Gesellschaft für Didaktik des Sachunterrichts (GDSU)^{1, 2}

Perspectives Framework for General Studies in Primary Education

A framework for teaching general knowledge

2003

⁽¹⁾ In the Federal Republic of Germany the 16 States (Länder) are autonomously responsible for all matters of culture and education, each maintaining its own school system. Primary school generally is a four year (age 6 to 10) comprehensive school (six years in Berlin and Brandenburg) traditionally committed to an integrated concept of education. Sachunterricht (General Studies) is considered one of the core subjects next to German Language and Mathematics. Although the name of the subject differs from Land to Land as well as the syllabi, the books used and the topics taught, a concurring understanding of this subject and its Didaktik has evolved, establishing it as an university discipline of own standing. In 1992 the Gesellschaft für Didaktik des Sachunterrichts e.V. (GDSU) was founded. Its membership now comprises most of the full-time personell involved in research and training for General Studies at the universities and other teacher training institutions.

⁽²⁾ The translation of names and terminology is at risk of introducing misunderstanding even when clarification is intended. "Gesellschaft für Didaktik des Sachunterrichts e.V. (GDSU)", for instance, may be translated either as "Society for Didactics of General Studies" or as "Society for Teaching General Studies", whereby both translations understate the determinancy and control of contents, aims and topics, which "Didaktik" traditionally emphasizes. Similar problems are induced by the word "Sachunterricht". As these and some other indispensable concepts are grounded in the cultural tradition of German primary education, meaning hardly can be defined without relating to it. Hopefully, it will be exposed and built as reading progresses.

^{2 &}quot;Didaktik" in German educational terminology refers to the Science of Teaching comprising both curriculum and instruction. In consequence, teachers must be qualified for taking decisions on both of them.

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1 The concept of the Perspectives Framework

1.1 The educational aims of General Studies

From the pedagogic and didactic points of view, primary school advocates the challenging task of assisting children in:

- orienting themselves in the world, understanding their environment,
- helping them to participate in shaping their surroundings,
- learning systematically and reflectively,
- acquiring the prerequisites for later learning.

The contents and methods used in the teaching of General Studies therefore have to be adequate to meet present needs and future demands, they have to lay the foundations of live long education and promote its development by enticing children to learn and rewarding them with the enjoyment of learning, of knowing and of shaping their life.

The potential of primary school children to learn is often underestimated. In General Studies common knowledge has to be expounded, not just replicated, and it has to be put into the perspective of understanding and of substantiated performance. As evidence increases that learning to truly know excites and inspires children we should not offer them less. Teaching General Studies needs to be designed in a way that is interestingly demanding both in content and method, stimulating the children's willingness and satisfying their capacity for learning as early as possible. The perceptual, intellectual and learning abilities of children need to be taken seriously right from the beginning of primary school and have to be promoted in all subject areas.

From the above follows that one of the foremost tasks of General Studies is general knowledge teaching³. It has to support children in investigating their natural, social, and technologically structured environment in an educationally effective way, while at the same time laying the foundation for more specialized courses in secondary schools later on. General knowledge teaching is closely linked to language teaching, but may not be subsumed under it. Although language supports the acquisition of content through communication and representation, the study of language and communication does not disclose how things are, how they came to be as they are, how they relate or how they affect each other.

To adequately fulfil the tasks challenging General Studies, general knowledge teaching has to take account of children's questions, interests and learning needs and develop them further by taking advantage of knowledge that has been developed and nurtured within the cultures of specialized subjects. In this way,

³ The primary school subject of Sachunterricht seems adequately described by General Studies. But as its conceptual focus, at present, is on knowledge development it seems appropriate to introduce the concept of general knowledge teaching for characterizing the predominant didactic emphasis of teaching Sachunterricht.

General Studies supports children in acquiring culturally significant knowledge and in gaining a reliable foundation both for increasingly independent action and for further learning. In addition, general knowledge teaching promotes critical reflection of knowledge as a precondition for new ideas and for practicable problem solving. This also involves the issue of the quality of the knowledge gained – how true and usable is what one knows and what others know and how can that be tested?

The expectation that General Studies should foster educationally effective investigations of the natural, social and technological environment challenges general knowledge teaching to look beyond the horizon of common cultural and practical knowledge. Its content touches on areas for which various natural science and social science disciplines provide knowledge that has specialist underpinnings and methodologically tried and tested processes. The broad range of the contents of general knowledge teaching on the one hand offers a variety of opportunities to link up with primary school children's experiences and interests. On the other hand, in view of the numerous and sometimes competing demands made on the primary school, the question arises of where the emphasis in the content of general knowledge teaching lies: What is its specific contribution to sustainable effective education? At the end of their primary school career, what should children have learned about their social, natural and technological environment – and why?

The concept of the Perspectives Framework aims to provide an answer.

1.2 The educational concept of the Perspectives Framework

To ensure continuity both with the subjects at secondary schools and also with children's experiences and interests in the world at large, contents and processes for General Studies are selected under five different perspectives:

- the social and cultural perspective;
- the spatial perspective;
- the nature perspective;
- the technological perspective;
- the historical perspective.

These perspectives

- take into account children's relevant and educationally effective experiences in dealing with their natural, social, and technological environment;
- are sufficiently selective to be able to define advances that are made in ability, knowledge, and understanding in relation to knowledge provided and nurtured in specialized cultures;
- provide opportunities for continuity with lessons offered in specialist subjects in secondary schools and thus ensure that important areas of knowledge are adequately taken into account.

However, the perspectives must not be regarded as separate and independent of one another. The task of general knowledge teaching is to link together the contents and processes assigned to these perspectives in a way that makes sense of a topic, so that broader connections can be grasped and made accessible to questions of norms and values. This idea has been conceptualized in this Perspectives Framework for General Studies.

A fundamental aspect of the didactic concept of the Perspectives Framework is to define where the fields of tension lie between children's experiences and knowledge, on the one hand, and knowledge securely based in specialist subjects, on the other.

The two poles of this field of tension should mutually balance each other in the didactic selection process. Establishing an orientation based on the children's experiences reduces the risk that an orientation based on specialized subjects will lead to concepts unrelated to experience and prone to rote learning. Complementary, if the requirements of specialized subjects are taken into perspective the risk will be reduced that lessons produce banality and reproduce no more than the everyday knowledge children already have.

Educationally effective specialist-subject perspectives are thus given a specific profile in general knowledge teaching, and each provides its own distinct access route to investigating issues and specific methods and processes. For each specialist perspective, knowledge is formulated that in each case could be described as fundamental and should be capable of building up subject-specific and intersubject competences.

The individual perspectives are intended to provide orientation to help in the concrete shaping of lessons, giving examples both of topic areas and of the contents and processes that need to be learned for them. They allow that ethical issues of meaning arise and world orientation commences to be dealt with as well in General Studies. However, the perspectives are formulated in such an open fashion here that in shaping the actual lesson, children's questions and experiences, their specific social situation, and also the special abilities and interests that teachers have will come to bear. The perspectives thus make it possible to take into account children's individual learning paths and opportunities for development, while at the same time laying the foundations for further learning abilities.

