This handbook is a policy and working document which promotes convergence and coherence between the linguistic dimensions of various school subjects.

It proposes measures to make explicit – in curricula, pedagogic material and teacher training – the specific linguistic norms and competences which learners must master in each school subject. It also presents the learning modalities that should allow all learners, and in particular the most vulnerable among them, to benefit from diversified language-learning situations in order to develop their cognitive and linguistic capacities.

Education Department
Education Policy Division
Language Policy
DGI II – Directorate General of Democracy
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A HANDBOOK FOR CURRICULUM DEVELOPMENT AND TEACHER TRAINING

THE LANGUAGE DIMENSION IN ALL SUBJECTS

Jean-Claude Beacco
Mike Fleming
Francis Goullier
Eike Thürmann
Helmut Vollmer
with contributions by Joseph Sheils

Education Policy Division
Language Policy Unit
Education Department
Directorate of Democratic Citizenship and Participation
DGII – Directorate General of Democracy

Council of Europe
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Mastering the language of schooling is essential for learners to develop the skills necessary for school success and for critical thinking. It is fundamental for participation in democratic societies, and for social inclusion and cohesion.

This handbook is a valuable resource for education authorities and practitioners in Council of Europe member states. It will help them to reflect on their policy and practice in language education, and support them in developing responses to the current challenges of education systems.

It has a strong practical orientation, but it also embodies key principles and values of the Council of Europe. It emerges directly from two recent recommendations of the Committee of Ministers. Recommendation CM/Rec(2012)13 of the Committee of Ministers to member States on ensuring quality education emphasises the importance of preventing underachievement and draws attention to the key role of language in ensuring fairness in access to knowledge. Recommendation CM/Rec(2014)5 of the Committee of Ministers to member States on the importance of competences in the language(s) of schooling for equity and quality in education and for educational success highlights the importance of language not just as a separate subject in school, but in all subjects across the curriculum.

The recommendations and proposed measures in the handbook will support education policy makers and professionals in their efforts to support migrant children as well as native speakers who may be at a disadvantage, and will contribute to raising the quality of education for all learners.

I invite education policy deciders in our member states to raise awareness concerning the language dimension in all school subjects and to support all professionals in charge of education in making this dimension explicit and transparent in curricula and in the whole teaching process. This will contribute to ensuring equity and quality in our education systems.

Snežana Samardžić-Marković
Director General of Democracy
Council of Europe
Introduction

In April 2014, the Committee of Ministers of the Council of Europe passed Recommendation CM/Rec(2014)5 on the importance of competences in the language(s) of schooling for equity and quality in education and for educational success.1 One of the key principles in the recommendation highlights the importance of language not just as a separate subject in school, but in all subjects across the curriculum. This is an aspect of language education that presents a particular challenge for policy makers and practitioners, since it requires new insights and a whole-school, cross-curricular perspective. This handbook has been written, therefore, to support the implementation of the principles and measures set out in Recommendation CM/Rec(2014)5. It aims to show why language is important in all subjects, and what the implications are for policy and practice.

The handbook builds on and enriches the work of the Language Policy Unit’s Languages of Schooling project carried out under the aegis of the Steering Committee for Educational Policy and Practice of the Council of Europe. The committee has recognised that the acquisition of competences in language is an essential foundation both for success in school and for participation in modern democratic and diverse knowledge societies. The Languages of Schooling project has sought to underpin that principle and explore its practical implications with a series of seminars, conferences and publications. A rich variety of studies and conference papers arising from this work are available on “A platform of resources and references for plurilingual and intercultural education”.2 However, it was thought that a handbook that could stand as a publication in its own right would be a useful addition. Each chapter contains references linking to sections of the platform where particular issues are treated in greater depth.

