of study business and administration, technology, health and social work, design, nutrition and home economics, as well as agriculture, bio- and environmental technology. Training includes instruction and professional training. As a rule, completed relevant vocational education and training or sufficient relevant work experience can serve as a substitute for grade 11 of the Fachoberschule, so that pupils with such qualifications can proceed directly with grade 12 of the Fachoberschule. This gives them the opportunity to acquire not only in-depth professional knowledge, skills and competences, but also the Fachhochschulreife. The Fachoberschule thus makes an important contribution to the permeability of the education system and thus to the equivalence of general and vocational education and training.

Berufsoberschule

The Berufsoberschule also contributes greatly to the permeability of the education system. Just as in the Fachoberschule, graduates of vocational training in the dual system or graduates of vocational training under Land law (see Berufsfachschule) can acquire a higher education entrance qualification in the Berufsoberschule. Providing two years of full-time education, the Berufsoberschule leads to the Fachgebundene Hochschulreife and, with a second foreign language, to the Allgemeine Hochschulreife. Attendance of the Berufsoberschule can also be on a part-time basis for a correspondingly longer period.

Acceptance into the *Berufsoberschule* requires the *Mittlerer Schulabschluss* or qualifications recognised as equivalent and at least two years' successful vocational education and training or at least five years' relevant practical experience. The first year of the *Berufsoberschule* can be replaced with other study courses leading to the *Fachhochschulreife*. The *Berufsoberschule* covers specialisations in technology, economy and management, nutrition and domestic science, health and social professions, design as well as agriculture, bio- and environmental technology. The pupils are assigned a specialisation in accordance with the first vocational training or practical experience they have already completed.

Vocational education and training in the dual system

About half of the young people of any one year age group begin training in one of the around 330 training occupations recognised under the Vocational Training Act and the Handicrafts Code (*Handwerksordnung* – HwO – R82). The vocational education and training lasting two, three or thee-and-a-half years depending on the occupation takes place in the *duales System*. It is described as a *dual system* because training is carried out in two places of learning: at the workplace and in a *Berufsschule* (vocational school). The aim of vocational education and training is to impart, within a structured course of training, the vocational skills, knowledge and qualifications necessary to practise a skilled occupation in a constantly changing professional world.

Those successfully completing education and training are immediately entitled to do skilled work in a recognised occupation requiring formal training (anerkannter Ausbildungsberuf).

There are no formal prerequisites for admission to the dual system; education and training is generally open to everyone. Of the trainees with newly concluded training contracts, around 26.2 per cent achieved the Hauptschulabschluss or an equivalent qualification as their first general education qualification at the end of the lower secondary level in 2018, whilst 45.4 per cent gained a Mittlerer Schulabschluss. The number of those undergoing training within the dual system who have already completed the upper secondary level and obtained a Hochschulreife or a Fachhochschulreife (higher education entrance qualifications) corresponded to 22.2 per cent in 2018. The training is based on a training contract under private law between a training company and the trainee. The trainees spend three or four days a week at the company and up to two days at the Berufsschule. Alongside this, training at the Berufsschule in the form of coherent blocks (Blockunterricht) lasting up to six weeks is increasingly common. The training companies assume the costs of the on-the-job training and pay the trainee a training allowance which, as a rule, is in accordance with a collective bargaining agreement in the sector concerned. The amount of the allowance increases with each year of training and is, on average, about a third of the starting salary for a specialist trained in the corresponding occupation.

The vocational skills, knowledge and qualifications to be acquired in the course of training at the workplace are set out in the *Ausbildungsordnung* (training regulations), the particulars of which are specified by the training company in an individual training plan. A nationwide *Rahmenlehrplan* (framework curriculum) is drawn up for vocational *Berufsschule* classes for each recognised occupation requiring formal training as set out in the training regulations.

The acquisition of advanced and in-depth vocational competences can be made possible by offering additional qualifications, which can be laid down in the respective training regulations.

Comprehensive information and data on vocational education and training and especially about the dual system is available in the annual Report on Vocational Education and Training (Berufsbildungsbericht) of the Federal Ministry of Education and Research (Bundesministerium für Bildung und Forschung – BMBF) and in the Data Report Annexed to the Report on Vocational Education and Training (Datenreport zum Berufsbildungsbericht) of the Federal Institute for Vocational Education and Training (Bundesinstitut für Berufsbildung – BIBB).

