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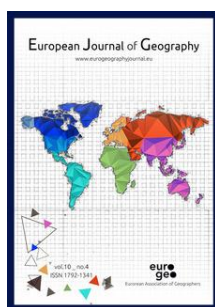
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The situation of geography teachers on the labour market in Poland: overt and covert issues

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Abstract

Economic, social and cultural changes generate new challenges on the labour market for teachers in every country. Poland has recently witnessed significant changes in factors that were identified in literature as crucial to the situation of teachers on the labour market, such as systemic reforms, demographic trends, the overall situation on the labour market and occupational prestige. The scale and impact of some of these factors can be precisely measured and statistically accounted for, yet there are others that remain somehow hidden. The objective of the article is to present and analyse the current situation of geography teachers in Poland, taking into account the impact of both overt and covert factors. The paper is based on an analysis of primary and secondary data. Primary data were collected during our own research on online job advertisements and revolved around information on the real demand for geography teachers. Secondary data were official reports and statistics related to the social and professional standing of teachers in Poland. The analysis proves that in the last ten years the population of teachers has aged and experienced a drop in real wages. There has also been an increase in staff turnover and patchwork careers. Moreover, we have observed that it is highly unlikely to secure a full-time position as a geography teacher and that there have been huge fluctuations in the prestige of geography as a school subject. The identified changes can result in a shortage of qualified geography teachers in the short term, particularly in cities



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1. INTRODUCTION

Teachers are currently one of the largest professional groups in the public sector in Poland (Smak, Walczak, 2015). The labour market for teachers is quite specific because, like some other public sector occupations, it has both monopoly power as far as the provision of credentials is concerned and near monopsony power when it comes to the recruitment of teachers (Dolton et. al., 2003; Chevalier, Dolton, 2004). The occupation of a teacher is worthy of attention not only due to its size and monopsony characteristics but also because of its impact on social development. The teaching profession as well as teachers themselves are in this context called "agents of social change" (Bourn, 2016). This potential and the role of teachers are acknowledged in EU documents (e.g. Education for change, 2014) and in research papers (Hargreaves, 2009; Brysch, Boehm, 2014; Urwick, Kisa, 2014; Bourn, 2016; Lindqvist, Nordänger, 2016; Sukhorukou, Gladkiy, 2019).

At the same time, the number of young adults interested in the teaching profession is dwindling. This tendency prevails in many countries of Western Europe and the US, and also applies to geography teachers. The literature review demonstrates that school geography teaching has become a less popular career option for graduates in many other countries as well. For instance, in the 1960s and 1970s, about 20 per cent of geography graduates in the UK went into teaching and this trend continued until the 1990s. The reason for this was a lack of alternative career opportunities for graduates. With time this percentage gradually decreased. For example, in Portsmouth's department by the mid-1990s, only four or five from graduating cohorts of 110–130 took their places on Initial Teacher Training programmes and of these, most chose primary school teaching (Bradbeer, 2010). Current statistics on career destinations of geographers prepared by HESCU indicate that the number of graduates who work in school as education professionals amounts to 6%, and 3% are those who find jobs in childcare, health and other education occupations (What do graduates ..., 2017). The situation looks similar in the US, where approximately 8% of Master's degree holders in GEES are interested in seeking a job in the education sector (Wilson, 2013).

These alarming academic findings did not translate into up-to-date case studies or analyses of the labour market for the teaching profession in individual countries (Buyruk, 2014). This also refers to Poland. On the one hand, Poland belongs to the group of European countries where there is no shortage of qualified geography teachers. On the other hand, there is no register of graduates with a qualification to teach geography in Poland, nor is there any forecast for the demand for teachers of geography or any other subject (Key, 2013). Only non-quantitative data are published regarding the surplus, shortage, and balanced professions, where geography teachers have been classified as "balanced" (Occupational ..., 2017). There is in fact no data available on labour market supply and demand for the entire teaching profession, not just geographers. At the same time, academic research has proven that there is a clear drop in the number of students who choose teaching majors (Piróg, 2012) and take up employment in schools (Piróg, 2018a).

This paper is an attempt to close the research gap and present a comprehensive analysis describing the specificity of the labour market situation of geography teachers in Poland. Consequently, we have analysed quantitative (measurable) data and officially published statistics as well as qualitative data including somewhat covert

aspects which have been identified in the literature review as necessary in this type of analysis.

2. THEORETICAL BACKGROUND AND FRAMEWORK OF THE RESEARCH

As the literature review suggests, the situation for teachers on the labour market is shaped by a variety of factors that academic research should take into account. Some of the most influential factors are systemic changes and reforms. Teachers in most countries are experiencing similar government interventions in the form of national curricula (eg.: Day, 2004; Dhimitri, et.al, 2018). Consequently, the implementation of new plans and curricula as a result of education reforms has an impact on the demand for teachers of certain subjects, including teachers of geography (Chłoń-Domińczak, 2017). Class sizes can reduce or boost the demand for teachers immediately by increasing its desired pupil-teacher ratio (Zabalza et. al., 1979). Systemic changes often translate into a reorganisation of the entire school network, followed by fluctuations in demand for teachers of specific subjects at a given school. Such changes force teachers to either look for a new employer or up-skill so as to be able to teach another subject in order to keep their job (Steffy, Wolfe, 2001; Day, 2002, 2004; Chevalier, Dolton, 2004; Webster et al., 2005; Piróg, Jania, 2013; Maier, Budke, 2017; Mzuza, et.al., 2019). Education reforms are stressful for teachers and they discourage younger teachers in particular from remaining in the profession as well as force some to leave teaching before the retirement age (Torman, Woods, 2009; Viano et al., 2019).

The second group of factors that shape the labour market for teachers are demographic trends, which are one of the most important factors that determine staff policy and provide a stimulus for the evolution of the education labour market (Ashenfelter et al., 2010; Crehan, 2016). Changes in the rate of natural increase in a given country or region determine the number of students subject to compulsory education (Robertson, 1997; Santiago, 2004; Barbieri, 2007).