The handbook is primarily addressed to those responsible for curriculum development, the development of pedagogical material and teacher education, whether working at national or school level. It is also relevant for teachers who have a particular interest in deepening their understanding of the importance of language. The handbook has a practical orientation but it is not a “manual”, in that it is not intended as a “how to” book with a list of prescribed activities. It does, however, seek to clarify the basic insights and principles underlying the need for support in language education in all subjects. The implementation of policy and practice related to language education requires not just a mechanical application of rules, but an understanding and awareness of what is appropriate in particular situations as determined by the context. The intention, therefore, is to raise awareness and develop understanding of the issues that have implications for practice and, above all, to influence practice at national and school level. In order to enhance the practical value of the handbook, each chapter contains illustrative material, and appendices have been included to provide further material to aid reflection. The handbook is not intended as an academic text, but it does offer some theoretical perspectives and an underlying rationale. These are essential because the importance of language in all subjects can easily be misinterpreted and met with opposition if not fully understood. This is one of the challenges faced by policy makers. For example, the idea that language is important in all subjects can easily be reduced to a focus on the more superficial aspects of spelling and grammar. While these are important, they represent only one aspect of what language education entails. Subject teachers may argue that a focus on language will distract from their main responsibility for teaching their subject. This line of argument tends to arise if

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1. Recommendation CM/Rec(2014)5 of the Committee of Ministers to the member states of the Council of Europe: www.coe.int/cm (“Adopted texts”).
2. www.coe.int/lang-platform (“Languages of schooling/Language as subject and Language(s) in other subjects”).

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the implications of the relationship between language and cognition are not fully recognised; attention to language in the subject classroom will not only improve the pupils’ competence in subject-based as well as general language use, but will also help deepen their understanding of the subject matter and their wider learning in the subject. It is sometimes argued that a focus on language in all subjects is important for high-achieving pupils, but less significant for those who are pursuing less academic goals. This view underestimates both the role of language in all learning and the importance of competence in language for full participation in a democratic, knowledge society. By acquiring the language of a subject and reflecting on it consciously, all learners, independent of their background, will master the content and accompanying tasks more successfully. The misunderstanding that the importance of language in all subjects is more significant for high-achieving pupils may arise from the use of the term “academic language”. This term is widely used now in education to refer to the language characteristics of school subjects and the aspects of language proficiency that are valued and required by the school. These go beyond the spontaneous and generally informal language used in the everyday social life of most pupils. The specific competences that need to be mastered for successful knowledge building are often unfamiliar to many pupils before they enter school. These may not be made sufficiently explicit, giving rise to a “hidden curriculum” that makes the linguistic challenge posed by the school even more demanding. This is an issue for all learners, but particularly for those from socially disadvantaged backgrounds, or whose home language is different from the main language of schooling. Recognition of the importance of academic language is not elitist but, on the contrary, is rather an essential aspect of working towards equity in educational outcomes. Academic language provides access to more differentiated ways of thinking and expression. Deciding on what terminology to use in this handbook was a challenge and the subject of much discussion for the authors. The term “language of schooling” is widely used to describe the dominant language of instruction in school, which is normally the main national or regional language. The plural “language(s)” is sometimes used to show that in some contexts, more than one language is used for this purpose. However, the term “language of schooling” is also employed by some writers to refer to those uses of language that are particularly important for learning in subjects. In this handbook, we have adopted the term “academic language” for this purpose and kept “language of schooling” as the more general term for describing the language used in teaching a subject. We adopted the term “academic language”, despite its potential for ambiguity, because it is now so widely used in educational writing about language education. Decisions on other terms were more problematic. One of the central arguments of this handbook is that it is necessary to break down the general concept “language” into more refined categories in order to support classroom teaching. However, terms like “form”, “function”, “genres”, “domains” and “text types” are often the subject of dispute in academic literature and have different connotations among linguists and literary theorists, depending on their tradition or context. There was the further complication that this handbook will be published in two languages and is likely to be translated into more languages. The intention therefore has been to keep the use of categories and specialist terminology to a minimum and not to get involved in the various disputes about the use of the terms. In most cases, the meaning will be clear from the context.

