

4.1 LEVEL OF EDUCATION IN CZECHIA

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The level of education is an important indicator of vertical differentiation of the population structure (Machonin et al. 2000), particularly of social status. In terms of statistical data, the level of education is the most appropriate indicator of the level of progress in an administrative district, the quality of the labour force and its cultural level and, at the same time, it provides a general indication of the nature of human resources that is significant for the balanced social and economic progress of an area.

It is clear from the census that the general level of education has improved significantly in the course of the last sixty years. This is shown by the dramatic decrease in the percentage of people with only primary education (from 83% in 1950 down to 19% in 2011) and by the significant rise in tertiary educated inhabitants (from 1% up to 13%; ČSÚ 2003, 2011; see Figure 4.1.1). On one hand, with increasing accessibility of higher levels of education for wider population strata there are more successful graduates of secondary and tertiary schools. On the other the older population with lower (largely primary) education is slowly dying out (Wahla 1988). The goal of the map is to depict differentiation in educational levels in districts of Czechia between 1970 and 2011. It also focuses on the changeability/inertia of the spatial pattern of the educational structure over the last forty years. The map also relates to the chapter in the Encyclopaedia of Social-spatial Differentiation where the educational structure of Czechia's population has been analysed on the level of municipalities in 2001 (Puldová 2011).

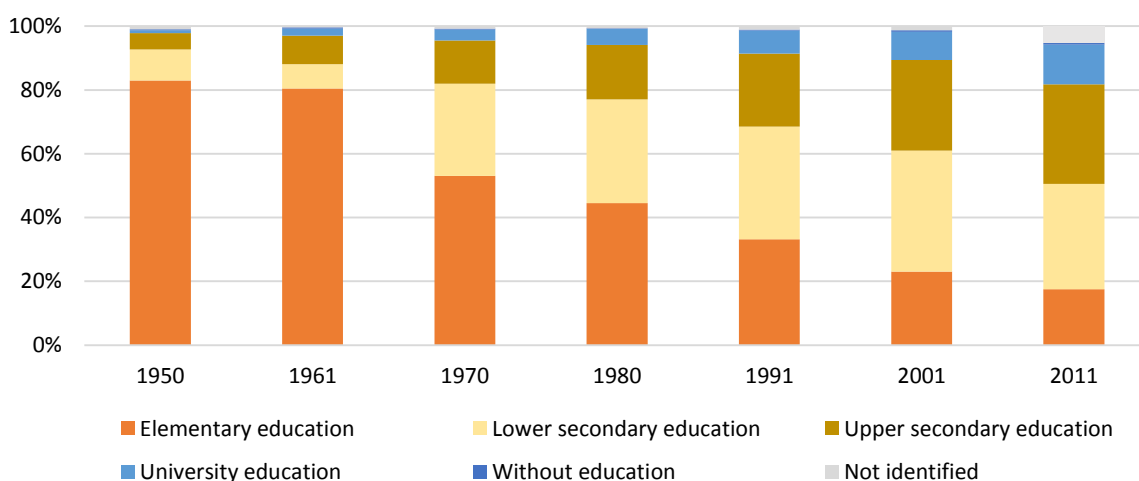


Figure 4.1.1: Educational structure of the population in the Czech Republic in 1950–2011

Source: SLDB 2003, 2011

The specialized map has been drawn from the censuses of people, houses and apartments held in 1970 and 2011. In both maps the same indicators are included to show the level of education. On the one hand the population structure is described according to the

highest level of education achieved (primary, secondary without maturita exam, secondary with maturita exam, and tertiary). This complex indicator describes the overall level of education of the population in a given area and it takes all levels of education into account and places different values on each. The indicator provides an approximation of the number of years an average inhabitant of a municipality spent in education. The weight of separate levels of education was established according the minimal number of years of study needed to reach them (see Table 4.1.1).

Level of education	1970		Level of education	2011	
	Number of years of schooling	% of category*		Number of years of schooling	% of category*
Primary education		53,8%			19,1%
Without education	4 years	0,3%	Without education	5 years	0,5%
Primary education (elementary school)	4.5 years	19,4%	Primary (including incomplete)	8.5 years	18,6%
Primary education (9 years school)	8.5 years	34,1%			
Secondary education without maturita exam		29,1%			34,8%
Secondary technical (without maturita exam)	11 years	29,1%	Secondary including vocational (without maturita exam)	11.5 years	34,8%
Secondary education with maturita exam		13,6%			32,9%
Full secondary general	12.5 years	3,4%	Full secondary (with maturita exam)	12.5 years	28,6%
Full secondary technical	12.5 years	10,1%	Follow-up courses	13.5 years	2,9%
In-company education programmes	14 years	0,1%	Post-secondary technical education	15.5 years	1,4%
Tertiary education		3,5%			13,1%
Tertiary education	18 years	3,4%	Bachelor	15.5 years	2,1%
Theological faculties	17.5 years	0,05%	Master	18 years	10,4%
			Doctor	21.5 years	0,6%
Total		100 %			100 %

