



Framework Education Programme

for Secondary
General Education
(Grammar Schools)



Výzkumný ústav pedagogický v Praze

Framework Education Programme for Secondary General Education (Grammar Schools)

FEP SGE



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The English version of the Framework Education Programme for Secondary General Education (Grammar Schools) utilises the English abbreviations for the phrases in question. The original, Czech abbreviations have been left only in the case of the names of Czech institutions due to their familiarity, i.e. the Research Institute of Education in Prague (VÚP), the Ministry of Education, Youth and Sports of the Czech Republic (MŠMT) and the Association of Grammar-School Principals (AŘG).

PART A

1. Definition of the Framework Education Programme for Secondary General Education (Grammar Schools)

1.1 System of Curricular Documents

In accordance with the new principles of curricular politics, formulated in the National Programme for the Development of Education in the Czech Republic (the so-called White Paper) and embodied in Act No. 561/2004 Coll., On Preschool, Elementary, Secondary, Higher Vocational and Other Education (hereinafter only as the 'Education Act'), a new system of curricular documents for the education of pupils between 3 and 19 years of age is being introduced into the educational system. Curricular documents are developed on **two levels – state and school**. In the system of curricular documents, the **state level** is represented by the **National Education Programme (NEP) and Framework Education Programmes (FEPs)**. Whereas the NEP formulates the requirements for the education which are applicable in initial education as a whole, the FEPs define the binding scope of education for its individual stages (for preschool, elementary and secondary education). The **school level** is represented by **School Education Programmes (SEPs)**, on the basis of which education is implemented in individual schools. The School Education Programme is created by each school according to the principles prescribed in the respective FEP.¹

Both the Framework and School Education Programmes are **public documents**, available to the teaching as well as lay public.

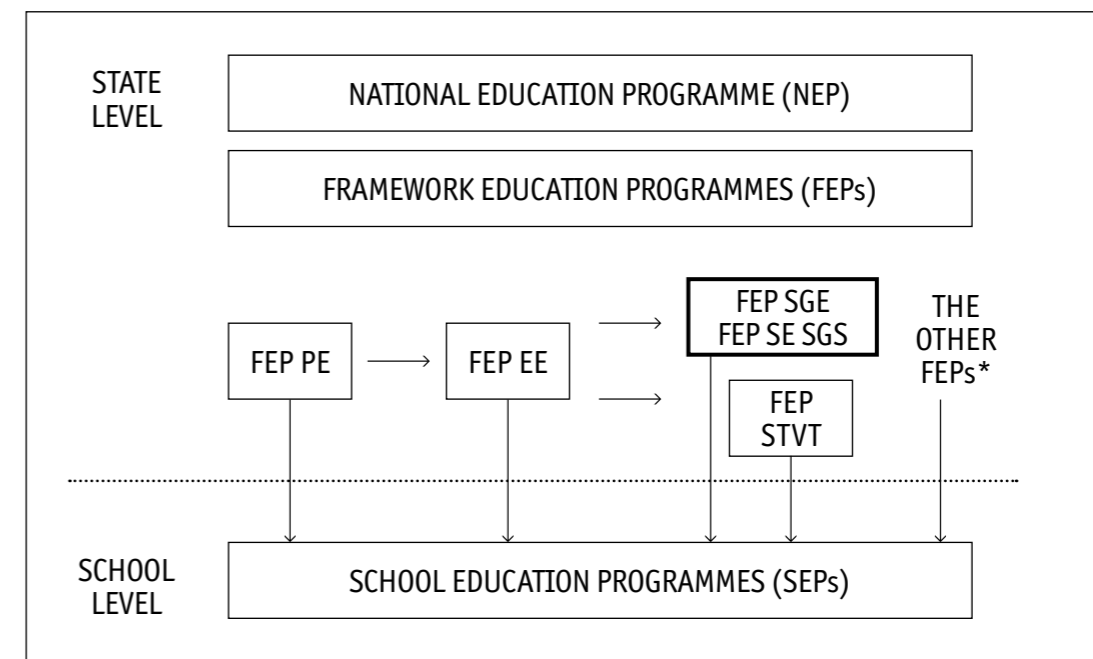


Diagram 1 – The System of Curricular Documents

Legend: FEP PE – Framework Education Programme for Preschool Education; FEP EE – Framework Education Programme for Elementary Education; FEP SGE – Framework Education Programme for Secondary General Education (Grammar Schools); FEP SE SGS – Framework Education Programme for Secondary Education at Sports Grammar Schools; FEP STVT – Framework Education Programme (Programmes) for Secondary Technical and Vocational Training.
* The other FEPs – other framework education programmes which are also delimited by the Education Act and have not been listed above.

¹ For the development of the SEP, schools can use the so-called *Manual for Developing School Education Programmes* (hereinafter only as the 'Manual'), which is created for the individual FEPs. The Manual provides information on the process of preparing a SEP and shows possible ways of elaborating the individual parts of the SEP with specific examples.

Framework Education Programmes:

- ▶ are based on a new educational strategy, which emphasises key competencies, their interconnectedness with the educational content and application of the acquired knowledge and skills in real life;
- ▶ build on the concept of lifelong learning;
- ▶ formulate the expected level of education stipulated for all graduates of the individual stages of education;
- ▶ support the educational autonomy of schools and professional responsibility of the teachers for the outcomes of the educational process.

1.2 Principles of the Framework Education Programme for Secondary General Education (Grammar Schools)

The FEP SGE

- ▶ is intended for the development of the School Education Programme at four-year grammar schools and the upper stage of six- or eight-year grammar schools;
- ▶ prescribes the elementary level of education to be attained by all grammar-school graduates, which the school must respect in its SEP;
- ▶ specifies the level of key competencies which should be attained by the pupils at the end of grammar-school education;
- ▶ defines the binding educational content – the expected outcomes and subject matter;
- ▶ integrates cross-curricular subjects with distinctly formative functions as a binding part of education;
- ▶ supports a complex approach to the implementation of educational content, including the possibility of interconnecting it appropriately, and expects that various educational approaches, different teaching forms and methods will be selected in accordance with the pupils' individual needs;
- ▶ makes it possible to modify the educational content for the education of pupils with special educational needs and of exceptionally gifted pupils.

The FEP SGE is an open document, which will be innovated at certain intervals based on the changing needs of society, the teachers' experience with the SEP as well as the changing needs and interests of the pupils.

PART B

2. Educational Characteristics

The education at four-year grammar-schools and at the upper stage of six- or eight-year grammar schools, which leads to the stage of secondary education completed with a school-leaving examination ('maturita'), is implemented in the fields *grammar school* ('*gymnasium*') and *sports grammar school*. In accordance with the Education Act, a Framework Education Programme for the implementation of education at grammar schools is issued for each field separately, i.e. *Framework Education Programme for Secondary General Education (Grammar Schools)* (FEP SGE) and *Framework Education Programme for Secondary Education at Sports Grammar Schools* (FEP SE SGS).

Considering the fact that the lower stage of six- or eight-year grammar schools provides elementary education and the pupils educated there thus fulfil their compulsory school attendance, **the education at the lower stage of six- or eight-year grammar schools is governed by the Framework Education Programme for Elementary Education. The Framework Education Programme for Secondary General Education (Grammar Schools) is related only to the education at four-year grammar schools and the education at the upper stage of six- or eight-year grammar schools.**

2.1 Organisation of the Education

The course of education at four-year grammar schools and at the upper stage of six- or eight-year grammar schools is governed by Sections 66–68 of the Education Act and Decree No. 13/2005 Coll., On Secondary Education and Education at a Conservatory, as subsequently amended (hereinafter only as the 'Decree on Secondary Education and Education at a Conservatory').

Education at four-year grammar schools and at the upper stage of six- or eight-year grammar schools is provided in day, evening, distance, e-learning (online distance learning) and blended forms of education. The conditions of the education in other than day forms of education are determined by Section 25 of the Education Act and by the Decree on Secondary Education and Education at a Conservatory. Grammar schools providing these forms of education may, in justifiable cases, adjust the educational objectives and content to the pupils so that they would correspond to their age, development and specific educational conditions.

Shortened study leading to the completion of secondary education with a school-leaving examination is governed by Section 85 of the Education Act.

2.2 Conditions for Acceptance for Study

The conditions for acceptance to study at grammar schools are governed by Sections 59–61 and 63 of the Education Act and Decree No. 671/2004 Coll., specifying the details of the organisation of the entrance procedure for study at secondary schools, as subsequently amended.

2.3 Methods and Conditions of Completing the Education and Acquiring a Certificate on the Attained Level of Education

The methods and conditions of completing the education at grammar schools are determined in Sections 72 and 77–82 of the Education Act and the Decree on the Completion of the Study at Secondary General and Vocational Schools.

For the profile part of the school-leaving examination, the school's principal shall specify the offer of the compulsory examinations, the content of which is in compliance with the syllabi of the compulsory subjects of instruction defined in the School Education Programme and with the syllabi of the seminars preparing for the school-leaving examination.

PART C

3. Educational Conception and Objectives

3.1 Educational Conception

Education at four-year grammar schools and at the upper stage of six- or eight-year grammar schools should provide the pupils with key competencies and general overview on the level of a person who has finished secondary education and thus prepare them especially for university education and other types of tertiary education, professional specialisation as well as for civic life.

A grammar school is to create a demanding and motivating study environment in which the pupils must have a sufficient number of opportunities to acquire the set level of key competencies, i.e. to attain certain important knowledge, skills, attitudes and values and be able to use them in personal, civic as well as professional life. The aim of education at a grammar school is not to present the pupils with the greatest amount of component knowledge, facts and data possible but to provide them with a systematic and well-balanced structure of knowledge, teach them to incorporate information into a meaningful context of everyday practice and instil in them the desire to develop their knowledge and skills further throughout their lives. A prerequisite of this is that approaches and methods stimulating the pupils' creative thinking, resourcefulness and independence be employed, differentiated instruction and new organisational forms utilised, integrated subjects incorporated, etc. in the education.

In the course of his/her education at a grammar school, a grammar-school graduate should acquire a wide knowledge base and attain such a level of key competencies which is required by the FEP SGE and which will allow him/her to develop his/her abilities and skills further in the process of lifelong learning and the acquisition of life experience. Such a graduate profile endows the pupils with the prerequisites for university and other study, for their adaptability in various fields and areas of human activity, for the adaptation to newly arising demands on the labour market as well as for their possible success abroad.

The FEP SGE sets only the general framework of the education at grammar schools. In their School Education Programmes, schools can thus enrich this framework on the basis of their own education plans, the needs and interests of the pupils as well as the regional conditions. In accordance with their SEP, their profile or focus, the grammar schools put the finishing touches to the profile of their graduate.

3.2 Educational Objectives

The education at four-year grammar schools and the upper stage of six- or eight-year grammar schools aims at fulfilling the following objectives:

- ▶ to provide the pupils with key competencies on the level which is required by the FEP SGE;
- ▶ to provide the pupils with a wide knowledge base on the level described by the FEP SGE;
- ▶ to prepare the pupils for lifelong learning, for their professional, civic as well as personal lives.

4. Key Competencies

Key competencies are a set of knowledge, skills, abilities, attitudes and values which are important for the personal development of an individual, his/her active participation in society and future success in life. Their selection and conception are based on which competencies are considered to be important for education at grammar schools. In order to be able to understand key competencies better and facilitate the work with them in the SEPs, key competencies are treated separately in the FEP SGE despite the fact that in practice they are interconnected and complement each other.

The education at four-year grammar schools and at the upper stage of six- or eight-year grammar schools endeavours to develop further the key competencies which the pupils acquired during their elementary education. The level of key competencies described in the FEP SGE is the desired state to be gradually approached by all the pupils depending on their individual capabilities. Considering the fact that the pupils' abilities and their personal aptitudes are quite varied, the teachers should measure the attained level of competencies by the personal progress of each pupil and his/her individual possibilities. The further development of key competencies should become a lifelong process of every individual.

The school should propose and describe in its education programme its own methods which will be employed by all the teachers in order to achieve the targeted development of pupils' key competencies. In the SEP, these methods are designated as educational strategies and employed in both the curricular and extracurricular activities.

At four-year grammar schools and at the upper stage of six- or eight-year grammar schools, a pupil should acquire:

- learning competency,
- problem-solving competency,
- communication competency,
- social and personal competency,
- civic competency,
- entrepreneurial competency.

The following are descriptions of what a pupil should be able to do in terms of the competency in question by the end of his/her grammar-school education.

Learning Competency

A grammar-school graduate:

- ▶ plans and organises his/her learning and work activity himself/herself, using them as a means for self-fulfilment and personal development;
- ▶ effectively employs various learning strategies in order to acquire and process knowledge and information, seeks and develops effective methods in his/her learning, reflects on the process of his/her learning and thinking;
- ▶ approaches information sources critically, processes the information creatively and employs it in his/her study and practice;
- ▶ evaluates his/her progress when achieving the objectives of his/her learning and work critically, accepts praise, advice as well as criticism from others, draws lessons from his/her successes as well as mistakes for further work.

Problem-Solving Competency

A grammar-school graduate:

- ▶ recognises a problem, elucidates its nature, divides it into parts;
- ▶ forms hypotheses, proposes gradual steps, considers the application of various methods when solving problems or verifying a hypothesis;
- ▶ applies appropriate methods and prior knowledge and skills when solving problems; apart from analytical and critical thinking, the pupil uses also creative thinking while employing imagination and intuition;
- ▶ interprets critically the acquired knowledge and findings and verifies them, finds arguments and evidence for his/her claims, formulates and defends well-founded conclusions;
- ▶ is open to using various methods when solving problems, considers a problem from various sides;
- ▶ considers the possible advantages and disadvantages of the individual solution variants, including the assessment of their risks and consequences.

Communication Competency

A grammar-school graduate:

- ▶ with respect to the situation and participants in the communication effectively employs available means of communication, both verbal and non-verbal, including expressing information of various types symbolically and graphically;
- ▶ uses specialised language as well as symbolic and graphic expressions of information of various types with comprehension;
- ▶ employs modern information technologies effectively;
- ▶ expresses himself/herself clearly, in spoken as well as written forms, comprehensibly and adequately to what, to whom and how, with what intent and in which situation he/she wants to communicate; the pupil is sensitive to the degree of experience and knowledge and to possible feelings of his/her partners in communication;
- ▶ presents his/her work as well as himself/herself in a suitable way before a familiar as well as unfamiliar audience;
- ▶ understands messages of various types in various communication situations, correctly interprets the messages being received and argues pertinently; helps achieve understanding in unclear or disputable communication situations.

Social and Personal Competency

A grammar-school graduate:

- ▶ realistically evaluates his/her physical and spiritual possibilities, he/she is capable of introspection;
- ▶ sets his/her objectives and priorities with respect to his/her personal abilities, interests as well as living conditions;
- ▶ estimates the consequences of his/her conduct and behaviour in various situations and adjusts his/her conduct and behaviour accordingly;
- ▶ adjusts to changing life and professional conditions and influences them actively and creatively according to his/her abilities and possibilities;
- ▶ actively cooperates when setting and attaining common goals;
- ▶ contributes to creating and maintaining valuable interpersonal relations based on mutual respect, tolerance and empathy;
- ▶ exhibits a responsible relation to his/her own health and to the health of others;
- ▶ decides on the basis of his/her own judgement, resists social and media pressure.

Civic Competency

A grammar-school graduate:

- ▶ considers relations between his/her personal interests, the interests of a wider group to which he/she belongs and public interests in a knowledgeable way, decides and acts in a balanced manner;
- ▶ hypothesises on the development of the society and civilisation in terms of life sustainability, makes decisions and acts in such a way as not to endanger or damage nature and the environment or culture;
- ▶ respects the diversity of values, opinions, attitudes and abilities of other people;
- ▶ expands his/her knowledge and understanding of cultural and spiritual values, helps create and defends them;
- ▶ carefully considers connections between his/her rights, duties and responsibility; approaches the fulfilment of his/her duties responsibly and creatively, defends his/her rights as well as the rights of others, acts so as to prevent their suppression and helps create conditions for their fulfilment;

- ▶ acts knowledgeably and responsibly in crisis situations and situations when life and health are in danger, offers help to others;
- ▶ reviews the events and development of public life, monitors what happens at his/her place of residence and its surroundings, takes and defends informed stances and acts for the common good as he thinks best.

Entrepreneurial Competency

A grammar-school graduate:

- ▶ decides purposefully, responsibly and with respect to his/her needs, personal disposition and possibilities on his/her further education and future professional specialisation;
- ▶ develops his/her personal as well as professional potential, recognises opportunities and makes use of them for his/her development in personal and professional life;
- ▶ applies a proactive approach, his/her own initiative and creativity, embraces and supports innovations;
- ▶ acquires and critically assesses information on educational and work opportunities, utilises available sources and information when planning and implementing his/her activities;
- ▶ endeavours to attain set objectives, continuously revises and critically evaluates the attained results, adjusts his/her further activity with respect to the set objective; completes activities which he/she has begun, motivates himself/herself to achieving success;
- ▶ judges and critically evaluates the risks related to making decisions in real-life situations and is ready to bear these risks if necessary;
- ▶ understands the essence and principles of entrepreneurship, weighs its possible risks, seeks and critically evaluates the opportunities for implementing a business plan taking his/her disposition, the reality of the market environment and other factors into account.

5. Educational Areas

Educational content at four-year grammar schools and at the upper level of six- or eight-year grammar schools has been divided into eight, roughly defined **educational areas** in the FEP SGE. Individual educational areas consist of one or more educational fields of similar educational content:

- ▶ **Language and Language Communication** (Czech Language and Literature, Foreign Language, Second Foreign Language);
- ▶ **Mathematics and Its Application** (Mathematics and Its Application);
- ▶ **Man and Nature** (Physics, Chemistry, Biology, Geography, Geology);
- ▶ **Man and Society** (Basics of Civics and Social Sciences, History; Geography);
- ▶ **Man and the World of Work** (Man and the World of Work);
- ▶ **Arts and Culture** (Music, Fine Arts);
- ▶ **Man and Health** (Health Education, Physical Education);
- ▶ **Information Science and Information and Communication Technologies** (Information Science and Information and Communication Technologies).

Each educational area contains the **characteristics of the educational area**, the **objectives of the educational area** and its **educational content**.

The **characteristics of the educational area** express the position and significance of the educational area at grammar schools and their interconnectedness with the concept of the educational areas in elementary education.

The **objectives of the educational area** express the ways in which the educational area and its fields contribute to the development of the pupil's key competencies. The objectives of individual educational areas must be respected by a given school when formulating educational strategies which are described in the syllabi of all subjects of instruction in the School Education Programme. These are the teachers' own strategies, which

they plan and which, based on their own experience, will lead to the targeted formation and development of the pupil's key competencies. These can be, for example, diverse methods and forms of work or various activities which are utilised in the individual subjects.

The **educational content** is an interconnected whole of the **expected outcomes** and of the **subject matter**. The **expected outcomes** define which levels of subject matter the students should achieve by the end of their grammar-school education, i.e. what desirable knowledge, skills, attitudes and values they are to possess. These outcomes not only provide information on the knowledge to be acquired but mainly on the abilities and skills to apply the acquired knowledge in more complex thought processes and in practical activities. They are the educational outcomes which can be employed in normal life and further studies and are verifiable using proper assessment tools. The **expected outcomes** formulated in the FEP SGE are **binding** for the creation of a SEP. Like the expected outcomes, the **subject matter** defined in the FEP SGE is **binding** for the SEP and is perceived as a means of achieving the set expected outcomes.

The entire educational content in the FEP SGE is binding for all pupils. Apart from the compulsory educational fields in the FEP SGE, it is also possible to use complementary educational fields, which expand the educational offer.² It is supposed that additional or more challenging expected outcomes and a wider range of subject matter will be determined by the school itself in its own education programme (e.g. with respect to its profile or the form of its profile part of the school-leaving examination). The educational content of the fields is separated into thematic areas and thematic wholes, or into themes, the subdivision and ordering of which do not need to be observed in the SEP.

The content of educational fields in the SEP will be elaborated into syllabi for the subjects of instruction. The subject of instruction can cover the whole educational content of one field defined in the FEP SGE, but the educational content of one educational field may also be separated into several subjects of instruction, or the educational content of several fields may be integrated into one subject. In the FEP SGE, it is also possible to integrate thematic areas, wholes and themes of various educational fields so as to support the inter-field (inter-subject) relations to the maximum degree possible. If a school makes use of this option, the integration of the educational content in the SEP must be targeted on the development of the pupil's ability to interconnect the acquired knowledge and skills.

5.1 Language and Language Communication

Characteristics of the Educational Area

The significance of this educational area lies mainly in cultivating the conscious use of language as a fundamental tool for the development of abstract thought and in broadening the student's abilities and skills in expression and communication, which form the basis for well-rounded, effective education. Language instruction makes it possible for the pupils to realise the intellectual treasures of their nation and its traditions. Pupils gradually learn to master not only the language itself but primarily the principles of its usage in various communication situations (both orally and in writing). Under the teacher's guidance, the pupils develop linguistic and stylistic abilities and skills, along with the corresponding communication competencies, by actively participating in various communication situations.

The educational area Language and Language Communication contains the following educational fields: **Czech Language and Literature**, **Foreign Language** and **Second Foreign Language**.

Through the instruction in **Czech Language and Literature**, which goes deeper in terms of both content and scope than elementary education, pupils learn adequately about the language as a starting point for communication in various, even more exacting, types of spoken utterances and written texts. This will enable pupils to develop competencies for the comprehension, production and reading with understanding, which will ultimately lead to their deep reading experiences. The teacher stimulates discussions or reflections on the texts. The development of these abilities and skills along with the mastery of specified theoretical knowledge is important not only for the study of Czech but also on a more general level, because a great deal of knowledge is encoded in language formulation, and new thoughts are normally expressed in natural language.

Mastery of **foreign languages** builds on the knowledge of Czech and has similar objectives, namely to be gradually able to express oneself in oral as well as written forms and to create complex communication competencies, but also specific objectives have been set. An active knowledge of foreign languages is currently necessary both from a global standpoint, because it contributes to international communication being more effective, and for the personal needs of the pupil, because it facilitates access to information and to more intensive personal contacts, through which it makes it possible to increase the pupil's mobility and to accelerate his/her orientation.

The emphasis in foreign-language instruction is currently put on increasing the level of communication so that the pupil is able to communicate effectively on common topics, establish social and personal relationships, and learn to understand the culture and customs of other people and respect them.

The instruction of foreign languages guides the pupil to a broadening of the communications skills which he/she acquired at elementary school (linguistic, sociolinguistic and pragmatic knowledge).

Education in the field **Foreign Language** builds on the level of language knowledge and communication skills corresponding to the **Level A2** as described in the Common European Framework of Reference for Languages, which the pupil achieved in previous education and which is aimed at attaining the **Level B2** according to this framework. Education in the field **Second Foreign Language** builds on the level of language knowledge and communication skills corresponding to the **Level A1** as described in the Common European Framework of Reference for Languages, which the pupil achieved in previous education and which is aimed at attaining the **Level B1** according to this framework.³

If the pupil does not have (or is not offered) the opportunity of building on the level of language knowledge and communication skills acquired in previous education corresponding to the Level A1 or A2 according to the Common European Framework of Reference for Languages, he/she is educated in a foreign language according to the school's individual offer. Education in this language is intended for complete beginners and is aimed at acquiring the level which is determined by the school within its possibilities and defined in its SEP in compliance with the Common European Framework of Reference for Languages.

In this case, however, the condition needs to apply that when a pupil selects two languages from any educational field, the pupil must gain, from at least one of the languages, language knowledge and communication skills corresponding to **at least the Level B1** according to the Common European Framework of Reference for Languages.

Objectives of the Educational Area

The instruction in this educational area is aimed at forming and developing key competencies by guiding the pupil towards:

- ▶ perceiving and using Czech as well as foreign languages as multiform means of processing and subsequently conveying information, knowledge and experiences acquired from interaction with the world and his/her own internal dialogue, of expressing his/her own needs and presenting his/her opinions as well as his/her independent solutions to problems and as means for further autonomous lifelong learning;
- ▶ mastering the basic rules of interpersonal communication in a given cultural environment and respecting them;
- ▶ forming a general overview of the social and historical development of human society, which aids in learning respect and tolerance for the different cultural values of various language communities;
- ▶ understanding himself/herself and his/her role in a range of communication situations, and defining his/her own position in relation to various communication partners;
- ▶ working creatively with not only factual but also artistic texts, which leads to the comprehension of the semantic structure of a text and its stylistic evaluation, which has a positive effect on the aesthetic, emotional and ethical aspects of the pupil's personality;
- ▶ forming an individual, objectively critical and overall positive attitude towards literature and towards the development of habits of reading both artistic and non-artistic literature individually, which are later reflected in the pupil's lifelong reading;
- ▶ shaping value orientations, taste preferences, and observing the surrounding world as well as oneself perceptively.

³ Education in the two fields may be aimed at acquiring an even higher final level of language knowledge and communication skills corresponding to the Common European Framework of Reference for Languages than the one prescribed by the educational content of these fields in the FEP SGE; this level is determined by the school itself. The SEP must specify what level of language knowledge and communication skills the pupil will have achieved within this framework at the end of his/her education, and the educational content of the foreign-language instruction must correspond to the stated level.

² Complementary educational fields are available in electronic form on the webpages of the Research Institute of Education – www.vuppraha.cz.

