

Support of the stakeholder consultation in the context of the Key Competences Review

Report 1: Comparative Analysis

Framework Service Contract to Provide Expertise and Support for European Cooperation in Education, Training, Youth and Sport (EAC/07/2015)



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1.0 Introduction

This report is one of the outputs for the ‘*Support of the stakeholder consultation in the context of the Key Competences Review*’ study (released under the DG EAC Framework Contract EAC-07-2015), which is being delivered by the Danish Technological Institute and Ecorys. It contains a comparative analysis of selected Member State and international key competence frameworks.

The selection of frameworks is based on desk research and contacts made with selected experts, and discussions with the Commission. The following Member States are included:

- Estonia
- Finland
- Flanders
- France
- Ireland
- Italy
- Netherlands
- Portugal

In addition, frameworks from the following international organisations are covered:

- OECD (two frameworks: OECD Key Competencies (DeSeCo) and Global Competency)
- Council of Europe
- World Economic Forum
- P21 Partnership for 21st century learning
- UNESCO

An overview of the selected frameworks is provided in the table on the following pages.

In the following chapters, the frameworks are compared in two groups: Member States (national/regional) (chapter 2) and international frameworks (chapter 3). The reason for dividing the frameworks in these two groups is that the Member States frameworks all take the EU Key Competences framework into account, although to different degrees, whereas the approaches for the international frameworks is much more varied.

For each of these two groups of frameworks, we look at both how the EU key competences are addressed, and how transversal skills (also called global skills, 21st century skills, etc.) are addressed.

Table 1-1 Overview of reviewed competence frameworks

Country or organisation	Level	Framework	Key facts	Competences/areas
MEMBER STATES				
Estonia	National	National curriculum for basic schools.	The curriculum is for basic schools and came into effect in 2011, last amendment was 29 August 2014	<ul style="list-style-type: none"> • Cultural and value competence • Social and citizen competence • Self-management competence • Learning to learn competence • Communication competence • Mathematics, natural sciences and technology competence • Entrepreneurship competence • Digital competence
Finland	National	National Core Curriculum for Basic Education 2014, Finnish National Board of Education ¹ .	<p>The national core curriculum for basic education focuses on students in grades 1-6.</p> <p>Came into effect in August 2016.</p>	<ul style="list-style-type: none"> • Thinking and learning to learn • Cultural competence, interaction and expression • Taking care of oneself and managing daily life • Multiliteracy • ICT Competence • Working life competence and entrepreneurship • Participation, involvement and building a sustainable future
Flanders	National (regional)	Cross-curricular final objectives in mainstream secondary education ² .	Inspired by the EU Key Competences Framework and the OECD Key Competencies, the final objectives focus on the minimum skills required by every citizen in Flanders e to enable them to participate actively in	<ul style="list-style-type: none"> • Common trunk • Learning to learn • Physical health and safety • Mental health • Socio-relational development • Environment and sustainable development

¹ http://www.oph.fi/download/151294_ops2016_curriculum_reform_in_finland.pdf

² <http://www.ond.vlaanderen.be/curriculum/english/corecurriculum/crosscurricular/crosscurricularfinalobjectives.pdf>

Country or organisation	Level	Framework	Key facts	Competences/areas
			<p>society, and to develop a personal life.</p> <p>Came into force in 2010.</p>	<ul style="list-style-type: none"> Political-legal society Socio-economic society Socio-cultural society
France	National	Décret n° 2015-372 du 31 mars 2015 relatif au socle commun de connaissances, de compétences et de culture. ³	<p>The “common base of knowledge, competences and culture”, and is designed for students aged 6 to 16.</p> <p>Came into effect in 2016.</p>	<ul style="list-style-type: none"> Languages for thinking and communicating Methods and tools for learning Personal and citizen development Natural and technical systems Representations of the world and human activity
Ireland	National	<p>Key Skills of Junior Cycle – National Council for Curriculum and Assessment.</p> <p>Senior Cycle, Key Skills Framework – National Council for Curriculum and Assessment⁴.</p>	<p>The “Key Skills of Junior Cycle” is designed for students aged 12-15, whereas “Senior Cycle Key Skills Framework” focuses on students aged 15-18.</p>	<p>Junior cycle</p> <ul style="list-style-type: none"> Managing myself Staying well Communicating Being creative Working with others Managing information and thinking <p>Senior cycle</p> <ul style="list-style-type: none"> Information processing Critical and creative thinking Communicating Working with others Being personally effective