On-the-job training

Vocational training places outside school (on the job) are available in industry and commerce as well as public administrations, in independent professions and, to a lesser extent, also in private households. The training companies are contractually committed to impart to the trainees the vocational skills, knowledge and qualifications as provided for in the *Ausbildungsordnungen* (training regulations) for the respective recognised occupation requiring formal training. The binding *Ausbildungsordnungen* (training regulations) have been established to set uniform nationwide standards that are independent of the companies' current operational needs and meet the requirements in the respective occupation. Training may only be

provided in training companies in which the skills demanded by the training regulations can be imparted by training personnel with the personal and technical qualification. Responsibility for the examination of in-company instructors lies with the bodies responsible within the dual system of vocational education and training, such as, for example, industry's self-governing institutions. The qualification of training companies and in-company training personnel is supervised by the bodies responsible for vocational education and training within the dual system. These are predominantly the *Kammern* (chambers of industry and commerce, chambers of handicrafts, chambers of agriculture). The responsible bodies also monitor the training to make sure it is conducted properly. Training should correspond to the requirements of the *Ausbildungsordnungen* (training regulations) in terms of both content and time but can deviate from this if required by practicalities within the company and if the communication of all remaining training contents is guaranteed.

A training establishment may not only be the individual training company, but also an association of several companies which cooperate in order to meet the requirements of the training regulation (network training – *Verbundausbildung*). Inter-company training centres, which can be linked to boarding-schools, provide supplementary training to young people who are being trained at small or specialised companies where they do not receive comprehensive training as defined by the *Ausbildungsordnungen* (training regulations). With modern technical equipment, these inter-company training centres can give training in areas many small companies are unable to cover for reasons of cost and capacity.

Training at the Berufsschule

The Berufsschule and the training establishments have a joint training and educational mission in the dual system of vocational education and training. In accordance with its position as an autonomous place of learning, the Berufsschule works together on an equal footing with the parties participating in vocational education and training. Its function is to enable pupils to acquire vocation-related and interdisciplinary competences, having particular regard for the requirements of vocational education and training, and to enable them to carry out their occupational duties and to help shape the world of work and society as a whole with a sense of social and ecological responsibility. The Berufsschule is also expected to offer courses preparing for vocational education and training or accompanying professional activities. In cooperation with general education schools, the pupil's competence is advanced so that they are able to take a reflected decision on their choice of vocation. The Berufsschule pupils can cooperate in tasks of further vocational and continuing education.

The scope of training at the Berufsschule amounts to at least twelve hours a week. It consists of vocation-related and interdisciplinary lessons and covers vocational learning content and a practically-oriented extension of the previously acquired general education, in particular in the fields of German language, a foreign language, politics or economics, religion or ethics and sports. Further details are regulated by the Länder. Practically-oriented teaching at the *Berufsschule* usually covers eight hours a week. It is based on the framework curricula resolved by the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder (*Kultusministerkonferenz* – KMK), which were agreed in accordance with the latest version of the process agreed between the Federation and the Länder Joint Protocol of Results from 30 May 1972 (*Gemeinsames Ergebnisprotokoll vom 30. Mai 1972*). An increase in the

scope of lessons through supplementary offers (e.g. Fachhochschulreife) for high-achieving pupils and additional remedial teaching for low-achieving pupils (e.g. language development) is possible.

The framework curricula of the Standing Conference for vocation-related teaching at the *Berufsschule* provide for seven lessons a week in the first year of training. Notwithstanding this, the scope of lessons in the vocation-related field can be eight weekly teaching hours if framework curricula are drawn up for *Ausbildungsberufe* (recognised occupations requiring formal training) that combine competences from more than one profession in the first year of training.

In order to be able to cater for specific local needs, the organisation of lessons in *Berufsschulen* is left up to the Länder and thus the schools. In principle, the way lessons are organised in the *Berufsschule* is chosen in close cooperation with the chambers or guilds and the companies within the catchment area. Flexible regulations hereby allow a number of different temporal organisational forms aimed at optimising the learning phases in the company and in school.