5.1.1 Czech Language and Literature

Educational Content

LANGUAGE AND LANGUAGE COMMUNICATION

Expected Outcomes

The pupil shall:

- ▶ differentiate between varieties of the national language and use them properly in his/her language expression depending on the communication situation
- ▶ describe the basic features of Czech and explain the principles of its development as well as modern evolutionary tendencies through an analysis of selected texts
- ▶ have mastered the principles of standard pronunciation in oral expression and use the phonetic means of the language (modulation of the volume, pitch and pace of voice; placement of stress and pauses, proper phrasing) suitably so as to be able to communicate effectively
- ▶ employ non-verbal means of language in oral expression properly
- ▶ adhere to the orthographic rules and solve more complicated cases using handbooks, effectively use the possible ways of the graphic layout of a text
- ▶ select appropriate means of expression both in writing and orally according to their function and their communicative intent, the given situation, context, and partner or audience; explain and justify the definitions of words in the given context
- ▶ apply his/her knowledge of morphology as well as the principles of Czech word formation and syntax
- ▶ employ his/her knowledge of clause elements and of the relations between them, of functional sentence perspective and communicative sentence types in order to express an idea properly, communicate effectively, structure utterances logically and distinguish between communicative intentions
- ▶ properly employ the stylistic stratification of Czech means of expression
- ▶ use various means of textual cohesion leading to increased comprehensibility, clarity, and logical coherence of the utterance; structure the text in accordance with its content organisation and development of the theme
- ▶ utilise the basic principles of rhetoric when creating his/her own spoken utterances or written texts
- ▶ select adequate communication strategies, take their partner and audience into account; recognise manipulative communication and be able to thwart it
- ▶ assess and interpret the communicative effects of a text and support his/her statements with arguments on the basis of an analysis of the text in terms of all aspects
- ▶ take excerpts from a text, create summaries and surveys
- ▶ employ various sources of information (dictionaries, encyclopaedias, internet) independently and effectively

Subject Matter

- **general instruction on language and speech** – langue and parole, language communication; thought and language; the national language and its varieties; Czech and Slavic languages; language culture; principal evolutionary tendencies of Czech
- **phonological aspect of the language** – the principles of standard pronunciation; phonological means of coherent speech
- **graphic aspect of the language** – writing system, its beginning and forms; basic principles of Czech orthography and the most frequent deviations from them
- **vocabulary, semantics and word formation** – lexical units (including phraseological); semantic relationships between words; processes of word formation

- **morphology** – word classes and their grammatical categories and forms
- **syntax** – basic principles of sentence structure (clause elements, clauses, sentences, and the relations between them); functional sentence perspective; basics of valency and text syntax
- **stylistic characteristics of means of expression**
- **text and style, objective and subjective stylistic factors**
- **text (communication) and communication situations** – environment, participants in communication, their roles
- **function of communications** – self-expression, appeal, persuasion, argumentation, contact, etc. as dominant functions of communication
- **degree to which the communication is prepared, official, formal and public; written vs. oral communication**
- **communication strategies** – appropriateness, choice of language structure, both verbal and non-verbal means of expression with respect to the partner; direct as well as indirect speech acts, language etiquette
- **monologue and dialogue** – composition of a dialogue, question–response relation; types of literary dialogue; personages within and outside the text (author, reader, narrator, lyrical hero, characters); narrative methods (direct speech, indirect speech, free direct speech and free indirect speech)
- **rhetoric** – types of rhetorical speech acts, preparation and implementation of a rhetorical performance
- **basic properties of a text, principles of its composition** – textual coherence (connectives, deictics, thematic progression); structuring of a text and its markers; paragraph and other units, mutual relationships between texts (intertextuality)
- **functional styles and their implementation in texts**

LITERARY COMMUNICATION

Expected Outcomes

The pupil shall:

- ▶ distinguish an artistic text from a non-artistic text, find the elements which make a text literary
- ▶ expound on differences between the fictional and real world and explain how the real world is reflected in a literary text, what influence the fictional world may have on the thoughts and actions of real people
- ▶ describe on specific examples the individual means of poetic language and explicate their function in the text
- ▶ distinguish and specify narrative elements (space-time, narrator, characters) and determine their function and effect on the reader
- ▶ recognise the types of discourse and narrative methods and assess their function in a specific text
- ▶ exhibit extensive knowledge of the structure of literary texts, literary genres, and critical theory terminology when interpreting a literary text in all its contexts
- ▶ identify the usage of a text inside another (intertextuality) and explain its function and effect on the reader
- ▶ express the meaning of a text, explain reasons for various interpretations of one text and the consequences thereof, compare and evaluate them, and detect possible misinterpretations of the text
- ▶ distinguish between texts which fall into the areas of the so-called serious literature, mainstream, and pulp literature and justify their opinion with arguments
- ▶ interpret dramatic, cinematic, and television treatments of literary works on his/her own
- ▶ describe the vital features of the basic periods in the development of Czech as well as world literature, important artistic movements, name their main representatives and characterise and interpret their contribution to the development of literature and literary thought
- ▶ explain the specifics of the development of Czech literature and explicate its position in the context of world literature (mutual inspiration, affinity, peculiarity and its causes)

- ▶ use information from specialised literature, internet, media and other sources creatively and classify and evaluate it critically
- ▶ use the acquired abilities and skills creatively in productive activities which develop his/her own individual style

Subject Matter

- **basics of literary science** – literary theory, literary history, literary criticism, poetics; interdisciplinary nature of literary science; literature and its function
- **methods of interpreting texts** – approaches and conventions of interpretation, sense and meaning, description, analysis, explication and actual interpretation of a text; reading competencies; interpretation and reinterpretation
- **methods of expressing experiences gained from literary works and opinions on them** (personal notes, annotations, criticism and reviews, polemics)
- **linguistic, compositional and thematic means of creating a literary work** – tropes; figures; rhythm, rhyme and the onomatopoeic means of poetry; monologue, dialogue, direct and indirect speech, free direct and free indirect speech; types of composition; motif, theme
- **text and intertextuality** – context, influence, and methods of intertextual reference and intertextual communication (motto, quote, allusion), genres based on intertextual reference (parody, travesty, plagiarism), front and back matter of a text (foreword, epilogue, illustrations, cover; authorial commentary, review)
- **development of literature in the context of period thinking, arts and culture** – the function of the division of literature into periods, development of the context of Czech and world literature; contributions of the great authorial personalities in terms of both themes and expressions; literary schools and movements; development of literary types and genres with an emphasis on modern literature

5.1.2 Foreign Language

Educational Content

RECEPTIVE LANGUAGE SKILLS

Expected Outcomes

The pupil shall:

- ▶ understand the main points and ideas of an authentic oral expression with a rather complex content on a current topic and express its main as well as complementary information
- ▶ distinguish between individual speakers in a discourse, identify different styles, emotional tones, opinions and attitudes of the individual speakers
- ▶ understand the main points and ideas when reading an authentic text or written expression with a rather complex content on a current topic
- ▶ identify the structure of a text and distinguish between the main and complementary information
- ▶ find and accumulate information on a less common, specific topic from various texts and work with the information acquired
- ▶ infer the meaning of unknown words based on already acquired vocabulary, context, knowledge of word formation and cognates
- ▶ utilise various types of dictionaries, informative literature, encyclopaedias and media
- ▶ read literature in the language of study with comprehension
- ▶ describe the plot and the sequence of events in a film or play

PRODUCTIVE LANGUAGE SKILLS

Expected Outcomes

The pupil shall:

- ▶ formulate his/her opinion in such a way that he/she is understood, using correct grammar, spontaneously and coherently
- ▶ reproduce freely and coherently an authentic text with vocabulary and language structures characteristic of a rather demanding text which he/she has read or listened to
- ▶ present a coherent speech on an assigned topic
- ▶ create lucid texts on a wide range of topics and express his/her attitudes
- ▶ describe in detail his/her surroundings, interests and activities related to them
- ▶ structure formal as well as informal written expressions logically and clearly, using different styles
- ▶ receive information of a rather complex content with a good degree of comprehension and be able to convey it in such a way that he/she is understood while using grammar correctly
- ▶ use a broad general vocabulary to develop argumentation without reducing the content of the communication
- ▶ employ monolingual and specialised dictionaries when writing on selected topics

INTERACTIVE LANGUAGE SKILLS

Expected Outcomes

The pupil shall:

- ▶ express and defend his/her ideas, opinions and attitudes using appropriate written as well as oral forms
- ▶ comment on and discuss various opinions on non-fiction and fiction texts adequately and using correct grammar
- ▶ react spontaneously and using correct grammar in more complicated, less common situations while using appropriate phrases and expressions
- ▶ communicate fluently on abstract as well as specific topics in less common or specialised situations, respecting the rules of pronunciation
- ▶ begin, carry on and end conversations with native speakers and join in active discussion on various topics concerning more specialised interests

Subject Matter

LANGUAGE MEANS AND FUNCTIONS

(connected with personal, educational, work-related and public areas which the pupil encounters commonly, less often or only in specific circles)

- **phonetics** – the phonetic structure of a word, the phonetic aspect of a sentence, phonetic reduction, phonetic features
- **orthography** – rules for more difficult words, principles for phrasing and intonation arising from the written form of the language, pronunciation conventions
- **grammar** – nominal and verbal phrases, morphemes, prefixes, suffixes, further ways of expressing the past, present and future, complex subordinate clauses, compound sentences, derivation, functional shift, transformation, valency
- **lexicology** – collocations, set phrases on the sentential level, proverbs, simple idioms, phrasal verbs, set clause patterns, specialised terms and phrases on common topics

COMMUNICATIVE FUNCTION OF THE LANGUAGE AND TEXTUAL TYPES

(connected with personal, educational, work-related and public areas which the pupil encounters commonly, less often or only in specific circles)

- **attitude, opinion, viewpoint** – agreement, disagreement, consent, request, denial, possibility, impossibility, certainty, obligation, prohibition, order
- **emotion** – like/dislike, interest/lack of interest, delight/disappointment, surprise, astonishment, worry, gratitude, sympathy, indifference, fear
- **moral attitudes and functions** – apology, forgiveness, praise, rebuke, regret, confession, condemnation
- **shorter writings** – greetings, messages, congratulations, invitations, responses, personal letters, official letters, requests, advertisements, structured résumés
- **longer writings** – detailed CVs, narrations, reflections, essays, detailed descriptions, technical descriptions
- **reading and listening comprehension** – logically structured texts in non-complicated language, informational texts, descriptive, factographic, documentary, imaginative and artistic texts
- **independent oral expression** – description, summary, comparison, narration, notice, presentation, textual paraphrase
- **interaction** – formal as well as informal conversation, discussion, correspondence, structured interview, unexpected situations in both personal and professional life, communication by telephone and other media
- **information from the media** – press, radio, television, internet, film, audio and video recordings, public announcements, telephone

THEMATIC AREAS AND COMMUNICATION SITUATIONS

(In terms of content and language, the source texts are more difficult but not complicated, contain elements of artistic, journalistic, scientific and popular-science styles, are related to both common and less common, specific as well as abstract topics which the pupil can encounter in everyday life or when travelling to countries in a given language region.)

- **public area** – public institutions, public announcements, authorities, official letters, main political parties and bodies, public meetings, public services, passports, authorisation, performances, competitions
- **work area** – state administration, companies, industry, agriculture, less common professions, instruments and equipment, events at work, employment contracts, business letters, advertising materials, manuals, job description, occupational safety
- **educational area** – elementary, secondary and tertiary education in the Czech Republic and countries of the foreign language studied, scientific societies and clubs, professional institutions, vocations and degrees from educational institutions, student gatherings, classroom equipment, work in the classroom, debates and discussions, annotations, summaries
- **personal area** – home when abroad, lie of the land, social relationships, close family or friends, colleagues, artistic subjects, household utensils, sports and recreational equipment, health, accidents, lifestyle, non-traditional holidays, non-traditional hobbies, recipes, novels, magazines
- **personality area** – identity, methods of self-perception, philosophy of life
- **social area** – nature, environment, ecology, global problems, science and technology, progress

REALIA OF THE COUNTRIES OF THE LANGUAGE STUDIED

- **political and economic position in the world**
- **brief characteristics of the economy, society and culture**
- **relations with the Czech Republic**
- **literature, important works and authors**

- **science, technology, sport, art, significant personalities, works, achievements**
- **life and traditions, family, education, national pastimes and specialties**
- **language peculiarities and differences**
- **media and their impact on individuals and society**
- **current affairs and events of greater significance**
- **authentic materials** – press, radio, film

Note:

Education in Foreign Language is aimed at attaining the Level B2 as specified in the Common European Framework of Reference for Languages, which can be described as follows:

The pupil expresses himself/herself clearly without reducing the content of the communication. He/She has sufficient means of expression to be able to provide a clear description, express his/her opinions, develop arguments without major problems with finding the right words, for which he/she uses some types of complex sentences. The pupil has a high level of vocabulary in general, although to a lesser degree mistakes occur and incorrect words are selected, which however do not cause problems in communication. The pupil has mastered grammar well and only occasionally makes small or unsystematic mistakes; minor mistakes may occur in sentence structure but are not frequent and can be corrected later.

The pupil avoids serious mistakes in formulations, expresses himself/herself with confidence, clearly and politely in terms of formal as well as informal functional styles which correspond to a given situation or persons in question.

5.1.3 Second Foreign Language

Educational Content

RECEPTIVE LANGUAGE SKILLS

Expected Outcomes

The pupil shall:

- ▶ understand the main points and ideas of authentic oral expressions as well as written texts on a common and familiar topic
- ▶ identify the structure of a simple text and recognise the main information
- ▶ distinguish between individual speakers in a discourse, identify different styles and emotional tones of the communication
- ▶ guess the meaning of unknown words based on the context and already acquired vocabulary
- ▶ utilise various methods of reading depending upon the type of text and the purpose of reading
- ▶ use various types of dictionaries when reading uncomplicated factographic texts

PRODUCTIVE LANGUAGE SKILLS

Expected Outcomes

The pupil shall:

- ▶ reproduce a less demanding authentic text with vocabulary on a common topic which he/she has read or listened to in such a way that he/she is understood
- ▶ formulate his/her opinion both orally and in writing on a simple, common topic in such a way that he/she is understood, using correct grammar and briefly

- ▶ structure formal as well as informal written expressions of a medium length on a common or familiar topic logically and clearly
- ▶ create oral as well as written expressions on a simple topic as a linear sequence of ideas
- ▶ describe his/her surroundings, interests and activities related to them simply and coherently
- ▶ summarise and communicate, both orally and in writing, common information with a simple content
- ▶ employ translation dictionaries when writing on less common topics

INTERACTIVE SPEECH SKILLS

Expected Outcomes

The pupil shall:

- ▶ explain, using correct grammar, his/her opinions and attitudes in a written as well as oral form and describe his/her personal interests or everyday life in a short and simple expression
- ▶ react adequately and using correct grammar in common everyday situations while using simple, appropriate phrases and expressions
- ▶ communicate with a certain degree of self-confidence, using acquired vocabulary and grammatical means while respecting the rules of pronunciation
- ▶ join a conversation, even if with minor difficulties, with native speakers on common and familiar topics in predictable everyday situations

Subject Matter

LANGUAGE MEANS AND FUNCTIONS

(connected with personal, educational, and social areas and related to interests and specific communication situations which the pupil can encounter commonly)

- **phonetics** – distinctive features, word stress, word tone, syllable structure, rhythm, intonation, weak and strong forms of pronunciation
- **orthography** – punctuation, rules for common words, contractions, commonly used lithographic symbols, pronunciation conventions in dictionaries
- **grammar** – simple word forms, vowel gradation and consonant mutation, irregular and zero forms of word classes, synonyms, antonyms, basic ways of expressing the present, past and future, the present passive, compounds and compound lexemes, complex subordinate clauses, compound sentences, suppletion, government, concord
- **lexicology** – set phrases, comparison, compound prepositions

COMMUNICATIVE FUNCTIONS OF THE LANGUAGE AND TEXT TYPES

(connected with personal, educational and social areas and related to specific communication situations which the pupil can encounter commonly)

- **attitude, opinion, viewpoint** – agreement, disagreement, consent, request, denial, prohibition, order, possibility, impossibility, certainty, obligation
- **emotion** – like/dislike, interest/lack of interest, delight/disappointment, surprise, astonishment, worry, gratitude, sympathy, indifference, fear
- **moral attitudes** – apology, forgiveness, praise, rebuke, regret, confession
- **shorter writings** – greetings, messages, congratulations, invitations, responses, personal letters, simple formal letters, requests, simple advertisements
- **longer writings** – brief CVs, stories, simple descriptions

- **reading and listening comprehension** – logically structured texts in non-complicated language, informational texts, descriptive and artistic texts
- **independent oral expression** – description, comparison, narration, short notice, presentation in simple formulation, paraphrase of a short text
- **interaction** – formal as well as informal conversation, discussion, correspondence, structured interview
- **information from the media** – press, radio, television, internet, film, audio and video recordings, public announcements, telephone

THEMATIC AREAS AND COMMUNICATION SITUATIONS

(In terms of both content and language, the source texts are organised, not complicated, logically structured, of an informative and descriptive character, relate to specific and common topics and draw on authentic situations which the pupil can encounter in everyday life or when travelling to countries in a given language region.)

- **public area** – services, shops, shopping malls, open-air markets, goods, stickers and packaging, public transport, schedules, tickets, fines, theatre, cinema, programmes, entertainment clubs, restaurants, food menus, hotels, forms, common events, medical services, notices, flyers
- **work area** – job, common professions, common companies, common equipment of a workplace, business administration, business letters, buying and selling, simple manuals and job description, road signs, simple recipes
- **educational area** – school, classrooms, school areas, teachers, school facilities and equipment, less common school aids, significant school days and events, instruction, homework, discussions, videotexts, computer screen texts, dictionaries, handbooks
- **personal area** – family and its social ties, friends, relatives, home furnishings and equipment; life outside the home: halls of residence, hotel, friends' home, surrounding landscape; simple equipment for sports and fun, life in the country and in the city, vacations, holidays, personal letters
- **personality area** – hobbies, interests, opinions and attitudes towards close surroundings
- **social area** – nature, environment, culture, traditions, sports, media

REALIA OF THE COUNTRIES OF THE LANGUAGE STUDIED

- **geographic classification and brief description**
- **historic events, famous figures**
- **lifestyle and traditions in comparison with the Czech Republic**
- **culture, arts and sport, some famous personalities and their accomplishments**
- **excerpts from significant literary works**

Note:

Instruction in the Second Foreign Language area is aimed at attaining the Level B1 as specified in the Common European Framework of Reference for Languages, which may be described as follows:

The pupil has sufficient means of expression and corresponding vocabulary to make himself/herself understood and express himself/herself, even if with a certain degree of hesitation. The pupil has sufficient descriptive language means which are a part of such thematic areas as family, hobbies and interests, work, travel, and current events at his/her disposal. The pupil communicates adequately in familiar contexts; in general, he/she uses grammar correctly, although the influence of the mother tongue is perceptible. The pupil uses his/her stock of grammatical means and patterns in easily predictable situations. He/She makes serious mistakes when expressing more complex ideas or speaking about unknown topics. The pupil uses a wide range of language functions and reacts within the limits of what he/she has mastered. The pupil utilises the most common expressive tools of the neutral functional style.

5.2 Mathematics and Its Application

Characteristics of the Educational Area

Instruction in Mathematics and Its Application at grammar schools develops and broadens the understanding of quantitative and spatial relationships in the real world, improves the pupil's quantitative literacy and ability of geometric insight. The mastery of the required mathematical apparatus, elements of mathematical thinking, creation of hypotheses and deductive speculations are all means of providing a new, deeper understanding and the requisites for further study. The mastered mathematical concepts, relationships and processes instil mental discipline and help the pupil acquire a sense for wholeness.

Mathematical education helps cultivate abstract and analytical thinking, develops logical judgment, and teaches clear and factual reasoning aimed at finding objective truths rather than defending one's own opinion. The focus of the instruction lies in mastering the ability to formulate a problem along with a strategy to solve it, in actively mastering mathematical tools and skills, and in cultivating the capability of applying these skills. Mathematics contributes to the pupil's being capable of evaluating the correctness of his/her approach when deducing theses and recognising false conclusions.

In the course of his/her studies, the pupil discovers that mathematics is applied in many fields of human activity (e.g. economics, technology but also in social sciences), that it is influenced by external stimuli (e.g. in the area of natural sciences) and that modern technologies are a useful aid to mathematics. The pupil learns that mathematics is a part of our culture and the product of a complex multicultural historical development linked with many important figures in the history of mankind.

Objectives of the Educational Area

The instruction in this educational area is aimed at forming and developing key competencies by guiding the pupil towards:

- ▶ mastering basic mathematical concepts and relationships by means of gradual abstraction and generalisation based on discovering their characteristic properties;
- ▶ determining, classifying and using concepts, analysing and generalising their properties;
- ▶ forming a stock of mathematical concepts, relationships, algorithms and methods for solving problems and for utilising the mathematical apparatus acquired;
- ▶ analysing problems and formulating plans for solving them, selecting the proper procedure when solving mathematical exercises and problems, evaluating the correctness of a result while taking the conditions given into consideration;
- ▶ working with mathematical models, realising that results may be reached by various methods;
- ▶ developing logical thinking and judgment, forming hypotheses on the basis of experience or experiment, verifying or invalidating them on the basis of contradiction;
- ▶ understanding mutual relationships and links between subject-matter areas, and applying mathematical knowledge in other educational areas;
- ▶ expressing himself/herself precisely and improving his/her graphic expression, understanding mathematical terminology, symbols and mathematical text;
- ▶ justifying mathematical approaches, defending his/her own approach;
- ▶ developing skills to work with various representations;
- ▶ using a calculator and modern technologies to complete tasks effectively and present the results;
- ▶ developing experience with mathematical modelling (towards performing activities through which the pupil learns to recognise and find situations in which he/she can orient himself/herself by means of mathematical description), evaluating mathematical models, recognising the limits of their usage, being aware that reality is more complex than the mathematical model, that a particular model may be appropriate for various situations and a single situation may be expressed by means of various models);

- ▶ developing geometric perception and spatial imagination;
- ▶ understanding mathematics as a part of our cultural heritage and an indispensable method for understanding the world.

5.2.1 Mathematics and Its Application

Educational Content

LOGIC AND PROOF

Expected Outcomes

The pupil shall:

- ▶ read and record theses in the symbolic language of mathematics
- ▶ properly use logical connectives and quantifiers
- ▶ distinguish between definitions and theorems, discern premises and conclusions of the theorems
- ▶ discern between correct and incorrect judgments
- ▶ create hypotheses, justify their validity or invalidity, and refute invalid statements
- ▶ justify his/her approach and verify the validity of his/her steps in the solution of the problem

Subject Matter

- **basic mathematical knowledge** – proposition, definition, theorem, proof
- **sets** – set inclusion and equality, operations with sets
- **propositional calculus**

NUMBER AND VARIABLE

Expected Outcomes

The pupil shall:

- ▶ use the properties of the divisibility of the natural numbers
- ▶ operate with intervals, apply the geometrical meaning of the absolute value
- ▶ perform operations with powers and radices, transform numerical expressions
- ▶ estimate the results of numerical calculations and carry them out effectively, use calculators efficiently
- ▶ transform terms with variables, determine the domain of definition of terms effectively
- ▶ factorise polynomials into products, also reduce by employing formulas and apply this skill when solving equations and inequalities
- ▶ solve linear and quadratic equations and inequalities, solve systems of equation systems and, in more simple cases, discuss solubility and the number of solutions
- ▶ distinguish between equivalent and non-equivalent transformations
- ▶ interpret numerical, algebraic and functional relations geometrically, illustrate solutions to equations, inequalities and their systems graphically
- ▶ analyse and solve problems through linear and quadratic equations and their systems

Subject Matter

- **numerical fields** – natural numbers, integers, rational numbers and real numbers
- **powers** – powers involving natural, integer and rational exponents, radices
- **terms with variables** – polynomials, fractional terms, terms with powers and radices
- **equations and inequalities** – linear equations, inequalities and their systems, quadratic equations (discriminant, relations between roots and coefficients), product and quotient forms of equations and inequalities, equations and inequalities with absolute value, equations with an unknown in the denominator or as a radical; logarithmic, exponential and goniometric equations

WORKING WITH DATA, COMBINATORIAL ANALYSIS, PROBABILITY

Expected Outcomes

The pupil shall:

- ▶ solve real problems with a combinatorial implication (characterise possible cases, form models using combinatorial groups and determine their number)
- ▶ utilise combinatorial analysis methods when calculating probabilities, transform terms with factorials and binomial coefficients
- ▶ discuss and critically evaluate statistical information and the given statistical content
- ▶ select and employ appropriate statistical methods for data analysis and processing (use computer technology)
- ▶ represent data sets graphically, read and interpret tables, diagrams and graphs, recognise differences between the representations of similar sets on the basis of their diverse properties

Subject Matter

- **combinatorial analysis** – elementary combinatorial analysis exercises, variations, permutations and combinations (without repetition), binomial theorem, Pascal's triangle
- **probability** – random phenomena and their probability, probability of the conflation and intersection of phenomena, independence of phenomena
- **working with data** – data analysis and processing in various representations, statistical sets and their properties (weighted arithmetic mean, median, mode, percentile, quartile, standard deviation, inter-quartile deviation)

DEPENDENCE AND FUNCTIONAL RELATIONS

Expected Outcomes

The pupil shall:

- ▶ graph the required functions (given by a simple functional specification) and determine their properties
- ▶ formulate and justify the properties of the functions and sequences studied
- ▶ employ his/her knowledge of functions when solving equations and inequalities and when determining quantitative relations
- ▶ apply the relations between the values of exponential, logarithmic and goniometric functions and the relations between these functions
- ▶ model the dependencies of real events by means of known functions
- ▶ solve application exercises by using knowledge of functions and sequences
- ▶ interpret compound interest in terms of function and apply exponential functions and geometric sequences in financial mathematics

Subject Matter

- **general knowledge of functions** – the term function, definition scope and range, function graphs, function properties
- **function** – linear functions, the square-law function; quadratic function, linear fractional function, power functions, square-root function, exponential, logarithmic and goniometric functions, relations between goniometric functions
- **sequence** – determination and properties of sequences, arithmetic and geometric sequences

GEOMETRY

Expected Outcomes

The pupil shall:

- ▶ use geometric terms, justify and utilise properties of two- and three-dimensional geometric figures, classify the figures on the basis of the properties
- ▶ determine the relative position of linear figures, their distances and deviations
- ▶ make use of drafts when solving planar or spatial problems
- ▶ apply functional relations, trigonometry and term transformations in numerical geometry exercises, work with variables and irrational numbers
- ▶ solve positional and non-positional construction exercises using all points of a given area, by means of congruent depictions and construction based on calculation
- ▶ draw prisms and pyramids in free parallel projection, construct and depict the planar section of these figures
- ▶ solve planimetric and stereometric exercises motivated by practical experience
- ▶ utilise various methods for representing lines in a plane analytically (the geometric meaning of coefficients)
- ▶ solve positional and metric exercises on linear figures in a plane analytically
- ▶ utilise the typical properties of conic sections to determine analytic representation
- ▶ determine basic data on conic sections from analytical representation (from an axis or apex equation)
- ▶ solve exercises on the mutual position of a line and conic section analytically

Subject Matter

- **planar geometry** – planar figures (classification), circumference and area; congruency and similarity of triangles; the Pythagoras' and Euclid's Theorems; sets of points of a given property; angles in a circle, congruent representations (axial and central symmetry, shift and turn); homothety, constructional exercises
- **spatial geometry** – positional and metric properties; basic figures, surface areas and volumes, free parallel projection of planar lines
- **trigonometry** – sine and cosine theorems; trigonometry of a right-angle and general triangle
- **analytical planar geometry** – vectors and operations with them; analytic representations of a line in a plane, conic sections (circle, ellipsis, parabola, hyperbola)

5.3 Man and Nature

Characteristics of the Educational Area

The main priority of each area of natural-science learning is to uncover the laws governing natural processes by means of the methods of scientific research. Uncovering natural laws is rewarding in itself, as it satisfies the natural human curiosity to gain knowledge and understand what takes place beneath the surface of perceptible and often seemingly unrelated phenomena on the one hand and makes it possible to gain control over various natural objects and processes in order to be able to use them for further research as well as for various practical purposes on the other.

If natural-science education at grammar schools is to be of good quality and practically utilisable for the pupil, it is important that it guide him/her primarily towards seeking out the natural connections between the discovered aspects of natural objects and processes and not merely towards their mere detection, description, or classification. In the educational area Man and Nature at grammar schools, the search, discovery and utilisation of the laws of nature should be developed to a much greater degree than at elementary schools. Such an approach also stimulates the desire in the pupil for a deeper understanding of the order of the world around him/her and offers him/her the possibility of intense satisfaction of using his/her own abilities to seek this order and learn about it.

The content and methodology of natural-science education very clearly reflects the systemic character of nature and the multilevelled character of its organisation, because natural objects are mostly systems or create such systems. The examination of nature hence inevitably requires a complex, i.e. multidisciplinary and interdisciplinary, approach and thus also close cooperation between individual natural-science fields and the removal of any unnecessary barriers between them.

The educational area Man and Nature shall therefore also make it possible for the pupil to realise that barriers between individual levels of nature's organisation actually do not exist and often stem merely from our way of thinking and our isolated approaches. With its content, structural and methodical conception, this area is to form an environment of coordinated cooperation of all natural-science educational fields at grammar schools.

Natural-science disciplines are very close to one another also in terms of the methods and means which they utilise in their research activities, because they always combine empirical means (i.e. systematic and objective observation, measurement and experiments) with theoretical ones (concepts, hypotheses, models and theories), with each of these factors being indispensable in the research process and all factors affecting and supporting one another.

The pupil shall therefore have the highest number of opportunities possible to master progressively the empirical as well as theoretical methods of natural-science research selected, utilise them in the instruction along with the information on natural sciences, realise the importance of both for scientific knowledge, and particularly for its objectivity and veracity as well as for solving the problems which Man encounters when examining nature.

Natural-science research has also its own specific value and moral aspects. The objectivity and veracity of knowledge are considered to be its highest values. However, these can only be attained in an environment of free communication between people and of public and independent examinations on the methods of data collection and verification of hypotheses.

Natural-science education at grammar schools must therefore create also an environment for the free discussion of problems and for the verification of the objectivity and veracity of the information on natural sciences obtained or presented. This may be achieved by, for example, the pupil's mastering the rules of public discourse on data collection methods or hypothesis verification, developing his/her ability to submit his/her opinions, results or methods for critical public evaluation and learning to perceive his/her opponent not only as an antagonist of opinion but also as a partner in the common search for truth.

One of the most fundamental moral norms of the natural-science learning is first of all the requirement not to distort any data acquired through research and not to use its results for the creation of technologies or other practical applications which could harm human health or irrevocably disrupt our natural or social environment.

The pupil must be thus shown on specific examples the negative impact of such distortions of research data as well as of the abuse of research results in the natural sciences for the purposes which potentially endanger mankind and other components of nature.

By showing the pupil how the knowledge and methods of natural sciences can be used for the inspiration and development of other areas of human activities, ranging from various technologies to philosophy, the educational area Man and Nature presents the natural sciences to him/her also as an inseparable and indispensable part of human culture and by so doing increases the pupil's interest in them. This interest may be further encouraged by means of excursions to various scientific, technological or cultural institutions and undoubtedly also by using modern technologies as much as possible in the course of the pupil's education in natural sciences. Another factor which may contribute to raising the pupil's interest in natural-science education are objective evaluations of diverse information from the areas of pseudo-science or anti-science, as these evaluations often use precisely the knowledge and methods of the natural sciences.

The educational area Man and Nature is divided into the educational fields **Physics, Chemistry, Biology, Geography** and **Geology**. In the case of the educational field **Geography**, its educational content not only of a natural-science but also of a social-science character have been included in this educational area so as to preserve the educational field in its entirety.

Objectives of the Educational Area

The instruction in this educational area is aimed at forming and developing key competencies by guiding the pupil towards:

- ▶ formulating a natural-science problem, seeking an answer to it and possibly also specifying or correcting the solution to this problem;
- ▶ carrying out systematic and objective observations, measurements and experiments (mainly of a laboratory type) according to individual or team plans or projects, and towards processing and interpreting the data obtained and seeking connections between them;
- ▶ creating a model of natural objects or processes which would make it possible to represent properly their fundamental features and principles;
- ▶ using adequate mathematical and graphical means of representing natural-science relationships and laws;
- ▶ making use of the means of modern technology during activities providing knowledge of natural sciences;
- ▶ cooperating on plans or projects which yield knowledge of natural sciences and sharing data or hypotheses acquired during the research of natural facts with others;
- ▶ predicting the course of the natural processes studied based on the knowledge of general natural-science laws and specific conditions;
- ▶ predicting possible impact of practical human activities on the natural environment;
- ▶ protecting the environment, his/her health as well as the health of others;
- ▶ employing various natural objects and processes for self-fulfilment while taking their conservation into consideration.