The third group refers to the overall situation on the labour market which either stimulates interest in pursuing teaching as a profession among active and prospective teachers or considerably reduces this tendency (Dolton et al., 2003; Donitsa-Schmidt, Zuzovsky, 2014; Molin, et. al., 2015; Tehseen, Ul Hadi, 2015). The general situation on the labour market, particularly unemployment risks, shapes the situation of every profession, including teachers. Both professionally active teachers and prospective ones react very sensitively to fluctuations in the unemployment rate (Neugebauer, 2015; Nagler et al., 2015). The higher the unemployment rate, the more interested jobseekers are to choose safe public sector jobs and stability of employment over higher remuneration (Nagler et al., 2015). Also, the academic quality of new teachers is lower when job market alternatives are better (Bacolod, 2007).

Remuneration, as one of the variables, is an important factor affecting job satisfaction and contributes to the prestige and attractiveness of an occupation. Research to date has shown that the decision to enter teaching is dependent on the relative wage on offer for teaching jobs and non-teaching alternatives (Dolton et al., 2003). Increased earning opportunities outside of teaching have detracted high-ability individuals—especially women—from teaching (Neugebauer, 2015).

Another significant factor is the occupational prestige as well as the social and media image projected by a given profession. Research shows that particularly among

professions with a mission or social impact, the one factor that sustains job enthusiasm and satisfaction is the prestige and social recognition that members of a certain professional group enjoy (Kelchtermans, 2005).

In this study we analyse the situation of geography teachers on the Polish labour market taking into account all of the above factors (Figure 1).

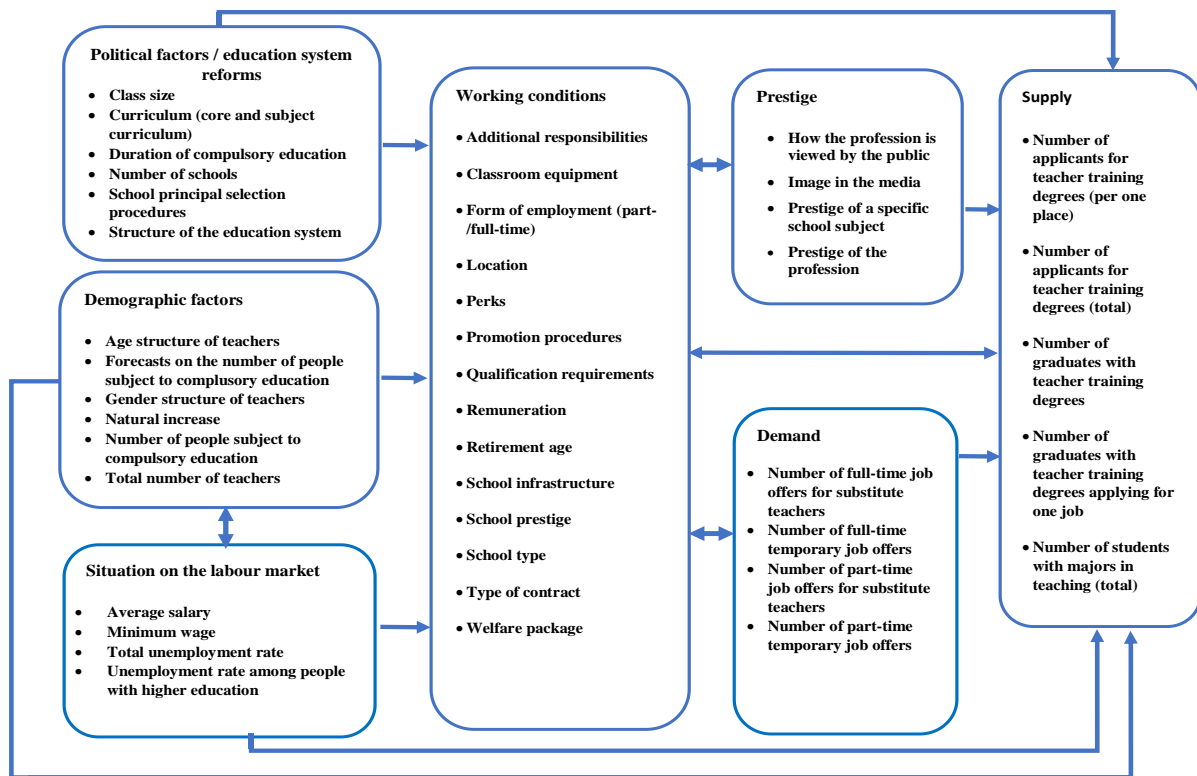


Figure 1. Factors shaping supply-demand relations on the education labour market

3. OBJECTIVE AND METHODS

The objective of the paper is to conduct an in-depth examination of the situation of geography teachers on the Polish labour market and reflect on the consequences of this status quo for geography as a school subject and as an academic discipline.

To achieve this goal, we formulated the following research questions which stem directly from the theoretical framework:

- Who are geography teachers? What are their employment conditions and career prospects?
- How do geography teachers in Poland view themselves and how are they viewed by the public?
- What is the real demand for geography teachers and what career development options do they have in the teaching profession?

The paper is based on an analysis of both secondary and primary data. The first group of secondary data were official reports and statistics related to education issued by Statistics Poland: documents and resolutions on professional promotion and remuneration, thematic reports of the European Commission/EACEA/Eurydice (Key

Data, 2013), the report of the Educational Research Institute (IBE) on the social and professional standing of teachers in Poland (Smak, Walczak, 2015) and the Teachers' Charter which regulates the working time and conditions in the public education sector in Poland (*Ustawa z dnia 26 stycznia 1982 r. Karta Nauczyciela* [Dz. U. z 2018 r. poz. 967; 2245 and 2019 r. poz. 730; 1287]). The second group of data, obtained from the Polish Ministry of Education, included the number of geography teachers, their demographic profile, gender distribution, and working time over the last 20 years.

