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Geography in Polish and French education systems – comparative study at secondary school level

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Abstract

The aim of education systems in 21st century Europe is to educate young people to a sufficient level of competence. The emphasis, however, is put on gaining skills or the ability to use the knowledge in practice. In recent years European educational strategies have stressed education results, a tendency visible in many framework curricula. This article aims to determine the place and importance of geography in Polish and French education systems following a comparative analysis of general framework curricula. Differences and similarities in the teaching of geography may contribute to further analyses in terms of methodology in the entire education system, didactics (related to the choice of the most effective teaching methods) and organisation (related to the number of hours devoted to geography classes).

Key words: geography, Polish education, French education, secondary school, framework curriculum, comparative analysis.

Introduction

Geography is considered to be a very important subject in 21st century European education systems due to its educational, practical and formative aspects. Contemporary geography is comprised of a system of disciplines examining the geographical space and explaining the causes and effects of its natural, social and economic diversity. Geography aims to describe and explain the relations and interdependencies between individual elements

of the flora and fauna as well as geological features. It also looks at the interplay between all those elements and human activity. Being part of natural sciences, geography contributes to developing a crucial human ability to perceive geographical processes and phenomena in different spatial, temporal and cultural contexts. Observation – the basic method of discovery in natural sciences – is an important factor developing the intellect through independent thinking, reasoning, analyzing and explaining the ways in which different geoecosystems function (Piotrowska 2005). Given the fact that geography classes are supposed to help young students to answer questions about the meaning and origin of life, the role of individual objects and phenomena as well as the possibility to make rational use of them, it is worthwhile to consider a holistic approach to geographical studies. Therefore, basic objectives of geography classes in 21st century European education systems are the following:

- Observe, understand and assess natural, social and economic phenomena and processes taking place on a local, regional and global scale as well as their mutual relations,
- Explain causes and effects of natural diversity, human life and activity in different morphoclimatic zones and cultures,
- Localise objects and phenomena and assess them from different perspectives,
- Diagnose the usefulness of the natural environment for different human needs and predict future changes (positive and negative) which take place in the natural environment as a result of economic activity,
- Appreciate natural beauty and values as well as promote the rational management and protection of natural resources,
- Take decisions on problems emerging at different times and locations.

The basic aim of the paper – to compare and assess teaching practices in geography classes at the secondary level in Poland and France – has been set taking account of the above objectives. The choice of France was determined by traditional links between Polish and French geographical research and the idea to bring to light a system of teaching geography that is different from the Anglo-Saxon tradition. The comparative study has taken into consideration basic educational objectives and results included in framework curricula, teaching content, methodology and the number of hours allocated to the subject whose importance we have already mentioned.

Research methodology

Teaching practices in geography classes at secondary level in Poland and France are compared and assessed through comparative analysis. According to comparative pedagogy, this method is used to compare and assess the effects of using different education systems in various countries. Comparative pedagogy as an academic discipline started to develop in Poland as late as 1960s. It was initiated by Nawroczyński who was of the opinion that comparative studies through which one's own country is compared against others are very useful (Pachociński, 1995). Okoń (1979) made a similar observation: "Learning about education systems in other countries enables us to better understand our own. We can get a clear picture of the features of our education system if we characterise it against practices used in another country". That is why it is worthwhile to analyse and compare the ways in which geography is taught in Poland and France.

The method chosen for the purpose of conducting the study is that of George Bereday – a comparative study involving several countries over the same time period. According to Bereday, the point of the method is to search for differences and similarities present in educational practice in various countries (Pachociński, 1995). The study ran through the following stages: 1. selecting the problem; 2. gathering and sorting data related to the problem; 3. interpretation; 4. formulating the hypothesis; and 5. drawing conclusions. The variables selected were pieces of information from basic state documents describing framework curricula for geography: Polish framework curriculum for secondary schools of 23 December 2008 (Regulation of the Minister of the National Education of 23 December 2008 on framework curricula for pre-school and general education in different types of schools); and French framework curriculum for lower secondary schools ISCED2 of 11 July 2006 (Le socle commun des connaissaces et de compétences, Décret du 11 juillet 2006 oraz Les Programmes au collège). We have also used more detailed documents and regulations.