1.3 Competences as target categories

"Being competent" means being competent to do something. This suggests a normative orientation that needs to be justified in terms of educational theory, taking into account the developmental tasks faced by children of primary school age.

Competences imply an interplay between general knowledge and procedural knowledge, on the one hand, and meta-cognitive knowledge and value-related

orientation knowledge on the other. Competences have to be understood here in relation to specifically defined demands made by the environment both in school and outside of school.

The concept of competence therefore seems an appropriate way of articulating in a more precise pedagogic and didactic fashion the educational demands made on general knowledge teaching – both in relation to the needs and interests of learners and in view of what is offered and required in the school subjects to follow:

- In addition to general and factual knowledge (declarative knowledge), competences include orientation knowledge, procedure-related abilities and skills (procedural knowledge) and knowledge that provides the basis for controlling and guiding learning and thinking processes (meta-cognitive knowledge). Competences thus aim beyond the mere acquisition of information and skills, namely towards promoting understanding.
- The formulation of competences defines in a more precise way the demands made on children as ability goals. For teaching purposes, this implies that knowledge, contents and methods cannot be viewed independently of each other. Advances in learning can be confirmed and tested with the help of tasks that involve application and arrangement. They cannot be adequately ascertained by merely setting questions about declarative knowledge.
- The relation to the concept of competence ensures continuity with a wide range of debates in the sphere of educational theory, since this concept is also being used increasingly in other pedagogic disciplines in order to define important educational and training goals with sufficient specificity and yet with enough openness to cope with new challenges.

Each perspective leads from examples relating contents and processes towards the construction of competences, and it illustrates the potential of networking between perspectives on an examplary topic. Due to the plethora of content-related aspects of general knowledge teaching, the criteria of exemplariness, productiveness, and accessibility are particularly important in determining specific topics. In this context, the use of examples avoids the tendency towards overloading learners with material. This is necessary in order to achieve an appropriate quality of knowledge and understanding.

In addition to building up fundamental content-related knowledge, general knowledge teaching also involves working on elementary methods, such as observation, experimentation, construction, and obtaining information. The corresponding process-oriented goals need to be linked to content-related ones in order to promote meaningful learning.

1.4 The contribution to didactic professionalization

In view of the dynamic changes constantly taking place in the challenges that society presents, in children's experiences, and in knowledge that can be

regarded as useful and meaningful, one of the fundamental tasks for teachers is to develop a professional attitude of progressive understanding for what is taught at school. The Perspectives Framework can be read as a core curriculum appropriate to the didactic and methodological challenges of general knowledge teaching — one that preserves the necessary balance between generally valid goals and openness in the design of contents and methods.

This balance is a central curricular challenge for general knowledge teaching. On the one hand, it should offer all children the same educational opportunities, on the other, it has to be open enough to allow teachers to take into account the specific learning conditions in the group they are teaching. The Perspectives Framework aims to support teachers as specialists in general knowledge teaching by taking their decisions regarding contents and methods to a high didactic level, and by having them reflect on these and communicate them.

In this way, the Perspectives Framework – given sufficient opportunity for situational and individual learning – is capable of providing continuity for content-related and method-related knowledge in all five perspectives. It thus ensures the relevance of general knowledge teaching both in terms of the demands on General Studies at the primary school level and of the transition to other subjects at the secondary school level.

To shape the teaching of general knowledge in an appropriate way, those teaching General Studies require competences in all five perspective areas. Institutions providing training and further education for teachers need to make a common effort to guarantee that these professional prerequisites are met.

1.5 The structure of the Perspectives Framework

Following the explanation on the concept of the Perspectives Framework (Part 1), the contribution made by each of the perspectives to an educationally effective investigation of the environment will be presented below. This includes creating the foundations for further learning (Part 2).

The competences that need to be aimed at in General Studies will then be formulated. They describe the learning and educational opportunities that General Studies should offer to children (Part 3).

The Perspectives Framework then details the way in which learning advances can be confirmed and tested with regard to perspective-oriented competences. Particular emphasis is given here to the higher-order interplay between competences and application and arrangement (Part 4).

Finally, the specific conditions for general knowledge teaching that need to be maintained, extended and created, so that it can fulfil its demanding goals, will be clarified (Part 5).

2 The educational potential of the five perspectives

2.1 The social and cultural science perspective

Social and cultural learning takes place in the field of tension between

- · the experiences of shared social life that are accessible to children; and
- what is required in terms of content and method from the perspective of social and cultural studies.

People live together in society. They shape their lives in the public and private sphere in various political, social, cultural, economic, physical, and ethnic conditions. All human beings have common as well as differing abilities and interests, lifestyles and patterns of interpretation. It is natural for there to be differences between people. Managing these differences in a constructive and responsible learning fashion is a challenge in dealing with oneself and in relating to other people.

To understand these connections, children's meaning-oriented and lifeoriented learning is directed toward:

- · developing a social culture of life and work;
- perceiving differences and respecting all human beings;
- · recognizing other people's interests and representing one's own interests;
- acting responsibly in public and private contexts;
- · grasping the cultural (and media) reconstruction of reality;
- conceiving and making one's own life plan.

2.2 The spatial perspective

Space-related learning takes place in the field of tension between:

- · the spatial conditions that children experience; and
- * what is required in terms of content and method from the perspective of the sciences concerned with conditions of space.

Space is a fundamental dimension of experience. People initially experience spaces as existing conditions. They explore spaces and orient themselves within them. The spatial-studies perspective contributes to an understanding of spaces as created, capable of being changed, designable and usable, leading to the development of a sense of responsibility for maintaining, caring for, and altering spaces.

In the primary school, establishing the following insights and abilities can lead to competent ways of dealing with the dimension of "space":

- Public and private spaces form individual and social frameworks for people's actions.
- In spaces natural factors and natural processes are inevitably at work (ecosystems).
- · Spaces are already structured by natural conditions and processes.

- · People perceive spaces in different ways.
- Spaces have been culturally structured by many generations of people in the past; their appearance today is influenced or shaped by this.
- · People are responsible for structuring and altering spaces.
- People live in spaces that they use and design according to their own decisions, guided by their needs and values, capacities and skills, consciously preserving or destroying them. There are often differing opinions about the way in which spaces should be structured and used.
- People move within spaces, exchange materials and products (trading relations) and by doing this, they create connecting traffic routes for various forms of transport.
- Within spaces people orient themselves by relating to characteristic objects, to distances and to directions. They use information of earlier observations, notes, sketches and maps, aerial and satellite photographs. They classify spaces according to their appearance and function.

2.3 The natural science perspective

The natural science perspective of learning takes place in the field of tension between:

- · children's experience and interpretation of natural phenomena; and
- · what is required in terms of content and method by the natural sciences.

Our perception and interpretation of the environment are strongly influenced by the natural sciences and their methods of discovery. Children experience nature in various ways and perceive natural phenomena in a nuanced fashion. Through investigation of simple biological, chemical, and physical relations, natural phenomena can be interpreted and a responsible way of dealing with nature can be developed.