Primary data were collected during our own research and revolved around information on the real demand for geography teachers because—as highlighted in the introduction—there are no official statistics regarding the demand for certain professionals on the labour market. In this situation, the only and at the same time the most credible method of finding out how many more geography teachers are needed in education are online job advertisements. Research suggests that job postings published online account for at least 70% of all vacancies where higher education is required (Carnevale et al., 2014). Moreover, in Poland, all public schools (they provide 86.6% of all teaching positions and the remaining percentage belongs to private schools; *Oświata...*, 2018) are obliged to publish job vacancies on official websites of the local boards of education and municipalities. Hence these advertisements can be regarded as an exhaustive source of information about the demand for geography teachers in schools.

Online job advertisements for teachers published on the above-mentioned websites are easily accessible, free of charge, and daily updated databases with information on the employers' demand for staff in education. In the case of advertisements for teachers, such job postings need to include information on the place of work, position, working time (part-time/full-time) and the type of contract. In Poland, job advertisements for teachers do not include information on remuneration due to the fact that salaries in the public sector are regulated by law. Remuneration within a certain pay grade is the same nationwide.

Data collection procedure involved the following steps:

- preparing a list of websites of boards of education and municipalities where schools are obligated to publish their vacancies;
- testing the data search, selection, extraction and import into the database;
- regular website browsing, data download and input into the database.

The data used to reach the objective of the paper were collected within a period of three months from June 1 until August 31, 2019, on the second working day of each week.

The choice of this particular period for the study was deliberate. Firstly, enrolment to all schools takes place within this time frame. This is when decisions are made about the number of classes and students in each class, classes with specialised profiles (e.g. tourism or geography profile). The outcome of the enrolment procedure generates possible demand for geography teachers. Secondly, this is usually the time when teachers retire and positions become available. Thirdly, within this time period professionally active teachers apply to the principal for extended medical leave, which means new teachers need to be hired as substitutes. Medical leave is granted to teachers by the school principal on the basis of a certificate from an occupational physician, who has an exclusive right to send teachers on medical leave. Medical leave is regulated in Poland by the Regulation of the Ministry of Health, adopted on January 19, 2018, on the health assessment of teachers for the purpose of granting medical

leave (Rozporządzenie, 2018). Nearly all teaching job vacancies are therefore announced within the period of the analysis. Job advertisements published in the remaining months of the year are occasional and, due to their nature (emergencies or maternity leave), nearly always concern short-term substitution contracts.

4. RESULTS

4.1 Who are geography teachers? What are their employment conditions and career prospects?

In accordance with Polish law, the right to exercise the profession of a teacher, both in primary and secondary schools, is granted to a person who has a Master's degree in the taught subject or a subject that is related to it. Exceptions are made for teachers of vocational subjects in basic vocational schools who may have the title of an engineer and teachers of foreign languages who must have at least a Bachelor's degree. Every teacher is obliged to have pedagogical training acquired either during higher education studies, in the form of postgraduate studies, or in the form of special qualification courses organized by schools of higher education or in-service teacher training centres (Świtła, 2012).

Between 2010 and 2018, the total number of teachers of general subjects slightly increased (8.5%) and amounted to 615,061 in 2018. The largest share belonged to teachers of PE, early school education, English and Polish. Geography teachers ranked twelfth. This hierarchy reflects the position of individual subjects in the curriculum. The largest number of teachers are employed for subjects with a high number of hours in the curricula (Table 1).

Table 1. Teachers of general subjects in the years 2010-2018*

	Subject	Number of teachers (30/09/2010 r.)	Number of teachers (30/09/2015 r.)	Number of teachers (30/09/2018 r.)
1	Physical education	54,042	68,548	61,170
2	Early school education	33,705	78,498	60,566
3	English language	43,873	48,475	50,954
4	Polish language	52,646	48,124	50,709
5	Mathematics	45,648	43,107	44,564
6	History	31,580	34,746	39,505
7	Religion	31,551	30,598	29,928
8	Informatics	31,490	17,787	27,817
9	Science	17,173	19,578	19,004
10	Biology	13,267	12,120	17,633
11	Civics	13,851	13,338	16,057
12	Geography	11,704	11,371	15,939
13	Art	17,515	18,516	15,843
14	German language	18,071	15,571	15,638
15	Education for family life	14,107	15,411	14,824

16	Technology	17,034	8,702	14,114
17	Chemistry	12,599	11,346	13,421
18	Physics	12,689	11,094	12,996
19	Music	13,946	13,605	12,487
20	Education for safety	884	8,083	10,132
21	Business studies	4,948	5,074	4,925
22	Ethics	935	3,979	3,763
23	Other foreign languages	5,361	4,030	3,558
24	French language	2,128	1,758	1,676
25	Spanish language	541	1,105	1,519
26	Other general subjects	65,477	71,234	56,322
Total		566,645	615,798	615,061

* in order of the number of teachers in 2018

Source: our own analysis based on the data obtained from the Ministry of Education

In Poland, similarly to other countries, teaching is regarded as a typically female job and belongs to the so-called "pink collar professions" (Gromkowska-Melosik, 2013; Carrol, Parasnis, Tani, 2018). In the school year 2014/2015 the share of female teachers amounted to 82.34% (Rachubka, 2015). With geography teachers this number was slightly lower and reached 77.7%. Now, this number increased to 80.8%. When we look at the age distribution, it is worth highlighting that the majority of teachers were over 46 years of age. In the last decade, the number of teachers over the age of 50 doubled and that of teachers below 30 dropped by half (Rachubka, 2015). The age of geography teachers increased more visibly from 42 years in 2010 to 47 years in 2018 (Table 2).