³ For a brief overview see: <http://www.education.gouv.fr/cid88125/qu-apprendront-les-eleves-de-6-a-16-ans-a-la-rentree-2016-decouvrez-le-socle-commun-de-connaissances-de-competences-et-de-culture.html>

⁴ http://ncca.ie/en/Curriculum_and_Assessment/Post-Primary_Education/Senior_Cycle/Key_Skills/Key-Skills.html

Country or organisation	Level	Framework	Key facts	Competences/areas
Italy	National (ESF/ERDF)	<p>Avviso quadro sulle azioni da attivare a valere sul PON “Per la scuola”.</p> <p>Il Programma Operativo Nazionale 2014-2020 “Per la scuola”, competenze e ambienti per l'apprendimento.⁵</p> <p>Communication of the actions to be activated in the framework of the PON (National Operational Programme) “for the school”/. The National Operational Programme 2014-2020 “For the school”, competences for learning.</p>	<p>PON is a national programme of the Ministry of Education funded under the European Social Funds and the European Regional Development Funds. All actions are also in line with the 2030 Agenda for sustainable development.</p> <p>Key competences are integrated in the actions developed under PON.</p>	<p>Basic competences:</p> <ul style="list-style-type: none"> • Communication in mother tongue • Communication in second foreign language • Math and scientific competences <p>Global citizenship competences:</p> <ul style="list-style-type: none"> • Food education and territory • Wellbeing, correct lifestyle and sport • Environmental education • Economic citizenship • Civics, respect for diversities and active citizenship <p>European citizenship Cultural, artistic and landscape heritage Citizenship and digital creativity Integration and hospitality Entrepreneurship education</p>
Netherlands	National	Bureau Platform Onderwijs2032: Ons onderwijs2032 – Endadvies, January 2016	The Platform Onderwijs2032 (Education2032) was commissioned by the Minister for Education, a social dialogue about the contents of primary and secondary education. The report/strategy is based on a comprehensive consultation process.	<ul style="list-style-type: none"> • Language skills • Numeracy • Digital literacy • Science • Language and culture • Social studies • Citizenship • Interdisciplinary skills

⁵ http://hubmiur.pubblica.istruzione.it/alfresco/d/d/workspace/SpacesStore/172146aa-ecd0-44b5-8f2e-6f356b246c55/prot950_17.pdf

Country or organisation	Level	Framework	Key facts	Competences/areas
Portugal	National	Perfil dos alunos à saída da escolaridade obrigatória ⁶	<p>The document “Profile of students at the end of compulsory schooling” is a draft consultation of the key competences that need to be acquired by students at the end of compulsory schooling.</p> <p>The public consultation closed 13 March 2017.</p>	<ul style="list-style-type: none"> • Languages and texts • Information and communication • Reasoning and problem solving • Critical thinking and creative thinking • Interpersonal relationships • Autonomy and personal development • Well-being and health • Aesthetic and artistic sensibility • Technical knowledge and technology • Awareness and control of the body
INTERNATIONAL ORGANISATIONS				
OECD	International	OECD Key Competencies (DeSeCo)	<p>The OECD defines key competencies in three broad categories.</p> <p>Published in 2005.</p>	<ul style="list-style-type: none"> • Use tools interactively • Interact in heterogeneous groups • Act autonomously
OECD	International	Global Competency	<p>The Global Competences framework represents a new, ambitious and still experimental approach to global competence which the OECD has developed in consultation with the international community of experts.</p>	<ul style="list-style-type: none"> • Skills: Analytical and critical thinking, Ability to interact respectfully, appropriately and effectively, Empathy, and Flexibility. • Knowledge and Understanding: Knowledge and understanding of global issues, Intercultural knowledge and understanding. • Attitudes: Openness towards people from other cultures, Respect for cultural otherness, Global-mindedness, and Responsibility.