The handbook moreover does not aim to be comprehensive, for that would make it too long and run the risk of making it inaccessible. For example, the issue of sign language is not addressed, but it is acknowledged that this could well feature in the language policy of a school. Also, the impact of digital technology and other “new literacies” on pupils’ language use is not dealt with separately, although the importance of this area of research is recognised. The handbook has been written to support policy implementation and teacher development with compulsory schooling in mind, and the content has been selected accordingly. A number of issues are addressed transversally rather than in separate chapters. For example, the importance of quality education features in many of the chapters, as do the needs of vulnerable learners. We are aware that language education is not the only factor in ensuring quality in schools: teaching expertise, resources, socio-cultural context and a host of other influences are also relevant. However, language education is of the utmost importance, is closely related to some of the other factors, and is often not sufficiently addressed. A further reading section has been provided in Appendix 2 so that readers can pursue particular issues in more depth. As the handbook emphasises, teachers of all subjects have to be aware of the challenges posed by the need to support pupils in mastering the specific language competences that their school disciplines demand. For this reason much of the document is devoted to examining and illustrating possible ways in which teachers can provide language-sensitive subject teaching, offering pupils specific forms of support in acquiring the general “academic” and the subject-specific or “scientific” language characteristic of their school subjects. Teachers in schools are already subject to heavy demands. However, a focus on language does not have to be an additional responsibility, but is rather a re-focusing of subject teaching to make it more effective and
even more enjoyable. The thematic chapters contribute in different but complementary ways to analysing competences in the language of schooling, approaches to language in and across the curriculum, and teaching/learning factors that can support learners in acquiring "subject literacy".

Although the handbook can be read as linear text, some readers may wish to focus on particular sections that are more relevant to their concerns. For that reason, some of the key principles have been reiterated in several chapters, although the intention has been to avoid too much repetition.

Chapter 1, in recalling the guiding principles underpinning Recommendation CM/Rec(2014)5, highlights the importance of competences in the language of schooling not only for school success, but also for equity and quality in education. It introduces basic concepts and issues, and summarises the implications for curriculum development and implementation. The chapter emphasises that language education must always be viewed in relation to values.

Chapter 2 addresses the role of language in knowledge building, and the relationship between language and cognition. This is one of the key perspectives underlying the importance of language in all subjects. Subject teachers need to be aware of the different functions that language can perform that are both cognitive and linguistic in nature. The concept of "subject literacy", as a useful term for describing the broad goals of subject learning, is also addressed.

Chapter 3 examines the different forms that language takes in classroom communication and how these relate to learning in subjects. These will be largely familiar to readers but examining them specifically from a language perspective offers new insights and makes them less likely to be taken for granted, for they are not all equivalent in terms of their role in knowledge acquisition.

Chapter 4 examines what is practically involved in acquiring academic language and the importance of the role of teachers in providing support or "scaffolding" so that pupils can progress from ordinary, everyday forms of expression to those that are knowledge-related. This will involve, for example, building bridges between familiar genres and those that help to generalise insights and knowledge beyond immediate experience or observation.

Chapter 5 looks in more detail at the issues raised by language diversity in schools. This can have a positive or negative impact on pupils' performance, depending on a number of factors that are explored in the chapter. The types of provision that can be made for students who have limited proficiency in the language of schooling are also examined, including for the development of academic literacy.

Chapter 6 addresses the importance of the language of schooling at primary level. It stresses the importance of including language objectives when planning the curriculum. This is particularly important for pupils who are not native speakers of the language of schooling. Pupils at primary level need to be helped to move from a focus on self to a more decentred use of language, for example from narrative to reporting, but also from informal to more formal uses of language.

Chapter 7 examines the role of language as subject when it is accepted that language is central to all subjects. Although it should not be seen simply as a "service" subject, language as subject does have a special role in language education. The importance of a school language policy is emphasised as a focus for sharing approaches across the curriculum.