Table 2. Geography teachers in the years 2010–2018—general characteristics

Date/Year	Number of teachers			Average age	Number of teachers		Female teachers (%)	Number of FTE
	total	employed full-time	employed part-time		female	male		
30/09/2010	11,704	1,770	9,934	42.92	9,229	2,475	78.85	7,816.93
30/09/2015	11,371	1,106	10,265	45.71	8,945	2,426	78.67	6,739.46
30/09/2018	15,939	785	15,154	47.20	12,880	3,059	80.81	8,415.61

Source: our own analysis based on the data obtained from the Ministry of Education

When it comes to terms of employment, the largest group were teachers employed full-time for whom a weekly workload (teaching hours) equals or exceeds FTE (i.e. 18 hours per week). The second category are part-time teachers for whom their weekly workload is less than one FTE. These could include teachers with 1/5 or 1/4 FTE, but also those with 7/8 or 6/8 FTE. In our analysis, teachers who have full-time positions and are at the same time part-time teachers elsewhere were counted only once, as full-time employees. Part-time teachers employed in several schools were counted just once. In September 2009, there were 81.3% full-time teachers in Poland and 18.7% part-time teachers (Zarębska, 2010). After nine years in the group of general education teachers, this percentage changed significantly and amounted to 60% (full-time teachers) and

40% (part-time teachers) in 2018. The share of full-time geography teachers was lower than the average (Zarębska, 2010). In 2010, it amounted to 15%, and in 2018 to only 5% (Table 2). This means that almost every geographer (95%!) works part-time or works in more than one school, combining several jobs to make up one FTE.

Part-time work directly affects the possibilities of smooth and quick promotion for this group of geographers and consequently their salaries. In Poland, there are four categories of teachers: trainee teachers, contract teachers, appointed teachers, and certified teachers¹. The category results from professional experience, seniority, completed training courses and additional professional achievements (Ustawa z dnia 26 stycznia 1982 r. Karta Nauczyciela (Dz. U. z 2018 r. poz. 967 i 2245 oraz z 2019 r. poz. 730 i 1287). Basic pay in the entire public sector is the same all over Poland for teachers within a given pay grade.

Remuneration is linked with a pay grade and determined by the Ministry of Education in the relevant regulation regarding minimum basic salaries for teachers, general rules for bonus allocation, and pay schemes for working on non-business days. In the last decade teachers' salaries have risen by 21%. Within the same time frame, the minimum wage in Poland increased by nearly 40% and the average salary by over one third. In 2009 teachers' salaries were higher than the minimum wage by one third in the case of entry level trainee teachers and by more than half for teachers at the peak of their careers. Currently, this difference amounts to 13.2% for trainees and 36.7% for the most experienced teachers. The above-mentioned data justify the conclusion that the rise of teachers' pay was significantly lower than the rise of the minimum wage and average salary. Remuneration of trainee teachers is only slightly higher than the minimum wage (Table 3).

The observed changes in teachers' salaries for each pay grade and in relation to the analysed pay brackets occurred in the period when the situation on the labour market was consistently improving. In the analysed decade, the unemployment rate dropped from about 11% to 5.2% in July 2019 (GUS, 2019).

Demand for teachers is linked to the demographic situation, in particular to the current and a forecast number of pupils subject to compulsory education.

In Poland, the age structure of the population has been undergoing negative changes since the 1990s. A drop in the birth rate resulted in the dip in the number of children in kindergartens and schools. This data is also corroborated by the indicators describing natural increase. Since the mid-1990s, the rate of natural increase was close to zero and in the years 2002–2005, it reached negative values up to -0.04%. In this case, there is no straightforward replacement of generations, and the number of children and young people continues to decrease. This process is more prominent in cities, where the birth rate is lower than in the countryside. And as the number of people aged 3–24 is

¹ After university graduation, the teacher-to-be becomes a “trainee” for one or two years. Having completed their traineeship, together with an interview before a committee consisting of the trainee’s mentor, head of school, and a trade union representative, enhances the trainee’s status to the next level—the “contract teacher”. As a contract teacher, they work for at least three years. After passing an external examination, they can become an “appointed teacher”. Three good years have to be completed at this level, plus an interview with a committee consisting of the school head, three experts chosen by the Ministry of Education, and a trade union representative to become a certified teacher.

decreasing, there are fewer pupils in schools. UN forecasts for the coming years are not optimistic. It is estimated that the number of children and young people will continue to

Table 3. Teachers' remuneration, the average salary and the minimum wage in Poland in the years 2009–2019 (gross, PLN)

Type		Year					Change 2009–2019
		2009	2011	2013	2016	2019	
Pay grade	trainee teacher	1,906	2,182	2,265	2,265	2,417	+ 21.2%
	contract teacher	1,962	2,246	2,331	2,331	2,487	+ 21.1%
	appointed teacher	2,227	2,550	2,647	2,647	2,824	+ 21.2%
	certified teacher	2,616	2,995	3,109	3,109	3,317	+ 21.2%
Remuneration	minimum	1,276	1,386	1,600	1,850	2,100*	+ 39.3%
	average	3,102.96	3,399.98	3,650.06	4,047.21	4,271.51*	+ 36.0%

Note: (*) Year 2018.

Source: our own analysis based on the Regulations of the Ministry of Education and Sport, dated January 31, 2005, on minimum basic pay for teachers, general rules for bonus allocation and pay schemes for working on non-business days (Official Journal 2009 No. 52, item 422; Official Journal 2011 No. 161, item 967; Official Journal 2014, item 416; last amended in Official Journal 2019, item 1587).

decrease. From 1995 to 2015 the number of people aged 3–24 dropped by one third. According to demographic forecasts, the situation in Poland is not going to change quickly. The number of children and young people attending schools will continue to decrease until the year 2035. This gives rise to a problem with matching the number of teachers with the number of students at each level of education (see Table 4).

