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GEOGRAPHIC EDUCATION IN CREATING VOCATIONAL SKILLS OF THE YOUTH IN SECONDARY SCHOOLS

Abstract: Polish educational system is evolving together with the changes occurring in the world. However, in many cases, the pace of this evolution does not guarantee full equipping the graduate with the knowledge needed on the future job market. Certainly there are formed the basic skills which will be used by the youth in their future job. The aim of the article is the assessment of the place of geographic education (acquired knowledge and moulded skills) in creating vocational skills of the youth. The results of the research among the pupils of the last year of secondary school are presented in the article.

Key words: geography, vocational skills, standards of studying education, usefulness of knowledge

INTRODUCTION

The issue of usefulness of geographic knowledge in the process of development of human consciousness is not a new problem and for a geography teacher the function of geographic knowledge in the whole education of the society is obvious (cf. Liszewski 1999). There comes a question, is it noticeable for others?

Among the educational aims of the geography on a secondary school level, except directly connected with acquiring knowledge and geographic skills, there are those which are of general nature: 'knowing, understanding and interpreting causative-consecutive and functional relations in different spatial and time scales', 'belief in the need of participation in the development of their region and Poland, as well as taking actions on preservation of environmental and cultural heritage' or at last: 'understanding of complexity of the world, interdependence

of its particular elements and readiness to participate in its transformation according to the principle of sustainable development' (Program ... 2007).

From the point of view of the educational values which are provided by geography, 'playing crucial role especially in understanding many occurrences and processes of contemporary world and forming national consciousness' (Groenwald et al. 2008), it should be an important factor on all levels of education, as well as facilitate forming vocational skills in many areas.

MATERIAL AND METHODS

The purpose of analysis carried out by the author of the article is a trial to assess the consciousness of youth in the area of the usefulness of the knowledge and geographic skills in their future job.

It is based on statistical survey carried out among pupils of the last year of their education in secondary school in the city of Slupsk. Their character has been primarily qualitative and exploratory-cognitive. The research has been conducted among 500 people – including 376 pupils of secondary school and 124 pupils of technical secondary school. Among respondents, 198 were the pupils of classes with extended level of geography (sporting-touristic class, geographic-linguistic, biological-geographic, accommodation technical secondary school). The remaining group learned geography at a standard level (humanistic class, historical-legal, biological-chemical, mathematical-physical, economic technical secondary school). The research tool was a questionnaire, including 14 questions, in majority of open character. The research has been carried out in September 2010 during pedagogical practice for students of the 4th year of geography in Pomeranian Academy in Slupsk.

Conducted analysis is limited to professions requiring higher education because analyzed group in almost 90% declared taking up further education on higher studies and they expect their future job would be connected with their education.

With the purpose of being objective on the demand for knowledge and geographic skills in various professions, the introduction includes detailed review of data contained in the education standards on all currently confirmed faculties (Science ...2007).

GEOGRAPHIC CONTENT IN THE STUDY PROGRAMMES

The analysis of obligatory education standards in higher studies concentrates on 'geographic content' (knowledge and skills) which, at least at the basic level, the pupils graduating from secondary school could encounter.

Amid currently confirmed 119 faculties (exclusive of 'unique faculties') in 34 of them the education content, which should be considered with reference to geographic knowledge acquired in secondary school, has been emphasized. There is an obvious connection to affined fields, just as: tourism and recreation, oceanography, environmentalism, geology, land management, geodesy and cartography. The education standards of these faculties cover wide range of topics and its relation with geography is quite visible and widely accepted. The education in this area takes place often in the same geography units, even composing specific specializations in the faculty of geography.

Remaining ('non-geographic') highlighted faculties can be divided into those which show connection with widely understood social-economic geography and those linked with physical geography and environmentalism.

The first group consists of education in demography and demographic relations, which found its place in education standards on following faculties: administration, political science, social policy, emergency medical services, sociology, international relations and public health. Few topics are considered repeating: demographic structures, the elements of natural movement, migration, reproduction of population, demographic forecasting, changes of demographic structures in Poland, Europe and in the world.

