KEY COMPETENCES FOR LIFELONG LEARNING — A EUROPEAN REFERENCE FRAMEWORK

Background and aims
As globalisation continues to confront the European Union with new challenges, each citizen will need a wide range of key competences to adapt flexibly to a rapidly changing and highly interconnected world.

Education in its dual role, both social and economic, has a key role to play in ensuring that Europe’s citizens acquire the key competences needed to enable them to adapt flexibly to such changes.

In particular, building on diverse individual competences, the differing needs of learners should be met by ensuring equality and access for those groups who, due to educational disadvantages caused by personal, social, cultural or economic circumstances, need particular support to fulfil their educational potential. Examples of such groups include people with low basic skills, in particular with low literacy, early school leavers, the long-term unemployed and those returning to work after a period of extended leave, older people, migrants, and people with disabilities.

In this context, the main aims of the Reference Framework are to:

1) identify and define the key competences necessary for personal fulfilment, active citizenship, social cohesion and employability in a knowledge society;
2) support Member States’ work in ensuring that by the end of initial education and training young people have developed the key competences to a level that equips them for adult life and which forms a basis for further learning and working life, and that adults are able to develop and update their key competences throughout their lives;
3) provide a European level reference tool for policy makers, education providers, employers, and learners themselves to facilitate national and European level efforts towards commonly agreed objectives;
4) provide a framework for further action at Community level both within the Education and Training 2010 work programme and within the Community Education and Training Programmes.

Key Competences
Competences are defined here as a combination of knowledge, skills and attitudes appropriate to the context. Key competences are those which all individuals need for personal fulfilment and development, active citizenship, social inclusion and employment.

The Reference Framework sets out eight key competences:

1) Communication in the mother tongue;
2) Communication in foreign languages;
3) Mathematical competence and basic competences in science and technology;
4) Digital competence;
5) Learning to learn;
6) Social and civic competences;
7) Sense of initiative and entrepreneurship; and
8) Cultural awareness and expression.

The key competences are all considered equally important, because each of them can contribute to a successful life in a knowledge society. Many of the competences overlap and interlock: aspects essential to one domain will support competence in another. Competence in the fundamental basic skills of language, literacy, numeracy and in information and communication technologies (ICT) is an
essential foundation for learning, and learning to learn supports all learning activities. There are a number of themes that are applied throughout the Reference Framework: critical thinking, creativity, initiative, problem solving, risk assessment, decision taking, and constructive management of feelings play a role in all eight key competences.

1. Communication in the mother tongue (1)

Definition:
Communication in the mother tongue is the ability to express and interpret concepts, thoughts, feelings, facts and opinions in both oral and written form (listening, speaking, reading and writing), and to interact linguistically in an appropriate and creative way in a full range of societal and cultural contexts; in education and training, work, home and leisure.

Essential knowledge, skills and attitudes related to this competence:
Communicative competence results from the acquisition of the mother tongue, which is intrinsically linked to the development of an individual’s cognitive ability to interpret the world and relate to others. Communication in the mother tongue requires an individual to have knowledge of vocabulary, functional grammar and the functions of language. It includes an awareness of the main types of verbal interaction, a range of literary and non-literary texts, the main features of different styles and registers of language, and the variability of language and communication in different contexts.

Individuals should have the skills to communicate both orally and in writing in a variety of communicative situations and to monitor and adapt their own communication to the requirements of the situation. This competence also includes the abilities to distinguish and use different types of texts, to search for, collect and process information, to use aids, and to formulate and express one’s oral and written arguments in a convincing way appropriate to the context.

A positive attitude towards communication in the mother tongue involves a disposition to critical and constructive dialogue, an appreciation of aesthetic qualities and a willingness to strive for them, and an interest in interaction with others. This implies an awareness of the impact of language on others and a need to understand and use language in a positive and socially responsible manner.

2. Communication in foreign languages (2)

Definition:
Communication in foreign languages broadly shares the main skill dimensions of communication in the mother tongue: it is based on the ability to understand, express and interpret concepts, thoughts, feelings, facts and opinions in both oral and written form (listening, speaking, reading and writing) in an appropriate range of societal and cultural contexts (in education and training, work, home and leisure) according to one's wants or needs. Communication in foreign languages also calls for skills such as mediation and intercultural understanding. An individual's level of proficiency will vary between the four dimensions (listening, speaking, reading and writing) and between the different languages, and according to that individual's social and cultural background, environment, needs and/or interests.