The situation of teachers on the labour market is largely shaped by reforms of the education system. For nearly 20 years, from 1999 to 2017, the education system in Poland comprised six years of primary school, three years of lower secondary school, and the following types of upper secondary schools: three years of general secondary school, four years of technical secondary school or two years of vocational school. Before the reform, geography as a separate subject was taught in lower secondary schools. Pupils had one lesson per week in year 1 and 2, and two lessons per week in the third year. In upper secondary schools, students who did not choose geography for their school leaving examination attended only one class per week, in the first year. Furthermore, students who chose geography as one of their final examination subjects had additionally four hours of geography per week in later years. In primary school

geography was not a separate subject, but content was taught during science classes which combined geography, biology, physics and chemistry.

Table 4. Population in Poland by age (in thousands)

Year	1995	2000	2005	2010	2015	2020	2025	2030	2035
Natural increase per 1000 people	1.2	0.3	-0.1	0.9	-0.7	-	-	-	-
Poland (in thousands)	38,284	38,254	38,157	38,530	38,437	37,830	37,438	36,796	35,993
Including age groups:									
3–24 years	11,740.9	12,615.6	9,325.	8,029.1	7,524.0	1,116	974	858	820
3–6 years	2,130.6	1,738.5	1,471.7	1,475.1	1,633.2	1,590	1,435	1,247	1,121
7–12 years	3,826.2	3,204.3	2,611.5	2,206.	2,294.5	2,438	2,379	2,151	1,875
13–15 years	1,999.4	1,862.8	1,589.4	1,269.1	1,097.3	1,117	1,226	1,185	1,063
16–18 years	1,932.1	2,044.9	1,707.9	1,447.7	1,177.8	1,049	1,187	1,221	1,141
19–24 years	1,852.6	3,765.1	1,944.5	1,631.2	1,321.2	2,320	2,135	2,367	2,417

Source: our own analysis based on: <https://stat.gov.pl/obszary tematyczne/ludnosc/ludnosc/struktura-ludnosc,16,1.html>, *Oświata i wychowanie w roku szkolnym 2010/2011 i 2017/2018*, *Rocznik Demograficzny 2011*.

*The data refer to people aged 19–21, and in the year 2015 to people aged 7–12 and 14–15

The reform of the education system, implemented on September 1, 2017, brought about fundamental changes to the structure and curricula of Polish schools. Primary school was extended from six to eight years and lower secondary schools were phased out. Geography was brought back to primary schools and is now taught as a separate subject from the fifth grade. Pupils have geography lessons once a week in grades 5, 6 and 8, and twice a week in the seventh grade. Since September 1, 2019, the reforms have also been carried out in secondary schools. In general, and technical secondary schools, the number of geography classes will increase both for the basic level (people who do not choose geography for their secondary school leaving examination) and the advanced level (for students who choose geography for their secondary school leaving examination). For the basic level, the number of geography classes increased from one per week to four (e.g. one lesson per week in the first year, two lessons in the second year, and again one lesson per week in years 3 and 4). A higher number of compulsory geography classes in secondary schools as well as the double cohort of pupils affected by the reform (two cohorts, graduating from primary schools and lower secondary schools at the same time) was the reason for the higher demand for geography teachers in 2019, which translated into a higher number of full- or part-time positions in secondary schools (Rozporządzenie MEN, 2017, 2018, 2019)

4.2 How do geography teachers in Poland view themselves and how are they viewed by the public?

The perception of a given profession, either by its members or by the public, is shaped by a variety of factors. The most important ones include self-presentation, the media image, economic status, and the role of education in social development (Kane, Mallon,

2006; Hargreaves, 2009; Smak, Walczak, 2017). The way a given profession is perceived is manifested through prestige, status, self-esteem and respect.

Prestige is a socially convertible value—members of certain groups perceive other groups as prestigious (Domański et al., 2010). Prestige is also described as regard, respect, esteem, appreciation, honour, social status or even fame (Sztompka, 2012). Prestige is shaped by who we are in various contexts and roles, by the position we hold, and results from perception and assessment (Domański et al., 2010).

Status determines where we situate teachers among other professions (due to tangible and intangible aspects). Status is understood as a public perception of the relative position of an occupation in a hierarchy of occupations (Hoyle, 2001 in Hargreaves, 2009).

In this paper, we examine three different dimensions of perception: occupational prestige, subject prestige and self-esteem.

4.2.1 Occupational prestige

Within a hierarchy of occupations, teachers in Poland have held a high (seventh) place for a long time. They earn recognition of 70% of the studied population, which places them ahead of doctors, for instance. Professions that came ahead of teachers were firemen, university professors, miners, workers, nurses, and engineers (Centrum, 2013). In-depth studies on the image of teachers among the public in Poland, which analysed terms of employment (holiday leave, workload, level of pay), job characteristics (stress level, difficulty, responsibility), and how teachers are viewed, unravel a more complex perception of this occupation. Half of the respondents think that teachers in Poland have excessive holiday leave. The same number of respondents are of the opinion that teachers do not work enough hours per week. On the other hand, one third of the respondents do not consider teachers' holiday leave excessive and one fourth do not agree that their workload is insufficient. Opinions are divided also regarding the level of teachers' pay, but most people say they are not too low. The majority (i.e. 86% of Polish society) view teachers' work as stressful, difficult and requiring a lot of responsibility. Two thirds of the respondents believe that teachers are well qualified and willing to further improve their skills. Even though the respondents themselves view this occupation as a prestigious one, they have mixed opinions about whether teachers are generally respected (more than one third think that they are respected and another third is of the opposite opinion).

In order to check whether the teaching profession enjoys occupational prestige, we used projection questions where the respondents had to answer whether they wanted their kids to become teachers. Over half of the respondents (54%) did not want any of their children to become teachers, whereas one third approved of such a scenario (Centrum, 2012).