Chapter 8 examines the language requirements specific to subjects. These are quite complex and varied, and depend in part on how the subject's aims are conceived. The chapter also addresses, through examples, the importance of scaffolding language in the classroom, and offers considerations for further research.

Chapter 9 describes some practical implications of being "language sensitive" in the subject classroom. Attention is also drawn to the importance of creating a supportive classroom culture (as opposed to simply employing particular methodologies or techniques) that develops openness and curiosity towards language, and encourages the development of language strategies within and beyond content learning.

Chapter 10 addresses the need for a curriculum in which goals for subject-based language learning are spelled out explicitly. Different approaches are possible, as seen in various examples that have been tried out or that are in the process of being implemented. This leads to a general discussion of the various approaches to curriculum development and implementation with some of their advantages and limitations. It is argued that language competences as part of subject teaching and learning have to be identified and made transparent whatever the educational context may be.

Chapter 11 stresses the importance of teacher training as crucial for perceiving and integrating the language dimension into content teaching. Various implementation strategies are discussed: integrating the language
dimension into the continuous professional development of teachers, establishing a system of literacy coaches and encouraging schools to develop a language-sensitive culture of content teaching, and learning across disciplinary boundaries through sharing and co-operation among teachers.

Chapter 12 argues that the pursuit of quality in education means that the quality of educational provision overall, including measures to promote inclusion and equity, need to be evaluated, in addition to evaluation of the curriculum and learning outcomes. Making an overall assessment of a form of education is a necessary though complex undertaking.

The conclusion provides a brief overview of the central arguments in the handbook, with a call to readers to respond to its challenges and suggestions.
Chapter 1

The language dimension in all subjects: an important issue for quality and equity in education

The Council of Europe project on “Languages in and for education” has led to many important insights and results that are presented on “A platform of resources and references for plurilingual and intercultural education”. As outlined in the introduction, this handbook aims to draw on and extend that work, and present it in a more systematic way. The language dimension is of the utmost importance for all levels of school learning, but it is particularly important for learning in all subjects. It is on this very subject-specific level that key issues related to quality and equity in education can either be resolved (in concrete terms) or will continue to exist.

In addition to the Recommendation CM/Rec(2014)5 of the Committee of Ministers on the importance of competences in the language(s) of schooling for equity and quality in education and for educational success (see Appendix 1), a number of studies at national, regional and international level also highlight the importance of competence in the language of schooling, not only for school success, but for equity and quality in education. For example, assessments by the Organisation for Economic Co-operation and Development (OECD), policy documents by the United Nations Educational, Scientific and Cultural Organization (UNESCO) and programmes supported by the European Commission agree that the acquisition by learners of proficiency in the language of schooling represents a major asset for learners themselves, for the education system, for social cohesion and for the future of our societies. The importance of the language of schooling is thus widely recognised but, as pointed out in the introduction, because “language of schooling”, as other terms, tends to be used in different ways, it needs further explanation. This chapter will introduce some of the key terms and concepts that are central to the argument of this handbook. It will also outline some of the implications for teaching and curriculum, and highlight the importance of competence in language for equity and quality of education. All of these arguments will be developed further in subsequent chapters of the handbook.