The study showed that there are differences and similarities between the content of documents which are translated into the level and prestige of geography teaching at secondary schools. Particular emphasis was put on answering the questions on:

1. **status of the framework curriculum**: What is the legal prestige of the framework curriculum?

2. features of geography teaching:

a. Is geography taught on a subject or integrated basis?

b. How many hours are set aside for geography classes in studied countries?

3. extracurricular and curricular teaching objectives, teaching content, general and specific objectives, sills and requirements:

- a. What are the extracurricular objectives of general education?
- b. What are the extracurricular skills (competences) of the students?
- c. What are the curricular objectives/general requirements of geography teaching?
- d. How are curricular objectives/general requirements formulated?
- e. What are the features of the teaching content/requirements for geography?
- f. What is the scope of the teaching content/requirements for geography?
- g. How important are key competences in geography education systems in both countries?

4. required or recommended ways of teaching the framework curriculum (methods and forms of teaching)

- a. Does the framework curriculum impose or foster specific methods and forms of geography teaching?
- b. Is the use of scientific terminology required for different student activities (e.g. formulating problems, conducting observation, explaining, drawing conclusions)?
- c. What is the role ascribed to experimental teaching in geographical education?
- d. Does the framework curriculum envisage independent research and the use of scientific data?
- e. How important is IT in geography teaching?
- f. Does the framework curriculum make it necessary to use motivating methods of teaching geography such as the problem method or the didactic project method?
- g. Does the framework curriculum envisage teaching classes outside the school (e.g. field observation, studies, educational trips)?
- h. Are individualised forms and methods of education targeted at gifted students or students with special needs used or recommended?

5. assessment process

- a. At what stages of education is external assessment carried out?
- b. What elements of geographical knowledge and skills are reflected in the external exam system?

Results

The results of the comparative analysis have been gathered in a table (Table 1). The information obtained concerned the place and role of geography in Polish and French education systems. Education practice was also described in terms of the content and methods of teaching.

Table 1. The place and importance of geography at the level equivalent to Polish secondary school in Polish and French education systems

Poland	France
Educational level and student age	
Secondary school (3-year I degree school) 13 – 16 years	Collège (I degree secondary school); 11 – 15 years
	The equivalent of Polish secondary school are forms 5, 4 and 3 numbered in reverse order compared to Polish ones (12 – 15 years)
Features of geography education together with the number of classes	
Obligatory subject-based teaching of geography over a 3-year-long period, 4 hours in a 3-year-long teaching cycle	Teaching of geography is obligatory and subject-based. Geography is taught in the following group
	of subjects: History – Geography – Civic Education and Life and Earth Sciences.
	History – Geography – Civic Education are taught for 4 years:
	- in form 6 for 3 hours a week
	in forms 5 and 4 for 3 to 4 hours a weekin form 3 for 3.5 hours a week
	Life and Earth Sciences are taught - in form 6 for 1.5 a week
	- in forms 5 and 4 from 1.5 to 2.5 hours a week
	- in form 3 for 1.5 hours a week
Framework curriculum status	
Regulation of the Minister of the National	Le socle commun des connaissances et de

Education of 23 December 2008 (Official Journal of 15 January 2009, No. 4 item 17).

compétences, Décret du 11 juillet 2006.

Extracurricular education objectives

- "1. Students should acquire a defined amount of information about facts, principles, theories and practice.
- 2. Students should develop skills necessary to use acquired information when performing tasks or solving problems.
- 3. Students should develop attitudes necessary to live an efficient and responsible life in the modern world".

Acquiring basic information and competences necessary to understand and consistently describe the world.

- 1. Students should be able to put acquired knowledge into practice in various situations.
- 2. Students should adopt certain attitudes necessary in their lifetime (the need for knowledge and creativity, need to strive for the truth, being open to others, respect for oneself and others).

Extracurricular skills (competences)

- 1. Reading students should know how to understand, use and reflect on texts;
- 2. Mathematical thinking students should use mathematical tools in everyday life;
- 3. Scientific thinking students should use scientific knowledge;
- 4. Students should communicate in their mother tongue and foreign languages;
- 5. Students should use IT tools efficiently;
- 6. Students should search for, select and critically analyze information;
- 7. Students should be competent learners;
- 8. Students should know how to work in a team.