Essential knowledge, skills and attitudes related to this competence:
Competence in foreign languages requires knowledge of vocabulary and functional grammar and an awareness of the main types of verbal interaction and registers of language. Knowledge of societal conventions, and the cultural aspect and variability of languages is important.

Essential skills for communication in foreign languages consist of the ability to understand spoken messages, to initiate, sustain and conclude conversations and to read, understand and produce texts appropriate to the individual's needs. Individuals should also be able to use aids appropriately, and learn languages also informally as part of lifelong learning.
A positive attitude involves the appreciation of cultural diversity, and an interest and curiosity in languages and intercultural communication.

3. Mathematical competence and basic competences in science and technology

Definition:

A. Mathematical competence is the ability to develop and apply mathematical thinking in order to solve a range of problems in everyday situations. Building on a sound mastery of numeracy, the emphasis is on process and activity, as well as knowledge. Mathematical competence involves, to different degrees, the ability and willingness to use mathematical modes of thought (logical and spatial thinking) and presentation (formulas, models, constructs, graphs, charts).

B. Competence in science refers to the ability and willingness to use the body of knowledge and methodology employed to explain the natural world, in order to identify questions and to draw evidence-based conclusions. Competence in technology is viewed as the application of that knowledge and methodology in response to perceived human wants or needs. Competence in science and technology involves an understanding of the changes caused by human activity and responsibility as an individual citizen.

Essential knowledge, skills and attitudes related to this competence:

A. Necessary knowledge in mathematics includes a sound knowledge of numbers, measures and structures, basic operations and basic mathematical presentations, an understanding of mathematical terms and concepts, and an awareness of the questions to which mathematics can offer answers.

An individual should have the skills to apply basic mathematical principles and processes in everyday contexts at home and work, and to follow and assess chains of arguments. An individual should be able to reason mathematically, understand mathematical proof and communicate in mathematical language, and to use appropriate aids.

A positive attitude in mathematics is based on the respect of truth and willingness to look for reasons and to assess their validity.

B. For science and technology, essential knowledge comprises the basic principles of the natural world, fundamental scientific concepts, principles and methods, technology and technological products and processes, as well as an understanding of the impact of science and technology on the natural world. These competences should enable individuals to better understand the advances, limitations and risks of scientific theories, applications and technology in societies at large (in relation to decision-making, values, moral questions, culture, etc).

Skills include the ability to use and handle technological tools and machines as well as scientific data to achieve a goal or to reach an evidence-based decision or conclusion. Individuals should also be able to recognise the essential features of scientific inquiry and have the ability to communicate the conclusions and reasoning that led to them.

Competence includes an attitude of critical appreciation and curiosity, an interest in ethical issues and respect for both safety and sustainability, in particular as regards scientific and technological progress in relation to oneself, family, community and global issues.

4. Digital competence

Definition:

Digital competence involves the confident and critical use of Information Society Technology (IST) for work, leisure and communication. It is underpinned by basic skills in ICT: the use of computers to retrieve, assess, store, produce, present and exchange information, and to communicate and participate in collaborative networks via the Internet.

Essential knowledge, skills and attitudes related to this competence:
Digital competence requires a sound understanding and knowledge of the nature, role and opportunities of IST in everyday contexts: in personal and social life as well as at work. This includes main computer applications such as word processing, spreadsheets, databases, information storage and management, and an understanding of the opportunities and potential risks of the Internet and communication via electronic media (e-mail, network tools) for work, leisure, information sharing and collaborative networking, learning and research. Individuals should also understand how IST can support creativity and innovation, and be aware of issues around the validity and reliability of information available and of the legal and ethical principles involved in the interactive use of IST.

Skills needed include the ability to search, collect and process information and use it in a critical and systematic way, assessing relevance and distinguishing the real from the virtual while recognising the links. Individuals should have skills to use tools to produce, present and understand complex information and the ability to access, search and use internet-based services. Individuals should also be able use IST to support critical thinking, creativity, and innovation.

