

4.2 LEVEL OF EDUCATION IN PRAGUE

Petra Špačková



The level of education is an important indicator in assessing the vertical differentiation of the population structure (Machonin et al. 2000), mainly in terms of social status. Thanks to the availability of statistical data, the level of education is the most appropriate indicator of advancement of territorial units, and their cultural level. From the census results it is obvious that between 1950 and 2011, the share of people who only achieved primary education significantly decreased in Prague. By contrast, there was a considerable increase in the share of people with tertiary education. The reasons for this are twofold: firstly, the higher levels of education have become more accessible to broader social classes, resulting in an increasing number of people who completed secondary and tertiary education. Secondly, the elderly population with lower (mostly primary) education has been passing away (Wahla 1988). Thanks to its prominent position, Prague has been one of the main centres of education in the Czechia for a long time (Puldová 2011). The purpose of this map is to describe the differences in the level of education of Prague population by cadastral territories in 1980 and 2011. It also focuses on the changing/constant spatial pattern of educational structure in the past thirty years. The map is loosely linked to the description of social status differentiation in the interwar period (see map sheet section B 4.1 Social status of inhabitants in interwar Prague).

The thematic map is based on the census results from 1980 and 2011. In 1980, the first census took place covering the whole of the present-day Prague (in the 1970s, Prague was significantly expanded when the former hinterland municipalities became part of it), which allows for an easy comparison of the respective spatial patterns. Both maps show the same indicators assessing the educational attainment. The population was assessed in terms of the level of education achieved (primary, secondary without maturita [i. e. school leaving] exam, secondary with maturita exam and tertiary). Also assessed was the development and spatial differentiation of the years of school attendance. This comprehensive indicator describes the overall level of education of the population of the given area, taking into account all levels of education and allocating different weight to each of them. The indicator represents an estimation of the number of years an average inhabitant of the municipality spent at school. The weight of the individual levels of education was determined based on the minimum number of years an individual has to spend studying to achieve it¹ (see Table 4.2.1). In the 2011 map, changes in the rating of the individual cadastral territories in terms of the most educated and least educated ones are also shown.

¹ However, the time spent in school is slightly distorted due to the fact that it could change in the course of time (e. g. the duration of compulsory schooling changed from 8 to 9 years) and the fact that it is different in different types of schools within the same category.

Level of education	1980		Level of education	2011	
	Number of years of schooling	Share of category*		Number of years of schooling	Share of category*
Primary education		31.1%			11.6%
Without education	5 years	0.2%	Without education	5 years	0.2%
Primary education	8 years	31.0%	Primary (including incomplete)	8.5 years	10.3%
Secondary education without matura exam		31.6%			22.7%
Secondary vocational	10.5 years	21.3%	Secondary including vocational (without matura exam)	11.5 years	22.3%
Secondary education with matura exam		24.9%			39.4%
Full secondary general	12.5 years	7.1%	Full secondary (with matura exam)	12.5 years	33.4%
Full secondary technical	12.5 years	17.5%	Follow-up courses	13.5 years	3.6%
In-company education programmes	14 years	0.3%	Post-secondary technical education	15.5 years	2.4%
Tertiary education		12.3%			26.4%
Tertiary education	18 years	12.3%	Bachelor	15.5 years	3.8%
Theological faculties	17.5 years	0.05%	Master	18 years	20.6%
			Doctor	21.5 years	2.0%
Total		100%			100%

Table 4.2.1: Educational structure of the Prague population and the number of years of schooling by educational attainment in 1980 and 2011

Source: ČSÚ, 1980, 2011

Note: * Share of the population with identified level of education. The share of people whose level of education was not identified is 1.2% in 1980 and 10.4% in 2011.

However, using census data has its methodological difficulties. Firstly, whereas in 1980 the data was related to permanently resident population, the 2011 census data describes usually resident population. In many areas, the difference in the size (and structure, to a certain extent) of usually resident and permanently resident population is quite significant. This disproportion (in favour of usually resident population) is usually

greater in (1) developing areas with substantial new housing construction (e. g. inner suburban areas within the administrative boundaries of Prague) and (2) neighbourhoods in the city centre and inner city, where the share of temporary residents (mainly young people or foreigners) is greater. Secondly, the quality of the 2011 census data is reduced due to a very high share of people whose education level was not identified (in some neighbourhoods, it was as high as 20–30%). To ensure long-term comparability of data, the number of people with a given level of education was extrapolated to people aged 15 or over with identified level of education.

Between 1980 and 2011, the level of education increased in all areas of Prague. The share of people with an university degree increased significantly (by more than twice) and so did the share of people with secondary education with matura exam (see Table 4.2.1). It is interesting that whereas in 1980, men had a higher level of education than women², in 2011 the gender differences were nearly non-existent³. In fact, the educational attainment of women was growing considerably faster than it was the case for men: for example the share of women with a university degree more than tripled in the given period.

The improvement of educational structure had a different intensity in different Prague neighbourhoods. The assessment of population structure by level of education completed is covered by Ouředníček (1997), who assessed the development in the 1970s and 1980s, and Šnejdová (2006) for the 1990s. In this text, the change in educational attainment is assessed based on the years of school attendance. Even though between 1980 and 2011, the value of this indicator didn't decrease in any of the cadastral territories, the spatial differentiation of the increase of educational attainment was considerable. Based on the extent of change in educational structure as compared to the rest of the city, we can define four basic groups of cadastral territories (see Table 4.2.2).

