

Chapter 2

Geography Curriculum in Czechia: Challenging Opportunities

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2.1 Brief Outline of the Development of the Geography Curriculum

In the Czech education system, the teaching of geography dates back to 1809, first in grammar schools and vocational schools. In 1869, with the issue of the Basic Imperial Education Act (Exner-Bonitz reform), geography was introduced to all years of primary and municipal schools. Gradually, geography also began being taught at most secondary schools (Knecht and Hofmann 2013). The teaching of geography during these early years and the concept of the curriculum were mostly static. School geography consisted of summaries and lists of countries, mountains, rivers, towns, important towns and cities, important places and battles (Janka 1970, page 32). Gradually, the first critics of this concept began to appear, who pointed to the low educational value of this kind of teaching. This is when the methodology and later the didactics of geography first appeared. However, this publication does not set out to provide a detailed historical development of the teaching of geography in Czechia. The dates of the introduction of the teaching of geography show that geography education underwent a long historical development which can be divided into several periods.

One of the most progressive periods is the years from the establishment of an independent Czechoslovakia to the start of World War II, which saw the rise of geography education. The shaping of schools was greatly influenced by the ideas of reform pedagogy. Formalism in education was suppressed, and the individuality of the pupil was promoted. Independent work increased, and in the area of geography, there was also teaching in the form of practical fieldwork and the like. After World

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War II, the education system in Czechoslovakia underwent many reforms which were controlled for many years by the ideology of the system. However, the entire education system was marked by one common feature: the “single education system”. This meant that teaching was based on a single curriculum. Up until the 1990s, there was no full alternative education system or even alternative teaching materials.

Hofmann et al. (2014) state that when looking back at the history of the teaching of geography in schools in Czechia, we discover that the creation of its contents has not changed in more than 80 years. In the 1920s, new curricula were introduced on the territory of Czechia, and intensive work was carried out on them from the mid-1920s onwards. The contents of these curricula were established on the “regional principle” based on learning about the place of residence, native region and republic where knowledge was presented of physical geography and the impacts of the position of the Earth in the universe. Despite learning about Europe, the curricula returned to the Czech Republic where their position was assessed within the broader community and concluded with the world and astronomy. In this period, the Pedagogy Department of the Central Association of Teachers’ Unions was also active and elaborated these curricula into the form of detailed timetables, paying particular attention to links between subjects. It is interesting how the tables devoted to the detailed timetables resemble “today’s efforts” to create the school educational programmes.

Although in the following years, the concept of education was more or less periodically reformed, the scheme of teaching geography still remained the same, if we ignore the ideological colouring of the entire education system from the 1950s to the 1980s. This period had an unfortunate effect on some geographic disciplines, especially political and regional geography. Traditionally, in geography the position of physical geography remained strong on which the unilateral ideological view did not have such an effect as on its socio-economic part. This classification of geography is also projected into the present period, when geography is still being classified in educational documents as a natural science (Hofmann et al. 2014).

As was stated above, the breakup of the single education system occurred in the 1990s. The introduction of plurality into the education system was related to the overall liberation of society, and besides alternative teaching programmes and educational materials led to a series of problems and unresolved issues. This saw the start of the search for an optimal system of teaching geography in Czech schools, which finally culminated in the discussion of curriculum reform at the turn of the millennium. The result of this discussion was a reform intended to implement innovative approaches, methods and forms in teaching that would activate pupils in the process of learning and prepare them to apply the knowledge they acquired in school in practical life and shape their personal attitudes and views. A significant feature of the “new” education strategy was the concept of lifelong learning, which was supported by the introduction of key competencies. Key competencies should be developed as a set of knowledge and abilities important for the personal development of an individual’s role in society (Rychen and Slagnick 2001). Here attention

was also drawn to the inadequate encyclopaedic concept of geography based on component approaches.

2.2 Geography and the Education System in the Czech Republic

In recent decades, there have been sweeping changes in the Czech education system. Moreover, these changes are ongoing, and the entire system is continuing to develop. According to the Constitution of Czechia, all citizens have an equal right to education. The Czech education system stems from the Education Act, which since 2004 sets a multilevel system of educational programmes that are created at the state and school level.