5.3.1 Physics

Educational Content

PHYSICAL QUANTITIES AND THEIR MEASUREMENT

Expected Outcomes

The pupil shall:

- ▶ measure selected physical quantities using proper methods, process and evaluate the results of the measurement
- ▶ distinguish between scalar and vector quantities and employ them while solving physical problems and exercises

Subject Matter

- **system of physical quantities and units** – the International System of Units (SI)
- **absolute and relative measurement deviation**

MOTION OF BODIES AND THEIR INTERACTION

Expected Outcomes

The pupil shall:

- ▶ utilise basic kinematic relations while solving problems and exercises focused on uniform or uniformly accelerated/decelerated motions
- ▶ determine in specific situations the forces and their moments affecting an object and the resultant of the forces
- ▶ employ (Newton's) Laws of Motion to predict the motion of bodies
- ▶ use the laws of the conservation of various important physical quantities in solving problems and exercises
- ▶ clarify the processes of the generation, propagation, reflection and interference of mechanical wave motion

Subject Matter

- **kinematics of motion** – reference system; body position and its change, velocity and acceleration
- **dynamics of motion** – mass and force; First, Second, and Third Laws of Motion, the inertial system; linear momentum of an object; compressive force, pressure; frictional force; elastic force; force of gravity and gravitational force; gravitational fields; moment of force; work, power; the connection between change in mechanical energy and work; the Law of Conservation of Mass, the Law of Conservation of Momentum and the Law of Conservation of Energy
- **mechanical vibrations and waves** – vibrations of a mechanical oscillator, their period and frequency; progressive wave motion, standing wave motion, wavelength and wave velocity; sound, sound volume and intensity

COMPOSITION AND PROPERTIES OF SUBSTANCES

Expected Outcomes

The pupil shall:

- ▶ explain the connection between the properties of substances in different states of matter and their internal structure
- ▶ apply the Laws of Thermodynamics with comprehension when solving specific physical exercises
- ▶ utilise the equation of state of an ideal gas with constant mass when predicting gas-phase changes
- ▶ analyse the origin and course of the process of elastic deformation of solid bodies
- ▶ compare the laws of thermal expansion of solids and liquids and use them to solve practical problems

Subject Matter

- **kinetic theory of matter** – character of motion and mutual interactions of particles in various states of matter
- **thermodynamics** – thermodynamic temperature; internal energy and its change, heat; the First and Second Laws of Thermodynamics; specific heat capacity; various methods of internal energy transfer in different systems
- **properties of matter** – normal stress, Hooke's Law; liquid surface tension, capillary phenomena; thermal expansion coefficient of solids and liquids; latent heat and specific latent heat

ELECTROMAGNETIC PHENOMENA, LIGHT

Expected Outcomes

The pupil shall:

- ▶ compare the effects of an electric field on conductors and insulators
- ▶ apply Ohm's Law in solving practical problems
- ▶ utilise the knowledge of mechanisms of conducting electrical current in metals, semiconductors, liquids and gases when analysing the behaviour of bodies made from them in electric circuits
- ▶ apply Faraday's Law of Induction to solve problems and explain the functions of electric devices

- ▶ compare the propagation of various types of electromagnetic waves in diverse environments
- ▶ apply the Laws of Light Propagation in a medium designed to determine the properties of the object depicted through simple optical systems

Subject Matter

- **electric charge and electric field** – electric charge and its conservation; electric field intensity, electric voltage; capacitors
- **electric current in matter** – current as a quantity; Ohm's Law for part of a circuit as well as a closed circuit; electric resistance; electrical energy and direct current power; semiconductor diode
- **magnetic field** – magnetic fields of conductors with current, magnetic induction; induced voltage
- **alternating current** – harmonic alternating voltage and current, their frequency; alternating current power; alternating current generator; electromotor; transformer
- **electromagnetic radiation** – electromagnetic wave; electromagnetic radiation spectrum
- **wave properties of light** – propagation and speed of light in various media; constancy of the speed of light in inertial systems and some outcomes of this law; the Laws of Reflection and Refraction, the refractive index; the visible spectrum, light interference
- **optical imaging** – reflection imaging on a planar and spherical mirror; imaging by refraction through thin lenses; visual angle; the eye as an optical system; magnifying glass

THE MICROSCOPIC WORLD

Expected Outcomes

The pupil shall:

- ▶ utilise the knowledge of quantisation of the energy of radiation and microparticles to solve physical problems
- ▶ assess nuclear transmutation in terms of incoming and exiting particles as well as the energy balance
- ▶ apply the Law of Radioactive Transformation to predict the behaviour of radioactive materials
- ▶ suggest possible ways to protect people from dangerous types of radiation

Subject Matter

- **quanta and waves** – the photon and its energy; corpuscular-wave nature of radiation and microparticles
- **atoms** – quantisation of electron energy in atoms; spontaneous and stimulated emission, laser; nuclear energy; synthesis and splitting of atom nuclei; chain reactions, nuclear reactors

5.3.2 Chemistry

Educational Content

GENERAL CHEMISTRY

Expected Outcomes

The pupil shall:

- ▶ utilise a specialised terminology when describing substances and explaining chemical processes
- ▶ perform chemical calculations and apply them when solving practical problems
- ▶ predict the properties of elements and their behaviour in chemical processes, based on a knowledge of the periodic table of elements
- ▶ use the knowledge of the particulate structure of matter and chemical bonds to predict some physical and chemical properties of substances and their behaviour in chemical reactions

Subject Matter

- systems of substances and their composition
- quantities and calculations in chemistry
- atomic structure
- the periodic table of elements
- chemical bonds and properties of substances
- temperature changes in chemical reactions
- rates of chemical reactions and chemical equilibrium

INORGANIC CHEMISTRY

Expected Outcomes

The pupil shall:

- ▶ utilise the terminology of inorganic chemistry when describing compounds
- ▶ characterise significant representatives of elements and their compounds, assess their raw-material sources, application in practice and impact on the environment
- ▶ predict the course of typical reactions in inorganic compounds
- ▶ utilise the knowledge of the fundamentals of qualitative and quantitative analyses for understanding their practical meaning in inorganic chemistry

Subject Matter

- hydrogen and its compounds
- s-elements and their compounds
- p-elements and their compounds
- d- and f-elements and their compounds

ORGANIC CHEMISTRY

Expected Outcomes

The pupil shall:

- ▶ evaluate the properties of a carbon atom significant for the structure of organic compounds
- ▶ apply the rules of the systematic terminology of organic chemistry when describing compounds with the option of using trivial names
- ▶ characterise the basic groups of organic compounds and their significant representatives, evaluate their raw material sources, their application in practice and their effect on the environment
- ▶ apply the knowledge of the mechanisms of organic reactions on specific examples
- ▶ use the knowledge of the fundamentals of qualitative and quantitative analyses to understand their practical meaning in organic chemistry

Subject Matter

- hydrocarbons and their classification
- hydrocarbon derivatives and their classification
- heterocyclic compounds
- synthetic macromolecular substances
- drugs, pesticides, colouring agents and detergents

BIOCHEMISTRY

Expected Outcomes

The pupil shall:

- ▶ explain the structure and function of compounds necessary for important chemical processes taking place in organisms
- ▶ characterise basic metabolic processes and their significance

Subject Matter

- lipids
- saccharides
- proteins
- nucleic acids
- enzymes, vitamins and hormones

5.3.3 Biology

Educational Content

GENERAL BIOLOGY

Expected Outcomes

The pupil shall:

- ▶ distinguish living from non-living systems on the basis of their typical properties
- ▶ compare significant hypotheses on the origin and evolution of living systems on the Earth
- ▶ explain the arrangement and function of the structural components and life manifestations of prokaryotic and eukaryotic cells
- ▶ explain the significance of the differentiation and specialisation of cells for multicellular organisms
- ▶ deduce the hierarchy of recent organisms based on his/her knowledge of their evolution

Subject Matter

- origin and development of living systems; evolution
- cell – structure and function

VIRAL BIOLOGY

Expected Outcomes

The pupil shall:

- ▶ characterise viruses as acellular organisms
- ▶ evaluate the ways of protection against viral diseases and methods of their treatment
- ▶ evaluate the positive and negative aspects of the significance of viruses

Subject Matter

- structure and function of viruses

BACTERIAL BIOLOGY

Expected Outcomes

The pupil shall:

- ▶ characterise bacteria in terms of ecology, medicine and economics
- ▶ evaluate the ways of protection against bacterial diseases and the methods for their treatment

Subject Matter

- **structure and function of bacteria**

PROTIST BIOLOGY

Expected Outcomes

The pupil shall:

- ▶ characterise protists in terms of ecology, medicine and economics

Subject Matter

- **structure and function of protists**

FUNGAL BIOLOGY

Expected Outcomes

The pupil shall:

- ▶ recognise and name (relying on various information sources if necessary) significant representatives of fungi and lichens
- ▶ assess the ecological, medical and economic significance of fungi and lichens

Subject Matter

- **structure and function of fungi**
- **structure and function of lichens**

PLANT BIOLOGY

Expected Outcomes

The pupil shall:

- ▶ describe the plant-body structure and the structure and function of plant organs
- ▶ elucidate the principle of life cycles and how plants reproduce
- ▶ compare shared vs. specific properties of thallophytes and vascular plants
- ▶ recognise and name (relying on various information sources if necessary) significant plant species and list their ecological requirements
- ▶ evaluate plants as the primary producers of biomass and the possible ways of utilising plants in various spheres of human activity
- ▶ assess the influence of living conditions on the structure and function of plant bodies
- ▶ evaluate the problems of endangered plant species and possible ways of protecting them

Subject Matter

- **plant morphology and anatomy**
- **plant physiology**
- **plant system and evolution**
- **plants and their environment**

ANIMAL BIOLOGY

Expected Outcomes

The pupil shall:

- ▶ characterise the main taxonomic units of animals and their significant representatives
- ▶ describe the evolution and adaptation of individual organ systems
- ▶ describe the principles of basic methods of animal reproduction and how animals develop
- ▶ recognise and name (relying on various information sources if necessary) significant animal species and list their ecological requirements
- ▶ assess the significance of animals in nature and in various spheres of human activity
- ▶ characterise the positive and negative impact of animal species on the human population
- ▶ characterise the basic types of animal behaviour
- ▶ evaluate the problems of endangered animal species and the possible ways of protecting them

Subject Matter

- **animal morphology and anatomy**
- **animal physiology**
- **animal system and evolution**
- **animals and their environment**
- **ethology**

HUMAN BIOLOGY

Expected Outcomes

The pupil shall:

- ▶ describe and explain human evolution on the basis of the scheme presented
- ▶ utilise his/her knowledge of organ systems to understand the relationships between processes taking place in the human body
- ▶ characterise individual human development and assess the factors having positive and negative effects on it

Subject Matter

- **support and movement systems**
- **metabolism systems**
- **regulatory systems**
- **reproductive systems**

GENETICS

Expected Outcomes

The pupil shall:

- ▶ use his/her knowledge of genetic principles to understand the diversity of organisms
- ▶ analyse the possibilities of using the knowledge from the field of genetics in everyday life

Subject Matter

- **molecular and cellular fundamentals of heredity**
- **heredity and mutability**
- **human genetics**
- **population genetics**

ECOLOGY

Expected Outcomes

The pupil shall:

- ▶ use the basic ecological terms correctly
- ▶ explain the basic ecological relations

Subject Matter

- **basic ecological terms**
- **conditions for life**
- **biosphere and its structure**

5.3.4 Geography

Educational Content

NATURAL ENVIRONMENT

Expected Outcomes

The pupil shall:

- ▶ compare the position of the Earth in the universe and its significant properties with those of other bodies of the solar system
- ▶ compare on specific examples the mechanisms of endogenic (including plate tectonics) and exogenic processes and their influence on the formation of the Earth's surface and human life
- ▶ explain the mechanisms of global atmospheric circulation and the consequences for the formation of climate zones
- ▶ elucidate the large and small water cycle and distinguish between the individual parts of the hydrosphere and their function in the landscape
- ▶ evaluate the waters and the Earth's soil cover as the bases for life and sources of development of society
- ▶ distinguish between the world's main biomes
- ▶ recognise the parts and elements of physiographic areas and the relations between them

Subject Matter

- **the Earth as a celestial body** – shape and motions of the Earth, impact of the Earth's motion on the life of Man and organisms, on the alternation of day and night, change of seasons, time zones on the Earth, the calendar
- **physiological area** – mutual relations and connections between parts of the physiological area, the basic principles and development of the parts of the physiological area, impact on the natural environment
- **the system of the physiological area at the planetary and regional levels** – objects, phenomena, processes, zonality, azonal phenomena

SOCIAL ENVIRONMENT

Expected Outcomes

The pupil shall:

- ▶ evaluate on specific examples the dynamics of population development on the Earth and the geographic, demographic and economic aspects affecting the behaviour, movement, distribution and employment rate of the population
- ▶ analyse the main racial, ethnic, linguistic, religious, cultural and political specifics in terms of ways of life and standard of living in the various cultural regions of the world
- ▶ identify the basic general geographic features and functions of settlements, along with current tendencies in the development of settlement
- ▶ evaluate on specific examples the global economy as an open dynamic system with certain sectors, structure and functions, and take factors of the spatial distribution of economic activities into account, define the core and peripheral areas of the world
- ▶ assess the uneven distribution, amount and concentration of the Earth's raw-materials and energy resources
- ▶ identify and compare the countries of the world and their international integration groupings and organisations according to the criteria of mutual similarity and diversity
- ▶ locate the main current geopolitical problems and changes on the political map of the world while taking historical development into consideration
- ▶ seek out the main global regions of tourism on maps and compare their location factors and potential

Subject Matter

- **population** – basic geographic, demographic, ethnic and economic characteristics
- **cultural and political environment** – population structure, system of government, geopolitical processes, main global flashpoints of conflict
- **settlements and habitation** – settlement structure and its development, settlement, municipality, town and their functions
- **the global economy** – location factors, sector and industrial structure and their consequences
- **socio-economic sphere** – socio-geographic systems, geographic aspects of wealth and poverty, globalisation

ENVIRONMENT

Expected Outcomes

The pupil shall:

- ▶ evaluate on specific examples various types of landscapes as a system of the continental part of a landscape area with specific features, certain elements, structures, surroundings and functions
- ▶ analyse on specific examples the natural and cultural (social) landscape elements and features of landscape
- ▶ evaluate some risks due to the effect of natural and social factors on the environment on local, regional, and global levels

Subject Matter

- **landscape** – landscape development, natural environment, social environment, development in land utilisation, cultural landscape, environmental science, landscape (geographical) ecology, types of landscape, landscape potential
- **course of the interaction between nature and society** – spatial coexistence, sustainable development (life), limits of the natural environment, global problems of mankind, educational, economic, and legal means of the protection of nature and environmental protection

REGIONS

Expected Outcomes

The pupil shall:

- ▶ recognise on specific regional examples the micro-regional, regional, national, macro-regional and global geographic dimensions
- ▶ specify the local region (based on the place of residence, school) on the map on the basis of selected criteria; evaluate the natural geography, economic and cultural conditions of a micro-region and its connections to larger territorial units and regions
- ▶ evaluate the position, natural conditions and resources of the Czech Republic
- ▶ locate the main development centres and peripheral areas of the Czech Republic on the maps and identify their specifics
- ▶ locate macro-regions of the world on the maps, define their borders, evaluate their natural, cultural, political and economic properties and compare these macro-regions

Subject Matter

- **local region** – possibilities for development in a micro-region, strategic and territorial planning
- **Czech Republic** – the economic and political position of the Czech Republic in Europe and in the world, the characteristics of the population and settlements, processes of economic transformation, structure of the economy, regions and Euroregions
- **macro-regions of the world** – centres, peripheries, model region – model problems with an emphasis on Europe and the European Union

GEOGRAPHICAL INFORMATION AND FIELD TRIP EDUCATION

Expected Outcomes

The pupil shall:

- ▶ use available cartographic products and other geographical sources of data and information in printed as well as electronic forms to solve geographical problems
- ▶ be able to orient himself/herself in a landscape using maps
- ▶ use selected geographic, topographic and cartographic terminology with comprehension
- ▶ create and utilise his/her own mental schemes and mental maps to orient himself/herself in a given area
- ▶ read, interpret and draw simple charts and tables, analyse and interpret numerical geographical data

Subject Matter

- **geographic cartography and topography** – practical application of cartographic products, maps of various function, cartograms
- **geographic and cartographic terminology** – widely used terms, cartographic symbols, legends, statistical data, other information, communication and documentary geographical data sources

- **geographic information and navigational systems** – Geographic Information System (GIS), Remote Sensing of the Earth (RSE), practical application of GIS, RSE as well as of GPS (the Global Positioning System) satellite navigation devices
- **field geographic education, practice and application** – geographical excursions and field exercises, practical topography, orientation, safety of activity and sleeping in the open, methods of observing, depicting and evaluating natural and social landscape features and their interactions

5.3.5 Geology

Educational Content

COMPOSITION, STRUCTURE AND EVOLUTION OF THE EARTH

Expected Outcomes

The pupil shall:

- ▶ compare the composition and structure of the individual spheres of the Earth and explain their mutual relations
- ▶ use selected methods to identify minerals

Subject Matter

- **Earth as a geological body** – basic geological and biological cycles
- **Earth's spheres** – chemical, mineralogical and petrological composition of the Earth
- **minerals** – their origin and deposit layers; crystals and their internal structure; physical and chemical properties of minerals
- **geological history of the Earth** – geological periods of evolution of the Earth; changes in continental positions; evolution of biota and the environment

GEOLOGICAL PROCESSES IN THE LITHOSPHERE

Expected Outcomes

The pupil shall:

- ▶ analyse the energy balance of the Earth and the causes of both internal and external geological processes
- ▶ determine the mineral composition and recognise the structure of common magmatic, sedimentary and metamorphic rocks
- ▶ analyse various types of disturbances in the lithosphere
- ▶ use the geological map of the Czech Republic to explain the geological development of regions

Subject Matter

- **magmatic processes** – the origin of magma and its solidification; crystallisation of magmatic minerals
- **weathering and sedimentation processes** – mechanical and chemical weathering, precipitation, sedimentation
- **metamorphic processes** – their types; contact and regional metamorphosis
- **lithosphere deformation** – brittle and plastic deformation of geological structures, evolution of the structure of continents and oceans; mechanism of plate tectonics; earthquakes and volcanism, formations on the Earth's surface

WATER

Expected Outcomes

The pupil shall:

- ▶ evaluate the usability of various types of water bodies and assess possible methods for effective water management in a given region

Subject Matter

- **surface waters** – their distribution on the Earth; chemical composition, pH; hydrogeological cycle, effect of water on geology
- **subterranean waters** – rock permeability; hydrogeological systems; chemical composition of subterranean waters; protection of subterranean waters

MAN AND INORGANIC NATURE

Expected Outcomes

The pupil shall:

- ▶ determine the basic properties of soil-profile samples and suggest the usability and methods of effective soil management in a given region
- ▶ assess the geological activities of Man in terms of their potential impact on the environment
- ▶ assess the significance of mining and manufacturing technologies in a given region and determine whether their ecological impact on the region is acceptable
- ▶ evaluate the safety of waste storage and disposal and the effectiveness of using secondary raw materials in a given region

Subject Matter

- **origin and development of soils**
- **interaction between nature and society** – approaches in environmental geology, recultivation and revitalisation of landscape
- **fieldwork and geological field trips**

5.4 Man and Society

Characteristics of the Educational Area

The educational area Man and Society makes use of social-science knowledge acquired during elementary education, develops it further and teaches the pupil to process that knowledge in a broader system of thought. This area includes also entirely new elements, the comprehension of which requires more advanced thinking activities and the practical experience on the part of the grammar-school pupil. The pupil learns to reflect critically on social reality, assess various problem-solving approaches in everyday practice and apply his/her knowledge to current situations. Important mental processes, practical skills and the sense of the pupil's self-identity are developed. This area contributes to developing historical awareness, to preserving the continuity of the traditional values of our civilisation and to providing civic education of the young. It encourages respect for the fundamental principles of democracy and prepares the pupil for the responsible life of a citizen in a democratic society in compliance with the principles of sustainable development. It also supports the awareness of the unrepeatable and unique nature of life, the significance of human dignity and reverence for the artefacts of the human mind of past generations as well as of the present.

The objectives of the educational area are implemented mainly through the educational fields **Basics of Civics and Social Sciences**, **History** and **Geography**. The educational content of the educational field **Geography** has been included in the educational area Man and Nature so as to preserve the educational field in its entirety. The overlaps of a given educational area are reflected also in the other educational areas.

Objectives of the Educational Area

The instruction in this educational area is aimed at forming and developing key competencies by guiding the pupil towards:

- ▶ developing a realistic view of reality and orienting himself/herself in social phenomena and processes which form the framework of everyday life;
- ▶ understanding the present in the context of the past and future, perceiving social reality in the past as an aggregate of examples of model social situations and patterns of human behaviour and conduct in various situations;
- ▶ understanding social development as changes of social expressions of life over time, assessing social phenomena interconnected with causal, resultant, consequential and other connections synchronically as well as diachronically;
- ▶ developing spatial conception of historical as well as contemporary phenomena, understanding the significance of geographical conditions for variability and diversity of social phenomena and processes;
- ▶ perceiving connections with European culture; understanding the contributions of various cultures to civilisation in the context of wider social conditions; using tolerant approaches towards minority groups in society, uncovering racist, xenophobic and extremist opinions and attitudes in interpersonal communication;
- ▶ mastering the basics of social-scientific analysis and historical criticism, differentiating between real and fictitious actions, understanding the variability of the interpretation of phenomena and ideas depending on the development of an individual and society;
- ▶ developing a positive system of values relying on the historical as well as contemporary experience of mankind; understanding the incorrectness of mechanically projecting present ethical ideas into the past;
- ▶ reflecting consciously on his/her own behaviour as well as on the behaviour of others; respecting various systems of values and motivations of others; revealing prejudice in the opinions on various people, events or social phenomena and processes; recognising negative stereotypes of the roles of men and women in society;
- ▶ reinforcing the feeling of responsibility for himself/herself as both an individual and a member of a certain community, developing mature forms of coexistence with other people and the willingness to participate in the public life of his/her municipality, region, or country; applying a partner-like approach in cooperation;
- ▶ adopting democratic principles in interpersonal communication, developing the ability to discuss public matters, recognising manipulative strategies, adopting personal standpoints and assuming critical stances towards social and social-science matters, using objective (unbiased) arguments, making use of historical arguments to support positive civic attitudes;
- ▶ developing and cultivating the awareness of personal, local, national, European and global identities.

5.4.1 Basics of Civics and Social Sciences

Educational Content

MAN AS AN INDIVIDUAL

Expected Outcomes

The pupil shall:

- ▶ explain why and how people differ in the manifestations of their behaviour, list examples of factors affecting human experience, behaviour and activity
- ▶ compare personality in the individual developmental stages of life, define what each stage brings to human life and with what life tasks it presents people
- ▶ explicate how people perceive, experience and learn about reality, themselves as well as other people and what can influence this perception and learning

- ▶ compare various methods of learning and evaluate their effectiveness for his/her study while taking his/her predispositions into account, apply the principals of mental hygiene when working and learning
- ▶ use the acquired knowledge when coming to know himself/herself as well as others and when selecting his/her professional orientation
- ▶ illustrate on specific examples appropriate methods of coping with difficult life situations

Subject Matter

- **nature of the human psyche** – consciousness; mental phenomena, processes, states and characteristics
- **human personality** – personality traits, their typology; development and formation of personality in the individual stages of human life; significance of lifelong learning and self-education
- **psychology in everyday life** – decisions on life issues; principles of mental health, difficult life situations, the system of psychological counselling

MAN IN SOCIETY

Expected Outcomes

The pupil shall:

- ▶ apply socially acceptable methods of communication in both formal and informal relationships, resolve possible disagreements or conflicts with others constructively
- ▶ respect cultural diversity and differences in the behaviour of members of different social groups, substantiate on specific examples what consequences prejudice can have
- ▶ explain what significance social control has in a group and in larger social units
- ▶ assess the role of social changes in the development of an individual and society, differentiate between constructive and destructive changes
- ▶ explain the nature of some current social problems and describe the possible impact of sociopathic behaviour on an individual and society

Subject Matter

- **man in his relation to society** – significance of the inclusion of an individual into social ties, socialisation process; interpersonal communication, problems in interpersonal relations
- **social structure of society** – social units, social institutions; social inequality, social mobility; an individual in a group (relations, roles, behavioural norms)
- **social phenomena and processes** – family, work, mass media, the surroundings; social deviation, social problems (unemployment, criminality, extremism)

CITIZENS IN A STATE

Expected Outcomes

The pupil shall:

- ▶ distinguish between historical and modern types of states (forms of government) and compare them
- ▶ define what the function of the constitution is in the state and which areas of life it regulates
- ▶ explain why the state authority in the Czech Republic is divided into three independent branches, distinguish between the functions and tasks of the organs of state authority of the Czech Republic and compare them
- ▶ explicate the nature of democracy, distinguish it from undemocratic forms of governing social groups and the state, compare the position of a citizen in a democratic and in a totalitarian state
- ▶ elucidate the nature and significance of political pluralism for life in a state, list examples of political extremism and explain wherein the danger of ideologies lies

- ▶ differentiate between parts of the political spectrum, compare approaches of selected political groups to solving various questions and problems in the everyday life of citizens
- ▶ explain how a citizen may influence social events in the municipality or state and how he/she can contribute to resolving matters of public interest
- ▶ explain the nature of communal and parliamentary elections, illustrate on specific examples possible forms of active civic participation in the life of the municipality or in wider communities
- ▶ defend his/her own human rights, respect the human rights of others and prudently oppose their violation
- ▶ say with which areas of problems citizens can turn to the individual state institutions, manage communication with authorities
- ▶ list examples of corruption, analyse its causes and speculate on its possible effects

Subject Matter

- **state** – symbols and functions, forms of state, legal state; the Constitution of the Czech Republic – overview of principal provisions
- **democracy** – principles and forms; civil rights and obligations, nature of civic society, its institutions; political parties, political life in the state; elections, election systems; authorities
- **human rights** – embodiment of human rights in documents; violation and protection of human rights, functions of ombudsman
- **ideology** – symbols and functions, overview of selected ideologies

CITIZENS AND THE LAW

Expected Outcomes

The pupil shall:

- ▶ explain what the difference between moral and legal norms is, explain the purpose of sanctions when legal norms have been violated
- ▶ list which state organs issue legal regulations and how and where they publish them
- ▶ distinguish between physical and legal entities and provide examples
- ▶ define the conditions for the establishment and cancellation of important legal relations (ownership, employment, marriage) and the rights and obligations of the participants in these legal relations
- ▶ show on specific examples the possible consequences of ignorance of the terms of a contract including its general terms
- ▶ be able to tell which cases are settled in civil proceedings and which in penal proceedings
- ▶ distinguish a criminal offence from a petty offence, define the terms for the criminal liability of citizens and provide examples of criminal sanctions
- ▶ distinguish between the scope of activity of the principal organs of legal protection, provide examples of legal problems concerning which citizens may approach these authorities
- ▶ respect valid legal norms in his/her action and conduct

Subject Matter

- **law and justice** – the purpose and object of law; ethics and law
- **law in everyday life** – legal personality, legal capacity; body of laws of the Czech Republic – its organisation; legal system, types of legal norms; contracts, their significance and content, general contractual terms and conditions
- **institutions of legal protection** – functions and duties, legal professions; purpose and course of civil proceedings; bodies participating in penal proceedings, their duties; system of legal counselling, activities and duties of civic counselling centres

INTERNATIONAL RELATIONS, THE GLOBAL WORLD

Expected Outcomes

The pupil shall:

- ▶ explain the reasons for European integration and assess their significance for the development of Europe
- ▶ identify the functions of EU authorities and provide examples of their activities
- ▶ assess the impact of the integration of countries into the EU on the everyday life of its citizens, give examples of how physical and legal entities may exercise their rights within the EU
- ▶ provide examples of the activities of some important international organisations and explain how these activities influence the operation of the global community, evaluate the significance of the Czech Republic's participation
- ▶ give examples of institutions which he/she can turn to if problems arise while abroad
- ▶ assess the manifestations of globalisation, provide examples of current global problems, analyse their causes and speculate on their possible consequences

Subject Matter

- **European integration** – nature and significance; the European Union – importance; integration process; EU authorities; common European currency
- **international cooperation** – reasons, importance and advantages; significant international organisations and associations – CE, NATO, UN, their purpose and scope of activity
- **globalisation process** – causes, manifestations, consequences; global problems

INTRODUCTION TO PHILOSOPHY AND RELIGIOUS STUDIES

Expected Outcomes

The pupil shall:

- ▶ explain the principles of philosophical questioning, compare the bases of philosophy, myth, religion, science and art for depicting reality and Man
- ▶ identify the main philosophical movements, list their key representatives and compare how basic philosophical questions were dealt with in the individual stages of the development of philosophical thinking
- ▶ argue correctly in terms of ethics and facts in dialogue and discussion, approach arguments of others reasonably and critically, identify incorrect arguments and manipulative strategies in interpersonal communication
- ▶ evaluate the importance of scientific knowledge, technology and new technologies for practical life as well as possible risks of their abuse
- ▶ assess the conduct of people in terms of ethical norms and individual conscience, elucidate the variability of basic ethical terms and norms over the course of history
- ▶ distinguish between important religious systems, identify manifestations of religious and other kinds of intolerance and recognise indications of sectarian thinking