"Investigating" in this context means:

- perceiving, identifying and working through problems in the relationship between humans humanity and nature;
- · discovering the characteristics of life at an elementary level;
- investigating the properties of substances and getting to know how substances can change and be transformed;
- · investigating natural phenomena with regard to physical laws;
- working on natural science processes and recognizing the way in which obtaining knowledge can be determined by the processes used.

2.4 The technological perspective

In the context of general knowledge teaching, technological learning takes place in the field of tension between

· the technological experiences that are accessible to children; and

• what is required in terms of content and method from the perspective of the technological and human sciences.

Technology shapes every field of life. It serves to secure our existence and our standard of living, but it also has potential for destruction. To be able to think about, take shared responsibility for and help shape a humane and sustainable form of technology, everyone needs to have fundamental knowledge about technology and the contexts in which it functions and becomes possible. Children already live in this technologized world; they use technology – increasingly media technology as well – and are affected by them. However, dealing with technology is usually reduced to the level of knowledge about how to operate and deal with equipment; the functional contexts, genesis, and effects of technology are often omitted. This contrasts with children's immediate fascination with looking behind things and discovering and shaping the way in which they function and operate.

An elementary technological education should help primary school children experience themselves not just as reacting to or operating with technology, but also, using comprehensible examples that have meaning for them,

- to extend their technological ability and knowledge in ways that are practical in life;
- to understand basic contexts of technological functioning and action;
- to learn elementary forms of technological action;
- to experience, present, and reflect on the ways in which technology, work and economy, natural sciences and society mutually condition each other;
- to consider in descriptive and evaluative ways the effects of technology, e.g. considering the environmental and social acceptability of technology;
- to address gender-specific attitudes towards technology and overcome inhibitions.

2.5 The historical perspective

In the context of general knowledge teaching, technological learning takes place in the field of tension between

- · the experience of change that is accessible to children; and
- what is required in terms of content and method from the perspective of the study of history.

Children initially take the material and social conditions of common life that have been produced by intentional and unintentional human actions simply as given facts. The historical perspective on selected contents of general knowledge contributes to an understanding of given phenomena (knowledge, technological artefacts, institutions, standards, social regulations, habits) as things that have been created, that can be changed, and for which responsibility needs to be taken.

The following insights and abilities are basic here:

- The conditions in which people live today are also the effect of decisions, actions, and abilities of people who lived before us. Actions by people who are alive today will influence the opportunities for action available to future generations (sense of time, awareness of possibility).
- What people cause (or have caused) by their actions is not always what they
 want to achieve by their actions (sense of responsibility).
- People had and have (depending on social status, origin, sex, opportunities, abilities, etc.) various ways of realizing their interests, needs and goals (economic and social awareness).
- What we know about the past always only represents a selection of which sources are available and which can be regarded as reliable, but may not always be in perspective (awareness of reality, capacity for criticism).
- To be able to understand what people did in the past, one cannot judge them
 only from one's own point of view today. One must also attempt to recognize
 and take into account the conditions prevailing at that time (awareness of
 perspective, understanding others, tolerance for foreign and different phenomena).

What children should know, be able to do, and understand?

Competences, contents and processes, and examples of topic networking

The competences that are founded, extended, and acquired in general knowledge teaching connect knowledge and experience in complex topic areas. To promote competences appropriately, subject-specific knowledge, methods and ways of working are also used. By making clear the contribution these make to understanding and to meaningful ways of dealing with a question or a problem, general knowledge teaching also provides preparation for future, more subject-specific ways of thinking and working. Not all perspectives need to be used here for every problem and every question.

3.1 The social and cultural science perspective

3.1.1 Competences

- 1. Being able to deal adequately with political and social problems in which the children themselves are involved, such as:
 - children's rights (with the goal of consciously claiming rights in the school and in the community, while also experiencing the value of responsibility for other people and for meaningful goals and acting accordingly),
 - · work and environment (with the goal of investigating how they relate),

- the family as an institution (with the goal of reflecting on one's own experience).
- 2. Being able to explore the economic, ecological and social bases for common life, being sensitive to their interaction, and capable of making understandable the fact that the production process based on the division of labour
 - · influences economic action,
 - · is bound into social contexts,
 - · is based on natural foundations for existence,
 - · has effects on social existence.
- 3. Being able to grasp the meaning of religions, customs, lifestyles for one's own orientations relative to meaning and values and those of other people, as the basis for common life, with the goal of achieving sensitivity to the fact that religions, customs and lifestyles must not be misused for political purposes.
- 4. Being able to analyze the origin of conflicts, as well as ways of avoiding them in current areas of conflict, and to recognize compromises as potential ways of acting. (This should also provide an opportunity to express fears and to learn to deal with these in an appropriate way.)
- 5. Increasingly being able to understand institutions and public spaces in terms of their structures and regulations, taking into account the relation between human beings and nature e.g., the institution of school in its social context; the way in which the community works; discovering and making use of opportunities to design and decorate public spaces.
- 6. Being able to adopt perspectives associated with the idea of "one world" by recognizing
 - · dependencies and interconnections,
 - · common bases for life.
 - · inequalities in living conditions e.g., as a cause of migration.
- 7. Consumption developing a culture of dealing with objects:
 - · recognizing consumer goods as a medium of social communication;
 - being able to carry out a critical analysis of the consumption process;
 - · being able to imagine alternative ways of dealing with consumer goods;
 - · recognizing ecological and economic aspects of the consumption process.
- 8. Perceiving cultural and physical differences as an enrichment of common life or as an individual restriction, as a cause of group formation or exclusion:
 - using the example of different sexes, generations, ethnic groups, physical characteristics;
 - in addressing the phenomenon of special needs or disadvantagement.

3.1.2 Examples of contents and processes

Criteria for selecting contents and methods, depending on the given situation in the classroom, can be: children's interests, needs, problems; continuity with

later learning; orientation toward what Klafki has termed "key problems typifying the epoch"; relevance to current public debates; real opportunities for the children to act in shaping their own lives and learning processes.

For example, the concerns of the social and cultural perspective could be made specific through the following contents and processes:

- Mutual shaping of common life in the class and in the school, reflection on this and its transferability to other areas of the children's social experience;
- contributing to changing a traffic situation that is relevant to children in the community – providing an opportunity to get to know local institutions and municipal processes;
- · identifying and thinking about various types of work;
- exploring the function of a consumer product (e.g., an item of clothing or sports equipment that is currently popular with children) in social life; thinking about purchasing behaviour and alternative uses;
- mutual introduction of children in multi-ethnic classes (or schools or communities) into "foreign" festivals and customs, and reflection on their meaning (perhaps with participation by foreign guests);
- getting to know the everyday routines, accommodation conditions, family structures, and economic status of children in other countries as a way of gaining access to differences and recognizing similarities (e.g., via products from other countries that are consumed here);
- · discovering the importance of group formation through scenarios developed by the children in sports clubs or other children's groups outside of school;
- jointly developing conflict-solving strategies for specific conflicts, and relating these to other areas of the children's social experience;
- becoming aware of different needs in life and different viewpoints through contact with older people, and learning to formulate one's own.