1.1. THE LANGUAGE OF SCHOOLING – ACADEMIC LANGUAGE USE

The term “language of schooling” is widely used to describe the dominant (sometimes only) national or minority/regional language used in the classroom for teaching. “Language of instruction” is often used for the same purpose, although some object to this term on the grounds that it implies a narrow, “transmission view” of what teaching entails. Contemporary societies are, in most cases, multicultural with increasing complexity as a consequence of mobility and migration. This presents a considerable challenge for schools, because the main language used for teaching and learning is very often not the first or home language of many of the pupils. To say that it is important for pupils to develop competence in the language of schooling or language of instruction is clearly self-evident. Pupils need sufficient competence in the language of schooling to be able to understand and participate in lessons. Even if more than one language is used as the main language(s) of schooling, it is likely that a number of pupils will still not be using their first or home language for learning purposes. They may underachieve, not because of any lack of ability, but because of their difficulties with the language of schooling. This is an important issue, and education systems and schools take different approaches to supporting pupils who struggle with the language of schooling. Children of families that have recently arrived in a country where the language used by the majority is different from their own may be provided with the linguistic support needed to acquire communicative competences in the language of the host country (this will be dealt with more fully in Chapter 5). However, there is another aspect of competence in the language of schooling that is just as important but far less obvious, and thus easily overlooked.
Pupils need to be able to use language not just for social and informal purposes but also to learn content, to express their understanding and to interact with others about the meaning and implications of what they learn. This requires a level of competence in what has been called “academic language”. This is another aspect of the “language of schooling”: it refers not just to different regional or national languages used in school, but to a type of language use that is more specialised and formal, needed for thinking, for forming and comparing ideas. Pupils for whom their first language is the language of schooling may still not be equipped to deal with the language demands placed on them by the school and specifically by learning in the different subjects. This challenge is often seen as a matter of acquiring new specialist vocabulary (for example in science: “electrolysis”, “ion”, “neutron”; in literature: “irony”, “imagery”, “tragedy”). Subject syllabuses invariably refer to concepts that pupils must assimilate. Most teaching materials also accord a place to the vocabulary corresponding to these concepts and draw the attention of both teachers and learners to the importance of grasping and memorising the meaning of the terms necessary for describing and handling subject-specific knowledge. Undoubtedly, being able to use new words appropriately is an important aspect of learning a subject and can cause problems for the learner. The precise meanings may require considerable technical knowledge, and the new terms may already have established meanings in everyday use (for example “positive”, “conduct”, “energy”). The challenge that new terminology presents to pupils in learning subjects needs to be acknowledged, but it is only one aspect of what mastering academic language entails. In fact, it could be argued that subject-specific vocabulary and terminology are not the most challenging aspect for learners.

The term “mastering academic language” by itself is rather too general and needs to be broken down into finer distinctions and narrower categories in order to reveal its different aspects and indicate the challenges these present for learners. These categories in turn have implications for policy and practice. Although the term “academic language” can apply to both oral and written texts, the first and most basic distinction is between oral and written language. Spoken language is usually highly contextualised, often makes use of non-verbal “academic language” can apply to both oral and written texts, the first and most basic distinction is between oral and written language. Spoken language is usually highly contextualised, often makes use of non-verbal clues to support meaning, and can make use of incomplete and less precisely structured formulations. Written language, on the other hand, is usually more distant from the potential audience and needs to be more carefully structured and precise. Of course, oral language can, in some cases, be more formal, as in a presentation or the “reading” of the news on the radio, just as writing can be informal and conversational, as in e-mails and text messages. However, when the difference between spoken and written language is not sufficiently acknowledged, reading and writing may not be given enough support in the subject classroom because it is assumed that pupils will acquire competence in these areas as easily as they do in conversational speaking and listening. The tacit assumption is that because pupils can engage in general classroom talk about subject content, they will be able to make the transfer to understanding/decoding complex texts or writing without further help. While oral communication in the classroom is extremely important for helping pupils to use their prior knowledge and negotiate the meaning of new concepts, they are usually obliged to formulate the newly acquired knowledge in increasingly articulated, coherent and abstract forms and eventually in (explicit) writing.