The main document which defines the principles of curriculum policy is the National Education Development Programme in Czechia, known as the White paper (Kol. 2001). This is a system project shaping the starting point of ideas, general plans and development programmes which are to be decisive for the development of the education system in the medium-term horizon (Kol. 2001). In the National Education Development Programme, educational objectives have been elaborated as set by the Education Act No. 561/2004 Coll., which defines the main areas of education, the contents of education and the means necessary to achieve these objectives (Kol. 2013a). The state level further consists of Framework Education Programmes (hereinafter “FEPs”), created by the Research Institute of Pedagogy and approved by the Ministry of Education, Youth and Sports. However, the Research Institute of Pedagogy was dissolved, and its duties are now carried out by the NIE – National Institute for Education. The FEPs are created for individual fields of education and define the compulsory contents, scope and conditions of education.

A two-level system of curriculum documents distinguishing between the state level and the school level was introduced. While the state-level curriculum was represented by the FEPs, the school-level curriculum was formulated in the school education programmes (SEPs). The implementation of the state curriculum at the school level is represented by the development of SEPs. In general, SEPs stand for educational autonomy of schools as well as teachers’ professional responsibility for the outcomes of the educational process. The point of SEP lies in motivating teachers to elaborate on their own ideas regarding education in schools (Kol. 2013a). This resulted in the relaxation of the considerably centralised and directive system of basic and secondary education at a lower level of management, such as regions, municipalities and individual schools, and the powers and obligations of school headmasters were significantly increased.

The education process takes place in educational facilities, which, according to the International Standard Classification of education, is classified under the following levels:

International Standard Classification of Education (ISCED 1997)

- 0 – Pre-basic education (nursery school)
- 1 – Basic education (level 1 of basic school)
- 2 – Lower secondary education (grade 6–9)
- 3 – Upper secondary education (grade 10–13 of secondary school)
- 4 – Schools of follow-up education
- 5 – Upper vocational schools, bachelor's and master's university degrees
- 6 – Doctoral study programmes

2.2.1 Basic Education

Basic or primary education is provided at basic schools for a period of 9 years of compulsory school attendance, which was introduced in 1774. This is the only educational stage in Czechia in which every child participates. For many children, this is the only chance to come into contact with the teaching of geography. Pupils with all levels of abilities and from all sections of the population acquire unique experience here of social relations. Peers in classes can influence each other in a naturally heterogeneous collective and build irreplaceable social capital which serves as a precondition for future life. In Czechia, there are more than 3.6 thousand primary schools.

The Framework Education Programme for Basic Education (Kol. 2013a) defines the educational contents which are divided into nine educational areas. All subjects in educational areas are compulsory at primary schools. Each area consists of inter-linked subjects. The areas marked in bold are those areas containing geography. The areas marked in bold and italics are those areas where geography has a significant overlap.

Educational Area in the Framework Education Programme for Basic Education

1. Language and Language Communication (Czech language and literature, foreign language)
2. Mathematics and its Application (Mathematics and its Application)
3. Information and Communications Technology (Information and Communications Technology)
4. **Man and his World (Man and his World)**
5. ***Man and Society (History, Citizenship Education)***
6. **Man and Nature (Physics, Chemistry, Natural History, Geography)**
7. Art and Culture (Music Education, Art Education)
8. Man and Health (Health Education, Physical Education)
9. Man and the World of Work (Man and the World of Work)

A compulsory part of the FEP is also cross-section subjects, whose objective is to fill in and strengthen links between subjects.

Cross-Section Subjects

- **Environmental education**
- Media Education
- ***Multicultural Education***
- Education of the Democratic Citizen
- ***Education in Thinking in the European and Global Context***
- Personality Education and Social Skills Education

The FEP for basic education (FEP BE) is drawn up in such a way, so pupils can attain key competencies or a summary of knowledge, skills, abilities, attitudes and values important for their personal development and use (Kol. 2013a).

Key Competencies

- Competencies for learning
- Competencies for addressing problems
- Communicative competencies
- Social and interpersonal competencies
- Civil competencies
- Working competencies

Basic education is divided into level 1 and level 2. Level 1 lasts 5 years (grades 1–5), attended by pupils at basic schools. This is the period when pupils are slowly prepared for systematic compulsory education. It is one of the most crucial periods because it brings great changes in the child's daily regimen. Care is taken at level 1 to provide comprehensive knowledge of the individual needs and capabilities of each pupil. The objective is to create the preconditions in pupils for lifelong learning.