Subject Matter

- **principles of philosophy** – basic philosophical questions, the relations of philosophy and myth, philosophy and religion, philosophy and science, and philosophy and art
- **philosophy in history** – key stages and movements of philosophical thought
- **faith in human life** – forms of faith, signs of religious faith; religious systems, Churches; sects

5.4.2 History

Educational Content

INTRODUCTION TO HISTORY STUDIES

Expected Outcomes

The pupil shall:

- ▶ characterise the meaning of historical knowledge and its nature as still developing, variable knowledge
- ▶ identify various sources of historical information, methods for acquiring it and the pitfalls which may arise when interpreting it

Subject Matter

- **significance of historical knowledge for the present**
- **historian's work, historical information, its types, purpose and possible applications**

PREHISTORY

Expected Outcomes

The pupil shall:

- ▶ explain the material and spiritual life of human society in the individual developmental stages of prehistory in line with current scientific knowledge; characterise the term archaeological culture
- ▶ explain the fundamental turning point in the evolution of mankind resulting from systematic agricultural activity and craftsmanship
- ▶ place the main archaeological cultures of prehistory temporally and spatially

Subject Matter

- **the Stone Age (Palaeolithic, Mesolithic, Neolithic, Chalcolithic), Bronze Age and Iron Age**

ANTIQUITY

Expected Outcomes

The pupil shall:

- ▶ explain the contribution of selected ancient societies, of Antiquity and Christianity to civilisation as the basic phenomena from which European civilisation has developed
- ▶ elucidate Judaism (the link between Judaism and Christianity) and other non-European religious and cultural systems
- ▶ describe the determining processes and events, and list the important figures of ancient history

Subject Matter

- **ancient Oriental states (Mesopotamia, Egypt, India, China)**
- **ancient Greece**
- **ancient Rome**
- **our lands and the rest of Europe in Roman times; civilisation and barbarism, the Limes Romanus as the boundary of Western civilisation**

MIDDLE AGES

Expected Outcomes

The pupil shall:

- ▶ elucidate the process of Christianisation and its influence on the formation of mediaeval states in Europe; explain the nature of the relations between the secular and ecclesiastical powers in Western and Eastern cultures as well as the manifestations of the influence of religion and church in mediaeval society
- ▶ define the transformations of the economic and political structure of mediaeval society between the 5th and 15th centuries and its specific manifestations in selected states
- ▶ characterise the basic features of the development on the territory of the Czech Republic
- ▶ define the characteristics of Islam
- ▶ explain the consequences of the Tartar and Turkish raids, particularly in Southern and Eastern Europe

Subject Matter

- **the formation of mediaeval Europe (the Byzantine-Slavonic area, the Frankish Empire and the area of Western, Eastern and Southern Europe)**
- **Islam and the Arab Empire, Mongolian and Turkish expansions**
- **Christianity as a new cultural and social link, internal disunity within Christianity, the Catholicism and Imperialism, the Crusades, heresy and Hussitism**
- **countryside and agriculture, colonisation; the development of crafts and trade, urbanisation**
- **education and art in mediaeval society**

EARLY MODERN PERIOD

Expected Outcomes

The pupil shall:

- ▶ identify the new philosophical and scientific ideas formulated between the 14th and 17th centuries; evaluate their practical impact
- ▶ understand the consequences of overseas discoveries which led to important changes in economy and political power
- ▶ describe the main features of the Reformation and Counter-Reformation, explain the consequences for further development in Europe and the world
- ▶ identify the basic signs of estatism and absolutism; list specific manifestations in individual countries and examples of flashpoints
- ▶ assess the position of the Czech state within the Habsburg states and analyse its internal social, political and cultural conditions

Subject Matter

- **the Renaissance and Humanism; the Reformation**
- **transoceanic voyages**
- **rivalry and cooperation between European powers in the Early Modern Period; the Thirty Years' War**
- **absolutism and estatism**
- **Baroque culture, politics, religion**

THE ENLIGHTENMENT, REVOLUTION AND THE IDEA OF FREEDOM, MODERNISATION OF SOCIETY

Expected Outcomes

The pupil shall:

- ▶ define and evaluate the main ideas and principles of the Enlightenment, identify which role these ideas played in the revolutions of the 18th and 19th centuries
- ▶ demonstrate on examples of specific states the gradual decline, collapse and transformation of the existing systems despite the efforts of the power structures to maintain them
- ▶ assess the reasons for having a constitution and evaluate the new organisation of the state, list the basic types of national parliamentary systems
- ▶ explain the emancipation movements of nations as well as individual social classes; define the position which the modern Czech nation had in this process, including its specific features
- ▶ characterise the process of modernisation, explain the course of industrialisation and its economic, social and political consequences; identify its ecological risks; determine the basic causes of asymmetrical development in Europe and the world as a result of different rates of modernisation
- ▶ explain the expansionist intentions of the superpowers in the marginal parts of Europe and outside Europe which led to numerous clashes and conflicts in the period

Subject Matter

- **the Enlightenment**
- **great revolutions** – the French Revolution 1789–1799, foundation of the USA, the revolutions of 1848
- **Europe during the Napoleonic Wars and after the Congress of Vienna**
- **development of manufacturing and science, transformation of agrarian society into industrial society, changes in social structure**
- **formation of modern national societies (Czech, Slovak, German, Italian); emancipation movements of social groups**
- **the prerequisites for imperialistic (power and colonial) policy of the superpowers and its manifestations; Russia's becoming a European superpower; the USA, its internal development and international position before World War I**
- **mutual conflicts of superpowers, diplomatic and military activities on the eve of World War I, non-European flashpoints of colonial conflicts**
- **transformations of lifestyle, education and art of the 'Belle Époque' period at the turn of the 20th century**

MODERN PERIOD I (1914–1945)

Expected Outcomes

The pupil shall:

- ▶ characterise both World Wars, document the social, economic and political consequences
- ▶ list the causes and manifestations of the political and power arrangement of the world which was determined by the exhaustion of the traditional European superpowers, the rise of the USA and the instalment of Bolshevik power in Russia
- ▶ define the basic features of the main totalitarian ideologies and be able to compare them with the principles of democracy; elucidate the causes and nature of the politics of aggression and the inability of potential victims to confront it
- ▶ explain the connection between the global economic crisis and the culmination of political problems accompanied by the radicalisation of right- and left-wing antidemocratic forces
- ▶ describe and assess the way of life in modern European society, evaluate the importance of mass culture

Subject Matter

- **World War I, the Czech Lands during WWI, the First Resistance**
- **Revolution in Russia, consolidation of the power of the Bolsheviks**
- **the Versailles System and its internal contradictions**
- **the establishment of Czechoslovakia, Czechoslovakia in the interwar period**
- **Europe and the World in the 1920s and 1930s, the Great Depression in the World and in the Czechoslovak Socialist Republic, the increase of international tension and beginnings of the war flashpoints**
- **the Munich Crisis and its consequences**
- **culture of the first half of the 20th century (the birth of modern art, rise of mass culture, sport)**
- **World War II (global and economic character of the war, science and technology as means for conducting war, the Holocaust), the Protectorate of Bohemia and Moravia, the Second Resistance**

MODERN PERIOD II – CONTEMPORARY HISTORY

Expected Outcomes

The pupil shall:

- ▶ describe the origin, development and collapse of the bipolar world, its military, political and economic groupings, mutual relations and the most important conflicts
- ▶ explicate the fundamental problems of the internal development of the countries of the Western and Eastern Blocks, with a particular focus on understanding the internal development and mutual relations between the superpowers USA and USSR and on the situation in Central Europe and in our country
- ▶ compare and explain the way of life and behaviour in undemocratic societies and in democracies
- ▶ describe the mechanisms and means of the progressive unification of Europe on the basis of democratic principles, explicate human rights in the context of European cultural traditions; know the basic institutions unifying Europe, the scope of their activities and functioning
- ▶ explain the main problems of specific ways of development of important postcolonial developing countries; clarify the importance of Islamic, Jewish and other non-European cultures in the modern world
- ▶ define the basic problems of the contemporary world and the possibilities for their further development

Subject Matter

- **Europe and the Post-War World (the UN, principles of the social state)**
- **the Eastern Block, its political, economic and social development; the USSR as a world power; Comecon, the Warsaw Pact**
- **Euro-Atlantic cooperation and the development of democracy; the USA as a world power**
- **living standards on both sides of the 'Iron Curtain'**
- **conflicts in the Near East, the birth of the state of Israel**
- **decolonisation; the 'Third World' and its modernisation processes** – economic, demographic and political positions in the global world
- **the fall of the Communist regimes and its consequences; integrating Europe and its position in the global world**
- **global problems of modern society**

5.4.3 Geography

The educational content of the educational field Geography has been included in the educational area Man and Nature so as to preserve the educational field in its entirety.

5.5 Man and the World of Work

Characteristics of the Educational Area

The educational area Man and the World of Work is an indispensable part of the system of the pupil's general education, his/her preparation for further education, and his/her entering the labour market. Instruction in the area Man and the World of Work is aimed at introducing the pupil into the full-fledged professional and economic life of a citizen. Although this educational area cannot replace actual professional experience, it attempts to prepare the pupil both theoretically and practically for those situations that he/she can commonly encounter in professional life. In his/her future professional life, the pupil will not be able to manage without a basic knowledge of market economics, the world of finance, the economic structures of the state as well as the European Union and the influence of the world market globalisation, and neither will he/she be able to do without the knowledge of global economics. He/She needs to know his/her own rights and responsibilities at work. He/She learns to evaluate his/her work abilities and select and build his/her professional career while taking the competition and the requirements on the European labour market into account.

The constantly developing legislation and relations in the economic marketplace require the pupil always to be able to apply his/her theoretical knowledge successfully to the current economic situation, not to fall for a superficial judgement but to be able to analyse the current situation correctly and react to it. Therefore, this educational area places great emphasis on the practical application of the skills acquired, which the pupil will have gained by dealing with model situations and working with authentic materials which he/she commonly encounters in the media. This presupposes skills in using modern information technologies, without which the pupil cannot manage in the modern world of work. Since contact with reality is quite important in this area, a part of education in the area Man and the World of Work can also be discussions with expert guests.

Instruction in the area Man and the World of Work puts great emphasis on the inter-subject relations and utilises all the knowledge and skills which the students have acquired in other areas.

Objectives of the Educational Area

The instruction in this educational area is aimed at forming and developing key competencies by guiding the pupil towards:

- ▶ understanding microeconomic as well as macroeconomic relationships and their practical application;
- ▶ utilising the possibilities of the social state responsibly;
- ▶ dealing with financial resources responsibly, taking his/her own possibilities and needs into consideration;
- ▶ being able to analyse the influence of the media in the economic world and make use of topical information from the media when analysing the Czech as well as global economies;
- ▶ understanding and critically analysing the benefits and risks of world-economy globalisation;
- ▶ taking professional qualifications into account by selecting a profession responsibly;
- ▶ identifying the current requirements of the international labour market and having the ability to react to them flexibly;
- ▶ avoiding the negative impact of unemployment effectively and using modern information technologies and the offers of state as well as private institutions when looking for a job, re-qualification, formation of a professional career and lifelong learning;
- ▶ creating the prerequisites for high-quality professional and occupational relationships;
- ▶ acquiring the skill of properly presenting himself/herself in public, of presenting the results of his/her work and of evaluating it adequately;
- ▶ selecting such a work schedule that takes human health, interpersonal relations and environmental protection into account.

5.5.1 Man and the World of Work

Educational Content

THE LABOUR MARKET AND SELECTION OF A PROFESSION

Expected Outcomes

The pupil shall:

- ▶ assess his/her health, character, and qualification prerequisites critically when deciding on further study and professional orientation
- ▶ assess the professional and educational offers relating to his/her choice of profession and career
- ▶ assess the job demand of the Czech as well as European labour markets and react flexibly to these demands by continuing his/her education
- ▶ provide the necessary documentation for the entrance procedure for further studies as well as for the selected profession
- ▶ present himself/herself and his/her work properly, act adequately at a job interview or during a competition for a post
- ▶ realise the importance of work for man's mental health, create a balanced work schedule taking his/her personal relationships into account

Subject Matter

- **selection of a profession** – work as a means of self-fulfilment, assessment of his/her own abilities, education and preparation for selecting a profession (professional and education offer), job interview and selection procedure (proper conduct, communication competencies, assertive behaviour, empathy), success at work and career growth; volunteer work as a method of gaining work experience
- **international labour market** – supply and demand in job opportunities; information, counselling and mediation services; the EU labour market, globalisation of the labour market, labour mobility, re-qualification, lifelong learning
- **personal management** – own work organisation, time management, work and interpersonal relations, work and family, workaholism

INDUSTRIAL RELATIONS

Expected Outcomes

The pupil shall:

- ▶ describe the process of concluding a work contract and handing in notice
- ▶ list his/her work rights and demand that they be respected by others, fulfil his/her work duties
- ▶ explain the function of trade unions
- ▶ select safe, environmentally friendly work procedures, use appropriate work tools
- ▶ act in an informed manner and adequately to the situation in the case of an occupational accident

Subject Matter

- **labour law** – legal terms and conditions related to the start of work, change in work status and termination of employment (contract, trial period, giving and receiving notice, severance pay); rights and obligations of the participants in industrial relations (working hours, disability, wage, minimum wage, bonuses), trade unions
- **occupational safety** – principles of occupational safety, ecological aspects of work, occupational accident and compensation

MARKET ECONOMICS

Expected Outcomes

The pupil shall:

- ▶ explain the mechanisms of market operation on the basis of specific, realistic and current situations in society
- ▶ calculate price as an aggregate of costs, profit and VAT, explain how the price differs based on the type of customers, place and season, explicate the reasons for fluctuations in the costs of goods or labour on the basis of the development of supply and demand
- ▶ recognise common price tricks (price without VAT) and other deceptive offers
- ▶ identify and compare the practical application of the individual forms of enterprise, determining which is most advantageous in a particular situation
- ▶ assess the benefits and risks of doing business as against being employed
- ▶ describe how to proceed in establishing his/her private business and how to apply for a trade licence
- ▶ analyse the hidden content of commercials, critically assess the role of marketing in the success of products on the market

Subject Matter

- **basic economic terminology** – types of economies, economic cycle, market mechanism, supply, demand, price formation and global economic questions
- **economic entities** – legal forms of enterprise (trade, types of company, cooperatives), the basic legal norms related to enterprise
- **marketing** – marketing and public relations, advertising, advertising agencies

NATIONAL ECONOMY AND THE ROLE OF THE STATE IN THE ECONOMY

Expected Outcomes

The pupil shall:

- ▶ explicate the basic principles of how the system of state revenue and expenditures functions
- ▶ differentiate between the basic types of taxes, identify to which activities tax obligations are related
- ▶ explain how to file a tax return mainly for income taxes, how to carry out basic tax calculations and calculate the amount to be paid for social and health insurance
- ▶ assess, based on current information in the media, the influence of the most important economic indicators (inflation, GDP, unemployment rate) on changes in the living standards of citizens
- ▶ elucidate the nature of inflation and its consequences for the earnings of the population, investments and loans, long-term financial planning, and list examples of how to avoid the consequences of inflation
- ▶ describe the method of calculating the subsistence minimum of his/her household and applying for social benefit for which he/she is eligible
- ▶ explain the function of welfare in unemployment relief, the function of labour offices and personnel placement services, be able to find information on jobs and re-qualification in various types of media

Subject Matter

- **fiscal policy** – state budget, tax system
- **monetary policy of the Czech National Bank** – inflation, exchange rates, the balance of payments, GDP
- **social policy** – pension system, social-welfare system, subsistence minimum, unemployment, national employment policy

FINANCE

Expected Outcomes

The pupil shall:

- ▶ employ the most common forms of payment, exchange money using the table of foreign exchange rates
- ▶ list the principles of stock-price development and the possible forms of investing in stocks and bonds
- ▶ distinguish between regular and irregular income and costs and based on them create a household budget
- ▶ suggest how to solve a budget deficit and how to deal with a budget surplus in a household
- ▶ explain on specific examples the enforcement of consumer rights (when purchasing goods and services, including products of the financial market)
- ▶ suggest methods of utilising available financial resources (savings, products with state contributions, stocks and bonds, real estate), select the most advantageous product for investing disposable financial capital and justify it
- ▶ select the most advantageous loan product based on his/her personal needs and justify his/her selection, assess the methods of securing the loan and explain how to avoid excess indebtedness
- ▶ explain the methods of setting interest rates and the difference between the interest rate and APR
- ▶ select the most advantageous insurance product based on his/her need
- ▶ explicate the function of the Czech National Bank and its effect on the activities of commercial banks
- ▶ utilise modern forms of bank services, including modern information and telecommunications technologies, know how to use the cashless system of payments

Subject Matter

- **money** – function of money, forms of payment in domestic as well as foreign currencies, bonds, shares of stocks; stock market
- **household management** – household budget, types of budgets and the differences between them, cash flow in the household; consumption spending, consumer rights, legislation on consumer protection
- **financial products** – methods of utilising surplus financial resources, saving and investment products, other methods of investment; resolving a lack of financial resources, loan products, leasing; interest rates, APR; insurance
- **banking system** – Czech National Bank and commercial banks, specialised financial institutions, modern forms of banking

5.6 Arts and Culture

Characteristics of the Educational Area

The area Arts and Culture is represented here by the fields **Music** and **Fine Arts**, along with a shared educational content of the integrating theme Artistic Production and Communication.

The field **Music** guides the pupil towards an understanding of the art of music. The educational content of Music therefore consists of three interconnected and interdependent areas of activity (production, reception and reflection), which make it possible for the pupil to express himself/herself musically during both individual and group activities, to learn about the principles of music work and to become acquainted with the various functions of music, as well as with values and norms in art, to understand the messages conveyed by the language of music, and to evaluate the music played, etc., thus to understand the nature of music better.

During music production, vocal, instrumental and musical movement activities are employed, which are not only reproductive but also quite creative. Through them, the pupil develops his/her musical abilities and reinforces the knowledge as well as the reproductive and productive skills that he/she has acquired. These activities comprise vocal training including intonation, working with rhythm, playing and writing instrumental accompaniments, as well as movement études.

Through listening activities, the pupil realises and verifies the influence of played music. Music acts here as an 'instructor' and makes it possible for the pupil to deduce new music-theory knowledge and link it with knowledge already acquired (e.g. identifying typical musical means of expression and their utilisation in a composition, etc.).

Reflection, as the third, highly 'synthesising' musical activity (in the triad: production – reception – reflection), is the highest level of learning activity, making 'complex interpretation of musical work and musical objects' possible. This 'complex interpretation' includes classifying played music into art periods, identifying the style, genre and type of work, forming aesthetic judgments and dealing with the particulars of approaching the interpretation of a musical work, with its meaning and message in the context of a particular artistic and historical period, with issues of music 'consumption' in terms of its functional classification, and with problems of 'arts management' and so forth.

The field **Fine Arts** builds, in terms of both its content and objectives, on art education in elementary education, and guides the pupil towards utilising the visual-representation means consciously on both the level of sensory dispositions and on the personal (subjective) and social levels.

The field Fine Arts utilises the visual-representation symbol systems (picture, sculpture, design, landscape, architecture, clothing fashion, film, new media, etc.), which are an indispensable tool when learning about human existence and experiencing it. In the personal realm, they are a specific tool for experiencing and learning; in the social realm, they are a tool for communication and mutual cooperation. The visual-representation symbol systems include both sign systems from the fine arts of various stages and styles on the one hand and other products of visual culture on the other.

The concept of visual-representation features is in principle a creative one, drawing from the comparison of existing and current experience, requiring an experimental phase in which these features originate and are verified through identification and communication. From this standpoint, the field Fine Arts approaches the artistic process in its entirety as one of artistic production, reception and interpretation.

The educational content of the field Fine Arts is subdivided into two main areas, as conceived in their historical and socio-cultural contexts and in their development and transformations.

The first area comprises the *Visual Symbol Systems*, enabling the formation of active, individual approaches to the content of visual communication. In the process of production, the pupil makes use of visual-representation expressions, his/her own, artistic as well as those applied in everyday communication (including the use of the technological tools available such as photography, video, film, ICT). The Visual Symbol Systems make it possible for the pupil to reflect on his/her personal place in the world of visual culture as a perceiver, interpreter and creator of communication content while realising the scope of its impact.

The second area includes *Symbol Systems of Fine Arts*, making personal and active participation of the pupil in the fine-art process possible; as well as reflection on his/her own experiences, attitudes and experience which he/she has gained through the experimental approach to visual-representation artistic means. Building upon this, the pupil creates an overview of the visual-representation expressions of the individual art movements, mainly since the 19th century.

This educational content is implemented by means of creative activities, whose expected outcomes interconnect the aspects of production, reception and interpretation such that the perceptiveness of the pupil's senses would develop further and the pupil would utilise his/her subjectivity and verify the communicative effect of visual-representation expression.

During these creative activities, such symbols are used which have a fixed meaning as well as those whose meaning is being created and altered. The field Fine Arts cooperates with other fields which develop imagery using other specific means (music, literature, drama, etc.).

The instruction in this area guides the pupil not only towards a deeper understanding of visual, musical and other types of art but also towards reflecting on the artistic process in its entirety and on the art fields in their mutual connections and overlaps. The instruction as conceived is developed further by the integrating theme Artistic Production and Communication, which is of an integrative character. The educational content of the theme makes it possible for the pupil to understand the basic principles of artistic production and the process of communication in art and reinforces his/her ability to reflect on art and culture as a whole. Artistic Production and Communication is compulsory educational content and must be included in the SEP in such a way as to ensure that each pupil is given an opportunity to become acquainted with it.

Objectives of the Educational Area

The instruction in this educational area is aimed at forming and developing key competencies by guiding the pupil towards:

- ▶ learning about art and understanding it by means of focused and conscious reflection and his/her own creation; studying and evaluating art in the context of historical, social and technological changes;
- ▶ understanding art as a specific and unique method of communication conducted between all the participants in the artistic process, being able to identify the principal features of the individual types of art by comparing and realising their similarities and differences;
- ▶ using the language of art as a means of expressing various phenomena, relations, experiences, emotions and ideas and being able to evaluate and compare his/her own method of expression and present it to other members of society;
- ▶ participating actively in the formation of an accommodating and stimulating atmosphere (based on understanding, tolerance but also criticism) to be able to learn and understand cultural values, manifestations and needs of miscellaneous social groups, ethnic groups and nations and participating in the formation of a positive relation to the cultural riches of the past as well as the present;
- ▶ realising the influence of a person's upbringing and education on the development of the creative personality in the role of author, performer and recipient, as well as on the quality of the person's participation in the artistic process.

5.6.1 Music

Educational Content

PRODUCTION

Expected Outcomes

The pupil shall:

- ▶ utilise his/her individual singing potential when singing, employ his/her voice sonorously and naturally when speaking while articulating correctly, segmenting sentences (communication content) logically, apply the principles of vocal hygiene in everyday life
- ▶ utilise simple and, depending on the school's equipment, also more complicated musical instruments (keyboards, electronic keyboards which can be connected to a computer) during individual as well as group musical activities and use his/her skills in playing the musical instruments adequately to his/her musical capabilities as a means of communicating both musical and non-musical thoughts and ideas
- ▶ react to music by moving and perform it adequately while taking his/her musical abilities and personal predispositions to movement into consideration; use movement in connection with music to express his/her own ideas and feelings
- ▶ orient himself/herself in the musical notations of simple or possibly more complex vocal, instrumental as well as vocal-instrumental songs and compositions; perform these compositions within the scope of his/her individual musical abilities

Subject Matter

- **vocal activities** – cultivation of singing and vocal expression, intonation and rhythmic training, solo and choral singing, orientation in the musical (graphic) notation of vocal compositions, improvisation of a simple vocal composition (intro and outro, period)
- **instrumental activities** – playing and creating instrumental accompaniments (rhythmic and melodic accompaniments, simple arrangements), playing and creating simple instrumental compositions (movement, small song form, rondo), orientation in the musical and graphic notations of instrumental compositions, modern musical instruments and computer
- **musical movement activities** – movement to music and gesture, movement études, dance as a means of communication

RECEPTION AND REFLECTION

Expected Outcomes

The pupil shall:

- ▶ single out principal musical features from music being played, identify the musical means of expression used in the composition, recognise the musical form of a given work and approach the work as a logically developing whole
- ▶ describe and illustrate on selected musical works (or their parts) important features of production and performance, explain in what an original and unmistakable contribution of a composer or performer lies, decipher and interpret possible messages communicated through music based on his/her abilities, knowledge and acquired experience
- ▶ perform music based on his/her knowledge and individual musical abilities; form personal opinions and preferences which he/she can defend in discussion
- ▶ orient himself/herself in the development of the art of music; realise the differences in musical thought in individual stages, identify musical styles by their characteristic musical features, describe the conditions and background of the origin of a musical composition on the basis of historical, social and cultural contexts
- ▶ identify music by its classification according to style, meaning and function, recognise whether certain music is appropriate or inappropriate in particular situations
- ▶ realise the role of the music industry in the modern world; describe possible applications of music in 'non-musical' areas and be able to provide examples of its abuse
- ▶ be aware of the differences in various peoples' approaches to music and musical creation, perceive music as a method of presenting his/her own ideas and opinions as well as the ideas, feelings and opinions of others, and be able to identify himself/herself with music or reject it on the basis of these factors
- ▶ recognise such features of musical creation that involve intolerance, racism and xenophobia, and be able to distance himself/herself from such music

Subject Matter

- **music as organised sound** – piece of music – musical object, musical means of expression, musical form, musical feature, formal structure and semantics of a composition
- **musical instruments, new technologies in music, musical recording, direct and indirect musical communication**
- **styles and genres of music, function of music** – music and its use in everyday life, music as a cultural asset and as goods, the aesthetic and artistic value of a piece of music, the music business, music made to order and its possible abuse
- **origins and development of music** – vocal and instrumental music, the classification of music development into periods (generally historical, cultural-historical aspects and a purely musical aspect), characteristic musical features of individual styles, overlaps, syntheses, seeking new paths in music
- **musical composers and performers, interpretation in music, arts management**
- **music as a method of identification, self-presentation and a type of generational utterance**
- **interpretation of musical compositions** – description of a piece of music on the levels of meaning, form and composition, classification of compositions into historical and social contexts, musical works as possible messages, individual evaluation

5.6.2 Fine Arts

Educational Content

VISUAL SYMBOL SYSTEMS

Expected Outcomes

The pupil shall:

- ▶ compare various symbol systems, e.g. those of the written and spoken language, music, dramatic arts
- ▶ identify the specifics of various visual-representation symbol systems while consciously applying their means to shape the content in his/her own creative and interpretative work
- ▶ identify on specific examples of visual-representation expressions of his/her own as well as artistic production the means characteristic for them
- ▶ define the roles of author, audience and interpreter in the creation of the content and the communicative effect of visual-representation expression
- ▶ list the personal and social sources of artistic creation, distinguish between them and compare them on examples of visual-representation expressions, and identify them in his/her own production
- ▶ show on specific examples the influence of social contexts and their transformations on how the content of visual-representation expression is interpreted, as well as how it affects the communication process
- ▶ list the effects of visual-representation expressions on sensory perception, and work with the effects consciously in his/her own production to increase the sensitivity of his/her sensory perception
- ▶ apply his/her personal experiences, past experience, and knowledge in his/her own work, identify their influence and individual contribution to his/her production, interpretation and reception of visual-representation expressions
- ▶ explain on specific examples the influence of the communication process on the reception and interpretation of visual-representation expressions; participate actively in the communication process and respect its plurality

Subject Matter

- **the visual-representation symbol systems in terms of knowledge and communication**
- **interactions with visual-representation expressions in the roles of author, audience and interpreter**
- **applications of visual-representation expressions on the level of the senses as well as on subjective and communicative levels**

SYMBOL SYSTEMS OF THE FINE ARTS

Expected Outcomes

The pupil shall:

- ▶ find, select and apply the proper means to implement his/her projects
- ▶ utilise his/her knowledge of current means of expression and the technical possibilities inherent in the selected medium to express his/her ideas
- ▶ characterise connections between the content of his/her own visual-representation expressions and particular artistic works, and compare which means of expression were selected and how they were employed
- ▶ draw connections between his/her own active contacts and acquired knowledge of the fine arts on the one hand and not only contemporary as well as historical expressions of the fine arts but also other visual-representation expressions used in everyday communication on the other
- ▶ explain on specific examples the effect of visual-representation expressions on the level of senses and on subjective and social levels, and how this effect influences the formation of attitudes and values
- ▶ form an overview of artistic visual-representation expressions on the basis of individually selected criteria

- ▶ identify artistic styles and movements (with an emphasis on the art since the beginning of the 19th century) in terms of substantial transformations in the perception and composition of artistic works and other visual-representation expressions
- ▶ list on specific examples the causes of the formation and transformations of artistic movements, and explicate the wider social and philosophical background of the production of artworks
- ▶ explain on specific examples of visual-representation expressions whether and how the means of expression of fine arts since the end of the 19th century have been reflected in current visual communication
- ▶ experiment independently with various visual-representation expressions while applying also the means of expression of current fine arts in his/her own production