The Länder can enact regulations by statutory order concerning the crediting of periods of vocational education spent in school for dual vocational education and training (Art. 7 of the *Berufsbildungsgesetz*). In this respect, the Standing Conference has recommended that

- the organisation of suitable education careers needs to achieve that learning periods spent in full-time vocational schools can be fully credited for vocational education and training and
- the extent of the crediting be made dependent on the scope of vocation-related teaching given within the school education and a consideration of the *Rahmenlehrpläne* (framework curricula) and *Ausbildungsordnungen* (training regulations) applicable to vocational education and training.

Crediting only takes place upon a joint application by training company and student.

Geographical accessibility

For the geographical accessibility of schools in the secondary sector, see chapter 5.2. on the organisation of primary education.

Admission requirements and choice of school

Admission to courses of vocational education at upper secondary level is based on leaving certificates and qualifications acquired at the end of lower secondary level (see chapter 6.4.). The admission requirements for the various types of schools and courses of education in the sector of vocational education are explained above.

Age levels and grouping of pupils/students

At the Berufsschule, classes in a specific or related anerkannter Ausbildungsberuf (recognised occupation requiring formal training) are given. For occupations with a small number of trainees (splinter occupations), the Länder are faced with special challenges in terms of school subjects and school organisation. If individual Länder are unable to ensure that instruction is differentiated according to subject, a range of instruction at vocational schools with a cross-border catchment area is to be set up on the basis of the school-law regulations for the Berufsschule pupils concerned from these Länder.

Organisation of the School Year

For the organisation of the school year in the secondary sector, see chapter 5.2. on the primary sector.

Organisation of the School Day and Week

In courses at *Berufsfachschulen* that provide basic vocational training, teaching in both areas of learning together comprises at least 30 hours per week. In the courses at vocational schools leading to a qualification in a recognised occupation, instruction shall comprise at least 32 hours per week. At least 12 periods are compulsory in grade 11 of *Fachoberschulen*, together with practical on-the-job training while at least 30 weekly periods of general and specialist lessons are required in grade 12. At the *Berufsoberschule* teaching comprises around 30 hours per week.

As for vocational education and training in the *duales System* (dual system), where initial vocational education and training is carried out jointly in a company and in the *Berufsschule*, at least 12 weekly periods of teaching are required at the *Berufsschule*. This may be organised in a variety of ways with students either attending classes on a part-time basis with, as a rule, 12 weekly periods two days a week throughout their course or alternating between two days one week and one day the next. Teaching may also be received in coherent blocks (*Blockunterricht*).

For general information about the daily and weekly timetable and the five-day or six-day week see chapter 5.2.

6.11. Teaching and Learning in Vocational Upper Secondary Education

Curriculum, subjects, number of hours

The statements made in chapter 5.3 on the primary sector apply for the CURRICULA AND EDUCATION PLANS for the vocational full-time schools. The responsibility for developing the curricula essentially lies with the Ministries of Education and Cultural Affairs of the Länder.

Apart from the subjects offered at a *Gymnasium*, BERUFLICHE GYMNASIEN have career-oriented subjects like business, technology, professional computer science, biotechnology, nutrition, agronomy, as well as health and social studies, which can be chosen in addition to general subjects as intensified course and are examined in the *Abitur*. In some Länder, there are a limited number of schools providing further vocational courses and specialisations. The subjects relating to such vocational courses and specialisations may also be elected as subject at an increased level of academic standards. In double qualification courses of education, additional occupation-specific subjects are taught, which as a rule are also examination subjects for the final vocational examination. The total volume of periods in these courses is at least 118 hours per week in the *gymnasiale Oberstufe*.

At Berufsfachschulen (full-time vocational schools) instruction is given in general/cross-occupational and subject- or occupation-specific areas. In courses providing basic vocational training, teaching in both areas of learning together shall comprise a minimum of 30 periods per week. In courses leading to a qualification in a recognised occupation, instruction shall comprise a minimum of 32 periods per week. They offer a very wide range of courses. There are *Berufsfachschulen* for business occupations, occupations involving foreign languages, trade and technical occupations, crafts industry occupations, home-economics-related and social-work-related

occupations, artistic occupations, the health sector occupations regulated by federal law etc. The division into subjects, fields of learning and projects is regulated by the Länder.