Level 1 is directly followed by level 2, which completes compulsory school attendance. It lasts for 4 years (grades 6–9) and can take place at basic school, grammar school or a conservatory. The most common form of teaching is on a daily basis of study. The pupil, parent or legal guardian can also request an individual plan making education possible without daily school attendance. The period of study at level 2 is challenging, because pupils undergo significant hormonal, physical and personality changes. These changes are described under the term puberty. During this time, individual differences begin to appear between pupils, who form their own opinions, experience new feelings and often reject tested truths. The objective of level 2 is to provide pupils with the best foundation of general education.

Preschool education can precede basic education, which so far is not compulsory in the Czech Republic. This is provided in nursery schools normally attended by children ages three to six. Preschool education has a positive effect on a child's development, supports personality development, prepares the child for further education and complements family upbringing. Given its importance, the objective of Czech preschool education is to improve its quality and availability. Currently, there are intensive discussions concerning compulsory preschool education.

2.2.1.1 Anchoring of Geography in the Framework Education Programme for Basic Education (FEP BE)

In Framework Education Programme for Basic Education (Kol. 2013a), geography education is divided into two areas: level 1, “Man and his World”, and level 2, “Man and Nature”.

“Man and his World” is the only educational area of the FEP BE conceived only for level 1 of basic education. This comprehensive area defines the educational contents applying to man, family, society, homeland, nature, culture, technology, health, safety and other subjects. It uses a view of history and the present and guides towards skills for practical life. The broadly conceived synthetic (integrated) contents cocreate compulsory basic education at level 1. The educational content of “Man and his World” is divided into five thematic circles (while basic geographic knowledge, skills and attitudes are taught in the first thematic circle):

- 1. Place where we live**
2. People around us
3. People and time
4. Diversity of nature
5. Man and his health

The level 2 of basic school is the educational area of “Man and Nature”, which includes questions associated with the investigation of nature. It provides pupils with the means and methods for a deeper understanding of natural facts and laws. It also gives them the necessary foundation for a better understanding and use of current technology and helps them to find their way in ordinary life.

The fields of education in “Man and Nature” are physics, chemistry, natural history and geography, whose research nature gives pupils a deeper understanding of the laws of natural processes and teaches them about the usefulness of scientific findings and their application in practical life. In studying nature, pupils also acquire important skills.

Education in this area is directed at shaping and developing key competencies guiding the pupil towards:

- Investigation of natural facts and their context with the use of various empiric learning methods (observation, measurement, experiment) and methods of rational thinking
- The need to ask questions about the course and causes of various natural processes that have an impact on the protection of health, life, environment and property and to correctly word these questions and look for adequate answers
- A method of thinking that requires the testing of expressed assumptions about natural facts in more independent ways
- Assessment of the importance, reliability and accuracy of obtained scientific data to confirm or disprove expressed hypotheses or conclusions
- Involvement in activities friendly to natural systems, their health and the health of other people

- An understanding of the context between human activity and the state of the natural and living environment
- Considerations and actions that prefer the most effective use of sources of energy in practice, including the broadest use of their renewable sources, especially solar radiation, wind, water and biomasses
- Creation of skills suitable for contact with objects or situations potentially or currently harmful to human life, health, property or environment

The subject of geography is divided at level 2 into seven thematic circles:

1. Geographic source of data, cartography and topography
2. Natural picture of Earth
3. Regions of the world
4. Social and economic environment
5. The environment
6. Czech Republic
7. Geography fieldwork, practice and application

The thematic circles contain expected outputs and summarised education content. These elaborated thematic circles form the basic framework of education at level 1 and level 2 of basic school, which pupils are expected to have attained upon graduation. In a certain sense, the expected outputs take on the form of the intended standard (see further).

2.2.2 Secondary Education

The Czech education system is characterised by a high rate of completion of secondary education. Pupils can attend secondary school after completing compulsory primary school and successfully passing the entrance exam for the chosen school. After completing the educational programme, pupils will attain a secondary education with a vocational certificate or secondary education with a secondary school-leaving exam (in Czech, *maturita*). Pupils attain these educational levels at grammar schools, secondary vocational apprentice training centres, follow-up study schools or at conservatories.