⁶ <http://dge.mec.pt/perfil>

Country or organisation	Level	Framework	Key facts	Competences/areas
			Global competence is developed throughout an individual's entire lifetime.	
Council of Europe	International	Competences for Democratic Culture	The framework describes the competences needed to participate effectively in a culture of democracy, and live peacefully together with others in culturally diverse democratic societies. Published in 2016.	<ul style="list-style-type: none"> • Values: Valuing human dignity and human rights, Valuing cultural diversity, Valuing democracy, justice, fairness, equality and the rule of law • Attitudes: Openness to cultural otherness and to other beliefs, world views and practices, Respect, Civic-mindedness, Responsibility, Self-efficacy, Tolerance and ambiguity. • Skills: Autonomous learning skills, Analytical and critical thinking skills, Skills of listening and observing, Empathy, Flexibility and adaptability, Linguistic, communicative and plurilingual skills, Co-operation skills, Conflict-resolution skills. • Knowledge and critical understanding: Knowledge and critical understanding of self, Knowledge and critical understanding of language and communication, Knowledge and critical understanding of the world: Politics, law, human rights, culture, cultures, religions, history, media, economies, environment, sustainability.
WEF	International	21 st Century Skills	21 st century skills are the skills that meet the needs of a 21 st century marketplace.	<ul style="list-style-type: none"> • Foundational Literacies: Literacy, numeracy, scientific literacy, ICT literacy, financial literacy, cultural and civic literacy. • Competencies: Critical thinking/problem-solving, creativity, communication, collaboration.

Country or organisation	Level	Framework	Key facts	Competences/areas
				<ul style="list-style-type: none"> • Character Qualities: Curiosity, initiative, persistence/grit, adaptability, leadership, social and cultural awareness.
P21 Partnership for 21 st century learning	International/US	P21 Framework for 21 st Century Learning	<p>This framework describes the skills, knowledge and expertise students must master in work and life; it is a blend of content, knowledge, specific skills, expertise and literacies.</p> <p>The partnership was founded in 2002.</p>	<ul style="list-style-type: none"> • Key subjects and 21st century themes • Learning and innovation skills • Information, media and technology skills • Life and career skills
UNESCO	International	Intercultural Competences. Conceptual and Operational Framework.	<p>This framework provides two sets of terms of intercultural competences – culture and communication.</p> <p>They are not stand alone competences; rather, they must be understood in relation to one another as a set.</p>	<p>Culture</p> <ul style="list-style-type: none"> • Intercultural • Identity • Values, attitudes, beliefs <p>Communication</p> <ul style="list-style-type: none"> • Language • Dialogue • Nonverbal behaviour

2.0 Comparative analysis – Member States

This chapter compares the selected Member States frameworks with the EU framework. An overview table comparing the main aspects of the different frameworks with the EU framework is provided. Annex 1 provides more details of each framework.

The Member States frameworks are clearly inspired by the EU key competencies, but this does not mean that they consist of the same set of competences. All of these frameworks take a holistic perspective. None of the frameworks aim at simply producing “good employees” - rather, they aim to prepare an individual to become a capable and “good citizen” all-round.

The frameworks are mostly aimed at primary and/or secondary schooling (cf. the overview in Table 1-1). Some focus on curricula, while others are more broadly oriented (across subjects). To supplement the review of these frameworks, the work of Cedefop on key competences in VET has also been included in the review and is discussed later in this chapter.

Table 2-1 Comparison of Member States frameworks with the Key Competences Framework

Key Competences Framework	Estonia	Finland	Flanders	France	Ireland	Italy	Netherlands	Portugal
Communication in the mother tongue	Communication competence	Not explicitly covered	Common trunk (communicative ability), but otherwise not explicitly covered	Languages for thinking and communicating	Communicating (junior and senior cycle) Information processing (senior cycle)	Basic competences – communication in the mother tongue	Language skills (Dutch)	Languages and texts Information and communication
Communication in foreign languages	Communication competence	Not explicitly covered	Common trunk (communicative ability), but otherwise not explicitly covered	Languages for thinking and communicating	Not explicitly covered (possibly integrated in the same categories as comm. in mother tongue)	Basic competences – communication in foreign languages	Language skills (English)	Languages and texts
Mathematical competence and basic competences in science and technology	Mathematics, natural sciences and technology competence	Not explicitly covered	Not explicitly covered	Natural and technical systems Languages for thinking and communicating (mathematical, scientific and informatics languages)	Communicating (junior cycle – using numbers and data), but otherwise not explicitly covered	Basic competences – mathematics Basic competences – scientific field	Numeracy Science	Languages and texts Technical knowledge and technology
Digital competence	Digital competence	ICT competence	Not explicitly covered	Methods and tools for learning (digital tools)	Communicating (junior cycle – using digital techn. to communicate)	Citizenship and digital creativity	Digital literacy	Information and communication