Instruction at the Fachoberschule is given in the subjects German, foreign language, mathematics, natural sciences, economics and society as well as in field-specific subjects. Practical training takes place in grade 11, i.e. in the first year of this school type, as a relevant controlled placement in companies or equivalent institutions. The language and communication area of learning accounts for at least 480 lessons (240 each for German and a foreign language), the mathematics and natural sciences area of learning at least 320 lessons (mathematics 240, natural sciences 80) and the business and society area of learning at least 120 lessons in grades 11 and 12. Subject theory accounts for at least 440 lessons and practical experience 800 lessons in the first year in the subject-related field. The differentiation field accounts for at least 320 lessons, which can be used by the Länder to increase the subjects and areas of learning shown in the number of hours and to create further subjects.

In the Berufsoberschule that pupils attend for two years, instruction covers a total of at least 2400 periods (approx. 30 periods a week). Pupils are taught German, a compulsory foreign language, social studies (with history, politics, economics), mathematics as well as specialised subjects (*Profilfächer*) in accordance with the chosen specialisation, and natural sciences including information technology. The German and foreign language group of subjects accounts for at least 720 to 800 lessons, the social studies area of learning at least 160 to 320 lessons, mathematics at least 400 to 560 lessons and the advanced level courses and natural sciences including information technology at least 800 to 1,040 lessons. For the *Allgemeine Hochschulreife*, knowledge of a second foreign language must also be proven which accounts for at least an additional 320 lessons. The Standing Conference of the Ministers of Education and Cultural Affairs (*Kultusministerkonferenz* – KMK) passed common standards in June 1998 regarding the requirement level for instruction in German, a compulsory foreign language and mathematics.

Vocational education and training in the dual system

The curriculum at the part-time BERUFSSCHULE, like that of full-time vocational schools, breaks down into cross-occupational and vocational classes (see chapter 6.8.). Twelve periods a week are spent in class, eight of which generally cover material specific to the occupation in question.

The Rahmenlehrpläne (framework curricula) for vocational instruction at Berufsschulen, on the other hand, unlike the curricula for the vocational full-time schools, are worked out by the Länder in the Standing Conference and resolved in a coordinated procedure with the agreement of the Federation on the basis of the Ausbild-ungsordnungen (training regulations) for on-the-job training (see chapter 2.7.). They are structured in accordance with areas of instruction so as to support the acquisition of vocational knowledge, skills and competences. Areas of instruction contain a complex statement of objectives oriented around typical vocational acts, as well as references and time guidelines as regards content, i.e. references to the time of communication in the course of education as well as to the number of lessons. The knowledge, skills and competences to be attained in on-the-job training for professional qualification is set out in the training regulations. These regulations are issued for all

anerkannte Ausbildungsberufe (recognised occupations requiring formal training) by the competent federal ministry with the assistance of the social partners and in agreement with the Federal Ministry of Education and Research (Bundesministerium für Bildung und Forschung — BMBF). The coordination procedure ensures that the training regulations take account of what has been learnt from experiences in the working world and in the vocational schools, as well as the results of employment and occupational research and the results of pilot schemes of the Federal Institute for Vocational Education and Training (Bundesinstitut für Berufsbildung — BIBB).

Vocational education and training is particularly affected by digitisation and its repercussions for working, production and business processes. The teaching objective is increasingly the acquisition of competence in the use of digital tools and techniques. Apart from an understanding of digital processes, this also calls for an investigation of the direct effects of ever-increasing digitisation, e.g. with respect to work organisation and communicative aspects in, in some cases, globally networked production, supply and service chains.

Foreign language teaching in vocational schools

Foreign language teaching in the vocational sector builds on the competences attained in the lower secondary level. It makes a fundamental contribution to vocational education and training or the vocational orientation of pupils by equipping them to deal with foreign language professionally in relevant work situations. Given ongoing globalisation in the economic sector and on the labour market, in language activities specific to a profession and to a professional field, foreign language competence forms an important part of the professional ability to act. In the specialised subject classes (Fachklassen) of the dual system especially, the development of language competence relevant to the professional field is of great importance.

Teaching in the *Berufsschule* extends and deepens the foreign language competence according to its significance in the relevant *Ausbildungsberuf* (recognised occupation requiring formal training). In addition, the Standing Conference's foreign language certificate is an opportunity to demonstrate the acquisition of foreign language competences on the basis of the "Common European Framework of Reference for Languages" (CEFR) of the Council of Europe.

Teaching methods and materials

The Berufsschule bases its teaching on action-oriented didactic methods that are reflected in the curricula by the concept of learning areas. The use of new information and communication technologies opens up a further scope of conveying up-to-date vocational knowledge. The basic didactic methods to be used in on-the-job training are outlined in the *Ausbildungsordnungen* (training regulations).