In dealing with these ideas, children also acquire methodological abilities that allow them to deal with new questions and encourage them to take part in shaping their own environment, such as:

- · practicing participation;
- respecting cultural and physical variety (as well as gender differences) and dealing with them in a socially appropriate way;
- · learning how to argue;
- collecting and evaluating information;
- · forming opinions;
- · drafting and negotiating solutions to problems;
- · preparing, conducting, and evaluating inquiries;
- · carrying out documentation;
- presenting example cases.

3.1.3 Examples of topic networking

The topic of "work and environment" covers the environmental perspective of the natural sciences ("environmental compatibility", "sustainable management of resources", "traffic solutions", "ecologizing the school"), as well as the sociopolitical ("conflicts of interest", "links between poverty and wealth", "housework and occupational work", "employment and unemployment"), the technological ("development of technological working processes", "influence of technological discoveries"), the historical ("how we became what we are", "connections between working and living conditions in earlier times") and the spatial perspectives ("local products and services", "routes for supplies and trade").

3.2 The spatial perspective

3.2.1 Competences

Understanding that people's lives take place within spaces. Becoming consciously aware of spaces, exploring them in a deliberate way and orienting oneself within them, distinguishing between real and virtual spaces, characterizing public and private spaces and grasping their social or individual functions.

This involves the abilities:

- to perceive spaces of varying dimensions and to gather boundary experiences,
- to explore spaces with the help of maps, sketches, descriptions, and other aids, and to grasp spatial conditions,
- · to orient oneself immediately in spaces that one visits,
- to distinguish spaces from one another according to their appearance and functional characteristics and organize them correspondingly (assigning qualities and functions to them),
- · to distinguish virtual spaces as an expression of human thinking.
- 2. Understanding that spaces represent the natural basis for our existence and that people are dependent on natural conditions and factors. Knowing that spaces are part of the natural order and provided with different qualities, that natural forces and processes are at work in spaces and mutually affect each other, and that these causal links must be recognized and accepted by human beings.

This involves the abilities:

- to recognize and understand natural factors and processes in spatial phenomena, as well as their interactions,
- · to describe, grasp and compare the natural qualities of spaces,
- to use processes for information gathering and data collection to analyse and document data and information.

3. Understanding that human beings have always been designers and users of spaces. Knowing that people use, design, and alter spaces according to their needs, that spaces have been influenced or shaped by the achievements of many generations and thus reflect human existence and commerce, and also that current conditions can be changed in the future.

This involves the abilities:

- · to grasp, compare and evaluate the ways in which spaces are designed,
- to grasp and arrange spaces according to the appearance, as well as their social and economic tasks and functions,
- to understand and assess the way in which spaces are designed and used in the processes of development and change,
- to recognize what people have achieved in shaping spaces at various periods and grasp the significance of this for today,
- to use processes for information gathering and data collection to analyse and document data and information.
- 4. Understanding that each human being shares responsibility for protecting and shaping spaces, for the maintenance and preservation of the environment and of fellow human beings. Knowing that current and future shaping and changing of spaces should take place in harmony with nature, society, and the economy, and that each individual shares responsibility for his or her actions. This involves the abilities:
 - to grasp social agreements regarding the protection of habitats for human beings, animals and plants and on the protection of natural resources and to implement these in given situations,
 - to grasp, critically reflect on and evaluate the effects of measures that alter spaces,
 - to take part in specific planning for the shaping of one's environment, drafting suggestions and proposed solutions and, if possible, to actively contribute to implementing these (participation and anticipation),
 - to use virtual spaces as a medium for information, communication and collaboration,
 - to use processes for information gathering and data collection to analyse and document data and information.

3.2.2 Examples of contents and processes

The contents and processes involved in spatial existence derived from areas that are important for and accessible to children and which are fundamental to spatial studies. Examples that may be mentioned include the following contents and processes:

- · school, school grounds, school garden, school paths;
- · village/ city district, city;

- home and home environment, home functions (protection, regeneration, care, socialization, household equipment) here and elsewhere;
- · workplaces;
- · public utility and waste disposal institutions;
- · service facilities;
- · play and leisure facilities in the environment;
- · typical conditions in the region;
- · the state, Germany, Europe, the world in overview;
- · weather phenomena, weather observation;
- · water, soil, air: cycles, use, protection;
- shaping, risks to and protection of the habitats of human beings, animals, and plants;
- · producing route and location sketches;
- · describing routes;
- observing and describing space-related phenomena, reading and drawing ground plans;
- · building models in the sandpit, dealing with building models;
- reading, creating, and assessing sketches and maps and using them for planning;
- · practicing how to use aerial photographs;
- · using orientation aids (compass);
- · identifying points of the compass;
- calculating distances in natural settings by comparing, estimating and using the scale of a map;
- · collecting, evaluating, analysing, presenting information;
- · preparing, carrying out, analysing, and presenting surveys and interviews;
- · formulating questions for sources, witnesses and specialists;
- · using and operating equipment (telescope, thermometer, microscope);
- · planning, carrying out, analysing and documenting experiments;
- · carrying out research with the Internet;
- using virtual spaces as a medium for information, communication and collaboration;
- carrying out and evaluating simple observations of the sky (diurnal arc of the sun, moon phases, circumpolar constellations).

3.2.3 Examples of topic networking

The topic "home and home environment here and elsewhere" is connected with the historical perspective ("how did people in our town live in earlier times?"), with the technical perspective ("building a half-timbered house", "covering a roof with tiles or with thatch", "water pipes"), the natural science perspective ("properties of building materials", "why do you need isolating materials when you build a house?"), and with the social and cultural perspective ("different

types of settlement indicate different lifestyles", "various building styles", "various home furnishings and functions of rooms").

3.3 The natural science perspective

3.3.1 Competences

- 1. Perceiving, observing, naming and describing natural phenomena in an objective way. This includes:
 - nuanced perception of phenomena as a unit and as part of the total field of perception;
 - · describing the special characteristics of phenomena;
 - discovering and getting to know fundamental properties of materials, plants, and animals.
- 2. Tracing selected natural phenomena back to physical, chemical and biological laws and being able to distinguish between phenomena in organic and inorganic nature. This includes:
 - recognizing phenomena, identifying changes in inorganic nature and tracing these changes back to physical laws and changes in materials;
 - recognizing the characteristics of living things in organic nature. These include: metabolism, growth, development, sensitivity, movement, reproduction and heredity;
 - developing interpretation patterns (e.g., the food chain, cycles, habitat and living together in communities [biotope, biocenosis, ecosystems, symbiosis] and conceptual models (concepts; e.g., interaction and conservation).
- 3. Establishing questioning attitudes, identifying problems and using systematic means to solve problems. This includes:
 - · developing and formulating suppositions;
 - · researching information;
 - · drafting, carrying out and evaluating experiments;
 - · presenting results;
 - · applying knowledge gained from experiments to other natural phenomena;
 - · learning from examples that with the experimental method knowledge can be built up and facts can be inter-subjectively ascertained;
 - · learning from examples how to think up an experiment as a question addressed to nature, carry it out and evaluate it.
- 4. Understanding the laws of inorganic nature as conditions for the existence of organic nature. This includes:
 - · recognizing the laws of inorganic nature within processes in organic nature;
 - recognizing the dependence of organic nature on the laws of inorganic nature;
 - being aware of nature's cycles and their significance for organic nature and thus for human beings.