In the first group, there are cadastral territories the educational structure of which was very good in both census years. For a long time, these neighbourhoods have had a very high social status; they can be found mainly in the city centre and inner city with a high quality of housing (Josefov, Malá Strana, Vinohrady, Dejvice, Střešovice). The second group represents cadastral territories in which the educational structure of the population has significantly improved in the past thirty years. It includes some inner city neighbourhoods (Hrdlořezy, Jinonice), but mainly also cadastral territories on the outskirts of Prague (Lysolaje, Pitkovice, Křeslice), where the increase in educational

² See for example the share of men who completed tertiary education (18%) and women who completed tertiary education (8%).

³ The number of years of school attendance is the same for men and women (12.9 years). However, there are still gender differences in the share of people with tertiary education, which for men is still by several percentage points higher. On the other hand, the share of women with secondary education with matura exam is still significantly higher.

attainment is mainly related to the suburbanization process and in-migration of people with a higher social status.

Level of education	1980		2011	
	Number of years of schooling	Share of people with a university degree*	Number of years of schooling	Share of people with a university degree*
<i>Cadastral territories with a very good educational structure for a long time¹</i>				
Hradčany	12.0 years	21%	14.6 years	45%
Dejvice	12.2 years	22%	14.3 years	39%
Josefov	12.0 years	19%	14.3 years	37%
<i>Cadastral territories, whose position within the city ranking has been significantly improving in terms of educational attainment²</i>				
Hrdlořezy	9.9 years	4%	14.5 years	42%
Lysolaje	11.0 years	13%	14.4 years	41%
Jinonice	10.7 years	6%	14.2 years	39%
<i>Cadastral territories, whose position within the city ranking has been significantly deteriorating in terms of educational attainment³</i>				
Lahovice	10.6 years	7%	12.4 years	13%
Běchovice	10.5 years	6%	12.6 years	16%
Hloubětín	10.6 years	7%	12.7 years	19%
<i>Cadastral territories with a very poor educational structure for a long time⁴</i>				
Cholupice	9.6 years	1%	11.9 years	10%
Nedvězí	9.5 years	2%	12.4 years	12%
Královice	9.4 years	0.5%	12.4 years	17%

Table 4.2.2: Educational structure of the population of selected Prague cadastral territories and the number of years of schooling by educational attainment in 1980 and 2011

Source: ČSÚ, 1980, 2011

Note: The Table shows cadastral territories with the highest/lowest educational attainment within the given group of municipalities in 2011.

* Share of the population with identified level of education.

¹Cadastral territories, which belonged to the quarter of cadastral territories with the highest educational attainment in both census years.

²Cadastral territories, whose position within the city ranking significantly improved (improvement by at least 25 positions in the ranking of cadastral territories based on the years of school attendance).

³Cadastral territories, whose position within the city ranking significantly deteriorated (drop by at least 25 positions in the ranking of cadastral territories based on the years of school attendance).

⁴Cadastral territories, which belonged to the quarter of cadastral territories with the lowest educational attainment in both census years.

On the other hand, there are also areas whose position within the city ranking is lower than before. Even though also in these areas the level of education is increasing, this process is significantly slower than in the city as a whole. Such phenomenon can be

observed on the outskirts of Prague, in neighbourhoods with a lower social status (Lahovice, Běchovice, Komořany). However, among these neighbourhoods there are also cadastral territories with housing estates, which ranked among the most educated in 1980 (Háje, Střížkov, Kobylisy, Krč). The last group is made up of neighbourhoods the educational structure of which has been very poor for a long time and which belonged to the worst areas in both census years. These are mainly cadastral territories on the outskirts of Prague, where the housing construction was rather limited and which have thus preserved their rural character (Cholupice, Lochkov, Třebonice).

References:

- MACHONIN, P., GATNAR, L., TUČEK, M. (2000): Vývoj sociální struktury v české společnosti. Sociologický ústav AV ČR, Praha.
- OUŘEDNÍČEK, M. (1997): The Development of the Educational Structure of Prague. *Acta Universitatis Carolinae Geographica, Supplementum*, pp. 227–233.
- PULDOVÁ, P. (2011): Vzdělanostní struktura. In: Ouředníček, M., Temelová, J., Pospíšilová, L. eds.: *Atlas sociálně prostorové diferenciacie České republiky*. Karolinum, Praha, pp. 27–33.
- ŠNEJDOVÁ, I. (2006): Změny ve vzdělanostní struktuře obyvatelstva Pražského městského regionu. In: Ouředníček, M. ed.: *Sociální geografie Pražského městského regionu*. Univerzita Karlova v Praze, Přírodovědecká fakulta, Katedra sociální geografie a regionálního rozvoje, Praha, pp. 114–127.
- WAHLA, A. (1988): *Geografie vzdělání obyvatelstva*. Státní pedagogické nakladatelství, Praha.

Data sources:

- ČSÚ (1980): Databáze výsledků ze Sčítání lidu, domů a bytů k 1. 11. 1980. Elektronická databáze dat. Český statistický úřad, Praha.
- ČSÚ (2011): Databáze výsledků ze Sčítání lidu, domů a bytů k 26. 3. 2011. Elektronická databáze dat. Český statistický úřad, Praha.