- 7 basic competences of students at ISCED2 level
- 1. Command of the French language.
- 2. Practical knowledge of a modern foreign language.
- 3. Fundamentals of mathematics and scientific and technological culture.
- 4. Humanities.
- 5. Competence in commonly used IT tools.
- 6. Social and civic competences.
- 7. Independence and initiative.

Subject specific objectives / general requirements in framework curricula

Teaching objectives – general requirements

- "I Using different sources of geographical information. Students make observations and measurements in the field; know how to use plans, maps, photographs, drawings, charts, statistical data, source texts and IT tools to gather, process and present geographical information.
- II. Identifying relations and interdependencies; explaining phenomena and processes. Students use basic geographical vocabulary when describing and explaining phenomena and processes taking place in the geographical

Curriculum objectives

"The aim of experimental sciences is to understand and describe the natural and human-made world as well as the changes caused by human activity".

The teaching process should contribute to:

- 1. Learning about the world through observation, experience and experiments.
- 2. Stimulating interest in the world, natural environment and human activity.

Subject specific objectives refer to 7 key student competences at the ISCED2 level. In the case of geography they are contained in:

environment; identify relations and interdependencies in the natural environment, the economy and social life in different spatial contexts; understand mutual relations between people and nature; explain spatial diversity of natural conditions and human activity on Earth.

- III. Using geographical knowledge and skills in practice. Students use geographical knowledge and skills in order to better understand contemporary world and their place in it; use geographical knowledge and skills in their everyday lives including the rational use of natural resources.
- IV. Shaping attitudes (taking interest in the world and the region). Students develop: curiosity about the world taking interest in their own region, Poland, Europe and the world; awareness of the importance of the natural and cultural environment of Poland and the region as well as the responsibility it requires; patriotism and the sense of identity combined with respect towards other nations and communities with their system of values and lifestyles".

- Fundamentals of mathematics, science and technology
- Humanities

Students should understand that natural sciences contribute to progress, facilitate the understanding of processes and phenomena and make it easier to take decisions in line with sustainable development.

Formulation of subject specific objectives / general requirements

Subject specific objectives are formulated in the language of general requirements.

Objectives are formulated in the language of general requirements.

Description of the teaching content / requirements for geography

Teaching content for geography is formulated in the language of specific requirements.

Teaching content is formulated in the language of general requirements.

Requirements for geography are formulated in the language of specific requirements.

Scope of teaching / requirements for geography

Teaching content – specific requirements

- 1. Map reading, interpreting and using maps.
- 2. Earth shape, earth movement and their consequences.
- 3. Selected items of physical geography (atmosphere, global climatic diversity;

Geographic content in **History-geography**civic education

Form five:

- 1. Demographic development.
- 2. Diversity of living conditions.
- 3. Wealth and development of societies.
- 4. Relations between the society and resources.

lithosphere, volcanic phenomena, earthquakes; landscape impact of running water, sea, wind, ice sheets and glaciers).

- 4. Location and natural environment of Poland
- 5. Population of Poland.
- 6. Selected aspects of Polish economic geography.
- 7. Polish geographical regions.
- 8. Polish neighbours geographical diversity, changes (Germany, Ukraine, Russia).
- 9. Europe. Relations between nature, man and the economy (Western Europe, Northern Europe, Alpine countries, characteristics and importance of Paris or London as a global metropolis).
- Selected regions of the world. Relations between nature, man and the economy (Asia China, Japan, India; Africa Sahel and Southern Africa; North and South America USA, Brazil; Australia; Antarctic and Arctic.

5. Spatial development.

Form four:

- 1. Landscape diversity.
- 2. Globalization; analysis and causes.

Form three:

- 1. France geographical features, production area.
- 2. Role of France and the European Union in the world.

Geographic content in **Life and Earth Sciences**

Form five:

- 1. External geology.
- 2. Landscape evolution.

Form four:

1. Earth's interior activity (volcanic activity, earthquakes)

Form three:

- 1. History of the Earth.
- 2. Human responsibility for the environment.

Importance of key competences in geography teaching

"The concept of geographic education is based on moving away from teaching encyclopaedic facts and concentrating on the formative aspects of geography and developing skills".