- 5. Grasping the reasons for dealing with nature in a responsible way. This includes:
 - · being aware that resources are limited;
 - · being aware that regenerating resources takes time:
 - being aware of the importance of the diversity of species and the necessity of maintaining it.

3.3.2 Examples of contents and processes

In the first and second years of school, the emphasis lies on the initial competence: "learning, perceiving natural phenomena, observing, naming and describing". Examples:

- · appearance and names of plants and animals;
- · bodies of girls and boys;
- · eating and drinking, healthy nutrition;
- · health and disease;
- · day and night, diurnal arc of the sun, and the seasons;
- · sun, moon and stars;
- · stones and minerals;
- · clothing, textiles, washing;
- · properties of materials;
- · melting and freezing;
- · heat expansion (thermometer);
- · burning processes;
- · weather phenomena;
- · light, colour and shadow;
- · forces of wind and water.

In the first and second years of school, the following processes should be taken into account: watching, observing, describing, defining, collecting and arranging, examining and testing, comparing and measuring, caring and designing, thinking up simple experiments, carrying them out and evaluating them.

In the third and fourth years of school, the contents and processes developed during the first two years should be continued and deepened. Competences 2 to 5 listed above acquire increasing importance as learning processes continue. Areas and examples:

- conditions for the development and existence of human beings, animals and plants; anatomy of human beings, vertebrates and insects; structure and components of (higher) plants; growth, metabolism, living requirements and reproduction of humans, animals and plants; habitats, living together in communities and diversity of species; production and processing of ecological foods;
- properties of materials: properties of processed materials such as wood, glass, metal, plastics; mixtures of solid materials; properties of various fluids such as water, oil, vinegar (e.g., taste, viscosity); mixtures of fluids; aggregate states of

- water; solutions, solution behaviour of solids in water, with the temperaturedependent examples of sugar and salt;
- change of materials representing chemical transformations: burning processes, using the example of burning a candle; fire and fire protection; oxidation of metals such as iron, copper, or silver in air; oxygen and respiration;
- physical laws: sound and sound transmission; light and shadow; floating and sinking; air and air pressure; electricity and its uses; magnetic effects and the compass; experiences with levers, e.g. with a see-saw/scales; heat and heat expansion; changes in form (solid, fluid, gaseous); natural forces: wind and water:
- meteorological and cosmological effects: weather phenomena, weather map and weather forecast; wind and clouds; Earth, moon, sun and stars; diurnal arc of the sun, sundial; seasons;
- healthy lifestyles: rules of healthy nutrition; importance of activities and sports; protection against diseases and injuries; overcoming stress through relaxation; drug prevention;
- designing the environment, protecting it, threats to it: awareness of species, biotopes and living conditions; establishing and maintaining school grounds and
 a school environment based on ecological considerations; importance of care
 in dealing with flora and fauna; risks of environmental pollution.

In examining these aspects, particular importance is given to natural science processes.

These include:

Inspecting, observing, describing, defining, collecting and arranging, classifying, examining, comparing, perceiving (tasting, smelling, listening, touching), measuring, comparing sense perceptions and measurement processes, care and design, documenting, recording, formulating of suppositions and interpretations, interpreting, planning, carrying out and evaluating experiments, justifying and testing statements, formulating and evaluating explanations, skills in drawing, creating and analysing of tables and diagrams.

3.3.3 Examples of topic networking

The natural science perspective is linked to other perspectives in many different ways. But even within the natural science perspective itself, there are connections in general knowledge topics between chemical, physical, biological and ecological aspects. In the classroom, these perspectives should be put in relation to each other in accordance with the specific topic of concern. This way, children learn to think in a contextual way and to network their knowledge.

When primary school children deal with the topic of air, they discover that air takes up space, causes resistance, has weight and expands when it is heated (the physical aspect). They discover that air contains oxygen, which is important for us to breathe and for burning and oxidation processes (the chemical and

biological aspect), and that air pollution can threaten the environment (the ecological aspect).

Through observations, simple experiments and also using measurements, children can discover that air all in all has a tremendous weight and that it exerts heavy pressure on every object on earth (the physical aspect); that this pressure can be used for example to preserve foodstuffs (domestic science aspect); and that pressure changes have an influence on the weather (meteorological and technological aspect). This makes phenomena in everyday life comprehensible, such as the sound heard when a vacuum-packed tin of peanuts is opened.

Historical references, such as the discovery of the effects of air pressure, the construction of a barometer and prediction of the weather by the mayor of Magdeburg, Otto von Guericke, also illustrate the way in which human beings investigated nature and natural laws to develop new knowledge (the historical aspect).

3.4 The technological perspective

3.4.1 Competences

- 1. Being able to apply technological means and ways. This includes:
 - · appropriate use of simple tools and devices to produce things;
 - · appropriate and environmentally friendly use of materials;
 - · planning, building, constructing and reinventing;
 - · assembling, dismantling, and analysing;
 - · graphic and linguistic drafting and presentation;
 - experimentation;
 - · comparing and evaluating.
- Being able to understand and explain technological in the spheres of work and production, transport and traffic, supply and waste disposal, building and accommodation, information and communication.
- 3. Being able to comprehend important technological inventions, grasp their importance for humanity and place them in a historical context.
- 4. Using examples, being able to assess and evaluate technological developments with regard to the conditions necessary for them and their desirable and undesirable effects. Being able to think of alternatives to today's technologies.
- 5. On the basis of acquired abilities, knowledge and understanding, boys and girls can develop an interest in and a positive awareness of their own technological capabilities.

3.4.2 Examples of contents and processes

The contents and processes of technological learning derived from areas that are important to children and accessible to them, and which are in addition funda-

mental to the technological sciences. This material should be didactically productive – i.e., it should foster the acquisition of the above-mentioned competences.

Examples:

- tools and simple machines as aids for everyday requirement (producing and using tools, the way in which tools, equipment and machines work e.g., automatic devices such as the washing machine at home);
- functioning and use of practical items and toys (e.g., iron for clothes; vehicles);
- effects, change, transmission and use of energy (e.g., natural energy of the sun, wind and water, electrical energy, machines for work);
- supply and waste disposal (e.g., water, sewage works, garbage, foodstuffs and their preservation, paper recycling);
- technological products as need-oriented solutions to problems (e.g., buildings, cranes, windmills and water mills);
- manufacturing processes (e.g., single-item manufacture, serial and mass production);
- preservation processes, degree of processing of food (e.g., raw, partly processed, and ready-made);
- human inventions and cultural achievements (e.g., the wheel, printing, preservation of food, paper, vehicles, communication and information media such as the computer);
- · historical development of technological devices and systems (e.g., drilling equipment, washing machines, means of transportation);
- jobs and workplaces (e.g., baking at home, in the bakery, at the bread factory);
- work and its importance for people (e.g., housework, schoolwork, earning a living, unemployment, voluntary work);
- technological changes/developments, comparing earlier times and today, and their effects on people and the environment (e.g., baking, washing, building, paper production in earlier times and today).