Use of IST requires a critical and reflective attitude towards available information and a responsible use of the interactive media. An interest in engaging in communities and networks for cultural, social and/or professional purposes also supports this competence.

5. Learning to learn

Definition:

‘Learning to learn’ is the ability to pursue and persist in learning, to organise one's own learning, including through effective management of time and information, both individually and in groups. This competence includes awareness of one's learning process and needs, identifying available opportunities, and the ability to overcome obstacles in order to learn successfully. This competence means gaining, processing and assimilating new knowledge and skills as well as seeking and making use of guidance. Learning to learn engages learners to build on prior learning and life experiences in order to use and apply knowledge and skills in a variety of contexts: at home, at work, in education and training. Motivation and confidence are crucial to an individual's competence.

Essential knowledge, skills and attitudes related to this competence:

Where learning is directed towards particular work or career goals, an individual should have knowledge of the competences, knowledge, skills and qualifications required. In all cases, learning to learn requires an individual to know and understand his/her preferred learning strategies, the strengths and weaknesses of his/her skills and qualifications, and to be able to search for the education and training opportunities and guidance and/or support available.

Learning to learn skills require firstly the acquisition of the fundamental basic skills such as literacy, numeracy and ICT skills that are necessary for further learning. Building on these skills, an individual should be able to access, gain, process and assimilate new knowledge and skills. This requires effective management of one's learning, career and work patterns, and, in particular, the ability to persevere with learning, to concentrate for extended periods and to reflect critically on the purposes and aims of learning. Individuals should be able to dedicate time to learning autonomously and with self-discipline, but also to work collaboratively as part of the learning process, draw the benefits from a heterogeneous group, and to share what they have learnt. Individuals should be able to organise their own learning, evaluate their own work, and to seek advice, information and support when appropriate.

A positive attitude includes the motivation and confidence to pursue and succeed at learning throughout one's life. A problem-solving attitude supports both the learning process itself and an individual's ability to handle obstacles and change. The desire to apply prior learning and life experiences and the curiosity to look for opportunities to learn and apply learning in a variety of life contexts are essential elements of a positive attitude.
6. Social and civic competences

Definition:

These include personal, interpersonal and intercultural competence and cover all forms of behaviour that equip individuals to participate in an effective and constructive way in social and working life, and particularly in increasingly diverse societies, and to resolve conflict where necessary. Civic competence equips individuals to fully participate in civic life, based on knowledge of social and political concepts and structures and a commitment to active and democratic participation.

Essential knowledge, skills and attitudes related to this competence:

A. Social competence is linked to personal and social well-being which requires an understanding of how individuals can ensure optimum physical and mental health, including as a resource for oneself and one’s family and one’s immediate social environment, and knowledge of how a healthy lifestyle can contribute to this. For successful interpersonal and social participation it is essential to understand the codes of conduct and manners generally accepted in different societies and environments (e.g. at work). It is equally important to be aware of basic concepts relating to individuals, groups, work organisations, gender equality and non-discrimination, society and culture. Understanding the multi-cultural and socio-economic dimensions of European societies and how national cultural identity interacts with the European identity is essential.

The core skills of this competence include the ability to communicate constructively in different environments, to show tolerance, express and understand different viewpoints, to negotiate with the ability to create confidence, and to feel empathy. Individuals should be capable of coping with stress and frustration and expressing them in a constructive way and should also distinguish between the personal and professional spheres.

The competence is based on an attitude of collaboration, assertiveness and integrity. Individuals should have an interest in socio-economic developments and intercultural communication and should value diversity and respect others, and be prepared both to overcome prejudices and to compromise.

B. Civic competence is based on knowledge of the concepts of democracy, justice, equality, citizenship, and civil rights, including how they are expressed in the Charter of Fundamental Rights of the European Union and international declarations and how they are applied by various institutions at the local, regional, national, European and international levels. It includes knowledge of contemporary events, as well as the main events and trends in national, European and world history. In addition, an awareness of the aims, values and policies of social and political movements should be developed. Knowledge of European integration and of the EU’s structures, main objectives and values is also essential, as well as an awareness of diversity and cultural identities in Europe.