Grammar schools provide a full general secondary education. The objective is to prepare students for a more challenging qualified profession or university study. It is completed with a secondary school-leaving exam and the acquisition of a secondary school-leaving exam certificate. The period of study may last 4 years for students after having completed the 9th year of basic school or 6 and 8 years. Secondary vocational schools work in the same way as grammar schools. Study at these schools lasts 4 years and is completed with a secondary school-leaving exam. These schools specialise in vocational fields as well as preparing students for university. Secondary vocational apprentice training centres offer study in fields which aim to prepare students for qualified activities mostly involving manual work. This is completed by

a final exam after 2–3 years of study and the acquisition of a final examination certificate and vocational certificate. If students with a vocational certificate decide to also take the secondary school-leaving exam, they can also attend a 2-year follow-up study. Secondary education can also take place at a conservatory. This is a specific type of education preparing students for challenging artistic or teaching activities in music, dance, singing and dramatic art. This lasts 6–8 years and is completed with a secondary school-leaving exam or certificate.

2.2.2.1 Anchoring of Geography in the FEP for Secondary Education (FEP GS)

Geography education is most comprehensively represented at grammar schools (the following paragraph will therefore be devoted only to grammar schools) and should have direct continuity in geography education that pupils undergo in basic education. The educational areas in the framework educational programme for grammar schools (Kol. 2007) are the same as for basic education and differ in the order and some formulations. The same applies to cross-section subjects and key competencies when the working competence is replaced with the competence for enterprise. This compliance should guarantee direct continuity in the lower educational level. In Czechia, there are more than 350 grammar schools.

Educational Area in the Framework Education Programme for Secondary Education

1. Language and Language Communication (Czech Language and Literature, Foreign Language, Second Foreign Language)
2. Mathematics and Its Application (Mathematics and Its Application)
3. Man and Nature (Physics, Chemistry, Biology, Geography, Geology)
4. Man and Society (Basics of Civics and Social Sciences, History, Geography)
5. Man and the World of Work (Man and the World of Work)
6. Arts and Culture (Music, Fine Arts)
7. Man and Health (Health Education, Physical Education)
8. Information Science and Information and Communication Technologies (Information Science and Information and Communication Technologies)

As conceived, the Framework Curriculum Timetable:

- Determines only the basic parameters of education organisation, through which it provides schools with ample scope for variability in preparing curriculum timetables for their school education programmes
- Reduces the number of normative elements in higher forms and thus makes it possible for schools to implement their educational objectives much more effectively and react flexibly to the educational needs and interests of the pupils
- Defines the overall minimum time allotment for individual educational areas (fields) in the 4-year grammar-school education programme and in the upper stage of 6- or 8-year grammar schools
- Enables integration of educational content

The first and second forms are conceived as periods during which pupils jointly acquire the functional basics of grammar-school education with a school-leaving examination, which may be further developed, reinforced and complemented variously in subsequent forms. For this reason, education in the first and second forms is conceived as compulsory in the great majority of educational areas. *The third and fourth forms* allow considerable variability on the level of school education programmes in the educational offer, which makes it possible for schools to meet the educational needs and interests of their pupils most effectively. Except for the educational areas, Language and Language Communication, Mathematics and Its Application (in the third form) and the educational field Physical Education, no other educational area or field is conceived as compulsory. Whether at all and in what forms the other educational areas (fields) will be included, what time allotment they will be assigned and how they will be implemented are determined by the school education programme. Optional educational activities must be offered to pupils by schools in at least the third and fourth forms (Kol. 2007, p. 82).

2.2.3 Upper Vocational Education

This is an education that deepens the knowledge and skills acquired in secondary education preparing students for challenging professions that do not require a university diploma. To be accepted by an upper vocational school, students must have the secondary school-leaving exam certificate and pass the entrance exam. The study lasts 3 years and includes vocational practice and is completed with a certificate. Graduates gain the title DiS (diploma specialist). Geography education here is represented only if it has direct continuity in the study field and applies only to individual geographic disciplines (e.g. tourism geography). Currently, this is more of a marginal form of education. A number of upper vocational schools have been transformed into universities only offering bachelor degrees.

2.2.4 University Education

University education in the Czech Republic has a long tradition. Charles University was founded here in 1348 as the oldest university in Central Europe. Study at the university is offered at the bachelor's and master's levels. The bachelor study programme lasts 3 or 4 years, and the student can begin to study after passing the secondary school-leaving exam and successfully completing the entrance procedure. The programme provides preparation for a profession and for study in a follow-up master's programme. The study ends with a state final exam, a part of which involves the defence of a bachelor's thesis, and the graduate gains the title Bc. The follow-up master study programme lasts 1–3 years and can also exist as a separate study

programme, in which case it can be 4–6 years. It aims at deepening theoretical knowledge and its application in practice. It is completed by a state final exam and defence of diploma thesis. The graduate gains an academic title such as Mgr., Ing. or MgA. Graduates of the master's programme can also go on to study a doctoral study programme. The entire system is shown in the diagram in Fig. 2.1. “specialised” geography, and its individual fields and geography for teachers are studied at universities in Czechia.