Subject Matter

- **fine arts as experimental practice in terms of the innovation of means, content and effect**
- **worldview, religious, philosophical and scientific-technical contexts of historical styles in the European cultural framework**
- **development of artistic means of expression necessary for understanding current visual communication**
 - perception of relations between objects and shapes in space (Cézanne), the integration and analysis of shapes (Analytical Cubism), surface and construction (Synthetic Cubism, Constructivism, Geometric Abstraction), creation of an illusion of space, volume and movement (the notion of mimesis in antiquity, photography, film)
 - variability of an image over time (Futurism, New Media), variability of shapes (animated film, New Media), moving points of view and changes in viewing angle (art of action, New Media), spatio-temporal understanding and quality transformation (Cubism, New Media), the principle of chance (Dadaism)
 - relativity of colour perception (Pointillism, Impressionism, Post-Impressionism, Cézanne), tactile and haptic qualities of an artistic work (Art Informel), involvement of the body, its movement and gestures in the creative process (Action Art, body art)
 - liberation of the image from the established depiction of the visible (Kandinsky, Kupka), figuration and nonfiguration (Neoclassicism, Lyric Abstraction), the relation between word and image (Letterism), origins and application of symbols (Symbolism, Surrealism, Pop Art, Conceptual Art)
 - creative potential of the subconscious (Surrealism), self-perception of the viewer (Action Art, personal mythology), participation in the social sphere (Performance Art), minorities (Postmodernism), traces of Man left in landscapes (Land Art)
 - connections with non-European cultures (Gauguin, Picasso, Minimalism), cancellation of the boundary between art and non-art (Duchamp), nonartistic and untrained visual expression (naïve art)
 - the requirement for general comprehensibility and at which point it is not understandable, the influence of advertising, the mass nature and authenticity of expression (Pop Art, television, New Media – Action Art, Postmodernism), quotation and meta-symbol (Postmodernism), modules and their combinations, recombinations and structures (New Media Art)

SHARED EDUCATIONAL CONTENT OF THE FIELDS MUSIC AND FINE ARTS (the integrating theme of the fields)

ARTISTIC PRODUCTION AND COMMUNICATION

Expected Outcomes

The pupil shall:

- ▶ employ his/her creativity consciously in various activities and consider creativity as a basic factor in the development of his/her personality; be able to explain its significance in the process of artistic production as well as in life

- ▶ explain the artistic symbol system as an internally differentiated system and be able to identify and locate in it innovative as well as conventional artistic symbols
- ▶ explicate on specific examples artistic expression as incomplete and indefinite in terms of its meaning; realise the relation between the subjective content of a symbol and its meaning acquired through communication
- ▶ be aware of the importance of personal impetuses in the formation of aesthetic experience; attempt to extract both the personal experience and experience with art which are related to this formation of aesthetic experience
- ▶ explain which prerequisites are necessary for the reception of a work of art and mainly for the understanding of contemporary artworks
- ▶ describe the significant features of the magical, mythical, universalist and modernist approaches to the artistic process, identify them in modern arts and explain on specific examples the shift in their content
- ▶ elucidate the significant features of the current (pluralist, postmodernist) approaches to the artistic process and explain on the basis of that the process of the formation of 'common taste' and 'aesthetic norms'
- ▶ be able to identify the fundamental features of current transformations and demonstrate on specific examples their influence on the transformation of communication in the artistic process

Subject Matter

- **the artistic process and its development** – the influence of the artistic process on how reality is perceived; the dynamics of perceiving the artistic process – its personal and social dimensions; the symbolic conditionality of perceiving the world – symbol systems of individual types of art; historical transformations of the conception of the artistic process (the magical, mythical, universalist, modernist, postmodernist and pluralist models of art); presentation of a work of art
- **the role of the individual in the artistic process** – sensory perception and its development; prerequisites for the production, interpretation and reception of a work of art; subconscious and conscious reception of an artistic work; creative personality in the role of author, interpreter, and recipient
- **the role of communication in the artistic process** – the place of art in society, its historical transformations; the use of artistic and non-artistic symbolism; art as a process of producing new symbols which have not yet been embedded in the society; the role of the artist in society; the audience and its role in the artistic process; current social and technological transformations (new technologies, new artistic disciplines and their content) and their influence on the role of communication in the artistic process; the subjective perception of artistic values in relation to socially accepted values

5.7 Man and Health

Characteristics of the Educational Area

The inclusion of the area Man and Health in education makes it possible to improve the pupil's attitude to health, reinforce his/her intellectual and emotional ties to the issues in question, and develop the practical skills which are decisive for a healthy lifestyle and the quality of life in adulthood. The inclusion of this educational area also proceeds from the assumption that well-prepared and motivated grammar-school graduates may later significantly influence the life and work attitudes towards health of the whole society.

The educational area Man and Health with its educational fields **Health Education** and **Physical Education** builds on the homonymous educational area of elementary education in both its outcomes and content. Whereas elementary education focused chiefly on forming positive attitudes towards health and on being informed on how to protect one's own health and safety preventively, grammar-school education is aimed more consistently at the acquisition of the ability to support and protect health actively within a wider community. This means that a grammar-school graduate should be ready to observe, evaluate, and – within his/her possibilities – resolve situations connected with health and safety also in terms of his/her future family, workplace, municipality, etc.

An important role in this is played by the greater ability of the pupil to obtain information, analyse its content, verify (apply) his/her knowledge in practical activities, discuss the problems which have arisen, how he/she experiences them, and discuss the effects of particular solutions on health, etc. The implementation of this educational area thus (in comparison with elementary education) builds much more on the pupil's independence, on his/her active approach to the problems in question, on personal experience and opinions but also on his/her forming relations with other people as well as with the surroundings more consciously, on greater responsibility for safety and health, on organisational abilities, etc.

Health Education has mainly a practical and applied character in education. By building on the natural- and social-science education and making use of specific information on health, it aims at the pupil's learning more about risky and non-risky behaviour (in partnerships, parenthood, in contact with addictive and other noxious substances, when safety is endangered, etc.) and his/her mastering practical methods suitable for the universal, active support of not only personal but also communal and global health (in everyday life as well as in emergency situations).

Physical Education draws mainly on a motivating atmosphere, the pupil's interest and his/her individual capabilities (potential) in striving for a lasting positive attitude to exercise and the optimal development of fitness, mental and social competencies. To this end, it makes use of specific emotional experiences, social situations and bioenergetic load in an individually prepared spectrum of exercise activities (ranging from fitness and wellness to sports performance activities). In terms of a lifelong perspective, physical education is aimed at providing the pupil with a better orientation in issues concerning the effect of exercise on health. It guides them towards mastering and regularly utilising specific exercise activities (conditioning and compensation programmes) in accord with his/her exercise interests and health needs. The question of safety and injury prevention in exercise is, of course, not to be omitted. At this level, great attention is also paid to the development of talent for movement and to the correction of movement handicaps (weaknesses).

It is also important to ensure that attitudes concerning health matters are not limited to this field and that good attitude to health is encouraged throughout the education and school schedule.

Objectives of the Educational Area

The instruction in this educational area is aimed at forming and developing key competencies by guiding the pupil towards:

- ▶ recognising physical, mental and social needs and the consequences of their fulfilment or lack of fulfilment;
- ▶ learning life values and forming proper attitudes concerning health and interpersonal relations;
- ▶ taking responsibility for his/her health, safety, and quality of the environment;
- ▶ reinforcing the following connections: health – physical, mental and social well-being (competencies) – care for one's health and safety – responsibility – mutual help – good feeling, appearance – vitality – performance – successfulness – social stability – health;
- ▶ living a healthy life and supporting health actively; including time-tested activities and procedures in the areas of hygiene, diet, exercise, personal safety, partnerships;
- ▶ being able to discuss issues concerning health, seeking and implementing solutions within the bounds of shared possibilities;
- ▶ obtaining insight into adult and family life and using the cause-effect principle, tolerance, respect and help as prerequisites for a conflict-free partnership and family life;
- ▶ active protection of his/her health against addictive and other noxious substances;
- ▶ mastering methods of effective behaviour and providing (securing) needed aid in situations when health and safety are endangered, including emergency situations;
- ▶ perceiving exercise not only as a source of positive effects on health but also of artistic, emotional, social and other experience;
- ▶ learning about the history of as well as the current social and sports life, and being able to evaluate specific phenomena concerning health.

5.7.1 Health Education

Educational Content

HEALTHY LIFESTYLE AND SELF CARE FOR HEALTH

Expected Outcomes

The pupil shall:

- ▶ strive for positive changes in his/her life connected with his/her health and the health of others
- ▶ include in his/her daily regimen methods of relaxation which he/she has mastered; apply the learnt regeneration methods in stress situations
- ▶ intervene, depending on a specific situation, when someone is seriously injured or in a life-threatening condition

Subject Matter

- **the influence of living and working conditions and lifestyle on health in the family, school and municipality**
- **healthy diet** – specific dietary needs according to age, health condition, and profession
- **sexual hygiene, hygiene during pregnancy**
- **first aid in the case of injury and acute medical emergencies**
- **mental hygiene** – preventing stress in interpersonal relations, managing stressful situations, effective communication, seeking help

RELATIONSHIPS BETWEEN PEOPLE AND FORMS OF COEXISTENCE

Expected Outcomes

The pupil shall:

- ▶ deal with problems in interpersonal relations fairly and sensitively
- ▶ assess values which make it easier for young people to become independent, enter into partnerships, get married and become parents, and strive for the fulfilment of these values in his/her life
- ▶ display ethical and moral attitudes concerning the protection of mother and child

Subject Matter

- **family relations, living with members of other generations under one roof, helping the ill and handicapped**
- **partnership, marriage, parenthood, incomplete family; substitute family care and its forms, institutional care**
- **risks involved in selecting a partner for life, crisis situations in a family**
- **development of social skills for coexistence with others** – candour towards others, negotiation, defending and upholding one's opinions, rejecting inhumane attitudes
- **models of social behaviour in intimate relationships** – candour, tolerance, respect for the other, empathy, patience, responsibility; self-knowledge, self-esteem

LIFE CHANGES AND WHAT THEY INVOLVE

Expected Outcomes

The pupil shall:

- ▶ be familiar with his/her personality, emotions and needs
- ▶ assert responsible and ethical approaches to sexuality, be aware of the possible consequences when making decisions
- ▶ be familiar with reproductive health issues in terms of taking a responsible approach to future parenthood
- ▶ know the rights of each individual in the area of sexuality and reproduction

Subject Matter

- **changes in adolescence** – physical, mental and social; seeking one's identity, orientation for the future, looking for a partner, experiencing emotional states and deeper emotional relationships
- **methods of self-reflection and controlling one's emotions**
- **care for reproductive health** – factors affecting fertility; preventive check-ups; education with regard to nicotine, alcohol and drug abuse and sexually transmitted diseases
- **methods of assisted reproduction, its biological, ethical, psychosocial and legal aspects**
- **models of mutual behaviour connected with the ethical and psychosocial aspects of partnership and sexual life** – responsibility, self-esteem, respect, decision-making

HEALTH RISKS AND THEIR AVOIDANCE

Expected Outcomes

The pupil shall:

- ▶ be immune to pressure to engage in self-destructive behaviour and a high-risk lifestyle
- ▶ assume a disapproving attitude to all forms of high-risk behaviour
- ▶ list the consequences of breaching the sections of penal laws on the manufacture and possession of addictive substances and activities conducted under their influence, on sexually-motivated criminality and hidden forms of individual violence; derive from these consequences personal responsibility
- ▶ decide on how to act in situations involving personal endangerment or danger to others on the basis of the models of behaviour learnt and depending on a specific situation

Subject Matter

- **civilisation diseases, eating disorders, sexually transmitted diseases, HIV/AIDS, hepatitis**
- **stressful situations, stress and methods of coping with it; the consequences of stress on physical, mental and social health**
- **risks affecting sexual and reproductive health** – promiscuity, voluntary and spontaneous abortion
- **sexually motivated criminality** – pornography, paedophilia, child prostitution, trafficking in women
- **hidden forms and levels of individual violence and abuse** – bullying, brutality, child abuse and neglect (CAN)
- **self-destructive addictions and criminality related to these phenomena** – health and psychosocial risks
- **manufacture, possession and sale of illegal addictive substances; addictive substances and traffic safety**
- **social skills needed for dealing with problems in unexpected, complicated and crisis situations** – mental hygiene in long-term difficult and stressful situations, making decisions in ethically problematic situations

PRESERVATION OF LIFE IN EMERGENCY SITUATIONS

Expected Outcomes

The pupil shall:

- ▶ decide on how to behave responsibly in particular emergency situations
- ▶ demonstrate the acquired practical knowledge and skills needed to be prepared for emergencies and participate actively in eliminating the consequences of a massive impact on the population

Subject Matter

- **announcement of the imminence of an emergency situation or of its occurrence**
- **natural disasters**
- **the leak of hazardous materials into the environment**
- **other emergency situations**
- **first aid** – triage during mass emergencies
- **social skills needed for dealing with emergency situations** – decisiveness, resourcefulness, selflessness, effective communication

5.7.2 Physical Education

Educational Content

ACTIVITIES AFFECTING HEALTH

Expected Outcomes

The pupil shall:

- ▶ organise his/her exercise regimen and utilise suitable and available exercise activities while taking his/her exercise predispositions, interests and health needs into account
- ▶ check the level of his/her health-oriented fitness and muscular imbalance by means of simple tests
- ▶ strive for optimal development of his/her fitness; select suitable conditioning programmes or sets of exercises for the maintenance and development of the level of health-oriented fitness from what is offered and modify them independently for his/her own personal use
- ▶ select from what is offered suitable sets of compensation exercises aimed at compensating for unilateral load, preventing and correcting muscular imbalance and make independent modifications for himself/herself
- ▶ utilise suitable sets of exercises for physical and mental relaxation
- ▶ prepare his/her body before exercise with respect to which muscular groups will be exerted
- ▶ behave practically and safely during exercise activities and that also in an unknown environment
- ▶ administer first aid in the case of sport-related or other injuries and that even under extraordinary conditions

Subject Matter

- **health-oriented fitness** – elements of the health-oriented fitness; conditioning tests
- **muscular imbalance** – causes of muscular imbalance; muscular-imbalance tests
- **health-oriented exercises**
- **organism and exercise load** – types of load; compensation for unilateral stress
- **an individual exercise regimen**

- **hygiene concerning exercise activities and the exercise environment**
- **risk factors affecting safety during exercise activities** – the principles of behaviour and conduct in various environments; adjustment of physical activities based on current conditions (possible risks)
- **first aid during sports injuries** – serious injuries and life-threatening states; improvised first aid under the conditions of sports activities

ACTIVITIES AFFECTING THE LEVEL OF PHYSICAL SKILLS

Expected Outcomes

The pupil shall:

- ▶ demonstrate the physical skills being acquired as allowed by his/her own individual prerequisites
- ▶ master the basic methods for developing the physical skills being learnt and strive to perfect his/her physical skills
- ▶ assess the quality of crucial elements of the movement, identify apparent reasons for the imperfections and apply specific steps leading to the necessary change
- ▶ respect differences in age, gender and performance as well as other physical differences and adapt his/her exercise activity to the particular composition of the group engaged in the sports activity

Subject Matter

- **physical skills and performance**
- **differences in physical skills and physical handicaps** – age, gender and performance
- **training, conditioning, coordination, creative, aesthetic exercises and exercises with a different focus**
- **movement games of various focus**
- **gymnastics** – acrobatics; vaults and practice with gym apparatus; exercise with equipment
- **conditioning and aesthetic forms of exercise with music and rhythmic accompaniment** (intended mainly for girls – at least two forms of exercises according to the conditions and interest of female pupils, or also male pupils if they are interested)
- **grappling technique** – self-defence; the basics of judo; aikido; karatedo (the basis is self-defence with the scope of the other activities being determined depending on the preparedness of the teacher and the pupils' interest)
- **athletics** – track and cross-country running (sprints, endurance running, relays); high jump or long jump (depending on the equipment of the school); throws, shot-put
- **sports games** – game systems, game combinations and game activities of an individual under competition conditions (at least two selected sports games depending on the conditions of the school and the pupils' interest)
- **hiking and sleeping in nature** – planning a hike and sleeping in nature; orientation in broken terrain, orienteering, campsite preparation and cleaning
- **swimming** – perfecting the swimming techniques mastered (another swimming technique); diving; rescue swimming, helping an exhausted swimmer, saving drowning people (swimming is included depending on the material conditions of the school)
- **skiing** – cross-country, downhill; snowboarding (the individual forms of skiing are included depending on the current snow conditions, material conditions and the pupils' interest)
- **other modern and non-traditional movement activities** (the activities are included depending on the conditions of the school and the pupils' interest)

ACTIVITIES ENCOURAGING THE LEARNING OF EXERCISE ACTIVITIES

Expected Outcomes

The pupil shall:

- ▶ utilise physical-education terminology (gestures, signals, symbols) with comprehension at the level of a gymnast, exercise leader and competition organiser
- ▶ select and use suitable kit and equipment for the exercise activities being learnt and treat them properly
- ▶ prepare (jointly with other pupils) a class or school tournament, competition and hike, and participate in implementing it
- ▶ respect the rules of the sports being learnt; referee or co-referee class or school matches, contests and competitions in the sports being mastered
- ▶ respect the rights and obligations arising from various sports roles – act according to the given role; cooperate for the benefit of the team
- ▶ monitor performance, sports results, activities connected with exercise and health as directed (even on a long-term basis – process the data measured, evaluate it and present the results in various forms
- ▶ fulfil Olympic ideals actively as an expression of general cultural sophistication

Subject Matter

- **mutual communication and cooperation in exercise activities**
- **athletic kit and equipment** – practicality, functionality, safety, affordability and quality
- **exercise-activity, sporting and hiking events** – organisation, promotion, evaluation, documentation
- **the rules of the exercise activities being learnt**
- **sports roles**
- **measurable and assessable data connected with physical education and sports**
- **Olympic ideals in the modern world: fair play** – teamwork in sports and helping opponents, helping the physically handicapped, sport for all, sport and nature protection, rejection of performance-enhancing substances incompatible with sports ethics
- **achievements in Czech sport in the context of the most important sporting events in history**

5.8 Information Science and Information and Communication Technologies

Characteristics of the Educational Area

The area Information Science and Information and Communication Technologies (hereinafter referred to as ICTs) at grammar schools builds on the ICT area in elementary education, aimed at mastering the basic level of computer and information literacy, i.e. at attaining the knowledge and skills necessary for utilising digital technologies.

The area Information Science and ICTs at grammar schools deepens the pupil's ability to utilise information and communication technologies, information tools and the possibilities for using application software creatively with the aim of achieving a better orientation in the growing amount of information while respecting the legal and ethical principles of using ICT resources. The pupil is guided towards acquiring the ability to apply computer technology in order to process information more effectively while utilising more advanced functions and thus transform the information acquired into systematically organised knowledge. The dynamic development of the ICT area requires flexibility on the part of the pupil when adapting to upgraded versions of digital devices and his/her capability to combine them.

Within the area Information Science and ICTs, the pupil will learn the basics of information science as a scientific field which examines computer and information processes in terms of the hardware and software used and their position in the modern world. The objective is to provide the pupil with the basic terms and methods of information science, help him/her develop abstract, systemic thought, stimulate his/her ability to express his/her ideas adequately, use meaningful arguments in defending his/her expressions, and approach problem solving creatively. The pupil will learn the basic principles of how ICT tools function and focus on comprehending the nature and course of information processes, the algorithmic approach to problem solving and the importance of information systems in society.

Considering the penetration of information and computer-science knowledge in various areas of human activity and the specific use of ICTs in diverse fields, it is advisable to include also intelligent, interactive educational tools and the modelling of natural, technical and social processes and situations in the education process, thus reinforcing the motivation to learn, which may increase the likelihood for the success of grammar-school graduates in further education and on the labour market.

The educational area Information Science and ICTs forms the platform for other educational areas and inter-subject relations, provides the pupil with a scope for creativity, self-fulfilment as well as teamwork, increases his/her motivation to develop both individual and group projects, creates an opportunity for the development of the pupil's own initiative, reinforces his/her sense of innovativeness and stimulates the utilisation of the tools of computer technology and the internet in preparing for lessons and for lifelong learning.

Objectives of the Educational Area

The instruction in this educational area is aimed at forming and developing key competencies by guiding the pupil towards:

- ▶ understanding the principles of using individual groups of application software and the factual connections between them, utilising their tools, methods and links appropriately in order to solve problems effectively;
- ▶ understanding the basic terminology and methods of information science as a scientific field and applying them in other scientific fields and professions;
- ▶ applying algorithmic thinking when solving complex tasks;
- ▶ employing ICT tools to model and simulate natural, technical and social processes and to implement them in various fields;
- ▶ using the spectrum of possibilities offered by communication technologies creatively and combining them to communicate quickly and effectively;
- ▶ utilising computer technology to increase the effectiveness of his/her work, improving work organisation and cooperating in a team on the level of the school as well as on national and international levels;
- ▶ utilising information and communication technologies (online education, cooperation on foreign projects) for lifelong learning and for the creation of positive attitudes towards the needs of an informed society;
- ▶ utilising the possibilities of computer technology and of the internet for cognitive, aesthetic and creative purposes because of the global and multicultural character of the internet;
- ▶ realising, respecting and moderating the negative impact of modern information and communication technologies on society and human health, learning the methods of preventing and protecting personal freedom from being abused or limited;
- ▶ collecting data from a greater number of alternative sources and differentiating between reliable, high-quality and unreliable, low-quality sources;
- ▶ respecting and utilising specialised terminology of information and computer sciences;
- ▶ identifying the fundamental legal aspects and ethical principles concerning work with information and with computer technology, respecting intellectual property, copyright, personal data and the principles of citing authorial work correctly.

5.8.1 Information Science and Information and Communication Technologies

Educational Content

DIGITAL TECHNOLOGIES

Expected Outcomes

The pupil shall:

- ▶ manage, combine and apply the ICT tools available
- ▶ utilise his/her theoretical as well as practical knowledge of the functions of individual components of both hardware and software to solve problems creatively and effectively
- ▶ organise data effectively and protect it from being destroyed or abused
- ▶ be familiar with the possible uses of ICTs in various areas of social knowledge and practice

Subject Matter

- **information science** – the definition of both theoretical and applied information science
- **hardware** – the function of ICT facilities, their parts and peripherals, technological innovations, data digitisation and representation
- **software** – operating-system and program-application functions, user environment
- **information networks** – network typology, internet, network services and protocols, data transmission
- **the digital world** – digital technologies and their possible applications in practice
- **data maintenance and preservation** – file and folder administration, compression, antivirus protection, firewall, data backup
- **ergonomics, hygiene and safety when working with ICTs** – health protection, the possible use of ICT tools by handicapped people

INFORMATION RESOURCES AND SEARCHING, COMMUNICATION

Expected Outcomes

The pupil shall:

- ▶ utilise the services of information networks available to search for information, to communicate, as well as for self-learning and teamwork
- ▶ make the best of the offer provided by information and educational portals, encyclopaedias, libraries, databases and educational software
- ▶ assess the recency, relevance and reliability of information resources and information creatively utilise information and communication services in compliance with ethical, safety and legislative requirements

Subject Matter

- **internet** – the global character of the internet, multicultural and language aspects, services on the internet
- **information** – data and information, relevance, the trustworthiness of information, specialised terminology, information sources, information processes, information systems
- **sharing specialised information** – discussion groups, e-conferences, e-learning
- **information ethics, legislation** – protection of copyright and personal data

INFORMATION PROCESSING AND PRESENTATION

Expected Outcomes

The pupil shall:

- ▶ process and present the outcomes of his/her work while using advanced functions of application software, multimedia technologies and the internet
- ▶ apply an algorithmic approach to problem solving

Subject Matter

- **publishing** – forms of documents and their structures, the principles of graphic and typographic modifications in a document, basic aesthetic principles in publishing
- **application software for work with information** – text editors, spreadsheets, graphics editors, databases, presentation software, multimedia, modelling and simulation, data export and import
- **algorithmic treatment of problems** – algorithm, writing algorithm, introduction to programming

6. Cross-Curricular Subjects

Cross-curricular subjects are currently perceived as topical. Their main objectives are to influence the pupil's attitudes, value systems and conduct. Cross-curricular subjects are an important formative feature throughout education, and in this sense grammar-school education thus builds on the cross-curricular subjects in elementary education, where the pupil encountered them for the first time.

Cross-curricular subjects comprise a compulsory part of education. They are reflected in educational areas (fields) not only in terms of their educational focus but also in terms of their content and help complement or interconnect what the pupil has mastered during his/her studies. The conceptions and functions of cross-curricular subjects have a positive effect also on the process of forming and developing key competencies.

The descriptions of all the cross-curricular subjects have a similar structure. They contain the **Characteristics of the Cross-Curricular Subject**, where the significance and position of the cross-curricular subject in question in grammar-school education are emphasised, followed by a specification of the relation of the cross-curricular subject to the educational areas and the **Contribution of the Cross-Curricular Subject to the Development of the Pupil's Character** both in the area of attitudes and values and in the area of knowledge, skills and abilities.

The content of the cross-curricular subjects recommended for grammar-school education is elaborated into **thematic areas**, containing a selection of **themes** (activities, topics). All the thematic areas are compulsory (the school must incorporate all the thematic areas in its SEP), but the depth, breadth (selection of themes) and forms of their implementation are entirely within the competence of the school and are specified in the SEP.

Cross-curricular subjects can be implemented as a **part of the educational content of the subjects of instruction**, dedicated separate **projects, seminars, courses, discussions**, etc., or taught as **independent subjects of instruction**, with the possibility to combine the above-listed forms at will.

The effectiveness of the educational impact of cross-curricular subjects is also supported by creating a suitable atmosphere in the class and the entire school as well as by making use of various further apt opportunities (e.g. theatre and film performances, television and radio shows, exhibitions, lectures, discussions, educational programmes) which the pupil can encounter outside of school.

The following cross-curricular subjects have been included in the education at four-year grammar schools and the upper stage of six- or eight-year grammar schools:

- ▶ **Moral, Character and Social Education;**
- ▶ **Education towards Thinking in European and Global Contexts;**
- ▶ **Multicultural Education;**
- ▶ **Environmental Education;**
- ▶ **Media Education.**

6.1 Moral, Character and Social Education

Characteristics of the Cross-Curricular Subject

Moral, Character and Social Education arises on the one hand from general tendencies in the development of the world and the demands placed by such development on grammar-school education, and on the other directly from the preceding chapters of the FEP SGE, where these demands are already reflected. Moral, Character and Social Education helps the pupil lead a healthy and responsible life as an individual as well as a member of society and provides the pupil with an opportunity to contemplate his/her experience and personal development. The subject develops the pupil's self-esteem, self-confidence and ability to assume responsibility for his/her behaviour in various life situations, in self-learning and at work. It teaches the pupil to understand the value of interpersonal relations and respect the opinions, needs and rights of others.

The knowledge and skills acquired within Moral, Character and Social Education may also help the pupil react to moral, social and cultural issues with which he/she will be confronted on his/her journey through life.

Globalisation and other socio-cultural phenomena bring a considerable number of people various risks (e.g. threats to emotional stability and physical existence due to their handling of the products of science and technology improperly; social problems connected with the speed and unpredictability of economic changes; favourable conditions for global terrorism; the rapid disintegration of social ties and cultural wholes which used to be stable in the long term; devastation of the environment).

As these risks emerge and begin to take effect, people seek ways to avoid them or reduce their destructive impact on individuals as well as society. One of the directions of these efforts to minimise these risks is to influence the character and social development of each individual in society through education so as to encode in people the prerequisites of the abilities to:

- ▶ form and maintain maximum personal stability, cope with risks, care for their psychosomatic health;
- ▶ cultivate high-quality interpersonal relations, and in processes of social interaction in all its forms (personal, political, intercultural, professional, social, etc.) act as effectively as possible for his/her own benefit and the benefit of others.

Cross-curricular subjects aim at:

- ▶ developing the character, individual prerequisites of each individual for living with himself/herself and with others in the contemporary social context;
- ▶ developing social (interaction, relations) skills for living with others;
- ▶ developing the ethical prerequisites for life in a community of people and in this world in general.

The emphasis on developing the above-mentioned abilities, skills and prerequisites within compulsory education (and thus also the reason for including the subject in the FEP SGE) follows from the current conception of general education, reacting to the points above. If grammar schools are to continue providing this type of education, they cannot avoid the general trend towards developing the overall human potential of their pupils. This means not only providing them with an overview of culture and the sciences but also offering them the educational opportunity to develop various types of skills for life, through which the pupils may optimise their practical ability to orient themselves in social situations and also put the education with which they have been provided by the grammar school in other educational fields to good use.