4.2.2 Subject prestige

The prestige of geography as a subject has undergone major changes. In the 1990s school geography was placed very high within the hierarchy of subjects (Table 5). Back then, it used to be viewed as one of the most important subjects with a score of 5.7 out of 6. Pupils valued the usefulness of geography in their everyday life and viewed it as an interesting subject to study. A decade later, geography ended up in lowly tenth

place (out of fourteen subjects) among students from villages and small towns, and in thirteenth place among pupils from cities. Geography-related knowledge was still viewed as useful in everyday life, but students' attitude towards this subject became more neutral or negative. Moreover, the respondents did not find school geography lessons useful for their professional careers. Studies conducted in 2008 and 2009 demonstrated that even though the status of the subject improved, it never recovered to reach the high standing it had enjoyed ten years before. In the first of the above studies, geography ranked fourth and in the second seventh out of eleven subjects included in the surveys. In both research projects geography came second among the science subjects most "liked" by pupils, with biology being number one. A vast majority of respondents believed that geography knowledge is useful in life as it, for instance, improves orientation skills, helps with finding geographic directions and reading maps, and is particularly useful while travelling. The assessment of how useful geography was in life was correlated with the respondents' age. One fifth of the students believed that geography was a difficult subject, but at the same time nearly 40% stated they enjoyed learning this subject (Mularczyk, 1993; Mularczyk, Kowalska, 2003; Hibszer, 2011; Piróg, 2018b).

Table 5. Evolution of students' attitudes towards school geography in the years 1990–2009

1990–91	2001–2002	2008–2009
one of the key subjects: 5.7 points on a six-point scale	one of the less important subjects: ranked 10th (out of 14 subjects) in villages and towns and 13th in cities	ranked fourth and seventh among the most important school subjects in lower secondary schools (out of 11 subjects) two years in a row
useful in everyday life: 15.4 points on an 18-point scale	somewhat useful: 13.8 on an 18-point scale	ranked second most "liked" science subject, after biology and ahead of mathematics
interesting (70%)	32.8% viewed geography positively; 42.6% were indifferent; 24.6% had a negative attitude	57–66% believed that geography-related knowledge and skills are useful in life
learning geography is fun (60%)	pupils did not see geography as offering an interesting career, 7% saw geography as useful in their professional life	39% said they enjoy learning geography; 22% thought that geography was a difficult subject

Source: Mularczyk (1993); Mularczyk, Kowalska (2003); Hibszer (2011)

Somewhere between occupational prestige and subject prestige there is also the media or newspapers' image of the profession. In Poland there have been no academic studies on the media image of specific occupations. Our own analysis of TV commercials aired in the last decade revealed that there was one commercial (a chocolate advertisement targeted primarily at children), in which a geography teacher had the leading role. The commercial shows a moment during a geography lesson on the

geological layers of the Earth. The class is conducted by an elderly female teacher. The actress plays the role of a physically unattractive, irritable, and unpleasant person who shouts and slams her hand on the desk announcing a test on rock types for the next day. Throughout the commercial, the teacher sits with a grim expression, frowning at the students (Picture 1). The image of a geography teacher presented in the commercial is unfair, unrepresentative of the profession, and not conducive to building a favourable perception of the occupation among the public.



Figure 2. Image of a geography teacher in a TV commercial for a popular confectionery brand (Wedel, 2017)

4.2.3 Self-esteem

Teachers in Poland evaluate themselves as good specialists in their practiced profession. More than 90% of teachers hold Master's degrees, they have participated in numerous courses, postgraduate studies, training sessions, etc. Also their professional experience contributes toward the high assessment of their own teaching competences (Osuch, 2011). At the same time, most teachers, in particular those that are middle-aged or elderly, are very critical of their own chances on the labour market in the fields not related to education and think poorly about how their competences could be useful in a different job, other than teaching. Most of them anticipate that if they lost their job or wanted to change it, they would find it difficult to get a new one. They hold this view even in the light of a very low unemployment rate in Poland. In their opinion, the labour market situation is particularly difficult in rural areas and small towns, where it is difficult to find any job, especially for people with higher education. The majority of teachers do not think it is possible for them to find employment in a different occupation and they are of the opinion that employers from outside of the education sector do not see teachers' competences as useful for different types of work. At the same time, local government representatives and other employers from the public sector appreciate teachers' skills—they would not exclude them from the recruitment process (Smak, Walczak, 2015; 2017).

4.3 What is the real demand for geography teachers and what career development options do they have in the teaching profession?

Within the analysed time frame, 1,084 job postings for geography teachers appeared. As advertisements were monitored on a weekly basis, it was possible to see considerable variety in the distribution of offers over time (Figure 3). A large number of advertisements (over 100) were posted in the second week after the end of the school year (i.e. at the beginning of July), when a total of 115 positions were offered. The most popular period was the second last week of the summer holidays (19–25 August), when 123 job postings were published. The fewest job vacancies were announced at the beginning of the studied time frame (until June 23, 2019), when the previous school year was still not over.

When we compare the data on a monthly basis, there are only minor differences between the number of advertisements published in July (388) and August (383).

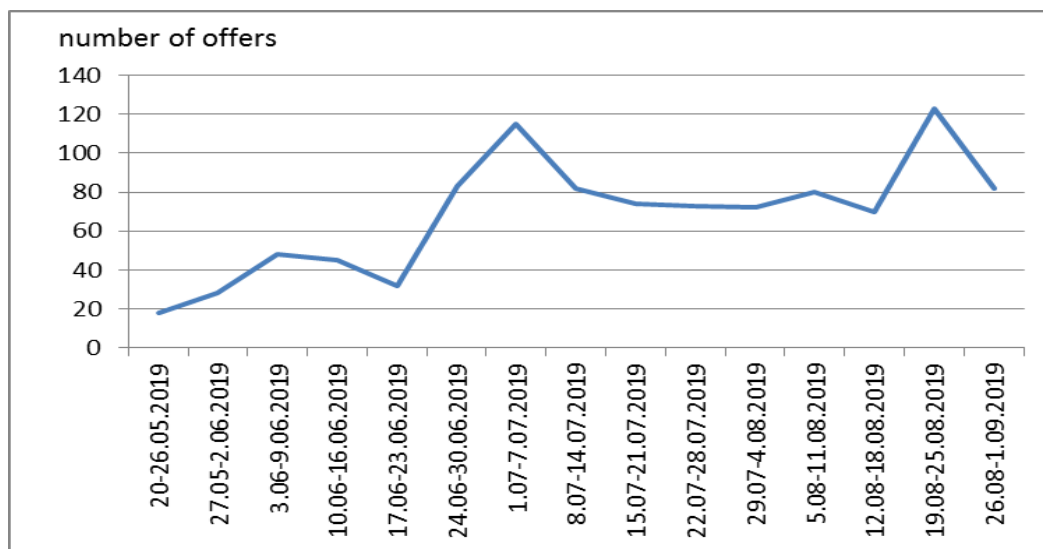


Figure 3. The number of job advertisements published within the analysed time frame