Another important issue performed on 'non-geographic' studies is a problem of contemporary social-economic and political changes both in Poland and globally. This kind of content is considered a standard in many faculties, especially regarding: European studies, international relations and economy.

The graduate of the European studies 'should understand and analyze social and political processes in the world, regional, national and local scale, as well as economic and legal principles grounding the organization and functioning of contemporary society' (Science ... 2007). These assumptions are about to be performed considering economic integration in Europe, localization, meaning and the role of Poland in Europe, also regarding societies and culture of Europe. In the education standards for the faculty of international relations appears a wide range of content in the matter of political and economic geography, international organizations, European integration or globalization and regionalization. One of the assumptions found in the graduate of economy profile is 'unconstrained movement in the European social and economic space' which should be achieved i.a. through realization of education in international economic relations and regional economy.

Among remaining faculties, which include issues of social and economic geography, finance and accounting should be highlighted. The graduate of this faculty should have 'the skill of analyze of basic economic occurrences', 'understand the reasons and results of economic occurrences at macro- and microeconomic level in the conditions of open market'. However, the standard of the

faculty of national security includes the topics connected with international economic relations like: organization and functioning of world economic system, international economic turnover, international market. In this faculty comes also (at the standard level) education in geography (not only social and economic) aiming at facilitating the following skills and competences: understanding the essence and characteristics of geographic depiction of reality, understanding geography as a science and practical knowledge about the human environment, interpretation of physical, economic and political maps. Another obligatory subject is education in geography of security, where the following content is underlined: the impact of natural factors on the activity of human and organizations, geographic conditioning of the security of Poland, systems of geospatial information.

Taking into account the faculty of journalism and social communication, the economic matters are covered by the subject of economic policy in Poland after 1989 and, regarding international relations, the processes occurring in contemporary international economic life, globalization, economic cooperation. Nevertheless, the graduate of administration should get the skill of 'analyzing the basic events in Poland and in the world', as a matter of education in sociology.

The graduate of political science 'should have general knowledge needed to understand the occurrences and processes in global, regional, national and local politics and also enabling analyze of relations between the functioning of political institutions, societies and human beings'. This would be realized by i.a. education in European integration and abovementioned demography. Also in the program of sociology, except of demographic processes, appear topics concerning the dynamics of changes in contemporary polish society, as e.g.: relations between politics, economy and society, polish reforms after 1989, the characteristics of economy regarding the factors of economic growth and privatization process.

The standards of the faculty of ethnology include topics relating to the ethnology of the world, Europe and Poland and in recommended frames of these issues the ethnical, cultural, linguistic, religion and racial variety of continents and macro-regions, geopolitical regions of Europe, migration and geographic regions of Poland can be found. On the other hand, the graduate of philology 'should have interdisciplinary competences allowing using the knowledge about the linguistic and acquaintance with it in various domains of the science and social life'. The graduate of this faculty can be employed in tourism, for instance.

The content concerning the functioning of Earth natural system are very important part of geography program at secondary school level. The elements of this matter occur also in the education standards on higher level. However, the most of them appear in the standards for the faculty of environmental engineering, mostly education in hydrology and Earth science, pedology and land rehabilitation, air protection and environmentalism.

The graduate of the faculty of landscape architecture 'ought to have the knowledge in natural sciences' gained through realization of the education content in physical geography (where i.a. those issues appear: the types of natural landscape in Poland, the minerals and rocks, surface water and groundwater, hydrological occurrences, climate factors, the elements of climate, the climate of Poland, vegetable landscape of Poland, topographic maps, thematic maps) and pedology.

The graduate of astronomy 'has knowledge (...) based on solid fundaments of mathematic and natural sciences' and the education in astronomical observations covers the issues of sky orientation, the Earth's orbit, time and calendar. Education in astronomy occurs as well in studying physics, but elements which could be considered as astronomical grounds of geography are rather limited. Education in geology appears in the faculty of construction, also in mining and geology. On the other hand, education in meteorology is recognized in the faculty of navigation.

Education in environmentalism includes among other things: methods of protecting atmosphere from pollution, protection of surface water, soil contamination, protection of lithosphere, protection from the noise, renewable and alternative sources of energy; it appears in standards of education for the faculties of energetic, mining and geology, public health, also occupational safety and health.