In view of its general nature, this cross-curricular subject is linked to practically all the educational areas of the FEP SGE. The educational area Language and Language Communication overlaps with the themes which are related to interpersonal communication within this cross-curricular subject; the area Man and Nature may be interwoven e.g. with the theme of protecting and developing the physical component of personality, the theme of a healthy lifestyle as well as of the biological basis of human social behaviour, and of ethics in relation to the environment; parallels between the areas Man and Society and Moral, Character and Social Education may be found in the thematic area of communication, interpersonal relations, social and ecological problems, intercultural contacts and skills, in the theme of the ethics of human behaviour, etc.; the area Man and the World of Work is easy to link with the themes concerning self-development, life-planning, development of study skills, and development of numerous social skills and attitudes needed for cooperation, organising others and coping with competition; the area Man and Health may be significantly supported by the cross-curricular subject in e.g. aiming at a healthy lifestyle, mental hygiene, and communicational hygiene; the area Arts and Culture clearly has contact with the cross-curricular subject because of its emphasis on the development of creativity, of emotional intelligence, etc.

Contribution of the Cross-Curricular Subject to the Development of the Pupil's Character

In the area of attitudes and values, the cross-curricular subject is to help the pupil:

- realise and respect the naturalness and value of the diversity of the manifestations of life, culture and each individual person;
- realise that almost every social or communicative act has an intrinsic moral dimension;
- realise the value of human cooperation;
- realise that various life situations frequently have more than one solution.

In the area of knowledge, skills and abilities, the cross-curricular subject is to help the pupil:

- aim at understanding himself/herself, create balanced self-perception:
 - recognise and control his/her feelings;
 - realise his/her personal qualities, skills, achievements and potential, and evaluate them;
 - realise his/her own identity;
 - develop self-confidence and responsibility and utilise his/her abilities;
 - set his/her own objectives and plan his/her personal development based on that;
 - realise how he/she is perceived by others, become able to accept praise as well as criticism, success and failure positively and become able to learn from experience;
 - present himself/herself purposefully in various situations;
- seek ways to confront stress arising from the character of life at a given time;
- distinguish factors affecting mental energy and creativity;
- gain specific (self-restraint as well as communicative) skills for handling various social situations (situations which are complicated in terms of communication; competition; cooperation; help, etc.);
- create a list of different behavioural variants and make responsible decisions on the utilisation of the different types of behaviour and conduct in various situations;
- understand the social group in which he/she lives;
- form high-quality interpersonal relations, take others into consideration; become aware of his/her rights, obligations and responsibilities within a group as well as the rights and obligations of others;
- learn to cooperate;
- pay attention to moral conduct and the interpretation of ethical phenomena in his/her own conduct;
- examine the realia and themes of the everyday life of Man;
- learn the principles of the theory of phenomena which he/she encounters in Moral, Character and Social Education and reflect on them.

Thematic Areas of the Cross-Curricular Subject

RECOGNISING AND DEVELOPING ONE'S PERSONALITY

- ▶ 'Me' myself, my behaviour, thought and experience
- ▶ how I understand my own physical, mental and social development, what my relation to my body and psyche is
- ▶ whether I am capable of perceiving myself positively and to what extent
- ▶ how I understand my own uniqueness
- ▶ what kind of person I want to be and why
- ▶ what I actually do and what I can and want to do for my personal development
- ▶ how I normally behave – what behaviour and conduct I select

- ▶ my relations to others
- ▶ how capable I am of mastering various phenomena both at school and in life outside the school
- ▶ what and how I can practice to improve the quality of my study skills
- ▶ how to develop a healthy and safe lifestyle
- ▶ how to be prepared for life changes
- ▶ Me and my present as well as future social roles (pupil, citizen, parent, etc.)

SELF-RESTRAINT, ORGANISATIONAL SKILLS AND EFFECTIVE PROBLEM SOLVING

- ▶ self-restraint reflexes – mapping situations in which I use my own will
- ▶ care for myself
- ▶ preventing difficult and stressful situations, stresses, etc.
- ▶ strategies for managing stressful situations with minimal harm
- ▶ relaxation
- ▶ overall care for my own health
- ▶ how to use communication skills in withstanding unproductive pressure
- ▶ where to seek information and professional counselling, what sources of help and organisations supporting individuals and people in relationships during crises exist
- ▶ how capable I am of organising my time
- ▶ how systematic my endeavours and activities are
- ▶ my organisational abilities and skills
- ▶ Me in leadership and subordinate roles
- ▶ how I control my thought processes in problem solving and what else I can learn in this area
- ▶ how I control myself in problem-solving situations
- ▶ how and when in my life I make decisions and important choices
- ▶ how I manage the social skills necessary for problem solving in interaction with others, and what else I can learn in this area

SOCIAL COMMUNICATION

- ▶ verbal and non-verbal communication (specifics)
- ▶ what I know about my communicational behaviour
- ▶ interpersonal communication and how I perceive it
- ▶ skills linked to the following communication qualities and how I can develop them further:
 - perceptive communication (partner-oriented perception, active listening);
 - apprehensive communication (understanding communicative signals in non-verbal as well as verbal communication in one's own culture and also in contact with other cultures);
 - respectful communication (methods of communicational behaviour which respect to differences in opinions, attitudes, cultures and nationalities);
 - accurate communication (comprehensibility, clarity, accuracy of the communication, persuasion and argumentation);
 - positive communication (with negative and positive statements balanced, openness, communication with partners as inspiration);

- creative communication (fluency, readiness, richness, expressiveness, resourcefulness, aesthetics of the communication);
- communication effective in achieving its aim (candour, assertiveness, communication tactics, functional methods of communication when cooperating, negotiating and solving problem or conflict situations)

EVERYDAY MORALITY

- ▶ what my sets of values are
- ▶ what morality I apply to myself, to others (other cultures), to nature and the environment in general
- ▶ how moral my conduct is in practical everyday situations
- ▶ how I assume responsibility in various situations
- ▶ how moral I consider my conduct to be and how I differentiate between good and evil in my life
- ▶ how I can develop good relations with people
- ▶ how I can become involved for the benefit of others (help, cooperation, participation in the democratic functioning of society, personal engagement in social issues)
- ▶ my values and my present as well as future social roles (pupil, sportsman, friend, parent, citizen, employee and others)
- ▶ me and the social and moral dilemmas of the age in which I live

COOPERATION AND COMPETITION

- ▶ my relation to cooperation and competition
- ▶ which of my personality traits are favourable and which on the other hand unfavourable for cooperative and which for competitive situations
- ▶ to what extent I want to be original and to what extent I am able to conform to others
- ▶ how I control myself when things do not proceed according to my wishes
- ▶ how to cooperate with people who are different and how to develop relations with adults
- ▶ how capable I am of accepting the opinions of others as a possible basis for my further development
- ▶ how to function as a member of a group and community, how to demonstrate willingness to cooperate with others
- ▶ social-communication skills useful for cooperation (clear communication, argumentation, argument solving)
- ▶ how I can and am able to help and support others and give advice
- ▶ how capable and willing I am to participate in activities of benefit to the public
- ▶ how able I am to recognise competitive situations and how I experience them
- ▶ how I manage competitive situations and what tactics I employ in them

6.2 Education towards Thinking in European and Global Contexts

Characteristics of the Cross-Curricular Subject

In the FEP SGE, the cross-curricular subject Education towards Thinking in European and Global Contexts provides a critical view of the globalisation and developmental processes as currently perceived in the modern world. The increasing interconnection of various activities in all areas of human life, the perception of favourable global economic, social, political, cultural and environmental elements and phenomena as well as problems, penetrating the nature of European integration and understanding oneself in this context – all these are the main contributions of this subject to grammar-school education.

The most suitable way of implementing this cross-curricular subject effectively is to integrate it into various educational areas, educational fields and subjects of instruction. An advantage of a cross-curricular subject is the integration of the information acquired into an all-embracing system of knowledge, skills, abilities, attitudes and values equipped with which the grammar-school graduate enters the real world. Opportunities for implementing this cross-curricular subject are provided by the entire FEP SGE, in particular the educational area Man and Society in all its parts with a special emphasis on civic education and education towards political culture (the educational field Basics of Civics and Social Sciences, particularly its thematic area International Relations, the Global World, and also the educational field History), along with the educational areas Language and Language Communication and Arts and Culture. In the educational area Man and Nature, the European as well as global dimensions are applied chiefly in the educational field Geography, where they are present in practically all the thematic areas (Natural Environment, Social Environment, Environment, Regions), as well as in the educational field Biology (in the ecological themes of all the thematic areas). Nor, however, can the component themes contained in other educational fields of this educational area (Physics, Chemistry) be omitted – the relation of Man to technologies, along with the education leading to a healthy lifestyle, physical culture and increasing physical endurance (the educational area Man and Health). An indispensable means in the FEP SGE for implementing the European and global dimensions is also the educational area Information Science and Information and Communication Technologies. The application of these technologies makes active forms and methods of learning and participation in international communication and projects possible. Current globalisation and developmental processes are supported by the dissemination of further modern technologies (chemical technology, biotechnology, technology in medicine, industrial technology), without which scientific and social (sustainable) development would not be possible.

The implementation of Education towards Thinking in European and Global Contexts in school practice exceeds the possibilities of instruction with the subjects traditionally divided. It requires effective team cooperation on the part of the teachers, the application of innovative and non-traditional educational procedures, techniques, forms and methods, cooperation between pupils, the preparation of projects, employment and support of extracurricular forms of learning and extracurricular activities. The implementation of this cross-curricular subject is also supported by, for example, contacts with important figures of public life, with social partners, with humanitarian organisations, cultural and social institutions in the region or cooperation with foreign, especially European, partner schools.

Contribution of the Cross-Curricular Subject to the Development of the Pupil's Character

In the area of attitudes and values, the cross-curricular subject is to help the pupil:

- assume responsibility for himself/herself and the world in which he/she lives;
- participate in solving local problems, contribute to solving problems on the regional, national and international levels actively, namely even in situations requiring long-term joint effort;
- become perceptive to cultural differences, understand them as an enrichment of life, learn to understand differences;
- realise the need for and benefit of solidarity and cooperation between people;
- respect and develop spiritual and moral values, mainly rationality, tolerance, social justice and democracy;
- respect the different opinions and views that other people may have on the world;
- show solidarity with people living in hard conditions;
- realise, respect and protect the values of the global as well as European cultural heritage;
- realise the impact and consequences of the globalisation and developmental processes, identify their positive as well as negative elements and phenomena, learn to seek compromises;
- take constructive stances on the burning questions of peace and human rights in specific life situations;
- combat violence, terrorism and harmful influences, which are the negative consequences of globalisation processes;
- realise the responsibilities and rights of European citizens, understand the concept of European citizenship.

In the area of knowledge, skills and abilities, the cross-curricular subject is to help the pupil:

- think systemically and seek connections between various phenomena and processes;
- cooperate with others actively and effectively, identify with the situation and environment from which their attitudes stem when learning and evaluating their opinions;
- form his/her own opinion on the basis of the information obtained, become able to express and defend it with arguments in discussions on political, economic and social problems in the context of European and global developmental trends;
- become able to accept the opinions of others and revise his/her original views on the issue in question;
- take advantage of local, regional and international opportunities to test his/her civic skills and the mechanisms and structures of democracy;
- compare the differences and similarities between the cultures and lifestyles in Europe and in the world while using his/her own experience, public information and artistic production;
- evaluate critically and utilise experience from other cultural environments;
- understand historical continuity in European as well as global contexts with respect to the development of his/her own nation and state;
- perceive and evaluate both local and regional phenomena and problems in broader European and global contexts;
- support the attitudes of European and other nations striving for harmonious development, peace and democracy;
- reflect on solutions to problems and conflicts and find them while taking the historical experience of Europe as well as other parts of the world into account;
- orient himself/herself in unknown environments and international situations;
- acquire social and cultural skills which make intercultural and international communication easier;
- gain practical skills for his/her personal as well as working life in the open European area.

Thematic Areas of the Cross-Curricular Subject

GLOBALISATION AND DEVELOPMENTAL PROCESSES

- ▶ the theoretical basis of the term 'globalisation': how developmental processes of the contemporary world are reflected in everyday social life and in an individual's life
- ▶ historical approaches to the processes of globalisation: perception of the developmental processes taking place in certain historical stages, first unevenly in different regions of the world, later already on a worldwide (global) scale
- ▶ viewing globalisation in geographical terms: the characteristics of the developmental processes and changes taking place in a certain area and time and manifesting themselves through the development of technology, growing dynamics in information transfer, capital flow, transport of goods, consumption, and labour mobility in a social environment; through greater innovation, intensity and pace of economic and social ties, exchanges and activities which more and more transcend traditional political, economic, cultural and geographical boundaries; by increasing mutual dependence
- ▶ perspectives of social development in the context of globalisation processes: aspects, dimensions and criteria of social development, their positive and negative effects and tendencies
- ▶ economic development and globalisation: the group of processes leading to the interconnection of producers and consumers on a global scale and what social and political impact it has, including: the internationalisation of the global economy – nation-states, multinational corporations, the global market and consumption; global economic inequality – unevenness of the distribution and development of the world economy, production and consumption centres and peripheries, concentration of economic and political powers
- ▶ globalisation and cultural changes: processes supporting uniformity and difference of cultural environments, the decrease in global cultural diversity, the spread of the so-called global culture and its consequences

- ▶ the local cultural environment in the globalisation process: the support of local interests, communities and identities (the contrary process of the so-called glocalisation against globalisation)
- ▶ global and European cultural areas: ethnic, linguistic and religious diversity, areas of civilisation, their specifics, differences and potential for cooperation; interpenetration of world cultures, ethnic, religious and cultural conflicts as a consequence of globalisation
- ▶ Man as an individual in a global context: discussion on how to express one's personal identity (understand oneself, comprehend oneself within society); understanding of national as well as European identity, effects on Man as an individual in society in a local, regional and global context

GLOBAL PROBLEMS, THEIR CAUSES AND EFFECTS

- ▶ uneven global development: economic, ethnic, religious, ideological, political and cultural conflicts, the main global conflict points, terrorism
- ▶ poverty and wealth: different evaluation aspects and criteria
- ▶ unevenness in economic and social development: the so-called divided world; international debt
- ▶ world population development, international migration and migration politics, asylum and refugee movements with the subjects traditionally divided
- ▶ health in the global context: differences in the area of health and healthy lifestyle
- ▶ education in the global context: differences in the area of education
- ▶ the environment and sustainable development: global environmental problems of natural and social environments
- ▶ inequality between men and women in the global context, gender issues
- ▶ human rights in the so-called divided world: civic, political, economic, social, cultural; children's rights, organisations dealing with human rights
- ▶ political approaches and methods when making decisions on the local and global levels: the governmental as well as non-governmental sectors

HUMANITARIAN AID AND INTERNATIONAL-DEVELOPMENT COOPERATION

- ▶ historical roots of development cooperation: colonialism, decolonialisation, the Cold War
- ▶ international institutions for supporting development cooperation: global financial, economic, cultural and religious institutions, the UN
- ▶ possibilities for participating in development cooperation: organisations in the area of humanitarian aid and development cooperation on national and international levels, foundations and funds supporting people in need, their functions
- ▶ human development and its various dimensions: sustainable living and development, the Millennium Development Goals project – specific objectives in the area of development and eradication of poverty
- ▶ humanitarian aid and development cooperation: solidarity with afflicted countries and regions; development cooperation including all the activities attempting to react to the long-term problems of poor countries; reasons, methods and forms of implementation
- ▶ world trade: internationally organised Fair Trade and problems in implementing it

WE AS EUROPEANS

- ▶ the geographic and geopolitical profile of Europe, European language and cultural areas
- ▶ European cultural roots and values: Christianity, democracy, law, art, science, economy
- ▶ similarities and differences in the lifestyles of various European countries
- ▶ the process of European integration: historical repercussions, development after World War II, the European Union, common policies and institutions within the EU; the Czech Republic in the European Union, other significant European institutions and organisations
- ▶ important Europeans: a selective mosaic of representatives of European politics, science, and culture of world renown; important Europeans and their influence on Czech politics, science and culture

- ▶ important Europeans from a Czech background: a selective mosaic of representatives of European and world renown of politics, science and culture who come from Bohemia, Moravia and Czech Silesia
- ▶ historical development of the Czech nation in the European context and its main stages
- ▶ political aspects of the position of the Czech lands in Europe and in the world: significant developmental milestones
- ▶ the economic development of the Czech lands in the European and world contexts: the main transformation processes
- ▶ relations between the Czech Republic and neighbouring countries and cooperation with them, Central European initiatives

EDUCATION IN EUROPE AND IN THE WORLD

- ▶ educational policy of the EU and how it is reflected in the educational system of the Czech Republic
- ▶ education programmes of the EU and the possibilities of participating in them
- ▶ process of the formation of the European educational area, student mobility
- ▶ opportunities for studying abroad and its conditions
- ▶ prestigious universities abroad
- ▶ scholarships at universities abroad
- ▶ comparative characteristics of education at grammar schools in the Czech Republic and similar schools abroad, profiles of grammar-school graduates and of the school-leaving examination, compatible elements and differences

6.3 Multicultural Education

Characteristics of the Cross-Curricular Subject

Multicultural education plays an important role in present as well as future societies which are based on multicultural relations. It is of crucial importance particularly for young people, who are preparing themselves for life in an environment in which they meet, and increasingly will, members of other nationalities, ethnic groups, races and religions, as well as people of different lifestyles and believing in different values. Its main task is to develop the pupil's understanding of himself/herself and the values of his/her culture, to support his/her integration into a wider multicultural environment while protecting his/her own cultural identity. In this respect, the role of the school in its influence on the pupil is both educational and instructional. For multicultural education to be successful and effective, it must penetrate the entire educational environment of the school, concern also interpersonal relations at school, between teachers and pupils, between the pupils themselves, and between teachers and the pupils' families. The climate of the class in the context of the wider environments of the school and society is important as well, along with, last but not least, the teacher's personality and competencies.

The cross-curricular subject Multicultural Education is not limited only to the information which the pupil obtains mainly in the educational fields Czech Language and Literature, Foreign Language, Basics of Civics and Social Sciences, History and Geography, which are closely related to multicultural education, but also attempts to stimulate, influence and direct the pupil's attitudes, value system and conduct, to reinforce his/her ability to participate in multicultural activities and succeed in international cooperation. Multicultural education focuses mainly on identifying and understanding the cultural differences between people of various origins, on interpersonal relations, intercultural communication and adaptation to life in a multicultural society.

Contribution of the Cross-Curricular Subject to the Development of the Pupil's Character

In the area of attitudes and values, the cross-curricular subject is to help the pupil:

- understand that all people are different, having their individual particularities regardless of their origin and social-cultural patterns;

- respect the uniqueness, dignity and unrepeatable nature of life, understand a human being as an indivisible whole of the physical and mental sides of personality, but also as a part of a certain ethnic group;
- accept the fact that everyone comes from a certain ethnic group and identify himself/herself with the opinion that all ethnic groups are equal and all people have the right to live and cooperate with each other;
- realise his/her cultural identity;
- realise the importance of the integration of an individual in family, peer and professional relationships, perceive Man as a social being and know the main types of social units;
- realise the importance of the quality of interpersonal relations for the harmonic development of personality;
- form an idea on what human solidarity is and take adequate ethical stances in critical stages of life, differentiate between assertiveness and unscrupulous, egoistic self-fulfilment;
- identify himself/herself with basic moral norms, apply them in personal life and be able to confront expressions of amorality, intolerance, xenophobia, discrimination and racism actively;
- realise the incompatibility of racial, religious and other intolerance with democracy;
- perceive multiculturalism as a means of the mutual enrichment of various ethnic groups;
- understand, respect and defend the idea that each individual is responsible for the elimination of discrimination and prejudice against people of another ethnic group, nationality, skin colour, religion, social origin, gender and sexual orientation actively;
- understand the importance of studying foreign languages as a source of knowledge for private life, for lifelong learning, work, international communication and cooperation;
- perceive himself/herself as a citizen who actively participates in the transformation of society so that it would better serve the interests of minority groups as well.

In the area of knowledge, skills and abilities, the cross-curricular subject is to help the pupil:

- understand the basic concepts of multicultural terminology (nation, culture, ethnicity, identity, assimilation, integration, inclusion, cultural pluralism, globalisation, xenophobia, racism, intolerance and extremism), know the most important national symbols and the principles of their use;
- gain knowledge, practical skills and overview of socio-cultural environments of another language area by means of studying foreign languages and other subjects;
- learn about the linguistic specifics of other ethnic groups in today's multilingual and multicultural world;
- become able to explain the meaning of such terms as majority and minority, social reconciliation, etc.; have an idea of the position of national and other minorities;
- identify the manifestations of racial intolerance, become able to explain the causes of xenophobia in the past as well as the present;
- understand the nature of the most severe sociopathic phenomena and their consequences for society;
- know the most important international organisations supporting multiculturalism and become oriented in their functions.

Thematic Areas of the Cross-Curricular Subject

BASIC ISSUES OF SOCIO-CULTURAL DIFFERENCES

- ▶ how socio-cultural diversity is manifested in various regions of the Czech Republic and in Europe
- ▶ what models of coexistence of different socio-cultural groups exist, what the basis of multiculturalism is
- ▶ what the differences between assimilation, integration and inclusion are
- ▶ what the present situation concerning immigration to the Czech Republic is (in comparison with some other European countries, e.g. Sweden, Switzerland, the Netherlands)
- ▶ what causes immigration (historical, social, economic triggers)
- ▶ what the causes triggering ethnic, religious and other intolerance as a possible source of international (intercultural) conflict are and how to prevent the intolerance

- ▶ what attitudes and conduct accompany xenophobia, racism, intolerance and extremism
- ▶ what the attitudes and conduct of a citizen of the Czech Republic and a European in general concerning immigration as a contemporary phenomenon, immigrants and the immigration policy of the state (or of the European Union) are

PSYCHOSOCIAL ASPECTS OF INTERCULTURALISM

- ▶ what I think of immigrants, asylum seekers, refugees
- ▶ how prejudice and stereotypes influence the contact between members of the majority with foreigners and members of minorities
- ▶ how I react to people whose thinking, convictions, and conduct is based on a culture different from my own
- ▶ from what the fear of foreigners arises
- ▶ how I can alter my monocultural opinions of others into multicultural thoughts
- ▶ how it is possible to alter and improve understanding between people of diverse cultural origins, religions, worldviews, etc.

RELATIONSHIP TO THE MULTILINGUAL SITUATION AND COOPERATION BETWEEN PEOPLE FROM DIVERSE CULTURAL ENVIRONMENTS

- ▶ how I can learn to utilise linguistic and cultural plurality for the necessary discussion on language and cultural diversity (in the Czech Republic, in Europe)
- ▶ by what means I can develop my language competencies for contact and cooperation with members of other ethnic groups (in the Czech Republic, in Europe)
- ▶ what institutions and organisations (in the Czech Republic, in Europe) I can turn to with a request for help in solving problems of a multicultural character
- ▶ how to use language in a manner free of racist and discriminatory expressions
- ▶ how to speak about others as people of other racial or ethnic membership, religion, sexual orientation, etc. without disparaging their equality
- ▶ how to learn to accept the fact that each language has its specific features and no language is superior to any other

6.4 Environmental Education

Characteristics of the Cross-Curricular Subject

In an age when we are witnessing a rapid decline in the state of global systems vital in terms of sustainable development, Environmental Education has become an important subject. Problems which have been created mostly by Man (the depletion of stratospheric ozone, pollution of the environment, imminent climate changes, exhaustion of natural resources, destruction of natural ecosystems, rapidly growing human population, emergence of new epidemics and diseases) require 'environmentally' educated citizens to solve and forestall them.

Environmental Education is an indispensable, important prerequisite for sustainable development, which is among the primary interests of the European Union. The fundamental prerequisite for moving towards sustainable development is to increase people's ecological awareness and to prepare them for qualitatively new stances across the entire technical-economic and social spectrum. For these reasons, Environmental Education is a cross-curricular subject in grammar-school education and one of the fundamental pillars of education for sustainable development.

Environmental problems occurring in the real world are rarely explicable merely in the context of the observations and knowledge of a single discipline. The basis for this cross-curricular subject may thus be found in a number of educational fields, namely in both natural-science fields, such as Biology, Chemistry, Physics, Geography and Geology, and in social-science fields such as Basics of Civics and Social Sciences, History, Man and the World of Work and Health Education, as a result of which the conception of Environmental Education requires a shift from instruction with the subjects traditionally divided to integrated-subject instruction.

The knowledge and experience from various fields are interconnected and subsequently used when resolving specific environmental problems in practice (Why should I recycle? How will I heat my home and why?, etc.). Also for this reason, the content of this cross-curricular subject has not been treated in a traditional manner (i.e. by simply listing the subject matter) but in the form of problem-based questions, with each question containing a number of component problems. An important consideration is not only the actual educational content but also the means used and the effect of the environment. A significant part of implementing this cross-curricular subject may thus also be e.g. making the operation and environment of schools more ecological, focusing on solving problems in the municipality and its surroundings, and cooperating with various partners outside the school.

Contribution of the Cross-Curricular Subject to the Development of the Pupil's Character

In the area of attitudes and values, the cross-curricular subject is to help the pupil:

- realise the specific position of Man in the system of nature and human responsibility for further development on the planet;
- express humility and respect with regard to the valuable things which Man cannot create, appreciate the value of nature, realise and become able to evaluate various stances to Man's place in nature and Man's conduct towards it;
- understand that for existential reasons Man needs to use natural resources for his/her benefit but always in a manner which will not irreversibly harm the environment;
- realise that each individual can help protect the environment by having an ecologically responsible approach to common, everyday activities;
- become aware of the space in which he/she lives and the changes taking place there, feel responsibility for its further development, and that not only from an environmental perspective.

In the area of knowledge, skills and abilities, the cross-curricular subject is to help the pupil:

- learn the complex interconnectedness within natural systems and understand that disrupting one part of the system can lead to the collapse of the whole;
- know from personal experience the things of natural and cultural value in his/her surroundings, consider them in their connections and understand the causes and effects of damaging them;
- seek the causes of the unsatisfactory state of the environment in the past as well as the present and seek possibilities for further development;
- understand the strong interconnectedness of ecological factors with economic and social factors and become able to select optimal solutions in real-life situations;
- consider various aspects of ecological problems, form his/her own opinion on them and attitude towards them;
- realise the effect of environmental pollution on human health;
- learn what possibilities he/she as a citizen has to protect the environment and become able to utilise them;
- acquire practical skills and habits for common, everyday activities which help improve the environment;
- interconnect the knowledge and skills from individual educational areas and utilise them when solving environmental issues.

Thematic Areas of the Cross-Curricular Subject

ISSUES OF THE RELATIONSHIP BETWEEN ORGANISMS AND THE ENVIRONMENT

- ▶ how organisms are affected by the environment in which they live and by what abiotic/biotic phenomena they are impacted
- ▶ how populations can be characterised, their properties and mutual relations
- ▶ energy and substance flows in the biosphere and ecosystem

MAN AND THE ENVIRONMENT

- ▶ in what ways Man has affected the environment since the beginning of human existence and what impact each of them has had in terms of sustainability
- ▶ in what ways organisms are important for Man, what causes the origin and extinction of various plant and animal species and how to protect them
- ▶ what energy resources and raw materials Man uses on the Earth and what advantages and disadvantages are connected with utilising and acquiring them
- ▶ how Man uses water, what the most common causes of its pollution are, what causes fresh-water shortages and what impact they have on society
- ▶ for what Man uses land and what consequences it has for the environment
- ▶ what causes the rapid growth of the human population and what effects it has on the environment
- ▶ which environmental effects endanger human health
- ▶ what the causes and effects of global ecological problems are and what stances interest groups take to the issue
- ▶ what means and possibilities (e.g. legislative, voluntary/civic, institutional, technological activity, etc.) of solving global ecological problems exist and how an individual can participate in solving these problems
- ▶ what basic principles are connected with the concept of sustainable development
- ▶ what the prognoses of the global development of the world based on the current environmental conduct of mankind are

THE ENVIRONMENT OF MY REGION AND THE CZECH REPUBLIC

- ▶ which environmental problems the Czech Republic and my region face most urgently
- ▶ what the history and status quo of the protection of the nature and landscape in the Czech Republic are
- ▶ which institutions in the Czech Republic deal with environmental issues
- ▶ what the most important legal provisions concerned with the environment are and how they are influenced by the European Union

6.5 Media Education

Characteristics of the Cross-Curricular Subject

The inclusion of the cross-curricular subject Media Education in the FEP SGE is motivated by the character of contemporary society. A key phenomenon of the present is the enrichment of life by the process of 'media coverage', thus by the fact that the great majority of information is conveyed by mass media, whose production has its own logic and rules, which it is necessary to be familiar with and differentiate between. Among all communication activities, the portion of those which are stimulated, enforced and provided by modern media technologies is increasing; in other words, the participation of individuals as well as groups in media communication is continually rising. Learning about the world and also making decisions in miscellaneous life situations, ranging from intimate life to voting behaviour, all this is influenced by information presented by the so-called mass media. These media also form an integral part of the globalising economy, whose substantial feature is the mass emphasis on consumption, experience and the present – features typical of so-called mass society. This is a trend which brings, on the one hand, numerous advantages and enrichment but, on the other, also a great number of risks (from the possible loss of orientation in society and its norms and values to isolation and the possibility of sociopathic behaviour). Modern society therefore requires its members to be able to orient themselves as independently as possible in the media offer (ranging from 'traditional' mass-media products to the possibilities of 'new', net media). This requirement is so strong and significant that managing this media offer has become a competency in its own right. The position of mass media and media communication in human life is quite obviously one of the main factors determining the quality of life, a factor so substantial that the media cannot be approached only in an intuitive but more so in an informed manner, thus it is necessary to acquire 'media literacy'. Therefore, systematic preparation for 'life with the media' (i.e. Media Education) is becoming a common and evident part of education in all developed societies. Modern Man must be equipped with the knowledge and skills which will make it possible for him/her to become oriented in mass-media production, to utilise it without succumbing to it.