In dealing with these topics, children also acquire competences with regard to important technological processes:

- using simple tools and devices appropriately and safely (e.g., hammer, pliers, saw, knife, scissors, manual drill, drawing instruments);
- producing something (paper, clay vessels, book-ends, toys e.g., a car made of wood by a child's own design or by following instructions);
- building and constructing (e.g., crane, water-wheels and wind-wheels, lighting installation, historical working machines, e.g., a hammer-mill driven by a water-wheel, bridges, towers, buildings, measuring devices, e.g., a simple scale and a wind measuring device);
- · being able to present drafts and solutions in drawings and in language;

- assembling, dismantling, and analysing something (e.g., assembling and repairing lights on a bicycle, analysing a bicycle's gears, assembling a bicycle wheel, analysing how a bicycle's bell works, analysing iron, the workings of a hairdryer, a manual drill, an air pump);
- discovering basic technological principles through simple technical experiments (e.g. the transmission ratio in gear wheels, stable basic forms);
- comparing technological developments (e.g., comparing work on a modern farm with a farm in earlier times; similarly, baking bread at home, in a bakery, in a bread factory);
- evaluating the consequences of technological change (newspaper printing in earlier times and today, typewriter, computer).

3.4.3 Examples of topic networking

The technological perspective is linked in many ways to aspects of other perspectives. Within an examplary topic, such as "from grain to bread", school students can learn in an intensive, action-oriented way how grains of wheat grow from wheat plants, what varieties of cereal there are (the biological and ecological aspects); what things were like in earlier times before there were machines (the historical and technological aspects); how cereals are prepared as foodstuffs – e.g., muesli, pasta or bread (the technological aspect), and how bread is produced in bakeries and bread factories (ergonomic, technological, and domestic science aspects). It is only in connection with non-technical considerations that the importance of technology in our lives becomes evident.

3.5 The historical perspective

3.5.1 Competences

- 1. Recognizing that our knowledge of history dependents on sources that have been handed down, and that the knowledge derived from analyzing these sources does not provide a precise picture of past events but can only offer a preliminary and limited approximation to the reality of the time from a specific point of view.
- 2. Understanding that children's present-day conditions are the result of developments in the past (decisions that have or have not been taken, actions, inventions, discoveries, etc., by people in the past) and that today's conditions therefore have to be seen as changeable, capable of being altered and open towards the future.
- 3. Knowing that the thoughts and actions of people in the past always have to be understood against the background of conditions at the time. Using specific examples, being able to assess people's actions in terms of their own time, and working out features that are the same or different today.

3.5.2 Examples of contents and processes

The content presented in learning history derived from areas that children are interested in and that can be worked through in a didactically productive fashion as suggested by the competences formulated above (e.g., social history, history of everyday life, history of ideas, history of technology).

Examples:

- reconstructing an event from the class's "history" (e.g., first day at school, class excursion, school open day);
- · writing one's own story or the story of one's family using appropriate sources;
- researching the history of a city district or of the school (looking for sources: buildings, monuments, street names, contemporary witnesses, pictorial material, objects, etc.); then drafting a future city or school;
- telling the story of life on a farm in earlier times from the point of view of a farmer, a farmer's wife, and a farm labourer or (female) farm hand;
- reconstructing the way in which a local institution important to the child originated (e.g., school, kindergarten, shopping centre, housing estate);
- investigating the way in which living conditions have changed through the invention of everyday objects (e.g., the invention of the light bulb): how will to-day's inventions (e.g., Internet, genetic technology) change our lives in the future?; thinking together about the individual's opportunities to influence his or her own life and living conditions;
- investigating living conditions for children in various social groups (poor and wealthy, boys and girls), in various cultures and periods;
- investigating the educational goals that schools had in earlier times and comparing them with today's goals;
- reconstructing everyday life, living conditions, traditions and customs, and beliefs in various cultures (Indians, Egyptians) or in various epochs (ancient world, Middle Ages) and comparing these with one's own.

In dealing with these historical topics, children also acquire methodological competences that increasingly enable them to approach historical issues independently. These include:

- interpreting sources such as pictures, texts, photos, buildings, inscriptions, street names, monuments, and maps that are appropriate (and have been prepared for teaching purposes);
- collecting, evaluating, analysing and presenting information (formulating targeted inquiries into source material);
- · being able to state why sources are suitable;
- recognizing and applying points of view for comparing sources (e.g., What can and cannot be learned from eye-witnesses? How reliable are their memories?);
- developing rules for dealing with various interpretations and maintaining and changing these as appropriate for given tasks;

- producing one's own documentation or writing histories (starting with my own story, the story of my family, and later on selected topics from history in general);
- preparing and carrying out role-play based on historical information, in which
 the children try to take decisions and actions against the background of a historically different framework and imagine themselves in the position of people
 at the time;
- · producing time frames;
- · independent preparation of investigations (in museums, buildings, in streets and squares).

3.5.3 Examples of topic networking

The four other perspectives can be linked to the historical perspective to provide support for linked preparation of topics. An example of this might be the historically oriented topic of "Boys and girls - in earlier times and today". Lessons on this from the point of view of the spatial perspective might start with the children exploring various leisure facilities in their district comparing offers for boys and those for girls. Selecting and analysing suitable references such as city archives, old newspapers, archives of local sports clubs with rich traditions, etc., and asking "contemporary witnesses" would illustrate changes in gender-specific activities and available facilities (the historical perspective). Since girls' and boys' biological characteristics (the natural science perspective) have not changed, the changed view on appropriate games and sports facilities must be associated with a change in role expectations of boys and girls or men and women (the social and cultural perspective). The question of whether the same change is reflected in professional profiles, particularly in the area of trade and technical professions, and in the home and lifestyles (the technical perspective) could lead to a deeper consideration of gender-specific role expectations.

4 Suggestions for evaluation

Understanding competences as a combination of different comprehensive skills and abilities (see section 1.3) prevents the risk of narrow specialization and of a merely cumulative assemblage of individual perspectives. The desired abilities and skills can be defined in terms specific to a given area and can thus be adequately distinguished from each other through their relation to a group of situations and demands that need to be coped with. However, they also have to provide continuity with each of the other competences to allow their combination for more comprehensive use.

Proof of competence or evaluation of the competences being aimed at is a central prerequisite for the successful implementation of these ideas in the class-

room. Without adequate ways of observing progress in learning, teachers lack reliable evidence that their teaching has been effective. In addition, demanding and interdisciplinary competences, including the application of knowledge, need to be demonstrable in appropriate forms. The usual tests of school performance do not provide this. Instead, methods need to be found that enable children to show that they are capable of acting competently not only in school, but in everyday situations as well. The following list indicates ways in which the competences can be tested selectively in relation to areas of content within each perspective.

Focusing on the social and cultural science perspective

Acquiring these competences has effects on social performance both within school and also in out of school social contexts, on attentiveness to other people, to oneself, and to the environment.