Skills for civic competence relate to the ability to engage effectively with others in the public domain, and to display solidarity and interest in solving problems affecting the local and wider community. This involves critical and creative reflection and constructive participation in community or neighbourhood activities as well as decision-making at all levels, from local to national and European level, in particular through voting.

Full respect for human rights including equality as a basis for democracy, appreciation and understanding of differences between value systems of different religious or ethnic groups lay the foundations for a positive attitude. This means displaying both a sense of belonging to one’s locality, country, the EU and Europe in general and to the world, and a willingness to participate in democratic decision-making at all levels. It also includes demonstrating a sense of responsibility, as well as showing understanding of and respect for the shared values that are necessary to ensure community cohesion, such as respect for democratic principles. Constructive participation also involves civic activities, support for social diversity and cohesion and sustainable development, and
a readiness to respect the values and privacy of others.

7. Sense of initiative and entrepreneurship

Definition:
Sense of initiative and entrepreneurship refers to an individual's ability to turn ideas into action. It includes creativity, innovation and risk-taking, as well as the ability to plan and manage projects in order to achieve objectives. This supports individuals, not only in their everyday lives at home and in society, but also in the workplace in being aware of the context of their work and being able to seize opportunities, and is a foundation for more specific skills and knowledge needed by those establishing or contributing to social or commercial activity. This should include awareness of ethical values and promote good governance.

Essential knowledge, skills and attitudes related to this competence:

Necessary knowledge includes the ability to identify available opportunities for personal, professional and/or business activities, including ‘bigger picture’ issues that provide the context in which people live and work, such as a broad understanding of the workings of the economy, and the opportunities and challenges facing an employer or organisation. Individuals should also be aware of the ethical position of enterprises, and how they can be a force for good, for example through fair trade or through social enterprise.

Skills relate to proactive project management (involving, for example the ability to plan, organise, manage, lead and delegate, analyse, communicate, de-brief, evaluate and record), effective representation and negotiation, and the ability to work both as an individual and collaboratively in teams. The ability to judge and identify one's strengths and weaknesses, and to assess and take risks as and when warranted, is essential.

An entrepreneurial attitude is characterised by initiative, pro-activity, independence and innovation in personal and social life, as much as at work. It also includes motivation and determination to meet objectives, whether personal goals, or aims held in common with others, including at work.

8. Cultural awareness and expression

Definition:
Appreciation of the importance of the creative expression of ideas, experiences and emotions in a range of media, including music, performing arts, literature, and the visual arts.

Essential knowledge, skills and attitudes related to this competence:

Cultural knowledge includes an awareness of local, national and European cultural heritage and their place in the world. It covers a basic knowledge of major cultural works, including popular contemporary culture. It is essential to understand the cultural and linguistic diversity in Europe and other regions of the world, the need to preserve it and the importance of aesthetic factors in daily life.

Skills relate to both appreciation and expression: the appreciation and enjoyment of works of art and performances as well as self-expression through a variety of media using one’s innate capacities. Skills include also the ability to relate one’s own creative and expressive points of view to the opinions of others and to identify and realise social and economic opportunities in cultural activity. Cultural expression is essential to the development of creative skills, which can be transferred to a variety of professional contexts.

A solid understanding of one’s own culture and a sense of identity can be the basis for an open attitude towards and respect for diversity of cultural expression. A positive attitude also covers creativity, and the willingness to cultivate aesthetic capacity through artistic self-expression and participation in cultural life.
In the context of Europe's multicultural and multilingual societies, it is recognised that the mother tongue may not in all cases be an official language of the Member State, and that ability to communicate in an official language is a pre-condition for ensuring full participation of the individual in society. In some Member States the mother tongue may be one of several official languages. Measures to address such cases, and apply the definition accordingly, are a matter for individual Member States in accordance with their specific needs and circumstances.

It is important to recognise that many Europeans live in bilingual or multilingual families and communities, and that the official language of the country in which they live may not be their mother tongue. For these groups, this competence may refer to an official language, rather than to a foreign language. Their need, motivation, and social and/or economic reasons for developing this competence in support of their integration will differ, for instance, from those learning a foreign language for travel or work. Measures to address such cases, and apply the definition accordingly, are a matter for individual Member States in accordance with their specific needs and circumstances.