2.3 Selected Problems of the Current Curriculum

Under the “single curricula”, stress was placed on the contents of education. The curriculum was then divided into basic (sometimes “core”) and additional. Textbooks formed the basis for school teaching and were the biggest source of information. Under the latest reform, stress was placed on the development of thinking and above all on the development of competence. The development of new communications technology and related amount of available information is forcing school reforms even in a number of other developed countries. The function of what pupils and students should know in the plural system of education began to be met by educational standards. The problem of educational standards not only from geography education is our first stop.

2.3.1 *Creation of Geographic Education Standards in Czechia*

In the case of Czechia, the creation of geography education standards is somewhat controversially conceived immediately in several respects:

1. Although Czechia has had the Basic Education Standard since 1995 (Kol. 2013b), this was not a standard which could meet the new curriculum reform launched at the turn of the millennium. The wording of this standard corresponded with the contents of basic school curricula.
2. The Ministry of Education, Youth and Sports of the Czech Republic did not decide to create new standards until the turn of 2011. The team that prepared the geography education standards was set up almost at “random”. The general public, such as from the members of the Czech Geographic Society, was not included in the creation of the standards.
3. The time for drawing up geography education standards was shorter than half a year, whereas in other countries, it is a long-term process lasting several years.
4. After submitting these standards, a new group was formed in the next half year which resubmitted the standards again under time pressure. They did not acquire their final form until the third elaborated version.