- At the end of four years of General Studies, children are capable of looking independently for information about facts in their social, cultural and natural environment, by questioning their own age group and adults, researching and reading in books and other texts, and by using electronic media.
- As they do this, they are attentive to different points of view. They know that statements made by people are associated with their experiences and the special characteristics of their life situation, and they can think about their own point of view in connection with their own experiences and their own life situation (aloud).
- On this basis, they can describe conflicts among their own age group by combining various points of views and arguments, and they can consider various solutions. They can transfer this experience to other groups of people when they read about conflicts or hear about them and see them in the media.
- They know that not all children in the world live in the same way they do. In
 describing these differences, they are attentive to social, ecological and economic differences.
- The children have developed criteria for assessing consumer goods and are able to apply these criteria. They can refer to what is "hidden" in "consumer goods": our dependency on intact nature, raw materials, work and the technology involved, and a message to make people buy these products. They can consider together with other children why they like to buy certain things and also how a purchasing decision may affect other people (parents, same age group, tradespeople and producers).
- The children are able to refer to and take account of several advantages and disadvantages of alternative forms of consumption (sharing, repairing, swapping, using less, paying attention to natural conditions such as the seasons).
- The children have developed a way of asking questions that shows attentiveness to differences (why is this so?) and alternatives (how would it be if?).

They can demonstrate this in discussing opinions in class, in observing situations in the community, and in watching TV programmes.

- At the same time, they are able to suggest, implement and test knowledge and practical options related to shaping their social life in the classroom and in the school.
- Children know about important public institutions and their purposes, and they are able to use this knowledge in participatory projects in the community.

Focusing on the spatial perspective

Competences can be recognized:

- in the children's confidence in experiencing space, in describing and classifying spaces, in their orientation within space, in sketching maps, in reading and analysing maps with appropriate attention to scale and legends (scale reduction and generalization);
- in an interest in the phenomena of the natural environment and in a nuanced grasp of factors in nature and their structuring effects;
- in understanding of, openness towards and interest in conditions within spaces and rooms (design, alteration, usage, and furnishing): chances and problems of using spaces, conflicts of usage, social norms, agreed rules, regulations for the design and usage of spaces and rooms;
- in understanding of and being increasingly open to developments and changes in and of spaces, for the achievements of earlier generations that still shape spaces for us today, and for planning the future design and usage of spaces;
- in using methods of obtaining data and information in ways designed to answer questions and solve problems.

Focusing on the natural science perspective

Competences become recognizable when children can, for example:

- · classify plants, leaves and fruits;
- identify plants and animals and name them, describe their living conditions and recognize the importance of the quality of their habitats;
- name typical characteristics and requirements of certain plants (plant species) and animals (animal species);
- · being able to care for plants and animals properly;
- · classify the phases of life of plants and animals in the course of the year;
- name properties of materials, distinguish between materials according to their characteristics and describe selected transformations of material in terms of their characteristics;
- · state laws in chemical and/or physical processes;
- describe an experiment (while it is being set up, or by imagining it) and state what is being tested by the experiment;
- set up an experiment (based on a model or instructions), start it, improve it;

- think up an experimental set-up and present it (in words, in a drawing, with materials);
- · develop, discuss, test and optimize the solution to a problem;
- · explain a phenomenon or fact that can be described in scientific terms;
- · explain ecological dependencies (using an example);
- · apply knowledge in new contexts and achieve transfer;
- · handle equipment and aids in an appropriate way.

Focusing on the technological perspective

Children can demonstrate the technological competences they have acquired, for example, by:

- · handling tools appropriately and safely;
- selecting equipment and materials skilfully and appropriately and assessing their quality and environmental friendliness;
- · state criteria for purchasing or not purchasing products;
- developing, discussing, testing and optimizing solutions to technological problems:
- being able to sketch technical drawings and present solutions to technological problems;
- · explaining connections between technological functions;
- applying and transferring technological knowledge that has been acquired;
- · knowing and describing workplaces and working conditions;
- · understanding operating instructions;
- · weighing up costs and benefits;
- · describing and evaluating the effects of technology;
- reflecting on their personal relationship and gender-specific approaches to technology.

Focusing on the historical perspective

Acquisition of the competences identified for the historical perspective can be recognized from the behaviour of children in their individual and collective way of dealing with historical issues and historical methods. Examples that can be given include:

- In producing reconstructional drawings or acting out earlier living conditions, children consider and test what can be regarded as "proved" and what is based on suppositions and ideas about life in earlier times; various possibilities can be considered and discussed.
- In working on a source, the children can ask questions related to the meaning or "truth" of the information contained in the source and they can find ways of testing this (by comparison with other sources or with an independent search for information).
- In investigating their own life situation, children independently find "traces" and evidence of the past

- In reconstructing and acting out changes in living conditions caused by inventions, the social effects of innovation can be considered.
- In reconstructing the everyday routines of people in earlier times, the different social and material conditions of life can be taken into account.
- Children can distinguish between the needs, desires and expectations for the future of children from a foreign culture and from earlier times, on the one hand, and their own on the other, and can trace this back to the different living conditions in each case.
- In preparing for role play, children themselves draw attention to important differences in living conditions and try to imagine in a concrete way the historically different situation and differences in trading conditions and their consequences.
- In writing fictional texts, children are able to place themselves in the imaginative world of someone having lived in earlier time, against the background of contemporary living conditions and ways of thinking.

5 Ensuring prerequisites for General Studies

To ensure that teaching General Studies can achieve the high educational standards required for this core subject of primary school education, it is necessary to guarantee and extend the availability of the required supportive structures and measures. The principal aspects include:

· Adequate teaching time

General knowledge teaching requires adequate teaching time, particularly in order to promote the children's processes of understanding and to extend their competences in applying what they have understood in action. However, adequate time is also necessary in order to allow adequate assessment and evaluation of the gains in learning and the growth in competence.

· Adequate equipment

If school students are to achieve in a way appropriate to the demands of this subject and extending their competences, it is indispensable for the individual schools to have the equipment needed for this purpose, including media points – e.g., with historical source material, material for carrying out scientific experiments, and technical equipment and tools. Schools and school grounds should be spaces for learning and gaining experience, laid out and designed in accordance with ecological requirements.

· Free scope for planning lessons

Widespread implementation of the ideas presented in the Perspectives Framework into the reality of schools is only possible, if the proposals made are correspondingly incorporated into the guidelines and curricula of the individ-

ual federal states. It should be recalled here that sufficient free scope is needed for learning and developing abilities. Strict, narrow curricular guidelines and centrally managed teaching controls must for this reason be rejected.

· Specific competences for teachers of General Studies

The decisive conditions for educationally effective general knowledge teaching are didactic, methodological and subject-specific competences on the part of the teachers, who prepare, carry out and analyse General Studies lessons. In their lessons, they have to competently implement the individual perspectives presented and they must be able to relate them in a meaningful way. The teachers' competence for the educational process here must involve not only declarative subject-specific knowledge, it must also demonstrate professionality in performance and attitudes and the many interconnections between them. For complex questions, situations and problem areas, teachers, when preparing their lessons, should be offered content-related starting-points that allow relevant discussions. In addition - particularly with regard to the processes, which may be specific to the particular subject - they themselves should be capable of taking action to avoid any reduction of the material to simple declarative knowledge. This also implies that teachers should acquire local competence and be able to abstract from specific conditions to put them into the social context.