In the standards of education for the faculty of architecture and urbanism in the effects of education concerning the basics of urban design 'preparation of the Local Plan ... regarding technical, social, natural, cultural and legal requirements' has been taken into account. The graduate of biology should have the knowledge and skills 'in the area of general issues of biology based on mathematic and natural sciences', whereas the graduate of social work 'ought to have profound knowledge of the nature and psychology, allowing to understand the system of human – environment'.

It is worth adding, that in many faculties appear different sorts of specializations, which often gain from and, as it is thought, also compete with other disciplines, including geography. A good example could be the specialization of 'ecotourism' in the faculty of biology.

PUPILS' OPINION ON THE USEFULNESS OF GEOGRAPHIC KNOWLEDGE

While considering the role of geographic content in the programs of particular faculties, there came out a question on how pupils reflect on the usefulness of knowledge and geographic skills in their future job.

The pupils polled in majority had taken a decision on their further vocational paths and, as it was mentioned in the introduction, 85,6% of them is planning to begin studying, just a little percentage of them abroad. 3,6% of them would take up education in a vocational college, 3,2% considers taking up a job right after secondary school and 7,6% hadn't decided yet, although most of them had pointed out professions which they want to work in. Among jobs mentioned the most popular are: philologist (especially English philologist), the worker in tourism and accommodation, jobs connected with finance and management, law and medicine (Table 1). The high position of tourism in the survey is a result of the specificity of the area of research, where the tourist function of the region, which the Pomeranian Academy is located in, is noticeably indicated. The other reason is the fact that the vital percentage of respondents was the youth of accommodation technical secondary school, who the most often indicated that their education would end at this level.

Table 1. The most popular jobs (specialties) for the youth

Job / speciality	Number of indications n=500
philologist	36
accommodation/tourism	30
finance, economy, management	26
doctor, dentist	26
lawyer	24
engineer	24
teacher (except geography)	22
architect	22
electronics engineer, electrician	22
gastronomy	20
journalist	20
geographer (including geography teacher)	18
educationalist, rehabilitation	16
psychologist	16
policeman, soldier	14
geodesist	8
cosmetologist	8
international relations	6

Source: Self-study based on survey carried out

In the face of dynamically changing conditions of functioning on both polish and global job market, interdisciplinary nature of domains and new character of the job there appears a necessity of gaining general essential skills. We need to look at the knowledge and perspectives formed by schools from a wider perspective, not only from the angle of 'useful subjects' whose final grades are required in enrolment or directly connected with chosen study discipline.

The youth polled assessed the usefulness of knowledge and geographic skills in their future job rather of poor quality. About 45,6% indicated high or medium usefulness and 54,4% low or none (fig. 1).

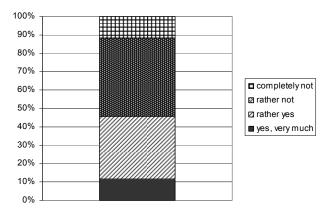


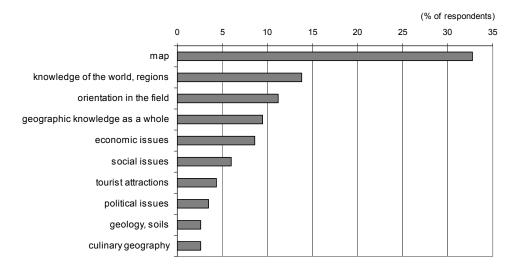
Fig. 1. The usefulness of knowledge and geographic skills in future job in the opinion of respondents; source: self-study based on survey carried out

This usefulness was mostly noticed by future workers in tourism – 22 (from 30 in general), 4 geodesists, 8 geographers, climatologists, architects, engineers, an air traffic controller, sailors and even farmers. The usefulness to a some extent is observed by philologists (14 from 36), remaining geodesists and workers in tourist industry, teachers of 'non-geographic' subjects, small group of journalists. Unfortunately, many philologists (22 from 36) didn't note any usefulness. In this group are also the majority of journalists, lawyers, economists and administrative workers, teachers in early-school education and military men.