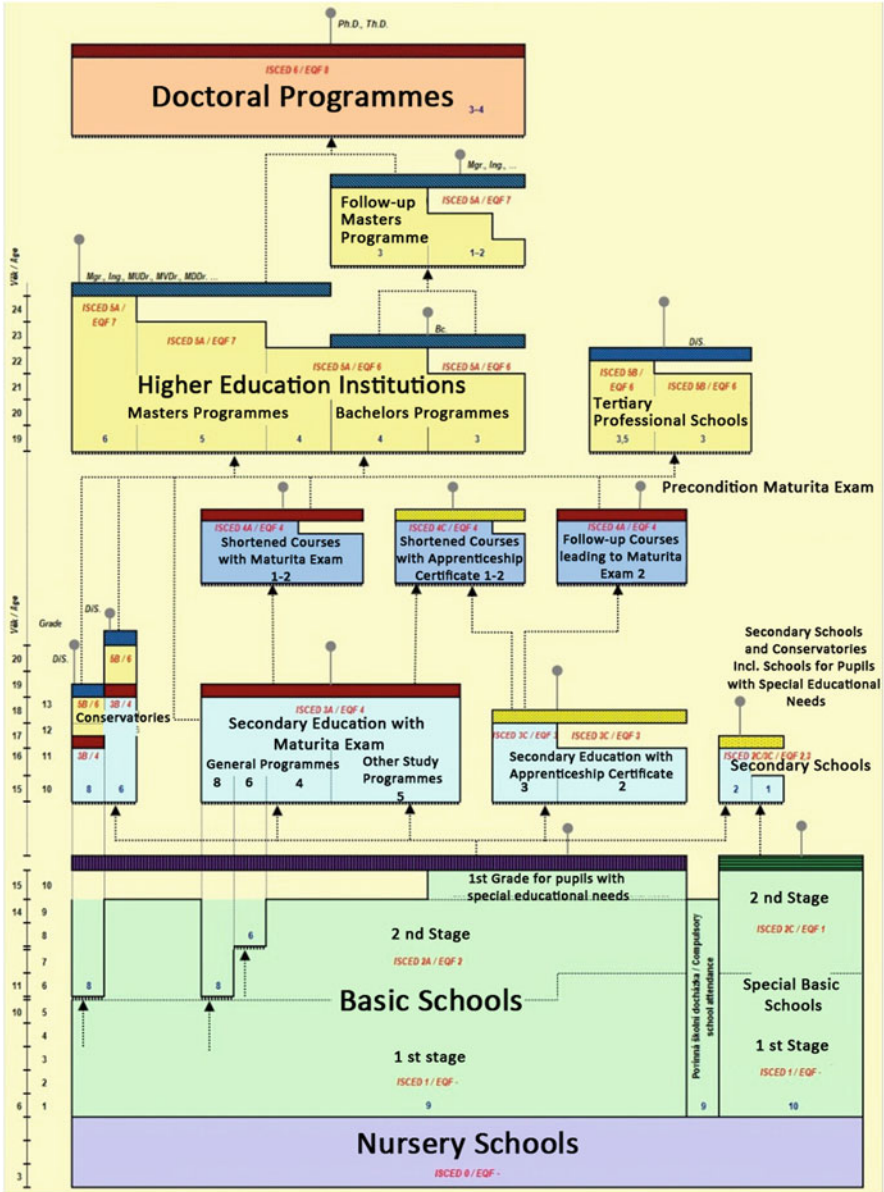


Fig. 2.1 The education system of the Czech Republic (Source: MŠMT ČR (2012))

5. Standards appear in an isolated condition only for level 2 of basic school, and their results or illustrative tasks are not tested, and if they are, then only randomly.
6. There are no special comments relating to individual areas of geography education.

This situation is highly typical of educational policymaking in Czechia (and probably of former communist countries in general), where the education system is hindered by low levels of expertise among teachers, principals and policymakers (Straková and Simonová 2013).

Currently, the function of the standard of Czechia consists of a “Framework Education Programme” (Kol. 2013a, b). The basis for the further elaboration and creation of the geography curriculum is seven thematic circles (see previous chapter), which basically copy the history of the teaching of geography in Czechia (see again above). In the Framework Education Programmes, we find expected outputs and curricula.

Expected outputs are of an activity nature and are practically focused, applicable in ordinary life and verifiable. They define the expected aptitude to use the learned curriculum in practical situations and in ordinary life. The FEP BE sets the expected outputs at the end of the *3rd year* (period 1) as *indicative* (non-binding) and at the end of the *5th year* (period 2) and the *9th year* as *binding* (Kol. 2013a, page 10).

The curriculum is structured in the FEP BE into individual thematic circles (subjects, activities) and is understood as *a means to attain the expected outputs*. It forms an integral part of the educational contents for its informative and formative function. The curriculum defined in the FEP BE is *recommended* to schools for distribution and for further elaboration into individual years or longer periods of time. The curriculum becomes binding at the level of the school education programme (Kol. 2013a, page 10).

It is up to the teacher to select geography curriculum which should serve as a means to comply with the expected outputs and consequently with general objectives. This should give teachers more freedom and enable them to be more creative.

The expected outputs therefore form an imaginary “target standard” in the FEP. Although the definition of expected outputs states that they are verifiable, we believe that this is only with great difficulty. Their wording is very general and comprehensive, and it is difficult to allocate teaching tasks to them (see example in Table 2.1). In 2010, therefore, the individual outputs received codes and were elaborated into the form of indicators (see Sect. 2.3.2).

We have already stated at the start of Sect. 2.2 that geography education standards appear in Czechia in an isolated condition for individual school levels. If we compare the FEP for level 1 of basic schools, for level 2 of basic schools and for grammar schools, we can expect differences in the wording and number of thematic circles (Table 2.2).

Based on a comparison of the columns in Table 2.2, it can be briefly stated that all the complexity of elaborating the FEP for various school levels disappears,

Table 2.1 Expected outputs for the thematic circle of geographic information, sources of data, cartography and topography

Geographic information, sources of data, cartography and topography
Expected outputs
<i>Pupil</i>
<i>Organises and reasonably assesses geographic information and sources of data from available cartographic products and papers, graphs, diagrams, statistical and other information sources</i>
<i>Uses with understanding basic geographic, topographic and cartographic terminology</i>
<i>Reasonably assesses geographic objects; phenomena and processes in the landscape sphere; their certain regularity, legitimacy and diversity; and their interrelation and conditionality, and distinguishes border (barriers) between fundamental spatial components in the landscape</i>
<i>Creates and uses personal mental diagrams and mental maps for orientation in specific regions; for spatial perception and assessment of places, objects, phenomena and processes in them; and for creating attitudes to the surrounding world</i>

Table 2.2 Comparison of thematic circles in the FEP for level 1 of basic schools, level 2 of basic schools and for grammar schools