Media literacy comprises a group of knowledge and skills which make it possible to handle the media offered effectively and in an informed way, to use media to one's benefit, and provides the means needed to uncover those areas of media production which are secretly manipulative.

Media Education is aimed at teaching the pupil – by means of analysing real media production as well as by means of the pupil's own media production and acquisition of knowledge about how the media function in society – to develop systematically his/her ability to use the media and their production critically and creatively, to utilise the media offer and maintain a healthy distance from it. Therefore, the concept of Media Education relies on the idea of media literacy as a group of skills and knowledge necessary for orientation in the immeasurable and non-transparent offer of media products, which create the (symbolic) environment in which Modern Man lives. Media Education should lead not only to enriching life through education towards the rational and valuable utilisation of media production but also to reducing the risks presented by media production. By means of various educational means, Media Education should guide the pupil towards such a development of his/her character and social skills that would instil in him/her the following prerequisites:

- ▶ reinforced awareness of his/her uniqueness;
- ▶ maintained critical distance from the model lifestyles presented to him/her in the mass media;
- ▶ incorporation of the mass media into the stock of information resources, education and entertainment utilised;
- ▶ checking the information from the media critically in other sources.

Media Education comprises two main areas:

- ▶ area of knowledge
 - social-science knowledge – provides the basic knowledge of the role of the media in society and their history – first of all, it is supposed to make the pupil realise the importance of the media for the life of society and the role of the media in everyday life (organising the daily rhythm, offering behavioural patterns, reflecting relations of authority and subordination, etc.) as well as in moments of historic tension (it is no coincidence that turning points of contemporary Czech history have been related to 'battles for the radio', as radio is a quick-reacting, generally available medium);
 - media-science knowledge – provides the basic knowledge on the media themselves and their conduct, provides methods for assuming a critical approach to media production – of all, it is supposed to make the pupil realise 'media logic', reflected in media products (the regularity and predictability of the newscast, stereotypical perception of minorities, orientation on consumer behaviour, support of economic success, etc.);
- ▶ area of skills – makes it possible for the pupil to create his/her own media production – its contribution is making the pupil realise through his/her own work under which circumstances media products are created, by what they are conditioned and limited, what the roles of focusing on arousing interest and of the need for a functioning team are.

With its factual content, this cross-curricular subject is chiefly connected with those educational fields which are related to the humanities, social sciences or psychology, thus mostly to: Basics of Civics and Social Sciences, Czech Language and Literature and History.

Basics of Civics and Social Sciences

Media Education mainly complements the pupil's idea on how decision-making processes function in political communication (significance of the media and 'media coverage', function of the public sector, risks of media manipulation), on political power and democracy's control of it (the role of journalism in society – 'the fourth estate', 'the watchdog of democracy', etc.), and on the public and public opinion (especially the position of public opinion surveys in media production). Furthermore, Media Education provides the pupil with an idea of current trends in media production, conditioned by its mass character and orientation on profit and consumption (depoliticisation of political themes, tendency for making everything more entertaining or the same).

Czech Language and Literature

Media Education offers the pupil an opportunity to apply his/her ideas on constructing the meaning of what is presented (it is necessary to show that when something or someone, for example a person involved in a news programme, a character in a TV series or a participant in a reality show, is ascribed a certain feature, it does not have to be his/her actual attribute but an 'artificially' ascribed feature), on playing with secondary (connotative) meanings (use of the words 'entrepreneur', 'embezzlement', or 'techno party' evokes certain images, which the media subsequently utilise as if they were generally valid), on stereotypes and myths, on culture, on the role of artistic expression and realistic character – Media Education makes it possible to use the knowledge of language and other symbol codes in the development of critical reading.

History

Media Education provides the pupil with information on the interconnections between the development of media and the development of modern societies, on institutions on which these societies are established, as well as information on the origin and development of the public sphere. Reference to how public communication tools have been perceived (the fears and hopes that each 'new' medium has invoked in the history of human communication) makes it possible to structure and enhance the thinking on the current situation. A special theme within this subject is the role of the media in moments of historic tension (newspapers in 1848, radio in May of 1945 and August of 1968, etc). A separate part is the history of technological tools expanding the possibilities of communication.

Contribution of the Cross-Curricular Subject to the Development of the Pupil's Character

In the area of attitudes and values, the cross-curricular subject is to help the pupil:

- develop a critical distance from stimuli coming from media products (i.e. to develop the ability to receive and process media products while being aware of how they are designed and with what communicational intentions they are presented on the market);
- reinforce self-reflection and find his/her place in society;
- realise the importance of unmediated interpersonal relations (family relations and partnerships) and their inner emotional and cognitive dynamics (frequently contrasting with the stereotypical presentation in media products);
- distinguish the social and aesthetic values of information in various semiotic codes, especially information in his/her mother tongue (support of language cultivation), and of visual information;
- increase his/her sensitivity to cultural differences, understand them as enrichment of life, learn to understand diversity;
- perceive lifestyle as an expression of his/her own authenticity and distinguish it from the consumer lifestyles presented by mass-media productions;
- develop an idea of teamwork, of the relations of cooperation as well as authority and subordination when creating a common work, and of his/her creative potential.

In the area of knowledge, skills and values, the cross-curricular subject is to help the pupil:

- master the methods of working with symbolic content rationally and in a controlled manner;
- stimulate his/her argumentation ability by teaching him/her to seek 'what has been left unsaid' in a text (questions that have been suppressed, manipulation through words and images, etc.);
- develop a basic idea of work in particular 'traditional' as well as 'new' media;
- master the skills necessary for teamwork, or also for its subsequent management and the coordination of its individual members, because the attempt to find positions in the sphere of public (or media) communication is ever more frequent in post-industrial (or information) society;
- enhance the awareness of professions in this area and increase the possibilities for informed decision-making when selecting his/her profession or further study;
- acquire knowledge which facilitates orientation in the world;
- support liberal decision-making based on a critical assessment of contradictory information offered, in particular making decisions on the level of the civic dimension of life in society and separating it from the consumer dimension;
- learn to evaluate the quality and significance of information sources;
- develop an idea of the role of the media in individual types of society and various historical contexts;
- understand the nature and manifestations of current trends in the development of the world, especially the integration and globalisation processes, and realise how these trends are reflected in everyday life (including the media offer), as well as in the long-term direction of society.

Thematic Areas of the Cross-Curricular Subject

The thematic areas of Media Education include components of knowledge and skills, which complement each other and are interconnected, forming in fact a whole.

MEDIA AND MEDIA PRODUCTION

(active in-depth involvement in the background of public communication)

- ▶ development of the media from book printing to internet, origin and types of mass media (press, radio, television)
- ▶ external influences on the behaviour of the media: institutional (media legislation), regulation, informal (pressure, lobbying, influential agencies, public relations, etc.)
- ▶ media financing (advertisement, fees, effectiveness implemented through standardisation)
- ▶ professional ethical codes
- ▶ people in the media and their work (journalists, entertainers, actors, managers)
- ▶ our rights with respect to the media (right to correction of incorrect information and right to reply)
- ▶ work organisation in the media: how the news is made, how entertainment shows are created, work in an editorial office, production crew
- ▶ work on the 'school medium' production team (printed periodical, radio or television broadcasting, internet periodical), analysis of the school production in terms of how well the principles and rules agreed to beforehand have been observed ('class media ombudsman')
- ▶ preparation of own written as well as recorded materials (text creation, audio and video recording using advanced functions of application software and multimedia technologies)
- ▶ communication and cooperation in a team (preparing a time schedule, allocation of tasks and responsibilities, the question of authorship and completing the materials as a whole)

MEDIA PRODUCTS AND THEIR SIGNIFICANCE

(sensitive perception of connections in an unstructured social environment)

- ▶ categories of media products (newspapers, magazines, radio and television broadcasting, websites), media-communication forms (the news, commentary, documentary, series, counselling show, photonovels, etc.), mutual inspiration between various media
- ▶ analysis of current news, criteria for news selection (importance for life, topicality, negativity, nearness, simplicity, unambiguousness, presence of a prominent figure, likelihood of lasting)
- ▶ the relationship between media products and reality (the media 'presentation' of reality, the relation between the news and reality, the relation between fiction and reality, 'play' with reality, relevance and trustworthiness of information sources and information)
- ▶ means of expression (codes and conventions) typical for specific media: visual, audio, and verbal means, secondary codes characterising individual media (covers of magazines for children and the young, radio and television signature tunes)
- ▶ stereotypes presented in media-covered representations, identification and evaluation of prejudice in a newscast, drama and entertainment shows
- ▶ what values and lifestyles are (are not) presented by media products and specifically how
- ▶ media production for the young (joint press analysis focusing on the presentation of intergenerational relations, intimate relationships, ideas on desirable and undesirable future)
- ▶ advertisement and its means of expression, a critical approach to advertising, advertisement analysis in terms of the strategy utilised (success in society, winning admiration, invitation to identification)
- ▶ preparation of an 'ideal' magazine for the young (what pupils consider interesting in real magazines and what they lack in them)
- ▶ preparation of an advertising campaign appropriately promoting the school

- ▶ preparation of a contribution on the same theme to various types of real newspapers or magazines
- ▶ preparation of a television performance based on a text from the daily press (the difference between written and oral expression)

END USERS

(knowledge of the power and meaning of an active approach to all stimuli)

- ▶ who the public, audience, citizens, users and consumers are
- ▶ how reader, listener and viewer groups form, what a target group is
- ▶ the media for selected groups (the young, women, interest groups)
- ▶ how audience is measured and described (number of copies, readership, ratings and audience share, market share)
- ▶ what an active audience and 'semantic power' of an audience (freedom to interpret information in one's own way) are
- ▶ media-consumption habits (organising one's day around media – reading newspapers or magazines, watching television, the 'battle for the remote control', furniture arrangement around the television, etc.)
- ▶ observation and description of media-use habits in a family/class/group and their analysis
- ▶ the readers'/viewers'/listeners' reception of a show, formulation of an opinion, writing approving or disapproving reactions

EFFECTS OF MEDIA PRODUCTION AND THE INFLUENCE OF THE MEDIA

(active approach to creating one's own intimate and social spaces)

- ▶ influence of the media on the organisation of everyday life (from daily rhythm through furniture arrangement to selection of controversial themes)
- ▶ anticipated or real influence of diverse media content on the state of mind of an individual (violence, pornography)
- ▶ influences on the whole society and on culture (influence on language culture, shared social values, social stability, sport, etc.)
- ▶ 'media counselling' activities (how to distinguish the tendencies of media consumption and how to change them)
- ▶ preparation of a television or radio discussion on the theme of 'the influence of the media' (influence of violent content, influence of the media on family life, influence of the media on the character of sport, etc.)

ROLE OF THE MEDIA IN MODERN HISTORY

(awareness of the role of the media in society)

- ▶ what the difference is between the position of Man in traditional and modern societies: importance of book printing, significance of broadcasting, importance of digitisation, continuous use of traditional and digital media
- ▶ what mass society is (mass culture, mass communication), significance of the Northcliffe Revolution
- ▶ modern society and freedom of speech: whether the media can be independent and responsible
- ▶ when tabloids originate and where this term comes from
- ▶ how society has communicated: from gestures through speech, the system of writing, printing and broadcasting to internet
- ▶ which media currently participate in forming our ideas on the events in the world and why
- ▶ the media and history: why an aggressor attempts to seize editorial offices, why radio is of use at confusing, groundbreaking moments
- ▶ the role of the media in the history of my municipality

7. Framework Curriculum Timetable

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 four-year grammar school education programme and at the upper stage of six- or eight-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 the 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 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 is determined by the School Education Programme. Optional educational activities must be offered to pupils by schools in at least the third and fourth forms.

A specific position among the educational areas included in the Framework Curriculum Timetable is held by the educational area Man and the World of Work and the educational field Health Education. Their educational content is defined by the FEP SGE, and it is hence the obligation of the School Education Programme to guarantee that pupils will have enough opportunities to acquire this educational content. The Framework Education Programme does not, however, specify in further detail in which forms and how the educational content of these areas (fields) should be implemented, whether separately or interconnected with the educational content of other educational fields. The Framework Curriculum Timetable allows these issues to be resolved by School Education Programmes.

7.1 General Notes

The minimum weekly time allotment in individual forms⁴ is 27 class hours and the maximum 35 (in accordance with the Education Act). The overall compulsory time allotment in the forms between one and four is 132 class hours per pupil. This time allocation is stipulated by the state. A school may determine a maximum time allotment of up to 140 teaching hours, with any time allotment exceeding the framework of the compulsory time allotment not being covered by the state.

For the implementation of the FEP SGE to be successful, it is necessary to create proper conditions for practical activities (laboratory activities, practical drills), seminars, ICT instruction, language instruction, etc., for which it is necessary to divide the pupils into smaller groups. For this reason, the minimum **average number of the teaching hours of one class per week** including the necessary class divisions (value H – Section 2, Subsection 2b of Decree No. 492/2005 Coll., On Regional Normatives, as subsequently amended) **is set at 53** for all forms of four-year grammar schools and of the upper stage of six- or eight-year grammar schools.

Such subjects of instruction are included in the curriculum timetable of the School Education Programme that build on the educational content of educational fields. The school determines the time allotment of individual subjects of instruction, which is based on the overall minimum allotment set for the educational area (field) in question, in its Framework Curriculum Timetable so as to fulfil the educational content of the field as specified in the FEP SGE.

The educational content of educational fields may be implemented in various ways, e.g. through seminars, exercises, hands-on practice, or projects; specific methods of implementation are determined in the SEP.

The school may develop integrated subjects in compliance with the conditions imposed on the integration of educational content of educational fields and cross-curricular subjects by the Framework Education Programme, in which case the time allotment is drawn by the school from the allotments of the educational areas concerned and from the time allotment available in the Framework Curriculum Timetable.

⁴ If the scheduling of the instruction is irregular, the minimum and maximum compulsory time allotments per week are understood as average.

Educational Areas Educational Fields	1st Year	2nd Year	3rd Year	4th Year	Minimum Time Allotment in 4 Years
Language and Language Communication	C	C	C	C	12
Czech Language and Literature	C	C	C	C	12
Foreign Language	C	C	C	C	12
Second Foreign Language					
Mathematics and Its Application	C	C	C	0	10
Man and Nature	C	C	0	0	36
Physics					
Chemistry					
Biology					
Geography					
Geology					
Man and Society	C	C	0	0	36
Basics of Civics and Social Sciences					
History					
Geography ⁵					
Man and the World of Work	←—————→				X
Arts and Culture	C	C	0	0	4
Music					
Fine Arts					
Man and Health	C	C	C	C	8
Physical Education					
Health Education	←—————→				X
Information Science and Information and Communication Technologies	0	0	0	0	4
Optional Educational Activities	0	0	C	C	8
Cross-Curricular Subjects	←—————→				X
Available Time Allotment					26
Total Compulsory Time Allotment					132

Time allotment in individual forms must be at least 27 class hours, not exceeding 35 hours.

Legend:

- C - the educational content of the fields of the educational area in question must be included in the respective form (forms)
- 0 - inclusion of the educational content of the fields of the educational area in question in individual forms is determined by the SEP
- ←→ - the educational content of the educational area (or field) defined in the FEP SGE must be included in the SEP during the designated period; in which form (forms) and how the educational content is implemented is determined by the School Education Programme
- X - time allotment is determined by the SEP

⁵ Because of the natural- as well as social-science character of Geography, the name of this educational field has been included in the list of fields in both the educational areas – Man and Nature and Man and Society. However, so as to preserve the content of the educational field Geography in its entirety, its educational content has been included only in the area Man and Nature.

7.2 Notes on Educational Areas

Language and Language Communication

- ▶ The educational area includes the fields Czech Language and Literature, Foreign Language, and Second Foreign Language.
- ▶ The School Education Programme must include at least two foreign languages, one of which must be English.

Mathematics and Its Application

- ▶ The educational area comprises only one, homonymous educational field.

Man and Nature

- ▶ The educational area includes the educational fields Physics, Chemistry, Biology, Geography and Geology.

Man and Society

- ▶ The educational area includes the educational fields Basics of Civics and Social Sciences, History and Geography.

Man and the World of Work

- ▶ The educational area comprises only one, homonymous educational field.
- ▶ The educational content of the field Man and the World of Work must be included in the SEP in the course of the education at four-year grammar schools and the upper stage of six- or eight-year grammar schools, which determines in which form (forms) and how the educational content is implemented.

Arts and Culture

- ▶ The educational area includes the fields Music and Fine Arts.
- ▶ Pupils must be offered the educational content of these fields (through subjects, modules, etc.) in order for them to be able to master fully the educational content defined in at least one of the fields, based on their own choice, including the content of the integrating theme Artistic Production and Communication.

Man and Health

- ▶ The educational area includes the fields Physical Education and Health Education.
- ▶ Because of the pupils' health and hygiene needs, the educational field Physical Education must be included in all four forms.
- ▶ The educational content of the field Health Education must be included in the SEP in the course of the education at four-year grammar schools and the upper stage of six- or eight-year grammar schools, which determines in which form (forms) and how the educational content is implemented.

Information Science and Information and Communication Technologies

- ▶ The educational area comprises only one, homonymous educational field.

Optional Educational Activities

- ▶ The time allotment for further educational activities covers the preparation of an offer of optional subjects, which are to develop key competencies, and reinforce and functionally elaborate the educational content of subjects in the SEP.

Cross-Curricular Subjects

- ▶ Cross-curricular subjects are a compulsory part of grammar-school education.
- ▶ All thematic areas of all cross-curricular subjects from the FEP SGE must be included in the SEP at the upper stage of grammar schools, but cross-curricular subjects do not have to be included in every form.
- ▶ The depth, width and methods of the implementation of cross-curricular subjects are entirely in the hands of schools and specified in the SEP – cross-curricular subjects can be implemented as a part of the educational content of other educational fields, can be devoted separate projects, seminars, courses, discussions, etc. or can be implemented as a separate subject in the SEP.

Available Time Allotment

- ▶ How the available time allocation is utilised is entirely within the authority and responsibility of the school's principal.
- ▶ The entire available time allocation in the SEP curriculum timetable must be utilised.
- ▶ Available time allotment is intended for:
 - implementing cross-curricula subjects;
 - introducing further subjects of instruction;
 - creating the school profile;
 - increasing the time allocation of individual educational areas (fields).

8. Principles for the Development of a School Education Programme for Four-Year Grammar Schools and the Upper Stage of Six- or Eight-Year Grammar Schools

A **School Education Programme (SEP)** is an obligatory part of a school's documentation and must be posted at an accessible place. The SEP prescribes the implementation of education at a particular school.

The School Education Programme must be prepared in compliance with the Framework Education Programme for Secondary General Education (Grammar Schools) as well as in accordance with generally accepted legal regulations. When creating their SEPs, six- or eight-year grammar schools follow the requirements of the FEP EE and of the FEP SGE. The preparation of a SEP is entirely within the authority of the school's principal, who is fully responsible for the education programme of his/her school, for its compliance with the Framework Education Programme, for its quality and implementation. Also teachers participate in the formulation of the programme, which is created in accordance with specific education plans of the school, the experience of the teachers, the conditions of the school, needs of the pupils, lawful requirements on the part of the pupils' parents or legal guardians, or requirements of the founding entity and the region, and they also participate in the development of its individual parts and are co-responsible for its implementation.

The school council pronounces on the SEP proposal and its subsequent implementation and authorises the method of the pupils' assessment. The implementation of the SEP and its compliance with the Framework Education Programme are reviewed by the Czech School Inspectorate, which conducts its inspection activity to this end.⁶

Principles for the Development of a SEP

A SEP:

- ▶ is developed for the entire period of education at grammar schools (in the case of six- or eight-year grammar schools, it is for the entire period of education at six- or eight-year grammar schools) and therein is governed by the requirements set by the relevant Framework Education Programme;
- ▶ creates the conditions for the acquisition of the educational content prescribed in the Framework Education Programme and hereby for the formation of the key competencies of the pupils;
- ▶ shows the school profile and the profile of the grammar-school's graduate;
- ▶ reflects the school's position in the region and its socio-cultural environment;
- ▶ builds on creative work of the teachers and utilisation of effective teaching forms and methods, does not limit the teachers in possible scheduling as well as methodological differences in their efforts to meet the specific needs of the pupils building on their own experience.

⁶ The text of the introductory paragraphs draws on the wording of the Education Act.

The Structure of the SEP for Four-Year Grammar Schools and the Upper Stage of Six- or Eight-Year Grammar Schools

This structure is followed by the SEP for four-year grammar schools and the upper stage of six- or eight-year grammar schools, whereas the structure of the SEP for the lower stage of six- or eight-year grammar schools is contained in the FEP EE, with six- or eight-year grammar schools having the possibility of creating one School Education Programme for the entire six or eight years of education, or of creating two independent SEPs, one for the lower and one for the upper stage of education. In terms of content, the part of the School Education Programme for the lower stage of six- or eight-year grammar schools is governed by the FEP EE and the part of the SEP intended for the upper stage of six- or eight-year grammar schools is governed by the FEP SGE.

1. Identification data

- ▶ title of the SEP⁷
- ▶ education programme⁸
- ▶ form of education⁹
- ▶ submitter
 - school name
 - school address
 - principal's name
 - contacts
- ▶ founding entity
 - name
 - address
 - contacts
- ▶ document is in force as of
 - date
 - principal's signature
 - stamp of the school

Further recommended data: motivational title of the SEP, IČO (business identification number), IZO (identification code of an organisation – a school or its part), RED-IZO (IZO of the Principalship), the name of the coordinator for the creation of the SEP.

2. School characteristics

- ▶ school size
- ▶ school facilities (material, spatial, technical, sanitary)
- ▶ characteristics of the teaching staff (staffing, qualification)
- ▶ long-term projects, international cooperation
- ▶ cooperation with parents and other entities (school council, educational counselling institutions, local and regional institutions, etc.)

Further recommended data: school location, the pupils' characteristics.

3. Characteristics of the SEP

- ▶ school's specialisation
- ▶ profile of its graduate
- ▶ organisation of the entrance procedure: the content and form, criteria for accepting pupils
- ▶ organisation of the school-leaving examination

⁷ It needs to be clear from the title of the SEP that it is a School Education Programme which has been developed in compliance with the FEP SGE.

⁸ A four-, six- or eight-year education programme.

⁹ A day, evening, distance, e-learning or blended form of education.

- ▶ educational strategies: common approaches on the school level applied in the instruction as well as outside which are employed by the school to shape and develop the targeted key competencies of its pupils; the educational strategies are formulated for each key competency or jointly for more key competencies so that it would be evident to which key competencies they are related
- ▶ provision of the instruction for pupils with special educational needs
- ▶ provision of the instruction for exceptionally gifted pupils
- ▶ incorporation of cross-curricular subjects: a list of all cross-curricular subjects and their thematic areas; a comprehensive description for each of the cross-curricular subjects including in which forms and using which particular ways the thematic areas of the cross-curricular subjects are implemented

4. Curriculum timetable

- ▶ arrangement of the curriculum timetable in a tabular form: a listing of the compulsory subjects of instruction with their time allotment for individual forms; enumeration of the time allotment for optional subjects in individual forms; the total number of lessons in individual forms and the total number of lessons in the four-year educational cycle and the upper stage of the six- or eight-year grammar-schools
- ▶ notes on the curriculum timetable: content specification, organisational conditions and further specifics appertaining to the implementation of compulsory as well as optional subjects if the data are not clear from the arrangement of the curriculum timetable in a tabular form (based on which field/fields, or cross-curricular subjects, the subject of instruction was prepared unless its educational content and name are identical to those of the educational field in question in the FEP SGE; usage of another organisational form than a class hour, etc.)

5. Syllabi

- ▶ name of the subject of instruction
- ▶ characteristics of the subject of instruction
 - content, time allotment and organisational specification of the subject of instruction (specific information on the subject important for its implementation; if it is integrated, indicate from which educational fields, their parts and cross-curricular subjects the educational content of the subject has been created)
 - educational strategies: common approaches applied on the level of the subject of instruction by the teachers to shape and develop the targeted key competencies of their pupils; the educational strategies are formulated for each key competency or jointly for more key competencies so that it would be evident to which key competencies they are related
- ▶ educational content of the subject of instruction
 - distribution and allocation of the expected outcomes from the FEP SGE into forms; if the subject matter is allotted into individual forms, the outcomes can be distributed into longer time periods
 - selection and allocation of the subject matter from the FEP SGE into forms; if the expected outcomes are allotted into individual forms, the subject matter can be distributed into longer time periods
 - cross-curricular subjects – selection of thematic areas while specifying the topics and activities in individual forms

Further recommended data: interrelations between subjects or further notes specifying the implementation of the educational content.

6. Assessment of pupils and the school's self-evaluation

- ▶ rules for the assessment of pupils
 - assessment methods – through marks, verbally, through a combination of the two methods
 - assessment criteria
- ▶ school's self-evaluation
 - areas of self-evaluation (in accordance with Decree No. 15/2005 Coll., specifying the requirements of the school's long-term plans, annual reports and self-evaluation, as subsequently amended, or other areas of self-evaluation)
 - objectives and criteria for the individual areas of self-evaluation
 - instruments for the individual areas of self-evaluation
 - time allotment of the evaluation activities

PART D

9. Education of Pupils with Special Educational Needs

Such pupils are considered as pupils with special educational needs who suffer from chronic health conditions (physical disability, visual and/or hearing impairment, mental retardation, autism, speech impediments, simultaneously handicapped with multiple disabilities and learning or behavioural developmental disorders), physically handicapped pupils (physical debilitation, long-term illness and mild mental-health disorders leading to learning and behavioural disorders) and socially disadvantaged pupils (coming from a family background with a low socio-cultural position, at risk of sociopathic phenomena, having court-ordered institutional care or education in a juvenile correction institution and pupils in refugee status and asylum-seekers).

The aim of the instruction of pupils with chronic health conditions and physically handicapped pupils who may be expected to pursue further studies is their integration into grammar-school education and the subsequent study at a university.

9.1 Education of Pupils with a Chronic Health Condition and/or Physical Handicap

The education of pupils with a chronic health condition and/or physical handicap is provided:

- ▶ at schools specifically established for such pupils;
- ▶ in separate classes, sections or study groups with specially adapted education programmes;
- ▶ through individual integration into regular classes.

For the education of individually integrated pupils, it is possible, should the need arise, to develop individual education plans jointly with the school counselling facilities. At grammar schools established specifically for the given type of health disability or in special classes of regular grammar schools, it is necessary to adapt the SEP to the type and degree of the disability of these pupils and to create such conditions that would contribute to the pupils' being successfully educated.

The education of pupils with special educational needs is implemented while using supportive measures, which are different from or provided beyond the scope of the individual pedagogical and organisational measures related to the education of the other pupils (Section 1, Subsections 1 and 2 of Decree No. 73/2005 Coll., On the Education of Children, Pupils and Students with Special Educational Needs and Children, Pupils and Students Who Are Exceptionally Gifted, as subsequently amended – hereinafter only as the 'Decree on the Education of Children, Pupils and Students with Special Educational Needs and Children, Pupils and Students Who Are Exceptionally Gifted') and in compliance with other conditions.

When diagnosing special educational needs, ascertaining the degree of supportive measures and considering the pupils' potential during their education, assistance is provided, with the consent of the parents or legal guardians, by school counselling facilities included in the Directory of Schools and Educational Institutes (pedagogical-psychological counselling centres, special pedagogical centres, etc.) and professional staff of the school's counselling section (mainly a special education teacher or psychologist).

Further Conditions Concerning the Education of Pupils with a Chronic Health Condition and/or Physical Handicap

Suitable conditions for education need to be created not only for graduates from elementary schools specifically established for pupils with a chronic health condition but also for pupils who have been integrated into the main educational stream. A school provides these pupils with conditions meeting their educational needs.

The planning and implementation of the educational process need to proceed from a specific diagnosis and description of the pupil's special educational needs and potential. It is particularly necessary to:

- ▶ take health aspects into account and respect the pupil's individuality and needs;
- ▶ make use of, as far as possible, all supportive measures during the pupils' education (see Section 1, Subsection 2 of the Decree on the Education of Children, Pupils and Students with Special Educational Needs and Children, Pupils and Students Who Are Exceptionally Gifted);
- ▶ apply the principles of differentiation and individualisation when determining the content, forms and methods of instruction in the process of organising activities;
- ▶ ensure specialised instruction of subjects of special educational care;
- ▶ make it possible, for serious reasons, to release the pupil, entirely or partially, from the classes of a subject or the performance of certain activities (see Section 67, Subsection 2 of the Education Act);
- ▶ take into account the type, degree and level of the condition or handicap when evaluating the outcomes of education;
- ▶ remove architectural barriers and make the necessary changes or adjustments to the school environment;
- ▶ cooperate with the pupil's parents or legal guardians, school counselling facilities and professional staff of the school's counselling section, and if need be cooperate with specialists from other areas (especially when preparing individual education plans);
- ▶ support gifted and talented pupils by creating suitable study conditions;
- ▶ support the further education of pedagogical employees focusing on improving the quality of their work with pupils with chronic health conditions and/or physical handicaps.

