#### 3 EDUCATION

A vast majority of data in this chapter was received from sources of a unit performing the State Statistical Service under the competence of the **Ministry of Education, Youth, and Sports** (MEYS). It mainly applies to the **Statistical yearbook of education** (Tables 3–1 through 3–19, 3–27, 3–32, and 3–33) and to an online database with data from the system of the **Union Information from Students' Registers** (the SIMS database), to which the universities, both public and private, transmit data on students, students enrolled for the first time, and graduates (Tables 3–20 through 3–26).

Besides sources of the Ministry of Education, Youth, and Sports, this chapter also uses **structural wage statistics**, namely as for data on the average gross monthly wage of teachers, educators, and teaching assistants working in regional education (Tables 3–30 and 3–31). The structural wage statistics is currently generated by merging of resulting databases of the sample survey of the Information System on Average Earnings of the Ministry of Labour and Social Affairs, which covers the wage sphere, and of the administrative data source of the Salary Information System of the Ministry of Finance, which exhaustively covers the salary sphere. The tables on the age structure of teachers (3–29) and share of women among school management personnel (3–28) are obtained from outputs of the Ministry of Education, Youth, and Sports, which takes them from data collected within the Salary Information System. Another exclusion are tables with international comparisons, which were received from the sources of **Eurostat** (Tables 3–34 through 3–41).

Participants of early childhood education are called children in statistics, those enrolled in primary and secondary education are pupils, and participants of short-cycle tertiary education and of higher education are called students.

Children in early childhood education (i.e. in nursery schools and in preparatory classes of basic schools or in a preparatory stage of special basic schools) and pupils and students in basic schools up to higher professional schools, respectively, are reported as numbers of studies (i.e., for example, if a pupil is enrolled in multiple study programmes or in multiple schools, he or she would be counted multiple times in the relevant piece of data). The only exception is a breakdown by citizenship, in which natural persons are kept as units. Unlike that, students of public and private universities are reported as headcount (i.e. one student, regardless of how many schools or programmes he/she studies in, is only counted once in every piece of data). Total numbers of students of and graduates from public and private universities thus may not be equal to the sums for individual universities or individual types of education (studies) and types of study programmes. Data on students of state universities (a military one and a police one) are only available as the number of studies.

The number of **children**, **pupils**, **and students of nursery schools up to higher professional** schools is kept **for a school year**. A school year starts on 1 September and ends on 31 August of the following calendar year. As regards children and pupils of nursery schools, basic schools, and secondary schools, and pupils of conservatoires it is reported according to the status **as at 30 September**; the numbers of students of higher professional schools are kept according to the status **as at 31 October** of a given school year.

The number of **graduates** from secondary schools, conservatoires, and higher professional schools and the number of **pupils who passed** from a basic school to a secondary school or who **finished** their compulsory school education is a **total for a given school year**.

Data on **universities** are received from the system of the Union Information from Students' Registers (the SIMS database), to which the universities, both public and private, transmit data on students, students enrolled for the first time, and graduates. Published data are as for the number of **students** according to the status as at 31 December of a given year; the data on **graduates** are for a calendar year. The source SIMS database is continually completed and updated, including retrospective corrections; the data presented in this yearbook refer to the state of processing as at 21 January 2023.

Those children, pupils, and students are deemed to be **foreigners** whose state citizenship is other than Czech. Only a single citizenship is recorded for children, pupils, and students of nursery schools up to higher professional schools; it is that one, which was stated during the enrolment in school or its latest updated version. When a child has dual citizenship, the Czech one is given preference to; further, a citizenship of a Member State of the EU is preferred. For students of public and private universities, more than one citizenship can be recorded.

Children or pupils **with disabilities** are children/pupils with a mental disability, with hearing impairment, with severe speech impediments, with physical disability, with multiple disabilities, with severe developmental learning disabilities and developmental behaviour disorders, and with autistic spectrum disorders. They can be individually integrated within common classes, included in special classes in regular schools, or attend schools focusing primarily on education of pupils with special education needs.

Pupils who finished their compulsory school education in the 1st up to the 8th school year are considered to be pupils who **finished their compulsory school education prematurely** (discontinued it). The compulsory school education starts in the beginning of a school year, which follows after the day when the child reaches 6 years provided that he/she is not allowed to postpone the start of his/her compulsory school education. The school education is compulsory for the period of nine school years, however, maximally until the end of the school year, in which the pupil reaches the age of 17. Therefore, it is also possible to terminate compulsory school education sooner than in the ninth grade. Persons whom it applies to can round off their education afterwards in courses to attain primary education and in courses to attain basics of education.

The numbers of **teachers** or, in case of universities, the numbers of **academics** are converted to full-time equivalent persons. For more detailed information see notes on respective tables below.

# Notes on Tables on regional education 3–1 through 3–19

**Regional education** includes data on nursery schools up to higher professional schools. **Nursery schools** belong to **early childhood education** together with preparatory classes of basic schools and a preparatory stage of special basic schools established at basic schools.