Key Competences Framework	Estonia	Finland	Flanders	France	Ireland	Italy	Netherlands	Portugal
					Managing information (junior cycle) Information processing (senior cycle)			
Learning to learn	Learning to learn competence	Thinking and learning to learn Multiliteracy (critical thinking and learning skills)	Common trunk (incl. perseverance, explore, open and constructive attitude) Learning to learn	Methods and tools for learning	Being creative (junior cycle) Managing information and thinking (junior cycle) Being personally effective (senior cycle)	Not explicitly covered	Not explicitly covered	Autonomy and personal development
Social and civic competences	Social and citizen competence	Participation, involvement and building a sustainable future Taking care of oneself and managing daily life (incl. well-being, health and safety)	Common trunk (incl. empathy, respect, working together, responsibility, considerateness) Physical health and safety Mental health Socio-relational development Political-legal society Socio-economic society	Personal and citizen development	Managing myself (junior cycle) Staying well (junior cycle) Working with others (junior and senior cycle)	Global citizenship – Wellbeing, correct lifestyle and sport Global citizenship – civics, respect for diversity and active citizenship	Social studies Citizenship	Interpersonal relationships Well-being and health

Key Competences Framework	Estonia	Finland	Flanders	France	Ireland	Italy	Netherlands	Portugal
			Socio-cultural society					
Sense of initiative and entrepreneurship	Entrepreneurship competence	Working life competence and entrepreneurship	Common trunk (initiative)	Not explicitly covered	Being personally effective (senior cycle – initiative)	Entrepreneurship education		
Cultural awareness and expression	Cultural and value competence	Cultural competence, interaction and self-expression	Socio-relational development (cultural and artistic manifestations)	Languages for thinking and communicating (languages of the arts) Representations of the world and human activity	Not explicitly covered	European citizenship Cultural, artistic and landscape heritage Integration and hospitality	Language and culture	Languages and texts Aesthetic and artistic sensibility
Other competences/ skills	Self-management competence	Taking care of oneself and managing daily life (incl. using technology responsibly; consumer and personal finance skills) Working life competence	Common trunk Political-legal society Socio-economic society Socio-cultural society		Critical and creative thinking (senior cycle)	Global citizenship: Food education and territory Environmental education Economic citizenship (economic, consumer, financial literacy)	Interdisciplinary skills: Creativity Critical thinking Problem solving Cooperation	Reasoning and problem solving Critical thinking and creative thinking Awareness and control of the body

2.1 Key competences in Member States frameworks

Among the reviewed frameworks, Member States tend not to distinguish between communication in the **mother tongue and in foreign languages**, but rather focus on “communication” in general. Only the Italian framework makes an explicit distinction between the mother tongue and foreign languages in separate headings. The Finnish and Flemish frameworks do not even explicitly include “languages” as such, but seem to presume that such basic skills are covered (which actually goes for mathematical competence and basic science/technology competences as well). The Dutch framework specifies that the languages which the students should master are Dutch and English.

The approach to **mathematical competence and basic competences in science and technology** is (surprisingly) varied. Whereas some frameworks tend to take a similar approach to the EU reference framework, focusing on basic skills and knowledge (numeracy) – Estonia, Italy, Netherlands – whereas others – France, Ireland, Portugal treat these competences largely as “languages” (the languages of mathematics and science), sometimes making a distinction for technology, which is partially treated as a more hands-on subject.