Further Conditions to Be Ensured for the Education of Pupils with a Chronic Health Condition

- ▶ to adapt and formulate the expected outcomes of the educational fields in order to make them realistic and attainable for such pupils in light of their potential, and adjust also the selection of the subject matter to these outcomes;
- ▶ to make it possible in the SEP, if the chronic health condition prevents the implementation of the educational content of an educational field or its part, to replace the educational content in question or its part with a related or different educational content which better suits the educational potential;
- ▶ to apply alternative forms of communication – sign language, Braille, etc.;
- ▶ to allow for personal assistance in compliance with the legislation in justified cases.

9.2 Pupils from a Different Cultural Background and Socially Disadvantaging Environment

For pupils from a background which is culturally, linguistically and frequently also socially entirely different from the environment of the majority population in the class, the instruction may be, especially at the beginning of the studies, too demanding, and the failure to handle it along with other barriers to study could lead in these pupils' case to their premature abandonment of their studies. Many such pupils participate in the regular life of the school without problems while others may encounter minor or even substantial problems due to their linguistic difference or because of their being deeply influenced by their families and other cultural models, which are reflected in their behaviour, conduct, different ordering of values and lifestyle. Specific problems of such pupils concern especially language – like in the case of anyone who is not educated in his/her mother tongue – and the differences arising from the otherness of the background from which these pupils come. Some might have e.g. problems with handling specialised terms in the subjects of instruction, others can have difficulties with integrating into the collective of the majority group in the class or in the school, etc.

In the case of pupils coming from a socially disadvantaging environment (among whom are often precisely pupils from culturally different minorities), serious problems of an economic nature and problems with insufficient support on the part of the family during study can occur. These pupils may also more frequently be in danger of negative phenomena, such as alcoholism, drugs, etc.

The integration of pupils from a different cultural background and socially disadvantaging environment, protection of the pupils' minority cultures and simultaneously support of their successfulness in the majority society must be a long-term objective of the school. It is therefore necessary for a school when preparing a School Education Programme to react to the cultural differences in the composition of the pupils and as far as possible to build also on the continuity arising from the history and culture of these pupils. For pupils from a different cultural environment, a school can develop individual education plans, which will suit their needs to the maximum degree possible and will enable them to receive information that will help them establish their own identity. A school must also remember to provide specific materials and aids, to employ methods of instruction suitable for the diverse learning styles of the pupils and various ways of organising the instruction, to plan the instruction in such a way that it would be based on the interests, experience and needs of pupils of different cultures, ethnic groups and social environments.

The most important agent for the successful education of pupils from different cultural and social environments is the teacher, who knows his/her pupils and is decisive for facilitating their integration into the collective of the class and school, creates a favourable social climate in the classroom and pays increased attention to relations between his/her pupils. Regular communication and feedback are also important. If need be, it is advisable to select a mentor for the pupil, who will plan and monitor the pupil's progress in his/her study and will help him/her study effectively. It is necessary to communicate and cooperate with the families of the above-mentioned pupils.

10. Education of Exceptionally Gifted Pupils

The issues concerning the education of exceptionally gifted pupils are very important not only because exceptionally gifted pupils have their own specific educational needs but also because the development of the talent of individuals is of crucial significance for the whole society. For this reason, it is important that all teachers be able to identify the exceptionally gifted pupils and create a stimulating and adequate educational environment for them.

Such a pupil can be considered as exceptionally gifted who manifests an exceptionally high level of performance in a narrow area or in the entire spectrum of human activities. An exceptional talent is manifested by an accelerated development in the activities in which the pupil demonstrates exceptional abilities or by a high level of results in these activities. An individual can have one but also several types of talents; on the other hand, it is possible that the performance of an exceptionally gifted pupil will be average or below average in some activities.

Also such pupils can be among exceptionally gifted pupils who for unspecified reasons give a lower-quality performance than their potential allows them, pupils with learning and/or behavioural developmental disorders, pupils from problem families, from a different cultural background, although precisely in the case of these groups of pupils an exceptional talent is generally often not expected.

Manifestations of Exceptionally Gifted Pupils

The exceptionally gifted do not form a homogeneous social group with the same characteristics. Some of their manifestations are, however, shared by most of these pupils. They usually are goal-oriented, involved, curious and motivated in the activities in which they are interested. They manifest themselves as strong individualities with their own pace and way of working. As they understand problems in their wider contexts, they are often able to find new solutions and transfer the experience gained to an unknown situation. In the activities in which they are exceptionally gifted, the pupils usually exhibit very good memory, good vocabulary and are able to focus deeply.

On the other hand, exceptionally gifted pupils do not like to repeat and practise what they have already mastered. It frequently happens that they make mistakes in simple tasks while easily managing more difficult tasks. In an activity which is of interest to them, these pupils have a precise idea on the ideal result and are perfectionists not only towards themselves but also towards the others and are quite intolerant of the imperfection of their own as well as of the others. This perfectionism can influence their method of monitoring their own work. Since some of these pupils do not know how to study and do not have fixed proper study habits, the subjects of instruction in which they do not achieve an above-average performance can be problematic for them and they soon lose the motivation to study them.

Exceptionally gifted pupils mostly seek individual work. Group work may therefore not always suit them, because they usually have problems in communicating with their classmates, a different work pace, and working together with the others sometimes does not bring anything new for their development. It is often the case that not even the collective wants to accept the exceptionally gifted pupil for his/her alterity. The exceptionally gifted pupils are sometimes afraid to show their abilities, because they fear that their exceptionalism would be ostracised by their classmates.

Exceptionally gifted pupils often have problems in social and emotional areas. They are quick-tempered, very touchy and have a strong sense of justice. They frequently are self-critical and sometimes have an erroneous self-image. It is occasionally hard for them to conform to the figure of authority or to the collective. Some of these manifestations may instigate conflicts with their classmates or teachers. Owing to puberty, the exceptionally gifted pupil may feel the need to adjust to his/her classmates, giving rise to the risk that his/her potential will not fully develop.

These as well as other manifestations of exceptionally gifted pupils may affect the instruction both positively and negatively. It is hence necessary for a teacher to be aware of the effects already when preparing for lessons, to make use of the positive ones as much as possible for the good of the class while suppressing the negative ones to the utmost, to lead the pupils to mutual tolerance and treat each of them individually.

The Care of a School for the Development of its Pupils' Gifts

In order for a grammar school to be able to provide education of a high quality for an exceptionally gifted pupil, it is necessary for it to cooperate from the very beginning, i.e. from the entrance procedure, with the elementary school from which the pupil is coming. In this situation, the school will be given the basic information by a comprehensive assessment, which contains a detailed and general description of the pupil's development thus far, his/her results in the instruction but also in the extracurricular activities, his/her placement in competitions and subject-specific Olympiads, the method of working with the pupil until now and psychological evaluation. Cooperation of the school with the family of the pupil is imperative as well.

In any case, the school must create various opportunities in the instruction in which every pupil should have the possibility to discover and demonstrate his/her talent. Should a teacher during the instruction discover that a pupil newly manifests some exceptional capabilities, he/she should recommend that the pupil and his/her parents visit the pedagogical-psychological counselling facilities, where the pupil will be professionally examined. Both the school and the parents will be able to receive further assistance in specialist counselling centres for the education of the exceptionally gifted, which have gradually been established throughout the CR.

An exceptionally gifted pupil can study according to an individual education plan (IEP). When preparing it, a school can make use of the assistance of the counselling care centre for the exceptionally gifted or pedagogical-psychological counselling centres. When creating an IEP, it is necessary to take into account the pupil's personality, the kind of his/her talent and ensure that the pupil is not overburdened. The preparation of an IEP for a particular pupil will be easier if a special programme for exceptionally gifted pupils (principles of their care, adjustment of the targeted and content specifications of the educational areas and assessment of the pupils) has been formulated in the School Education Programme. An exceptionally gifted pupil educated according to the IEP can during his/her studies at the grammar school attend some courses at a university as well as certain classes with higher forms, omit certain lessons, participate in various competitions. The school should make it possible for the pupil to study themes in which he/she is interested even if they are not included in the FEP SGE. The educational needs of the pupil can be fulfilled in several ways: by offering optional and facultative subjects, dividing into groups in various subjects, letting the pupil participate in the implementation of the school's or the pupil's own projects, take part in competitions at the republic-wide or international level, through the grammar school's cooperation with specialised and research workplaces here as well as abroad, individual study of specialised literature, e-learning, individual search for information from the internet or special teaching methods (enrichment of the subject matter and accelerated progress during the instruction). These methods can variously complement each other.

In some cases, it is advisable to create a **special class** for such pupils. This, however, assumes that there is a group of pupils in the same form with a similarly focused talent or exhibiting exceptional abilities in the entire spectrum of activities. In a special class, the method of enriching the subject matter, i.e. augmenting the educational content and providing a deeper insight into the problems, is the most applied. For this reason, it is advisable to cooperate with university teachers and other specialists.

For exceptionally gifted pupils, it is also possible to open a **class with accelerated progress during the instruction**, where the teacher proceeds according to the work pace and level of the knowledge and skills of the pupils. The accelerated progress is used only in one kind of a talent (e.g. the talent for logic and mathematics).

The work with exceptionally gifted pupils can be positively influenced by introducing the role of a mentor at the school. The mentor should be a specially trained teacher, the school psychologist or a special education teacher, whose task is to look for gifted pupils, prepare an individual education plan for the gifted pupil, mediate contact between the exceptionally gifted pupil and specialised workplaces, ensure cooperation between the teacher of the subject of instruction in question and the pupil's family, etc.

The Teacher's Approach to the Education of Exceptionally Gifted Pupils

It is possible to develop the talent of an exceptionally gifted pupil only if the following three fundamentals are ensured:

- ▶ the opportunity to discover/manifest the talent;
- ▶ high long-term motivation;
- ▶ an environment showing support.

Exceptionally gifted pupils usually have a strong internal motivation to pursue the activities in which they are gifted. Nevertheless, it is necessary to motivate them to the highest performance possible also in the activities for which they do not have so many exceptional abilities. A pupil should be motivated to such a performance even during group work. The teacher should set the requirements slightly higher than the current possibility of the pupil. In particular pupils from high-risk groups, in whose case talent is generally not expected, need to be motivated.

Support can be expressed by the teacher for example by accepting the possibility of there being several ways of solving problems and also the fact that an exceptionally gifted pupil can be better informed than he/she himself/herself is in the educational fields for which the pupil has liking. The development of talent is also supported by a friendly working environment in the class. It is created not only by the teacher but also by the classmates and the exceptionally gifted individual himself/herself. The teacher should stimulate the creation of such an environment in the class and ensure that it is maintained.

It is important to realise that the exceptionally gifted is not a teacher's aide but a pupil who should have the opportunity to learn something new just like his classmates. The teacher should help him/her find friends also among his/her classmates and integrate him/her into the collective of the class. In so doing, however, it is necessary to respect the personality of the exceptionally gifted pupil and not to force him/her into anything against his/her will. The pupils should learn to cooperate and communicate with each other. Furthermore, the teacher should ensure that the self-confidence of this pupil is strengthened, namely by supporting his talent, developing his strengths as well as by helping him/her understand himself/herself.

In the instruction, it is advisable to use problem- and project-solving teaching and work in activity centres as selected by the pupil himself/herself. By employing the heuristic teaching method, discussion, etc., the pupil should be guided to critical thinking; also the alternation of the instruction and self-study while using multimedia technologies has proved to be successful. Such teaching methods should, however, be used for the instruction of all the pupils at the grammar school.

In the course of education, also cooperation between teachers who teach the exceptionally gifted pupil in the individual subjects is important, which can ensure that the individual subjects are interconnected and prevent the repetition of already covered subject matter.

Examples of modifications in the organisation of the education:

- ▶ individual education plans;
- ▶ complementation, augmentation and amplification of the educational content;
- ▶ assignment of specific tasks;
- ▶ inclusion of the pupil in independent and more extensive work and projects;
- ▶ internal differentiation of the pupils in some subjects;
- ▶ occasional (temporary) creation of groups for selected subjects with an open possibility to choose on the part of the pupil;
- ▶ the pupil's attendance of some subjects with older pupils.

11. Conditions for Education at Grammar Schools

For the successful implementation of the education at grammar schools following the conception of the FEP SGE, it is necessary for the school to take pains to provide the optimal conditions (material, personal, pedagogical-psychological, psychosocial, sanitary and organisational). The formulation of sets of these conditions shall be based on valid legislative norms for school institutions.

The FEP SGE defines the optimal conditions at the general level and expects every school to put especially such conditions in its School Education Programme in concrete terms which support the education plans of the school.

Material Conditions

- ▶ the main (universal) classrooms of a class furnished with functional and aesthetically designed furniture and multimedia equipment – serving as the basic areas for the individual classes and for activities not specialised in advance
- ▶ special classrooms – which make it possible to employ various forms and methods – for the instruction of languages, ICTs, of natural-science and arts-education subjects, furnished with special functional furniture, devices, tools, didactic materials and aids; facilities for physical-education activities including a safe surface, gym apparatus and equipment
- ▶ laboratories and workshops making practical instruction in the number adequate to the requirements of the education programme as well as the norms of occupational safety while respecting the demands on the spatial arrangement and subdivision of classes into study groups
- ▶ areas for the storage of aids and for the preparatory work of the teachers (staff rooms), equipped with corresponding furniture and tools for the instruction of the individual educational areas and a proper equipment for the teacher's preparation and relaxation
- ▶ study zones for the pupils' relaxation as well as independent self study (in the form of libraries and reading rooms equipped with information technologies)
- ▶ work as well as relaxation areas and rooms for activities not posing high demands in terms of space – for collective as well as individual creative activities, areas for the pupils of the whole school or individual forms or special interest groups to meet
- ▶ further areas with the functional equipment necessary for other educational or supporting activities – areas for the operation of the school with communication technologies installed, for the personal hygiene of both the pupils and the teachers, areas for school meals, locker rooms or cloakrooms
- ▶ textbooks, teaching aids, didactic and information technologies, gym apparatus and equipment for physical education, etc., which make effective teaching and learning possible and stimulate the activity and creativity of the pupils, delight in learning and discovering

Personal and Pedagogical-Psychological Conditions

- ▶ teachers with the prescribed qualifications and specialised pedagogical-psychological competence, endowed with crucial competencies for the education of pupils and competencies for the performance of responsible and demanding pedagogical and managerial activities; fitting the requirements of the instruction on the teachers' qualifications together with other school activities, and harmony between the educational activities provided by the teachers and the objectives of education prescribed by the law and further provisions, fulfilment of the prescribed number of lessons and other educational activities
- ▶ teachers having the professional competencies necessary for the communication and social interaction with the pupils, their parents, the other teachers, specialists and institutions providing special services for the school
- ▶ teachers and educators having special competencies and functions (e.g. educational consultant, the school psychologist); teachers endowed with the ability to diagnose the learning activities of the pupils, motivate them to further activities, continuously educate themselves and flexibly modify their activity on the basis of permanent self-reflection and evaluation of education and edification
- ▶ fulfilment of the right and simultaneously duty of the educators to educate themselves continuously, purposefully and efficiently throughout their professional activity while making use of mainly the offer of those institutions providing the further education of educators

- ▶ teaching staff in the optimal composition – in terms of both specialisation and age – capable of teamwork, communication as well as cooperation
- ▶ managerial employees with significant managerial, pedagogical-psychological and organisational abilities who are capable of creating a motivating, inventive and at the same time demanding professional atmosphere, of striving for the permanent professional development of themselves as well as of the teaching staff, are endowed with conceptual thinking and advocate an innovative style of work, are able not only to advise but also to shield the teachers from negative outside factors

Conditions of Safety and Hygiene of Intellectual and Manual Labour, Psychosocial Conditions

- ▶ the principal value is health; intentionally influencing a favourable social climate and contentment during 'healthy' learning, candour and partnership in communication, respect, tolerance, recognition, empathy, cooperation and mutual help, propagation of solidarity with one's class and the school in general
- ▶ optimal correlation between the educational needs of the pupils and pedagogical efforts of the teachers; general benefit of the pupil is the main factor in the preparation and implementation of activities at a school
- ▶ education and instruction interconnected with real life – acquisition of those key competencies which have a practical sense for the pupils and lead to the development of the whole personality
- ▶ emphasis on the age and individual appropriateness and motivating evaluation of the performance of the pupil as well as the group – taking the individual possibilities of the pupils into consideration, functional feedback, tolerance of mistakes and errors, accommodation of the needs of an individual and his/her intimate problems
- ▶ the pupils' active participation in the education and the activities of the school, which builds on the model of a democratic community – the building of a community on the principles of freedom but at the same time of responsibility, stability of common rules, justice and cooperation
- ▶ safety and protection of the health of the pupils, teachers and non-pedagogical employees of the school during activities related to education, or during other activities, observation of the prevention norms
- ▶ improvement of the quality of the pupils' and teachers' work environment in compliance with the requirements of hygienic regulations, labelling of dangerous objects and parts of the buildings being used in accordance with the relevant norms, maintenance of the buildings reserved for education and instruction in a defect-free state, regular technical maintenance
- ▶ thorough, detailed, effective and demonstrable instruction of the pupils on possible health dangers and safety during all activities in which they take part during the lessons and educational activities, familiarisation with the school's rules, principles of safe conduct and provisions of safety regulations and rules, the schools' as well as general, related to educational and instructional activities
- ▶ correspondence of the difficulty of the education with the allotment of compulsory lessons, determined by the Framework Education Programme, which respects the pupils' physiological and mental needs, educational objectives, educational content and conditions
- ▶ effective protection of the pupils from violence, bullying, drug usage and other socially negative phenomena
- ▶ suitable timetable adequate for the pupils' age, proper dietary and drinking regimen (based on the pupils' age and individual needs); accessibility of the means of first aid and contacts to the doctor and other special services

Organisational and Managerial Conditions

- ▶ observation of the school legislative norms delimiting the rules of organisation and of the process of secondary general education, which is implemented according to the School Education Programme
- ▶ participation of all teachers in the preparation and implementation of the School Education Programme – specification of common educational strategies, relations, duties and responsibility when preparing and implementing the School Education Programme, definition of the priorities of the school's activities, determination of long-term educational objectives and conditions for the school's development, definition of the basic content elements of the school's activity, establishment and development of the school's traditions, coordination of the time allotted for the lessons and the school's schedule, etc.

- ▶ functional system of the school's self-evaluation instruments, specification of the basic criteria for the evaluation of the implementation of the School Education Programme
- ▶ support of the teachers' lifelong learning
- ▶ the basic rules of the school's activities (for the pupils, teachers, other users of the school, the public), ways of discussing problems with the pupils and their parents, open-door strategy towards the pupils' parents, an opportunity for the teachers to meet the parents, formation of high-quality social relations between the school and the public
- ▶ optimal schedule in harmony with the potential and needs arising from the age of the pupils (differentially), in compliance with the objectives, content and effective methods of learning, with interconnectedness between compulsory and facultative (optional) education
- ▶ optimal organisation of the school's activities in agreement with the age specifics and needs of the pupils and their safety (the schedule of the study, work, relaxation, exercise, dietary and drinking regimen, observation of the rules of hygiene, the schedule of extracurricular activities, etc.)
- ▶ functional and constantly updated system of information for the pupils, teachers, the school's management, parents, the school's partners and between the individual agents of the educational process
- ▶ mediation of up-to-date and relevant information to the pupils on their prospective success on the labour market and endowment of the pupils with i.a. organisational competencies which will be of use to them when deciding on their further professional and educational orientation
- ▶ general support of the school's activities which build on the lessons (subject-specific Olympiads, sporting and cultural competitions, the pupils' international-exchange activities)
- ▶ utilisation of the activities of the pupils in their elected organs and institutions when deciding on the implementation of important curricular as well as extracurricular activities

Glossary

This glossary contains only those expressions which have been used in the FEP SGE and explains their meaning in the context of this document. The glossary should serve primarily for principals of schools and teachers who develop their own School Education Programmes on the basis of the FEP SGE.

assessment of pupils

final as well as continuous assessment of the pupils' educational results, whose objective is to provide the pupils with feedback; the assessment expresses the degree to which the requirements set in the *School Education Programme* have been fulfilled and the degree of the individual educational progress of the pupils

cross-curricular subjects

these are areas of current problems faced by the world today and in the future within the *Framework Education Programme for Secondary General Education (Grammar Schools)*, which are becoming an obligatory part of the education at grammar schools; they are an important formative element in secondary education and help the pupil's personality develop particularly in the area of attitudes and values; they become an opportunity for the pupils' individual engagement and their mutual cooperation

curricular documents

the educational documents which delimit the legislative and content framework necessary for the development of the *School Education Programme*; the system of curricular documents is created and applied on two levels; on the state level, it consists of the *National Education Programme* and *Framework Education Programmes* while on the school level, it is formed by *School Education Programmes*

curriculum timetable

the part of the *School Education Programme* specifying the organisation of instruction at a specific school on the basis of the *Framework Curriculum Timetable for Grammar School Education*; it contains a chart with the list of compulsory and optional *subjects of instruction* and notes on the organisation and implementation of the individual *subjects of instruction*

education

the educational process, comprising both the educational and instructional components, in the course of which the pupils acquire the *key competencies* and *educational content* prescribed for a particular stage of education

Education Act

the abbreviated name for Act No. 561/2004 Coll., On Preschool, Elementary, Secondary, Higher Vocational and Other Education

educational areas

roughly delimited units of the *educational content*; the *Framework Education Programme for Secondary General Education (Grammar Schools)* contains eight educational areas, which consist of one or more *educational fields* of similar content

educational content

specification of the *expected outcomes* and *subject matter* on the level of *educational fields*, which is further elaborated on the level of the *School Education Programmes*

educational fields

the independent parts of the *educational areas* in the *Framework Education Programme for Secondary General Education (Grammar Schools)*; they specify the *educational content (expected outcomes and subject matter)*

educational objectives at grammar schools

the objectives set in the *Framework Education Programme for Secondary General Education (Grammar Schools)*, for the fulfilment and development of which a grammar school should strive

educational strategies

carefully selected and ordered approaches through which the school endeavours to fulfil the targeted *key competencies*

elementary education

education which is provided at elementary schools and at the *lower stage of six- or eight-year grammar schools*, or in other educational fields

evaluation activities

all planned and targeted activities of the school aimed at verifying, measuring, assessing and evaluating the results and changes achieved in all school activities and defined in the *School Education Programme*

exceptionally gifted pupil

a pupil who manifests exceptional abilities in a narrow area or in the entire spectrum of human activities

expected outcomes

the principal part of the *educational content* of the individual *educational fields*; they are verifiable, practically focused, activity-based and applicable in everyday life; they specify the level which is to be attained by all the pupils through the *subject matter*; they are set as binding

Framework Curriculum Timetable for Grammar-School Education

curriculum timetable for the *Framework Education Programme for Secondary General Education (Grammar Schools)*, which specifies the basic organisational parameters of education at grammar schools

Framework Education Programme for Secondary General Education (Grammar Schools) (FEP SGE)

the *curricular document* on the state level which normatively prescribes the general framework for the *education* at grammar schools; the FEP SGE defines mainly particular *educational objectives at grammar schools, key competencies, educational content* and its organisational arrangement and principles for the creation of *School Education Programmes*

Framework Education Programme for Elementary Education (FEP EE)

the *curricular document* on the state level which normatively prescribes the general framework for the *elementary education*

Framework Education Programmes

the *curricular documents* on the state level which normatively prescribe the general framework for the individual *stages of education* and are binding for the creation of *School Education Programmes*

integrated subject

a subject which on the level of the *School Education Programme* integrates the whole *educational contents* of *educational fields* or their parts

integration of educational content

the interconnectedness of the *educational content* on the level of themes, thematic areas, or *educational fields* and *educational areas*, which is made possible by the *Framework Education Programme for Secondary General Education (Grammar Schools)*

integration of pupils

the inclusion of pupils with special educational needs as well as exceptionally gifted pupils in regular classes and their education in accordance with their individual educational needs

key competencies

a body of knowledge, skills, abilities, attitudes and values important for the personal development and success of every member of society; the *Framework Education Programme for Secondary General Education (Grammar Schools)* defines the key competencies on the level which is to be acquired by all the pupils by the end of their education at the grammar school; at this stage of education, the following are considered as key competencies: learning competency, problem-solving competency, communication competency, social and personal competency, civic competency, entrepreneurial competency; they are not tied to the individual *subjects of instruction*; the pupils develop them throughout the course of the entire education by means of various activities provided by the school; this process continues further in lifelong learning

learning strategies

the sequences of activities which are deliberately ordered in the learning process in such a way that it would be possible to achieve the learning objectives; by means of them, the pupil decides which skills and in which order he/she will make use of

lower stage of six- or eight-year grammar schools

the lower stage of six- or eight-year grammar schools consists of the first two forms of six-year grammar schools or the first four forms of eight-year grammar schools

Manual for Developing School Education Programmes

a methodological document which is recommended for the development of *School Education Programmes*; it offers specific approaches for the creation of the individual parts of the *School Education Programme*, with examples from school practice supplied

National Education Programme

the supreme *curricular document*, which is created on the basis of the specifications in the *Education Act*

National Programme for the Development of Education in the Czech Republic

the conceptual document of Czech educational policy designated as the White Paper; it contains the plans for the development of education of the pupils between 3 and 19 years of age and proposals as well as recommendations of economic, political and educational nature, which are gradually being implemented

objectives of an educational area

the part of the *educational areas* which links the *educational content* with *key competencies*; it forms the starting point for *educational strategies* on the level of the *subjects of instruction*; through these strategies, the school endeavours to create and develop the pupils' *key competencies*

profile of a grammar-school graduate

a target category describing the qualities which a graduate from a particular school should have upon successful completion of the studies at this grammar school; the profile of a graduate arising from the education plans of the school is prescribed in the *School Education Programme* of the particular school

pupil with special educational needs

a pupil with specific learning and behavioural disorders, a pupil from a different cultural background and socially disadvantaging environment, a pupil with a chronic health condition (physical disability, visual and/or hearing impairment, multiple disabilities, speech impediments, learning developmental disorders, autism) and a physically handicapped pupil (e.g. a pupil with a long-term illness)

school council

the school's organ allowing adult pupils and the legal guardians of minor pupils, the school's pedagogical employees, the founding entity and other persons and entities to participate in running the school; it discusses the proposal of the *School Education Programme*

School Education Programme (SEP)

the *curricular document* on the school level, which presents the form of *education* at a particular school and its *profile*; the SEP is prepared on the basis of the relevant *Framework Education Programme*, by whose requirements it is guided, and according to which *education* at a specific school is implemented; a SEP is a compulsory part of a school's documentation and must be publicly accessible; a School Education Programme is published by the school's principal

school-leaving examination at grammar schools

an examination through which the education at a grammar school is completed; the school-leaving examination consists of a common and profile part

school profile

formulation of the school's education plans summarised in the *School Education Programme*

school's self-evaluation

is used for systematic assessment of the school's activities planned in the *School Education Programme*; the results of the self-evaluation serve as feedback, on the basis of which the school can adjust its own activities, and as the starting point for the school's future work; the self-evaluation is performed by the participants in the educational process – the school's management, teachers, pupils; the chapter School's Self-Evaluation is a part of the *School Education Programme* in which schools define their objectives, instruments and criteria of self-evaluation as well as time allotment of *evaluation activities*

secondary education completed with a secondary school-leaving examination

the level of secondary education which a pupil has achieved by successfully completing the education programmes of six- or eight-year grammar schools, of an education programme of a length of 4 years in a day form of education, of an education programme of an extension course of a length of 2 years in a day form of education or of an education programme of abbreviated study in order to acquire secondary education completed with a school-leaving examination

stages of education

legislatively defined phases of education with their content determined and specified in terms of time, which correspond to education in compliance with the relevant *Framework Education Programme*

subject matter

a part of the *educational content* of the individual *educational fields*, which is structured into thematic areas (topics, activities); it is understood as a means for achieving the *expected outcomes*, it forms an integral part of the *educational content*; on the level of the *Framework Education Programme for Secondary General Education (Grammar Schools)*, the subject matter is binding for the creation of the SEP

subjects of instruction

didactic and organisational treatment of the *educational content* in a specific *School Education Programme*; subjects of instruction are created on the basis of the *educational fields* specified in the *Framework Education Programme*

syllabi

the part of the *School Education Programme* in which the *educational content* of the individual *educational fields* is divided into *subjects of instruction* in individual forms

teaching methods

methods of instruction; particular educational techniques by means of which a teacher achieves the educational objectives which he/she has set for himself/herself

upper stage of six- or eight-year grammar schools

the upper stage of six- or eight-year grammar schools consists of the last four forms of six- or eight-year grammar schools

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