A second important category related to academic language use is that of “genre”. As indicated in the introduction, this term has been the subject of dispute in academic literature, with different connotations depending on the tradition or context. For the purposes of this handbook, the various debates are less important than establishing how the term “genre” might be useful in helping pupils master academic language, and in helping teachers know how to adapt their teaching. When pupils are asked to write up an account of a lesson (such as a science experiment, a field visit for geography, or a drama presentation in language as subject), they may be left confused if no further information is provided on the type/category of writing they are meant to use, for instance a report, log or personal reflection. The term “genre” as used in this handbook is useful in this context because it directs attention to the type/category of writing that is required; it points to the fact that certain texts share common features and can thus be grouped together. This is beneficial for subject teachers because it can assist them in setting a writing or an oral task with more detail of what is required, and in determining what kind of help pupils might require to complete it. It also helps the pupils themselves develop knowledge about what type of writing is needed in different contexts. Such knowledge is also important when approaching reading, because it helps to know what type of text is being dealt with in order to understand how to engage with it. For example, a different emphasis in reading strategies may be helpful when faced with a magazine article (browsing, reading visual clues) or a technical report (engaging prior knowledge, using knowledge of the likely structure, focusing on detail). The factors that determine groupings of texts are not confined to the forms that are “internal” to the text itself, such as vocabulary and grammar (for example a report tends to be written in the third person), but also draw on factors that are more “external” and contextual such as purpose and audience. Thus if the intention in writing the text is to describe, argue or persuade, this will influence the way it is structured and the choice of language.
Alongside "genre", the use of the term "text" is important in this context. It highlights the fact that a body of oral or written output should be considered as a whole and not just in terms of its constituent parts. Language may be considered at word level (spelling and vocabulary) or sentence level (grammar and punctuation) but it is when it is considered as a text that notions like context, meaning, purpose and deep understanding come more into play. When subject teachers are asked to give due consideration to language in their teaching, it may be tempting for them to assume that this requires them to acquire technical linguistic knowledge that is outside their specialisation. However, language at text level requires less specialised knowledge about forms of language but more focus on function, that is how language is used in particular contexts.

Language needs to be viewed not just as a system but also as "discourse". This term places emphasis on the use of language and its different functions; it draws attention to the living, dynamic nature of language and the way it creates meaning in social contexts. By drawing attention to aspects of language not just as system (for example rules of grammar) but also as discourse (for example, what is the writer aiming to achieve in this text? How does the writer achieve those goals?), subject teachers can be helped to see the close relationship between understanding of subject content and language use.

The role of language in knowledge building, and the relationship between language and thinking is central to the importance of language in all subjects and is dealt with in detail in Chapter 2. The purpose here is to introduce the key term "cognitive-linguistic function", which signals the close relationship between cognition and language. In the subject classroom, pupils will engage in activities such as explaining, arguing, hypothesising, comparing, etc. These types of activities are central to learning and understanding in any subject, and clearly require pupils to think. However, at the same time they do require pupils to use language in particular ways in order to express their intention, for example describing as opposed to explaining, comparing or hypothesising. These macro functions underlie all communication, including the highly subject-specific forms of expression or meaning-making.

The argument of this handbook is that all schoolteachers will be better able to help their pupils learn and understand subject content if they are able to provide support for them based on recognising the language dimension of the subject. This means, in part, helping them to distinguish between written and oral modes, and to gain command of genres and of cognitive-linguistic functions.

Teaching subject matter more successfully requires a focus on the language that mediates and transports meaning. It requires conscious and detailed planning on the part of the subject teacher in order to ensure that all children acquire the linguistic skills and competences necessary for understanding the relevant topics.

An examination of teaching materials in Figure 1.1 and Figure 1.2 illustrates the challenge presented by academic language.

**Figure 1.1: Learning to solve a problem**

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Learning to solve a problem

David drew this diagram of the electrical circuit he had just set up.
1. Reproduce the wiring diagram and indicate the direction of the current in each branch.
2. State which lamps are traversed by currents of the same intensity.
3. In which lamp(s) is the current intensity greatest?

Solution (extract from the textbook)

2. Lamps L_1 and L_5 are both located on the main circuit (containing the power source).
   Since components connected in series all carry the same current, L_1 and L_5 are traversed by currents of the same intensity I_1.
   Similarly, lamps L_2 and L_4, both situated on the same branch circuit, are traversed by currents of the same intensity I_2.
3. The current intensity in the main circuit is equal to the sum of the current intensities in the branch circuit; I_1 = I_2 + I_3, consequently, the intensity is greatest in the main circuit and in lamps L_1 and L_5.
```