· Ensuring independent courses

Skilled general knowledge teaching requires explicit activities specific to General Studies lessons, these have to be developed particularly during teachers' studies and training. Other subject specific forms of teaching — e.g., history, biology and geography — may be applied for the individual perspectives. However, due to their specific orientations, they are not suited for addressing issues at an inter-perspective level, or not sufficiently so. During teacher training courses, therefore, it must be ensured that for all students qualifying to teach General Studies at primary level, the integrative requirement of general knowledge teaching is sufficiently taken into account. This applies independently of whether there are separate courses for primary teaching or the training course combines qualifications for different age levels and school types. In addition to adequate special course material, interdisciplinary and inter-perspective material is also required for the specific didactic purposes of general knowledge teaching — e.g., in project-oriented course units.

· Special in-service-training courses for teachers of General Studies

To provide targeted support for teachers in individual fields of education, further training courses need to be offered on a more intensive basis. This is particularly true in the areas of technological and natural science teaching.

Appendix: The development of the Perspectives Framework

In developing and presenting the Perspectives Framework for General Studies, the Gesellschaft für Didaktik des Sachunterrichts (GDSU) has responded to the challenge in the field of educational theory and educational politics to identify the common tasks, goals, and educational contents of General Studies for German primary schools in such a way as to make clear both the relevance of the Perspectives Framework for the educational needs in primary school and the importance of the Didactic of General Studies as an academic discipline in the field of teacher training.

The Perspectives Framework can be read as a contribution — offering both concepts and contents — to the debate on the development of core curricula for school subjects.

It provides a framework concept which:

- maintains the necessary balance between generally valid goals and openness with regard to contents and methodological design;
- makes a contribution to quality assurance in the teaching of General Studies;
- supports the professionalization of teachers in didactics.

The Perspectives Framework is the outcome of three years of collaboration among educational experts from various disciplines represented within the GDSU commission on "A Perspectives Framework for General Studies", which was headed by successive chairmen of the GDSU. Following preliminary consultations, interim results were developed in the commission in working groups, sometimes with external consultants being called in from the scientific field, ministries of education and practical fields.

The following overview indicates the various stages of the project's development:

- "Basic elements" of General Studies in Primary Education (1999-2000)
 Initiated and coordinated by the then chairman of the GDSU, Prof. Dr. h.c. Helmut Schreier, members of the GDSU were invited to formulate essential contents and methods of General Studies. In a process adopted from the Delphi procedure, these suggestions were evaluated and summarized in March 1999 by the commission on "A Perspectives Framework for General Studies" and discussed at the GDSU general meeting in Munich (March 10, 2000).
- Structure and fundamental concept of the Perspectives Framework
 At a special meeting of the commission on "A Perspectives Framework for General Studies" (June 23-24, 2000 in Grossenlüder), the conceptual and content basis for the Perspectives Framework was developed.
- Specification of contents in working groups with external experts being called in (June-July 2000).
- Discussion of the working groups' results at a special meeting over several days
 with representatives of the educational authorities of 15 of the 16 federal states organized by the
 "A Perspectives Framework for General Studies" commission (Lutheran Academy, Tutzing, September 27-29, 2000).
- Publication of the first version of the Perspectives Framework
 Revision of the draft taking into account the consultation process and publication of the first
 version of the Perspectives Framework for General Studies in GDSU-Info February 2001, issue
 18, pp. 4-15.
- Presentation and discussion of the Perspectives Framework at a general meeting of the GDSU in Lüneburg (March 9, 2001).
- Further development considering the following central questions:
 After an analysis of contributions and discussions on the Perspectives Framework, which was also published in different places (cf. the report by the GDSU chairperson, GDSU-Info June 2001, issue 19, pp. 10-12), the "A Perspectives Framework for General Studies" commission agreed to carry out further development of the project based on the following central questions:
- (1) What opportunities for learning should children have in their General Studies classes? What should they have learned at the end of the primary school period?

- (2) How can this be achieved?
- (3) What support conditions are necessary?
- (4) In what ways can advances in learning made under the competences and contents described in (1) and (2) above be assessed?
- Development of suggestions in working groups (May to July 2001)
- · Discussion of the working group results at a third private meeting

of the "A Perspectives Framework in General Studies" commission, with participation by representatives of the authorities from all 16 federal states (Lutheran Academy, Tutzing, October 11-12, 2001).

It was agreed as the result of the plenary and working group discussions that the central questions listed above should be linked to the following tasks:

- 1. Justification of the concept of the Perspectives Framework;
- 2. Specification of the educational potential of the five perspectives;
- Specification of competences, contents and processes, and examples of topic networking as learning opportunities which General Studies should provide for children up to the end of the primary school period;
- 4. Suggested ways of evaluating these competences;
- 5. Ensuring the prerequisites for general knowledge teaching.
- Publication of the second version of the Perspectives Framework GDSU-/nfo February 2002, issue 21, pp. 8-39.
- Presentation and discussion of the Perspectives Framework
 at the "A Perspectives Framework Forum", held during the 11th Annual Meeting of the GDSU in
 Halle (March 6-9, 2002) and at a general meeting of the GDSU.
- · Preparation of the present version

After the chairman of the GDSU, in consultation with the heads of the working groups, had incorporated the responses, the present version was prepared.

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- Conditions for successful general knowledge teaching: Prof. Dr. Uwe Hameyer, Kiel; Dr. Andreas Hartinger, Regensburg
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- Version in GDSU-Info February 2001, issue 18: Prof. Dr. Uwe Hameyer; Prof. Dr. Joachim Kahlert; Prof. Dr. Dr. h.c. Helmut Schreier
- Version in GDSU-Info February 2002, issue 21, and the present final version: Prof. Dr. Diethard Cech; Dr. Andreas Hartinger; Prof. Dr. Joachim Kahlert; Prof. Dr. Kornelia Möller; Prof. Dr. Dietmar von Reeken; Prof. Dr. Ute Stoltenberg; Dr. Steffen Wittkowske
- English Version
 Translation by Michael Robertson BA DPhil
 Editing by Prof. Dr. Roland Lauterbach, David Whybra

The GDSU gratefully thanks the following individuals and institutions for their support:

Lutheran Academy of Tutzing, Tutzing
Fonds des Verbandes der Chemischen Industrie, Frankfurt am Main
Publisher Andreas Klinkhardt, Julius Klinkhardt Publishing, Bad Heilbrunn

Die Deutsche Bibliothek – Cip-Einheitsaufnahme Ein Titelsatz für diese Publikation ist bei Der Deutschen Bibliothek erhältlich. 2003.6.Kl. © by Julius Klinkhardt.

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Das gilt insbesondere für Vervielfältigungen, Übersetzungen, Mikroverfilmungen und die

Einspeisung und Verarbeitung in elektronischen Systemen. Druck und Bindung: WB-Druck, Rieden. Printed in Germany 2003. Gedruckt auf chlorfrei gebleichtem alterungsbeständigem Papier.

ISBN 3-7815-1277-0