With respect to **Digital competence**, several frameworks take a similar approach to the EU framework, but with some variation in the terminology used – digital competence, ICT competence, digital literacy, citizenship and digital creativity, whereas several others treat this competence as part of the language/communication area. For instance, France includes digital tools under Methods and tools for learning, and also takes a language approach, including informatics language under Languages for thinking and communicating.

Learning to learn, or methods and tools for learning, is explicitly included in about half the frameworks. In Finland, learning skills are combined with critical thinking into *multiliteracy*, “the competence to interpret, produce and make a value judgement across a variety of different texts which will help the pupils to understand diverse modes of cultural communication and to build their personal identity”. The Italian and Dutch frameworks do not include this competence, whereas Italy covers this competence under “autonomy and personal development”.

Social and civic competences are largely included in all frameworks, but the terminology used varies a lot. Some countries take a straight-forward approach similar to the EU framework: social and citizen competence (Estonia), personal and citizen development (France), whereas this area in most of the other frameworks is spread over several competences/skills. Generally, the competence covers three main aspects:

- “*civic*” in the sense of “citizenship”, with concepts such as “participation, involvement and building a sustainable future” (Finland), political-legal society/socio-economic society/socio-cultural society (Flanders), active citizenship (Italy)
- *social relationships*, including respect for diversity (Italy); empathy, respect, working together, responsibility, considerateness (Flanders), working with others (Ireland), interpersonal relationships (Portugal)
- *physical and mental well-being*, including “taking care of oneself” (Finland), “managing myself” and “staying well” (Ireland)

Sense of initiative and entrepreneurship as a separate competence is only present in a few of the frameworks – Estonia, Italy, Finland (in the latter combined with “working life competence”). Initiative is

a personal skill covered by the “common trunk” in Flanders, whereas the Irish framework refers to “being personally effective”.

Cultural awareness and expression is comprehensively covered in all frameworks, except the Irish. Again, the terminology and the degree to which this is considered as one competence or several, varies. The Estonian and Finnish frameworks refer to it as “cultural and value competence” and “cultural competence, interaction and self-expression”, respectively. In several frameworks, this is linked to language in the broader sense (languages of the arts, language and culture), and also to representations of the world and human activity (France), and aesthetic and artistic sensibility (Portugal).

Finally, a specific competence which should be mentioned is **financial literacy**, which is not part of the European framework. This is covered under the Finnish framework as consumer skills and personal finance skills, while the Italian framework specifically mentions financial literacy.

2.2 Transversal skills in Member States frameworks

In addition to the eight key competences in the European Key Competences Framework, transversal themes or skills are applied throughout the Reference Framework. The transversal skills play a role across all eight key competences and are: critical thinking, creativity, initiative, problem solving, risk assessment, decision taking, and constructive management of feelings.

Many of these skills, and other transversal skills, are also present in Member States frameworks.

Critical and creative thinking is the most pervasive of these. It is explicitly mentioned as a skill or competence in the frameworks of Ireland, Netherlands and Portugal, but is generally covered in most of the frameworks (for instance in relation to learning to learn-type competences). **Reasoning** and **problem solving** is similarly quite widely included. **Self-management** in various forms is also included in several frameworks, either as a separate skill or as part of social and civic competences (cf. above). **Working life competence** could also be considered as a transversal skill, or it could be included in one of the other competences (combined with entrepreneurship, as in the Finnish framework). The Dutch framework includes **cooperation** as an interdisciplinary skill, but this aspect is also covered under social and civic competences in several frameworks. **Initiative** may also be seen as a transversal skill which may or may not be linked directly to entrepreneurship.

2.3 Key competences in VET

Whereas the frameworks that were analysed above mostly deal with primary and secondary education, key competences for lifelong learning naturally play a role in continuing education, such as VET. The table below summarises how key competences are included in the VET frameworks of the Member States selected for this analysis⁷, based on Cedefop country reports (see reference below the table).

⁷ With the exception of Italy, for which a country report is not available.