Geography teaching involves most of the key competences: scientific, technical and IT competences; using different sources of geographic information; ability to learn, think in geographical terms, assess and forecast; social and civic competences; cultural awareness and expression.

In the framework curriculum each competence is presented as basic facts and the ability to put them in practice in different situations but also as a set of attitudes necessary throughout the entire lifetime, such as being open to others, the need to strive for the truth, respect for oneself and others as well as hunger for knowledge and creativity".

Each competence requires many school subjects and vice versa – each subject contributes to the acquisition of the 7 key competences.

Does the framework curriculum impose or foster specific forms of geography teaching?

"It is firmly recommended to move away from lecture-like forms of teaching towards the discovery method. It is particularly advisable to use stimulating, values-based methods".

Other suggested methods include direct and indirect observation, conducting experiments

Teachers choose education methods and textbooks themselves.

However, in the context of competences, recommended methods are observation, examination and experiments.

and case studies.

Is the use of scientific terminology required for different student activities (e.g. formulating problems, conducting observation, explaining, drawing conclusions)

One of the skills acquired at secondary school level is the ability to think scientifically or "the ability to use scientific knowledge in order to solve problems and draw conclusions based on observation". The use of scientific terminology is therefore required.

Students should use scientific terminology in speech and writing.

What is the role ascribed to experimental teaching in geographical education?

The important role of experiments (laboratory and field) and very important role of perception, understanding and explanation of natural phenomena and processes.

Teaching should help students understand the difference between facts and verifiable hypotheses on the one hand and opinions and beliefs on the other. To achieve this, much emphasis is put on: observation, examination and experiments starting at primary school level.

Does the framework curriculum envisage independent research and the use of scientific data?

One of the educational aims is to use different sources of information and be able to interpret them.

The framework curriculum talks about "developing interest in scientific and technical progress".

How important is IT in geography teaching?

The use of IT tools in school and everyday life is emphasised. Such skills are considered to be one of the key competences. Modern media (photography, 3D images, multimedia presentations, Internet resources) are to help students learn about and understand natural phenomena.

IT is considered to be the basic tool for finding, analysing and presenting information. Definition of competence No. 5 clearly determines the role of technology in learning. Command of commonly used IT tools is important.

Does the framework curriculum make it necessary to use motivating methods of teaching geography, such as the problem method or the didactic project method?

It is recommended to use problem and project methods combined with environment observation and consulting various information sources including multimedia ones. Case studies are also important. Projects are carried out at secondary level pursuant to Regulation of the Ministry of National Education of . 20.08.2010.

Suggested methods are observation, examination and experiments, but the teacher is entirely free and autonomous in his choice of teaching methods.

Does the framework curriculum envisage teaching classes outside the school (e.g. field observation, studies, educational trips)?

This element is particularly present in

Suggested methods are observation,

geography teaching. Excursions, field classes and direct observation carried out on such occasions are necessary for the correct course of the educational process. They are important when learning about the region. In addition, the project method usually requires part of the tasks to be completed in the field.

examination and experiments, but the teacher is entirely free and autonomous in his choice of teaching methods.

Are individualised forms and methods of education targeted at gifted students or students with special needs used or recommended?

Teaching is to be tailored to individual needs of the students, both strong and week ones. This is ensured by the obligation to carry out part of the educational tasks through projects.

In case of difficulties precautionary measures are taken such as individualised programmes, support or tutoring. Additional 3 hours a week are set aside for classes with students who experience difficulties.

At what stages of education is external assessment carried out?

At the final education stage – Form 3 of secondary school.

Exam results together with the final assessment of student achievements decide about enrolment in second degree high schools.

The national exam is taken at the beginning of the *collège* with the aim of identifying student progress and difficulties. Having completed their education in the *collège* students at national schools (and private ones contracted by the state) are registered by school directors to sit a written exam in several subjects. Following this exam, they are granted the national diploma, *diplôme national du brevet*, certifying the knowledge they gained over the two previous years (form s 4 and 3) of the *collège*.

What elements of geographical knowledge and skills are reflected in the external exam system?