Table 4.1.1: Educational structure of the Czech Republic population and the number of years of schooling by educational attainment in 1970 and 2011

Source: ČSÚ, 1970; 2011

Note: * Percentage of the population with the given level of education. The percentage of people whose level of education was not identified was 0.8% in 1980 and 5.3% in 2011.

However, using census data has certain methodological pitfalls. Firstly, while in 1970 only people with a permanent address were surveyed, data from the 2011 census include all those with a usual place of residence. At the same time, in many areas there is a significant difference between the number (and to a certain degree also the structure) of people who usually or permanently reside in a place. This disproportion (in favour of those who usually reside there) is generally greater for areas with a large number of newly built apartments (the suburban hinterlands of big cities). On the other hand, a higher number of permanent residents compared with those saying they usually reside there is found in less attractive border areas and in inner peripheries (Špačková et al. 2012). Secondly, the quality of data from the 2011 Census is reduced by the relatively high percentage of persons whose level of education was not stated (in the case of Prague and selected districts of the Ústí nad Labem region this is roughly 7–10%). In order to ensure the comparability of data in a long-term perspective numbers for persons with a given level of education were always related to the population over 15 years of age whose level of education is stated.

On the level of the Czech Republic as a whole the level of education rose between 1970 and 2011. The proportion of the population with tertiary education increased significantly (no fewer than four times), as did the number of those with secondary education with maturita exam (see Table 4.1.1). At the same time the educational level of women grew significantly faster and it is now on a similar level as for men (the approximate duration of schooling is 12 years for women and 12.3 years for men). However, differences in the proportion of the population with tertiary education are still two percent higher for men. On the other hand, there is a significantly higher percentage of women with secondary education with maturita exam (36% compared with 29% of men). Long-term differences between the levels of education among men and women are highest in districts of South and Central Moravia.

Educational structure improved at different rates in different parts of the Czech Republic. In 1970 there was relatively little variation in the educational level of different districts, with the exception of Prague and to a lesser degree other regional centres (Vasić 2005) and this was particularly true for people with tertiary education. It is interesting that while in 1970 the overwhelming majority of districts showed a low level of education with a predominance of people who had only completed primary education (the only exceptions being inner city districts of Prague, Brno-město, Pardubice, Hradec Králové and Plzeň), forty years later in the majority of districts at least 40% of the population have completed secondary education with maturita exam. The highest levels of education can now be seen in city districts (Prague, Brno-město, Plzeň-město, České Budějovice, Hradec Králové and others) but also in suburban districts (Praha-západ, Praha-východ, Brno-venkov; see Table 4.1.2). A poor educational structure can however still be seen in districts in the economically challenged areas in Northwest Bohemia (Sokolov, Děčín, Chomutov) or in border areas (Znojmo, Břeclav, Jeseník, Bruntál).

Level of education	Number of years of schooling	1970	Number of years of schooling	2011
		Percentage of population with tertiary education*		Percentage of population with tertiary education*
<i>Districts with the best education structure</i>				
1. Praha (1.)**	10.7 years	9.2%	13.3 years	26%
2. Brno-město (2.)	10.4 years	8.5%	13.1 years	25%
3. Praha-západ (9.)	9.4 years	3.0%	12.9 years	22%
4. Praha-východ (11.)	9.4 years	2.7%	12.6 years	18%
5. Plzeň-město (68.)	10.2 years	5.5%	12.5 years	17%
<i>Districts with the worst education structure</i>				
73. Most (31.)	9.1 years	2.0%	11.5 years	8%
74. Chomutov (24.)	9.2 years	1.9%	11.5 years	7%
75. Děčín (22.)	9.2 years	1.8%	11.5 years	7%
76. Tachov (60.)	8.8 years	1.9%	11.4 years	6%
77. Sokolov (28.)	9.1 years	1.7%	11.3 years	6%

Table 4.1.2: Structure of education of population in selected districts of Czechia and number of years of schooling related to achieved level of education in 1970 and 2011

Source: ČSÚ, 1970; 2011

Note: The table shows the districts with the highest and the lowest levels of education in 2011.

* Percentage of population with an identified level of education.

** Rank of the district according to number of years of schooling in 1970.

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