From the point of view of workload, the greatest majority of jobs on offer were part-time positions, which accounted for nearly 84% of all collected advertisements. The largest percentage (22%) of job postings offered positions for more than 0.5 FTE. One in five advertisements offered a weekly workload of five hours, which accounts for less than one third of one FTE. Part-time positions offering half the workload of a full-time position (9 hours per week) accounted for 7% of all job postings. In only about one in eight advertisements did principals look for full-time teachers (18 hours per week). Approximately 4% of job postings included offers that exceeded a full-time weekly workload, i.e. more than 18 hours (Figure 4).

As far as the school type is concerned, the majority of vacancies (64%) were available in primary schools. Among these job postings, most offered a part-time, five hours per week position, which is a standard number of geography hours in primary school, with one class per week for each grade.

When it comes to the period of employment, most schools offered permanent employment contracts (85.8%). This applied to all vacancies both part- and full-time.

On the other hand, there were only 154 (14.2%) job offers for substitute teachers (usually for a period of one year). These vacancies were available mainly in primary schools (over 77% of the postings). The remaining substitution contracts were offered in upper secondary schools.

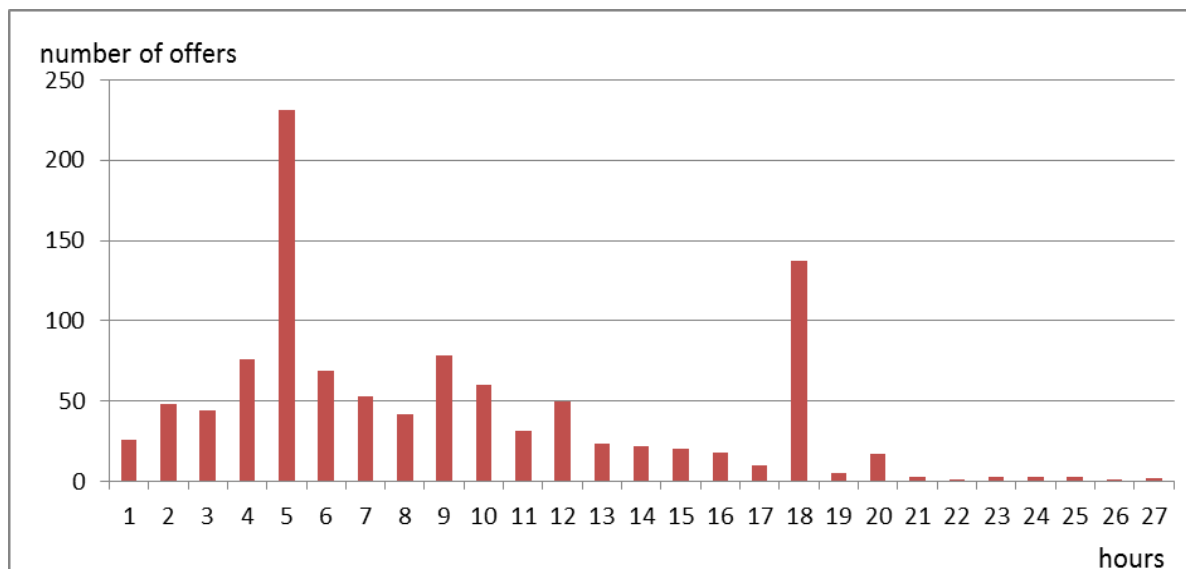


Figure 4. The number of job advertisements for a specific workload (part-time/full time)

From the point of view of location (Table 6), most jobs were offered in cities (nearly 40% of postings came from cities with over 100,000 inhabitants).

Table 6. Number of job advertisements in relation to location (number of inhabitants)

Locations in Poland by size	Number of locations	Number of locations with job offers	Vacancies	Substitutions	Total
Cities (over 100,000 inhabitants)	39	38	358	75	433
Towns (between 10,000 and 99,900 inhabitants)	364	132	225	18	243
Small towns (less than 10,000 inhabitants)	537	58	67	6	73
Villages	43,082	275	280	55	335
Total	44,022	503	930	154	1,084

Source: analysis based on <http://www.polskawliczbach.pl/>

As many as 30% of job advertisements came from as few as ten of the most popular locations (Table 7). The largest share of vacancies (more than 10%) were available in Warsaw, the capital city. Other popular locations offering jobs for geographers were Krakow, Łódź and Wrocław, with over 30 job postings for geography teachers each, followed by Szczecin, Gdańsk and Olsztyn. Concerning the situation in towns and villages, we observed that after cities, most of the jobs were available in the countryside (30% of all advertisements). Average-sized towns came third with a share of 22% of all postings and the lowest number of offers (0.7%) came from small towns (up to 10,000 inhabitants).

Interestingly, job offers in villages and small towns, given the overall high number of such localities, are relatively rare. Job opportunities for geographers in village schools are particularly limited because they are available in only 0.5% of all villages. Most likely, this is due to an observed negative trend prevalent in village schools where geography is taught by teachers of other subjects who acquired the right to teach geography during "fast-track" postgraduate courses. These are usually teachers who had to add geography on top of their core subjects in order to reach their minimum workload (18 hours). Both this hypothesis and its consequences require further in-depth studies.