Table 2-2 Key competences in vocational education and training (Cedefop)

Member State	Highlights of Key Competences in VET
Estonia	<p>Key competences are defined as general education studies within VET. The key competences that are essential to each programme (speciality) in VET are described in national VET curricula as modules. For example, language and literature, mathematics, foreign language, natural science subjects, social subjects, and entrepreneurship are all separate modules within the VET curricula. The key competences that are integrated in all vocational specialties are: learning to learn, digital competence, civic competence, sense of initiative and entrepreneurship and cultural awareness.</p> <p>The volume of key competences varies by VET programme.</p>
Finland	<p>Key competences for lifelong learning has been fully taken into consideration in upper secondary VET provision.</p> <p>Upper-secondary VET is made of three components: vocational units, common units and free-choice units. Key competences have been nationally adapted and included in the common units which can be divided into four categories that are compulsory for all VET programmes. The common units are: communication and interaction competence, mathematical and natural science competence, social and labour market competence, and social and cultural competence.</p> <p>The competences are included in the objectives of core subjects and the requirements of vocational qualification modules and their assessment criteria.</p>
Belgium	<p>In Belgium, key competences are central to compulsory education from age 6 to 18, including initial VET. Most of the key competences have been taken into consideration in upper secondary VET provision with the exception of learning to learn, and cultural awareness and expression.</p> <p>In general, learning to learn is seldom taken into account in education policies in Belgium. Cultural awareness and expression competences are not promoted in upper secondary VET in Belgium.</p>
France	<p>VET programmes consist of vocational and general (e.g. French, history, geography and civic education, mathematics, a modern foreign language, etc.) courses. The key competences are included in the general courses that are defined (syllabi) and examined nationally.</p> <p>All of the eight key competences have been taken into consideration in upper secondary VET provision.</p>
Ireland	<p>The role of key competences in education and training in Ireland is not confined to the VET sector alone. All legislation and policy documents deal with key competences across a range of levels and programme types (e.g. NFQ levels and VET, general or mixed programmes). As a result, the role of key competences in VET programmes is implicit rather than explicit: because many of the qualifications awarded to those completing further education and training programmes call for minimum achievement in most of the eight key competences, the courses will inevitably include at least some of the key competences.</p>
The Netherlands	<p>All eight key competences can be found in the initial VET curricula, albeit not under a separate heading or in a standardised form.</p> <p>Since 2012, English and math have been compulsory subjects in VET at level 4 [the highest of the four qualification levels], even if they are not a part of occupational profile. Competences in science and technology are included only if mastering of</p>

Member State	Highlights of Key Competences in VET
	<p>these subjects is required by the occupational standards (national qualifications framework). The same is true for digital competence.</p> <p>VET law states that vocational training has to support occupational career, citizenship and further learning, hence, learning-to-learn and interpersonal, intercultural and social competences as well as civic competence are compulsory elements of all VET curricula since the 1996 VET law.</p> <p>Entrepreneurship is also promoted in VET but it is compulsory only for some VET programmes, for example in retail. Cultural expression is not a compulsory subject in VET, except for programmes preparing for occupations in the cultural sector (for example, design, artist, audio-visual productions).</p>
Portugal	<p>Most key competences, as defined in the 2006 EU framework, are implicitly present in VET curricula. Mother tongue, foreign languages, maths, science, technology, digital competences are called differently. Other competences such as learning to learn, social and civic competences, entrepreneurship, and cultural awareness and expression may be considered as partially included in curricula of some VET programmes, especially those for young people.</p> <p>Upper secondary VET for young people lack national regulations with clear rules for implementation of the eight key competences. Nevertheless, most of them are acquired through the subjects. Key competences for adults in upper secondary VET are also part of the curricula. However, they do not include all eight key competences.</p>

Source: Excerpts from country reports on “Key competences in vocational education and training”, Cedefop 2016, <http://www.cedefop.europa.eu/en/publications-and-resources/country-reports/key-competences-in-vet>

Generally, key competences are included in VET education in these Member States, often with direct reference to the EU reference framework. In several Member States, for instance Estonia and Finland, all of the eight EU key competences are taken into consideration in the VET curricula. However, in some Member States there are exceptions where specific competences (particularly cultural awareness and expression) are not included. In some countries, the inclusion of competences depends on the occupational qualifications that the students are required to gain – for instance, in the Netherlands, competences in science and technology and digital competence are not always included.