Basic schools ensure compulsory school education. Children aged six years (or eight years as a maximum in cases of children with postponed compulsory school education) start compulsory school education, pursuant to the law. The compulsory school education lasts for nine years: five years at the first stage and four years at the second stage of basic schools. Primary education for pupils with special education needs who study in classes or schools with a modified education programme can last ten grades with a prior consent of the Ministry of Education, Youth, and Sports; the first stage then consists of the first to the sixth grade and the second stage of the seventh to the tenth grade. However, pupils do not have to fulfil all their compulsory school education in a basic school. They can leave the basic school earlier and complete their compulsory school education in lower stage of multi-year programmes of grammar schools (i.e. in the first two grades of a six-year grammar school or in the first four grades of an eight-year grammar school) and in a lower stage of an eight-year specialism of dance in conservatoires (i.e. in the first four grades).

**Secondary education** consists of several types of education offered by secondary schools. In the Czech Republic, there are three basic types of secondary education: secondary general education with an A-level examination (grammar schools), secondary technical education with an A-level examination, and secondary technical education with an apprenticeship certificate.

**Secondary education with an apprenticeship certificate** denotes (in full-time studies and not shortened form of education) two-year and three-year education programmes by successful finishing of which a graduate acquires an apprenticeship certificate.

Secondary education with an A-level examination denotes education programmes with an A-level examination, graduates from which acquire an A-level certificate. There are two types of the programmes. Secondary general education is a non-professional (non-specialised) type of education dedicated to preparation for further studies. These programmes are usually provided by grammar schools. Depending on their duration, these can be either four-year programmes, which basic school graduates go to after successfully completing the ninth grade, or multi-year programmes (i.e. eight-year and six-year programmes), to which pupils transfer from the fifth or the seventh grade of a basic school. In multi-year (programmes of) grammar schools, pupils still fulfil their compulsory school education in the first four or two years. Secondary technical education is concentrated on the professional side of education and prepares pupils to enter the labour market. It lasts for four years (i.e. in full-time studies and not shortened form of education) and is finished by an A-level examination.

For applicants who earned secondary education with an apprenticeship certificate from three-year full-time studies and want to pass their A-level examination in a given or a related field of education, there are **follow-up courses**. Follow-up courses last in full-time studies for two years and they are finished by an A-level examination.

Besides that, **secondary education without an A-level examination and without an apprenticeship certificate** also exists; however, it only applies to a small group of pupils.

Secondary education with an A-level examination can also be received in the Czech Republic in **conservatoires**, no sooner than after four years in full-time studies of a six-year education programme (determined for basic school-leavers) or after eight years in full-time studies of an eight-year education programme in the specialism of dance (in the first four grades pupils fulfil their compulsory school education). By passing the final (graduate) examination called "absolutorium" in a conservatoire a graduate receives short-cycle tertiary education in a conservatoire and earns the "certified specialist" (DiS.) title.

**Higher professional schools** offer to secondary school graduates with an A-level examination full-time studies in three-year fields (lasting for up to three and a half years in case of medical fields of education including practical training) and distance studies lasting for up to four years. This type of education is completed by passing the final (graduate) examination called "absolutorium" and graduates earn the "certified specialist" (DiS.) title.

Within technical education, there are a lot of fields of education. In regional education, a national **Classification of Basic Branches of Education** is used for breakdown by field and by group of fields of education. The Ministry of Education, Youth, and Sports is an administrator of the classification. For more information about the Classification of Basic Branches of Education see: <a href="https://www.czso.cz/csu/czso/klasifikace\_kmenovych\_oboru\_vzdelani\_-kkov-">https://www.czso.cz/csu/czso/klasifikace\_kmenovych\_oboru\_vzdelani\_-kkov-</a> (Czech\_only).

Further information on the methodology and statistical data related to regional education are provided in the publication of the CZSO called "Schools and school establishments – school year 2022/2023" (Czech only; code 230042-23), which is available for free on the website of the CZSO at: <a href="https://www.czso.cz/csu/czso/skoly-a-skolska-zarizeni-hqtm9ep237">https://www.czso.cz/csu/czso/skoly-a-skolska-zarizeni-hqtm9ep237</a>.

## Notes on Tables on universities 3-20 through 3-26

Universities offer bachelor, follow-up master, master, and doctoral study programmes. Master and follow-up master study programmes together are called master programmes in tables. Studies can be delivered in full-time, distance, or combined type of education. The system of schools providing higher education comprises public schools (university-type and non-university type of schools), private universities, and two state universities (currently the Police Academy of the Czech Republic in Prague and the University of Defence established by the Ministry of the Interior and by the Ministry of Defence, respectively). However, data on state universities are not, due to a different methodology (e.g. measuring of the number of studies instead of headcount) and different way of data collection (not by means of the SIMS database), included in summary indicators and only part of the Table 3–20 is devoted to them. The Tables 3–21 through 3–26 thus only show the situation in public and private schools.