Thematic circles for level 1 of basic schools	Thematic circles for level 2 of basic schools	Thematic circles for grammar schools
Place where we live	Geographic sources of data, cartography and topography	Geographic information and fieldwork teaching
People around us	Natural picture of Earth	Natural environment
People and time	Social and economic environment	Social environment
Diversity of nature	Regions of the world	Regions
Man and his health	Czech Republic	
	Living environment	Living environment
	Geography fieldwork teaching, practice and application	Geographic information and fieldwork teaching

because the thematic circles do not follow on one from the other. The expected outputs for the thematic unit of the Czech Republic in the FEP for grammar schools are apparently missing, because they are in the “Regions” unit. The links from the cartography and topography unit that are found in the FEP BE in the first circle are concealed in the FEP for grammar schools in the geographic information and fieldwork teaching circle. The assessment of the actual sequence in the deepening of individual thematic units in both documents is for separate comparison, and *it is more convenient to compare the expected outputs than just the circles* (Table 2.3).

At first glance, these facts can appear unsubstantiated, but the opposite is the truth. If we compare the creation of these documents in the geography education environment of NGS (National Geography Standards; see Sect. 2.3.2) USA, we find that it is difficult to expect the conceptual development of geographic knowledge, skills and attitudes which logically follow one from the other in the education system in Czechia. For the creation of the expected outputs and subsequent elaboration, we can for the above-mentioned reasons describe this method of conceiving the

Table 2.3 Comparison of expected outputs in a circle that applies to physical geography

Level 1 BS – <i>Place where we live</i>	Level 2 BS – <i>Natural picture of Earth</i>	Gramm. – <i>Natural environment</i>
Expected outputs, pupil:	Expected outputs, pupil:	Expected outputs, pupil:
<i>Will distinguish natural and artificial elements in the surrounding landscape and express various ways of their aesthetic value and diversity (period 1)</i>	<i>Will assess the position of Earth in the universe and compare the fundamental properties of Earth with the other bodies of the solar system</i>	<i>Compares the position of Earth in the universe and fundamental properties of Earth with the other bodies of the solar system</i>
<i>Will find typical regional peculiarities of nature, settlements, economy and culture in a simple way and will assess their significance in natural, historical, political, administrative and proprietary terms (period 2)</i>	<i>Will compare the action of internal and external processes in the natural sphere and their effect on nature and on human society</i>	<i>Compares using examples the mechanisms of the action of endogenic (including plate tectonics) and exogenic processes and their impact on the formation of the Earth's surface and on human life</i>
–	<i>Will demonstrate using specific examples the shape of the planet Earth and assess the consequences of the motions of Earth on the life of humans and organisms</i>	<i>Explains the mechanisms of global circulation of the atmosphere and its consequences for the formation of climate zones</i>
–	<i>Distinguishes and compares components and elements of the natural sphere, their interrelation and conditionality, distinguishes, names and classifies the shapes of the Earth's surface</i>	<i>Will distinguish the components and elements of the physical geographic sphere and will recognise the relationships between them</i>
–	–	<i>Will explain big and small circulation of water and distinguish individual components of the hydrosphere and their function in the landscape</i>
–	–	<i>Assesses the waters and pedosphere of the Earth as the basis for life and sources of the development of society</i>
–	–	<i>Will distinguish the main biomes of the world</i>

geography curriculum as problematic. As was already stated in the previous text, the wording of the expected outputs is too general, and sometimes it is difficult to imagine what they mean, what precisely is to be developed and what in their sense is to be achieved. Therefore, in 2010–2013 attempts were made to elaborate them into the form of *indicators*.

Table 2.4 Basic thematic circles of the standards of geographic education (level 2 of basic school)

	USA	Czech Republic	Slovak Republic
1.	World in a spatial context	Geographic sources of data, cartography and topography	Planet Earth
2.	Places and regions	Natural picture of Earth	Earth models
3.	Physical geography systems	Regions of the world	Travelling around the Earth
4.	Human systems	Social and economic environment	Geographic excursions and outings
5.	The living environment and society	Living environment	Australia and Oceania
6.	Application level of geography	Czech Republic	Polar regions
7.	–	Geography fieldwork teaching, practice and application	America – New World
8.	–	–	Africa, Asia
9.	–	–	Europe
10.	–	–	Slovakia

When conceiving the first version of elaborated standards, the group of authors attempted to include all their experience in this process under *time pressure*. It began systematically with a discussion concerning the wording of the expected outputs, which it first explained and then adjusted according to the revised Bloom taxonomy of educational objectives. This step was not accepted in the final version, and the wording of expected outputs remained the same as proposed in the original proposal of the FEP. The authors also attempted to present the circles using basic theses to explain how to proceed further in the creation of the indicators. Once the proposal for these indicators was presented, the working group no longer consisted of the same members, and besides discussions on the web portal of the National Institute for Education, it was not even tested.