6.12. Assessment in Vocational Upper Secondary Education

Pupil/students assessment

For information about the assessment of pupils at VOCATIONAL SCHOOLS in the upper secondary level see chapters 6.4. and 6.7., in which the basis for assessing and marking in the lower and upper secondary level is set out.

Berufliche Gymnasien in some cases offer pupils the opportunity to obtain more than one qualification at the same time (double qualification courses of education), viz. a

combination of *Hochschulreife* or *Fachhochschulreife* (higher education entrance qualifications) and a vocational qualification in accordance with Land law (e.g. for assistant occupations). A vocational education of this kind may also be obtained at institutions combining the *Gymnasium* and vocational schools (e.g. *Oberstufenzentren*) or at a particular type of school such as, for example, the *Berufskolleg* in Nordrhein-Westfalen. These double qualification courses of education at upper secondary level take three to four years to complete.

Under the DUALES SYSTEM (dual system) trainees take an intermediate examination according to the standards laid down in the *Ausbildungsordnungen* (training regulations) and *Rahmenlehrpläne* (framework curricula) around halfway through their training. These intermediate examinations are administered by the competent bodies (usually chambers of handicrafts or industry etc.). They may consist of practical, written and oral components. The intermediate examination usually covers the knowledge, skills and competences listed in the training regulations for the first three half-year terms of training, as well as the material taught at the *Berufsschule* according to the framework curriculum, to the extent it is of material importance for vocational education and training. After taking an intermediate examination, the trainee receives a certificate showing his/her current level of training.

Instead of an intermediate examination and a final examination, some training regulations have provided for a so-called *gestreckte Abschlussprüfung* (extended final examination). This does away with the previously standard intermediate examination, which was not relevant to achieving a pass grade. In the extended final examinations, part of the professional competence is tested after around two-thirds of the training period in part one of a final examination. The second part of the final examination takes place at the end of vocational education and training. Qualifications which were covered in the first part of the final examination will be included in the second part only to the extent required for the assessment of professional proficiency. The result of the extended final examinations is made up of the two partial results.

Progression of pupils/students

As far as FULL-TIME VOCATIONAL SCHOOLS are concerned, the comments on promotion in chapter 6.4. on the lower secondary level generally apply. Pupils do not repeat grades in vocational schools — if necessary, the training period may be extended.

Certification

Double Qualification courses of education at Berufliche Gymnasien which lead up to the Allgemeine Hochschulreife (a general entrance qualification for higher education) or to the Fachhochschulreife (higher education entrance qualification for the Fachhochschule) and a vocational qualification (according to Land regulations) or partial vocational qualification take three to four years and conclude with two separate examinations (academic examination and vocational examination). In addition, there are vocational training courses in which it is possible to obtain a vocational qualification, as well as the Fachhochschulreife. The acquisition of the Fachhochschulreife in vocational training courses requires the Mittlerer Schulabschluss and, according to the version valid at any one time of an agreement of the Standing Conference of the Ministers of Education and Cultural Affairs (Kultusministerkonferenz – KMK) made in 1998, is based on standards for contents and examinations.

The programme at Berufsfachschulen (full-time vocational schools) normally concludes with a final examination. In the *Berufsfachschulen*, different qualifications can be obtained, depending on admission requirements; these qualifications are either of a vocational or a general education nature. At *Berufsfachschulen* offering basic vocational training, young people can obtain the *Hauptschulabschluss* (first general education school leaving certificate) or the *Mittlerer Schulabschluss* in courses lasting one or two years. In contrast, the two-year full-time *Berufsfachschule*, for which a *Mittlerer Schulabschluss* is required, in its various branches of study leads to a professional qualification as a *state-certified technical assistant* in, for example, biochemistry, garment making, information technology or mechanical engineering or as a *state-certified business assistant* specialising in business administration, clerical operations, foreign languages or data processing. At *Berufsfachschulen*, under certain conditions the *Fachhochschulreife* can be obtained as well as the vocational leaving certificate.

The programme at the Fachoberschule concludes with a final examination after grade 12. This exam covers three general subjects (German, mathematics, foreign language) and one individual specialised subject (e.g. in engineering, business, administration or design). On passing the exam, pupils receive the certificate of Fachhochschulreife, a higher education entrance qualification qualifying them to go on to Fachhochschulen. The Länder may also establish a grade 13 leading to the Fachgebundene Hochschulreife or, if proficiency in a second foreign language is demonstrated, the Allgemeine Hochschulreife.