Table 7. Cities with the most job offers for geography teachers

No.	Town	Number of job offers
1	Warsaw	112
2	Kraków	34
3	Łódź	34
4	Wrocław	34
5	Szczecin	30
6	Gdańsk	16
7	Olsztyn	15
8	Kielce	13
9	Poznań	13
10	Radom	11

5. DISCUSSION

The conducted study proves that in order to show the full picture of the situation of Polish geographers on the labour market, it is necessary to examine both the visible factors and those which come to light after obtaining a more detailed insight and are somehow "hidden". Only such in-depth analysis provides a comprehensive evaluation of the situation and determines the change in trends in the analysed areas. It also highlights a series of issues and challenges that either already exist or will occur in the near future, both in Poland and in any other country that does not pay enough attention to the situation of teachers.

First, the low remuneration of teachers may result not only in limited interest of recent geography graduates in applying for teaching positions but also in teachers leaving the profession. Research on education and professional motivations of university students demonstrates that young people are becoming increasingly pragmatic. Those who study geography expect their university degrees to help them find well-paid jobs. The job of a teacher clearly does not belong to this category (Piróg, 2018a). Low salaries have already made many teachers leave the profession in many countries since the 1990s. This trend is particularly evident among young people under 35 years of age. In addition, recent university graduates with teaching majors do not apply for jobs in schools (Troman, Woods, 2009; Donitsa-Schmidt, Zuzovsky, 2016; Lindquist, Nordänger, 2016). The likelihood that both these trends will accelerate in Poland is currently high due to meagre pay, low unemployment rate, and often stressful staff transfers after the education reform. The above factors may force

principals to hire underqualified and uncertified teachers. These findings redirect the problem of a quantitative teacher shortage toward the problem of a hidden shortage that relates to the quality of the teaching force (Donitsa-Schmidt, Zuzovsky, 2014).

This may lead to a situation where retiring teachers will not be replaced by young specialists, or to a considerable drop in the quality of teaching when geography classes are held by people trained via fast-track postgraduate courses. The outcomes of this situation can be a decrease in the quality of school geography teaching, limited geography knowledge and skills among university candidates wanting to pursue a degree in geography, and an overall lower number of young people interested in studying geography in higher education institutions.

The observed increase of part-time positions offered to geography teachers forces them to pursue a patchwork career and start job hopping. A patchwork career is when teachers often change the types of schools, contracts, and specialties. For instance, teachers work in two or more different schools at the same time and have different types of contract signed in each school. They need to share their time and involvement among several schools which impedes carrying out their responsibilities. Job hopping affects teachers who need to change their job often not because they want to, but because they are not offered a permanent employment contract (Coldwell 2016; Piróg, 2018b). Such teachers usually take on temporary and substitution contracts to fill in for permanent teachers who are on extended leave (e.g. maternity, parental, medical, etc.). Once the permanent teacher comes back, the substitute teacher tries to "hop" to a different school to stand in for another teacher who is on leave.

The fact that patchwork careers and job hopping are prevalent among geography teachers produces mainly negative outcomes. Teachers with jobs in several schools need to put a lot of effort into the logistics of having to work in a few different locations. Consequently, they have less time for self-study or institutionalised ongoing training. This may result in lower work efficiency (Steffy, Wolfe, 2001; Day, 2002). Having to work in more than one school is called a "moonlighting" trend. It contributes to problems of poor service and is seen as part of a questionable tendency to commercialise teaching (Urwick, Kisa, 2014). In addition, studies have shown that it negatively affects teachers' job satisfaction and their relationships with pupils, parents, and colleagues (Roce, Malen, 2003). The necessity to pursue a patchwork career due to the saturation of the education job market results in a model called a "multi-speed career" (Wołk, 2016). It describes teachers who in order to collect enough hours for a full-time position work in two or more schools and as a result either cannot participate in training for a higher post due to formal restrictions, or simply do not have time to fulfil the criteria for promotion. Consequently, they experience a slowdown in their career development that is outside their control.

Some suggestions have been put forward in the literature on how to improve this unfavourable situation. They include offering economic incentives, easing the way for the profession, improving hiring strategies, providing opportunities for professional development, and improving working conditions (Donitsa-Schmidt, Zuzovsky, 2014). Our analysis has highlighted that to date none of the above recommended solutions have been applied in Poland.

6. CONCLUSIONS

The conducted analysis indicated that:

1. There has been a general increase in the age of geography teachers, the number of female teachers of this subject, and the share of people working part-time. On the other hand, the overall number of geography teachers has decreased in the last twenty years.
2. We have observed the increasing impoverishment of the teaching profession. The average salary of teachers within each pay grade increased by approximately 20%, but the rise was much lower than the increase of the minimum wage and the national average salary over that same period.
3. Since the mid-1990s Poland has experienced some unfavourable demographic trends, such as the rate of natural increase close to zero, and a decrease in the country's population and in the number of schoolchildren. As a result, the number of teachers needs to match the population of pupils at every stage of education.
4. People continue to perceive teachers as a respected professional group, yet this view does not translate into a good image in the media or parents' aspirations for their own children to become teachers.
5. According to teachers' self-assessment, the value and attractiveness of their competences outside of the education labour market are low.
6. Pupils hold a positive, yet changeable attitude towards school geography.
7. Education reform (closing down lower secondary schools and extending primary and upper secondary schools) has triggered some staff movement. There has been an increased demand for geography teachers since geography was brought back as a separate subject to the extended eight-year primary school and because of a considerable increase in the number of compulsory geography lessons (from one to four hours) in secondary schools (general and technical) as well as vocational schools.
8. There is a demand for geography teachers, which is reflected in over one thousand job offers between June and August. Most offers are for part-time positions or substitution contracts.
9. An analysis of the geographic distribution of job postings for geography teachers indicates that it is very difficult to find a job in villages and small towns, and relatively easy in cities.

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