Moreover, Czechia, with no national assessment (neither high stakes nor low stakes) of learning in basic and lower secondary schools, has become a unique case in Europe. Two attempts to introduce compulsory tests in the last grade of both basic and lower secondary schools (grade 5 and grade 9) were discontinued within the past 10 years. Schools can use tests developed and sold by several commercial providers. Since 2014, the national tests for system-level monitoring based on sample surveys shall be run every year (Dvořák et al. 2014).

2.3.2 Comparison of Basic Geographic Circles of Standards of the USA, Czech Republic and Slovak Republic

At first glance, it was obvious from Table 2.4 that the wording was already different from the basic circles discussed as part of geography education. However, this does not primarily mean that their contents also differed.

For example, the absence of the regional geography of the USA or fieldwork teaching does not mean that attention is not devoted to them in the later drafts. The regional geography of the USA is found in all the circles. Data collected from various sources, i.e. even by means of fieldwork teaching, is also carried out as a cross-section on suitable examples. The circles of standards of Slovakia have the most differences, especially in their specific form. The contents of physical geography and socio-economic geography in Slovakia are, for example, concealed under the title to the circle travelling around Earth. Meanwhile, the wording of the circles of the standards of the USA and the Czech Republic makes it possible to structure the curriculum into individual years in various ways, while circles in the draft standards of Slovakia are set for individual years. Sometimes, there is a tendency for teachers to no longer consider the circles that were discussed, even though in this fixed model, the model of a spiral curriculum structure is respected, which is discussed in other subjects in upper years. Table 2.5 breaks down the thematic units of NGS USA into a total of 18 standards.

2.4 Conclusion

At this point, it is very difficult to compare the philosophy of the creation of a geography curriculum in Czechia, Slovakia or Poland with the creation of the same curriculum in other countries (in this case, the USA). The purpose of the first chapter was to briefly introduce the creation of the geography curriculum in Czechia and some problems associated with this topic. This very brief comparison is not comprehensive but only illustrative. We are aware of the fact that the concept and contents of geography education in individual countries differ from one another in the context arising from geographic knowledge, which may be due to its development, language and culture. In other words, each curriculum is influenced by its national character. Of course, this does not mean that we must follow only the knowledge at the national level, especially in a country like the Czech Republic, which does not have a broad base of experts in geography education or geography teaching. We can be greatly inspired by comparing the curriculum with a different concept. The challenges of the Geography Education Section at the IGU can also be inspirational for us.

Table 2.5 Thematic units of NGS USA

Page no.	A geographically educated person will learn:
	<i>World in a spatial context</i>
1	How to use maps and further geographic models, aids, technology and geospatial technology of spatial thinking to gain, process and submit information about the world from a spatial perspective
2	How to use mental maps to structure information about people, places and the environment in a spatial context
3	How to analyse the spatial structure of information about people, places and the environment in a spatial context
	<i>Places and regions</i>
4	Physical geographic and socio-economic characteristics of places
5	Methods of creating regions to facilitate the interpretation of the complexity of the world
6	How culture and experience of people affect the perception of places and regions
	<i>Physical geography systems</i>
7	Physical geographic processes that shape the structure of the Earth's surface
8	Characteristics and the spatial layout of ecosystems and biomes on the Earth's surface
	<i>Human systems</i>
9	Characteristics, distribution and migration of people on Earth
10	Characteristics, distribution and diversity (complexity) of the world cultural mosaic
11	Structures and networks of mutual economic links of the world
12	Processes, structures and functions of human settlements
13	How cooperation and conflicts between people affect the division of the Earth's surface and control over it
	<i>The living environment and society</i>
14	How human activity modifies the physical geographic environment
15	How physical geographic systems affect socio-economic systems
16	Understanding changes that are linked to the problem of the assessment of the significance, use and distribution and importance of natural resources.
	<i>Application level of geography</i>
17	How to use geography to interpret the past
18	How to use geography to interpret the present and plan the future

Source: Heffron and Downs (2012), Matoušek (1997)

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