The course of study in the Berufsoberschule ends with a final examination and leads to the *Fachgebundene Hochschulreife* and, with a second foreign language, to the *Allgemeine Hochschulreife*. There is a written final examination in German, a compulsory foreign language, mathematics and a specific subject relevant to the chosen specialisation. Oral examinations can be held in all subjects. The achievements in the final examination count for at least one-third of the total marks obtained for the individual subjects in the final certificate.

In the DUALES SYSTEM of vocational education and training (dual system), trainees take a final examination or a *Gesellenprüfung* (final examination which, if successfully passed, leads to the award of a certificate showing proficiency as journeyman) administered by the *authorities responsible for vocational education and training*. The responsible authorities include regional and sectoral organisations from the various branches of industry and commerce, e.g. chambers of industry and commerce, of handicrafts, of liberal professions and of agriculture that perform governmental functions in the domain of vocational education and training. The responsible authorities can also be public service authorities (e.g. in the health professions and the care professions). The boards of examiners are made up of representatives of industry and labour and teachers at *Berufsschulen*.

The final examination or *Gesellenprüfung* consists of several examination areas, which are assessed in practical, written and/or oral tests. This determines whether the trainees have acquired the professional ability to act necessary to practice a skilled occupation within the meaning of the Vocational Training Act (Art. 1, Section 3 of the *Berufsbildungsgesetz* – R81). This includes the ability to plan and perform work processes independently and to inspect and to judge the work result. For the purposes of assessment of performances in individual areas, the board of examiners

may solicit expert opinions from third parties, in particular from vocational schools (Art. 39, Section 2 of the Vocational Training Act). Successful candidates are awarded an examination certificate. Concomitantly, the *Berufsschule* issues a leaving certificate if the trainee has achieved at least adequate performances in all subjects. The Länder can offer the option to compensate an inadequate performance. This certificate incorporates a *Hauptschulabschluss* (first general education leaving certificate) and may include a *Mittlerer Schulabschluss*, depending on the candidate's achievements. Through additional lessons and an additional examination, the *Fachhochschulreife* (higher education entrance qualification for the *Fachhochschule*) can be awarded in vocational courses of education accompanying the training. The leaving certificate shows the classification of the final examination and/or the vocational qualification within the German Qualification Framework (*Deutscher Qualifikationsrahmen* – DQR) and the European Qualification Framework (EQF) (cf. chapter 2.5.).

Under the Vocational Training Act (Art. 43 Section 2), anyone who has been trained in a vocational school or other vocational education and training establishment may also be admitted to a final examination carried out by the authority responsible for the vocational education and training, provided this course of education corresponds to vocational education and training in a recognised training occupation; for this purpose the course of education must be comparable to the relevant training regulations in terms of content, requirements and duration, it must be implemented systematically and must guarantee a suitable proportion of practical specialist training.

6.13. Other organisational models and alternative structures

The description of other organisational models and alternative structures in the primary sector explanations in Chapter 5.5. also apply to secondary education.

6.14. Post-Secondary Non-Tertiary Education

According to the International Standard Classification of Education (ISCED), the post-secondary, non-tertiary sector covers courses of education which follow the acquisition of a general education qualification or vocational qualification at upper secondary level. In Germany this definition basically applies to the one-year courses at Fachoberschulen and the two-year courses at Berufsoberschulen/Technischen Oberschulen, which lead to the Fachgebundene Hochschulreife and, with sufficient competence in a second foreign language, the Allgemeine Hochschulreife, and the Kollegs and Abendgymnasien, at which the Fachhochschulreife (academic part) or the Allgemeine Hochschulreife can be obtained. The post-secondary, non-tertiary sector also covers combinations of general and vocational courses and the acquisition of an entitlement to study and of a vocational leaving certificate at a Berufsschule in the duales System or at a Berufsfachschule, which conveys a vocational training certificate.

In Germany these courses are allocated to upper secondary education. A description of vocational schools can be found in chapters 6.8. to 6.10. on the vocational upper secondary level, and a description of *Abendgymnasien* and *Kollegs* in chapter 8 on general and vocational adult education.