Contrary to the proportion between content of physical geography and social-economic, included in program basis in secondary school, as well as the advantage of social-economic content in the education standard on higher studies, the youth primarily mentioned the former as useful, practical (fig. 2.). The most often pointed out was the skill of using a map (32,7%), the next was general knowledge of the world, regions and countries (13,8%) and orientation in the field (11,2%). Approximately 9,9% of respondents who had seen the usefulness of geographic knowledge confirmed that everything they had been

taught on geography lessons would be useful in their future job (they were in majority the pupils who want to work in tourism and as geographers). 8,6% applied to knowledge of geographic issues as useful in the future job. Also social issues (including demographic), political, tourist, knowledge of geology and soils were mentioned. There appeared few times the term of culinary geography.

Quite small, unfortunately, group of respondents (about 5%) indicated that formal skills acquired on geography lessons are essential and useful. These are: the skill of analyzing graphs, tables, doing calculations, the skill of logical thinking and reasoning and forming spatial imagination.



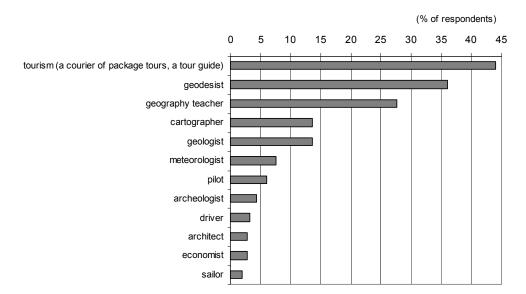
^{*} possible few indications

Fig. 2. Geographic knowledge and skills the most useful in the future job in the opinion of respondents; source: self-study based on survey carried out

The pupils were also asked about their opinion in which jobs in general the geographic skills and knowledge can be perceived as useful. As a result, linking geographic knowledge with the knowledge of environment, and most of all, the skill of using a map, have been emphasized. Although it is true that the most commonly chosen were jobs from tourist sector (44% of respondents), but among them the prevailing was a tour guide and a courier on package tours (fig. 3.). Almost the same number of people indicated geodesist as a person who the geographic knowledge would be useful in for in their work (36%). If indications concerning cartographer (13,6) are added, it will be obvious that among practical skills the prevailing is the interpretation of a map. The next place

belongs to the job of geography teacher (which is understandable) -27,6% of respondents and geologist 13,6%. Furthermore, a meteorologist, a pilot, a flight attendant, an archeologist and even a driver were indicated. Approximately 15,6% of those polled haven't depicted a job which geographic knowledge could be useful for (I don't know, no answer).

Another interesting thing is a problem how in the context of the assessment of geographic knowledge the decision of youth regarding the choice of examination subjects on the school-leaving examination is formed. All respondents which earlier declared that geography would be useful in their future job will take the leaving-school examination on this subjects at standard or extended level. However, 31,8% of those who consider this knowledge as quite useful are not planning to take examination on this subject. What is worth highlighting is a fact that 11,2% of those who think that geographic knowledge and skills are not useful for them will anyway take the examination on geography, and in prevailing majority at extended level. Also among people who noticeably denied that geography could be useful in their future job, 13,3% will take an examination on geography. So there comes a question if the youth is actually aware of the usefulness of knowledge acquired. It is naturally complex problem and requiring separate thorough studies.



^{*} possible few indications

Fig. 3. The usefulness of the geographic knowledge and skills in jobs in the opinion of respondents;

source: self-study based on survey carried out

SUMMARY

Geography as a subject in the school is found quite pleasant and popular as a subject on school-leaving examination. The knowledge and skills, which it takes, are not entirely noticed, not only among pupils, but generally in society. It is a pity that content connected with social, economic and political problems in Poland and globally are not appreciated. This content is present in education program in geography and also appears later in education standards on studies. It also seems to be fundamental not only from the point of view of a geographer but everyone.

An important problem seems to be showing opportunities of geography in solving some actual and essential issues not only academic, but also practical (Wojtanowicz 2006). We shall inform, underline more clearly the aims of geographic education in order to change today position of geography in education system and debunk a myth of a geographer, whose basic competence is a skill of using a map and help in doing crosswords.

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