- a) all exams specified in the programme are obligatory. Exam in geography in included in the "mathematics and natural sciences" part.
- b) 1. Knowledge of basic concepts, phenomena and processes
 - 2. Explaining relations and interdependencies between the natural environment and people
 - 3. Ability to use and analyse different sources of information.
- a) exam following Form 3 of the Collège b) in order to be granted the national diploma, *diplôme national du brevet*, students must pass a written exam in three subjects: French, Mathematics and History-Geography-Civic Education.

Source: Own study based on ministerial documents and regulations (reference numbers in bibliography: 1, 2, 3, 4, 8, 9, 10, 11, 12).

Conclusions

On the basis of the comparative analysis of framework curricula and documents containing the most important information and guidelines related to geography teaching at secondary school level (1st degree secondary school) in Poland and France, we can conclude that:

- The basic difference has to do with the place of geography in the education systems in Poland geography is taught in Geography classes whereas in France it is part of the History-Geography-Civic Education group as well as Life and Earth Sciences. In France geography is taught as an integrated subject.
- 2. In terms of the scope of teaching content, framework curricula for geography in Poland and France are similar.
- 3. Subject specific objectives in France reflect the 7 key student competences at the ISCED2 level and in the case of geography are included in: Fundamentals of Mathematics, Science and Technology and in Humanities Culture.
- 4. The French system is different from the Polish one in that it uses a comprehensive table, *Grilles de références*, with individual levels of competence which provide details on the level of geographic competence and stills acquired by the students. These are formulated as learning results and contain guidelines on student assessment.
- 5. French secondary school programmes emphasise the development of key competences (French framework curriculum is based on 7 key student competences at the ISCED2 level). Teaching of natural science is supposed to contribute to acquiring scientific and technological knowledge which will help students develop an overall, consistent and rational worldview. In Poland, development of key competences is not directly mentioned in the framework curriculum.
- 6. In both Polish and French framework curricula subject specific teaching objectives are formulated in the language of general and specific requirements. The expressions used are similar to the Polish wording of the framework curriculum.
- 7. In the French system all teachers are supposed to ensure adequate conditions for individual work with all students regardless of their abilities (work with gifted students and students with special education needs). It is therefore possible to learn under the guidance of a tutor and there are 3 additional hours for students who lag behind or those pursuing optional subjects. Such detailed provisions are not included in the Polish framework curriculum, but

- tailored teaching is highlighted also in the context of additional material such as teacher guides or educational projects financed from EU funds.
- 8. Each of the analysed framework curricula in Poland and France prioritises the teaching of practical skills during field classes, workshops using IT tools or project-based activities. In recent years, educational reform in Poland has stressed the project method through a concrete regulation (*Regulation of the Ministry of National Education of 20 August 2010, par. 21a*) as well as through upgrading projects to the level of an item mentioned on the secondary school graduation diploma.
- 9. In both countries teachers take independent decisions on adequate methods of teaching and didactic material to be used.

It is also worth pointing out that in France the school week runs from Monday morning to Saturday afternoon. The number of hours in secondary schools is 26-30. One hour is equivalent to 55 minutes with 5 minute breaks in-between. Hence students are present in the school from the morning (classes begin at 8:00 am or 8:30 am) until the afternoon – 5:30 pm or 6:30 pm. During the school day there are also breaks to rest and have lunch (lunch break is from 12:30 to 1:30 pm).

Summary

The differences between the framework curricula studied are related to the teaching content as well as divergent formulation and timeframes. What is evidently highlighted in the context of geography are effective and modern teaching methods taking account of new IT tools (including e-learning platforms), tailoring of teaching and assessment (focusing on weak and gifted students) and learning through observation and experiments conducted both in laboratories and in the field. Having analysed the place and importance of geography in French and Polish education systems, one can also say that geographic education is treated as one of the pillars contributing to the knowledge based economy (Tarkowski 2003). According to framework curricula, it is one of the educational tasks of the school to adequately prepare a student for life through transferring knowledge and developing skills which are to be expected at his current educational level. Acquired knowledge covers the basic ideas, rules, principles and laws relevant for a given discipline. Skills, however, have a practical dimension and allow the student to put knowledge into practice. European education programmes say that

"teachers are a key to bring change about" (*School for the 21st century*) and should be a link between the fast changing world and their students. It is only possible if there are good documents available which will contribute to an atmosphere in which competences are constantly improved in the case of the student and the teacher (Piotrowska, 2010).

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