## Notes on Tables on teachers and other teaching staff in regional education 3-27 through 3-31

The Table 3–27 is based on data collected at the Ministry of Education, Youth, and Sports; the category of teachers also includes headmasters and their deputies who also have teaching duties, as well as guidance counsellors. Teachers are reported for the school year, as at 30 September, with the exception of higher professional schools, which are reported as at 31 October.

The Tables 3–28 and 3–29 are based on data collected by the Ministry of Finance within the Salary Information System. Teachers here include teachers excluding managers, and only those working in schools established by a public founder. The early childhood education category includes nursery schools and early childhood education carried out in basic schools, i.e. in preparatory classes and the preparatory stage. The category of basic schools includes the first and the second stage of basic schools (ISCED 1 and 2 levels, respectively). For the definition of teachers, the corresponding types of work falling under the sub-major group 23 of the Classification of Occupations (CZ-ISCO) were selected.

Data on wages of teachers, educators, and teaching assistants in regional education (see the Tables 3–30 and 3–31) come from a special processing of data from the structural employee wage statistics. The category of teachers in regional education, total, includes teachers in early childhood education (i.e. in nursery schools and preparatory classes of basic schools), in basic schools (i.e. at the first and the second stage of basic schools, ISCED 1 and 2 levels), and in secondary schools (including conservatoires) as well as in higher professional schools. — See again the sub-major group 23 (teaching professionals) in the Classification of Occupations (CZ-ISCO). The following are not included there: managers who also have teaching duties and teachers or educators of pupils with special education needs. Who are included, however, are teachers at schools of all types of founders. The following belong to teaching assistants in regional education: assistants to teachers, assistants to educators, and teaching assistants in consulting facilities. Detailed methodological information and other statistical data can be found in the publication of the CZSO "Wages of teachers in regional education - 2012–2022" (Czech only; publication code: 230069-23), which is available for free on the website of the CZSO at: Mzdy učitelů v regionálním školství - 2012–2022 | ČSÚ (czso.cz).

# Notes on Tables on academics at universities 3-32 and 3-33

In the Tables 3–32 and 3–33, academics are those who are classified as academics by an internal regulation of universities. They are devoted to pedagogical or scientific activities within their contracted work

hours. Research workers who only do research work at universities and do not teach at all cannot be classified to academics. The numbers of academics are given as the average registered number of employees converted to full-time equivalent (FTE) in a given calendar year. Employees of two state universities are not included in academics in the data of the Ministry of Education, Youth, and Sports due to different data collection methods.

Among academics, we distinguish teaching staff in research, development, and innovation, professors, readers, lecturers, assistants, and junior lecturers. Assistants, junior lecturers, and research workers involved in teaching activities are included in the tables under the category of "other". The Table 3-33 shows the average monthly wages excluding other personnel costs/expenses and excluding other payments for work done.

#### Notes on Tables with international comparisons 3-34 through 3-41

Data published by Eurostat on the Czech Republic slightly differ from the data provided by the CZSO on the Czech Republic. For international comparisons, a unified methodology has to be determined, which may not be equal to the methodology usually used in individual countries. Above all, data are given in the breakdown according to the International Standard Classification of Education (ISCED 2011), which differs from terms usually used in the Czech Republic.

The Table 3–34 is devoted to **tertiary education**. It includes ISCED 5 through ISCED 8 levels; besides **higher education** it also includes **short-cycle tertiary education** in the Czech Republic. There are two types of it as follows. Short-cycle tertiary education in a conservatoire takes place in the last two grades of studies, i.e. in the 7th and in the 8th grades of eight-year conservatoires and in the 5th and the 6th grades of six-year conservatoires; it is classified under the ISCED 5 level. Unlike that, education in higher professional schools together with bachelor study programmes are classified under the ISCED 6 level (so-called bachelor's or equivalent level).

In other tables, levels of education are subdivided according to the ISCED classification. The ISCED 0 level is early childhood education (i.e. education provided in nursery schools, in preparatory classes of basic schools, and in the preparatory stage of special basic schools), ISCED 1 comprises the 1st stage of basic schools. The following belong to the ISCED 2 level in the Czech Republic: the 2nd stage of basic schools and grades of multi-year grammar schools and of an eight-year specialism of dance in conservatoires corresponding to it. The ISCED 1 and 2 levels thus correspond to the compulsory school education as it was determined in the Czech Republic. Secondary education after the completion of the compulsory school education belongs under the ISCED 3 level. More information about inclusion of Czech education programmes in the Classification of Education (CZ–ISCED 2011) can be obtained at:

https://www.czso.cz/csu/czso/klasifikace vzdelani cz isced 2011 (Czech only).

For further information on the methodology used by Eurostat and for methodological notes at some countries in tables see the following website: https://ec.europa.eu/eurostat/web/main/data/database.

Further information, data, and analyses of the CZSO can be found on the websites mentioned below:

Publications devoted to education: <u>Education - Publications | CZSO</u>

Statistical Yearbook of the Czech Republic: Statistical Yearbook of the Czech Republic - 2023 | CZSO

Regional yearbooks: Yearbooks | CZSO