3.0 Comparative analysis - international frameworks

The international frameworks are more diverse than the Member States frameworks, and take very different approaches. The **OECD Key Competencies** (DeSeCo) framework focuses on three very broad categories of competences, and reflectiveness (reflective thought and action) is a key term which is emphasized as being at the heart of the competences. This is supplemented by the OECD Global Competency framework, which aims to provide a starting point for the PISA 2018 assessment. One of the new elements in this framework (with regards to assessment) is the emphasis on attitudes and values.

The **P21 framework** (Partnership for 21st century learning) is a US framework which is considered by some experts as setting the standard for key competence frameworks internationally. It is a very comprehensive framework which describes the skills, knowledge and expertise that students must master in work and life; it is a blend of content, knowledge, specific skills, expertise and literacies.

Whereas both the Member State frameworks and the international frameworks tend to take a holistic view of competences, the **WEF framework** is the one that is most clearly aimed at the skills needed in a future labour market – “the 21st century marketplace”. In addition to foundational literacies and competences, it stresses a number of essential character qualities such as initiative, curiosity and leadership.

The **Council of Europe** Framework is also aimed at a specific area e.g. competences necessary for democratic culture. This framework describes the competences needed to participate effectively in a culture of democracy and to live peacefully together with others in culturally diverse democratic societies.

The **UNESCO** Intercultural Competences Framework is similar to The Council of Europe Framework in the sense that it also assesses the competences needed to live in a globalised world that moves people of different cultural backgrounds closer together. The framework is visually conceptualized by ‘The Intercultural Competences Tree⁸. The roots of the tree are the intercultural competences which are a blend of communicative competences (language, dialogue and nonverbal behaviour) and cultural competences (identity, values, attitudes and beliefs). Key to the framework is that none of the intercultural competences can stand alone; rather, they must be considered in relation to one another as a set.

In the table on the following pages, an overall comparison between the international frameworks and the EU Key Competences Framework is provided. Following that, we shall discuss in more detail the approaches to key competences, and to transversal skills, in the international frameworks.

⁸ See Intercultural Competences: Conceptual and Operational Framework, UNESCO 2013, <http://unesdoc.unesco.org/images/0021/002197/219768e.pdf>, p. 23

Table 3-1 Comparison of international frameworks with the Key Competences Framework

Key Competences Framework	OECD Key Competencies	OECD Global Competency	Council of Europe Competences for Democratic Culture	WEF 21 st Century Skills	P21 Partnership for 21 st century learning	UNESCO Intercultural Competences. Conceptual and Operational Framework. ⁹
Communication in the mother tongue	The ability to use language, symbols and texts interactively	Ability to interact respectfully, appropriately and effectively	Linguistic, communicative and plurilingual skills Knowledge and critical understanding of language and communication	Literacy Communication	Key subjects: English, world languages, arts, mathematics, economics, science, geography, history, government and civics. Communication and collaboration	Communicative competence Language
Communication in foreign languages	The ability to use language, symbols and texts interactively	Ability to interact respectfully, appropriately and effectively	Linguistic, communicative and plurilingual skills Knowledge and critical understanding of language and communication	Literacy Communication	Key subjects: English, world languages, arts, mathematics, economics, science, geography, government and civics. Communication and collaboration	Communicative competence Language

⁹ The UNESCO Intercultural Competences Framework provides two broad sets of competences, culture and communication. Each set of competences are made up of several concepts. These concepts do not stand alone, rather they should be understood in relation to one another. In the table, we attempted to place as many of the concepts as possible, but some are left out (these can be seen in the table of the UNESCO Framework in the Annex).

Key Competences Framework	OECD Key Competencies	OECD Global Competency	Council of Europe Competences for Democratic Culture	WEF 21 st Century Skills	P21 Partnership for 21 st century learning	UNESCO Intercultural Competences. Conceptual and Operational Framework. ⁹
Mathematical competence and basic competences in science and technology	The ability to use technology interactively	Not applicable	Not applicable	Numeracy Scientific literacy	Key subjects: English, world languages, arts, mathematics, economics, science, geography, history, government and civics.	Not applicable
Digital competence	The ability to use technology interactively	Not applicable	Not applicable	ICT Literacy	Information literacy Media Literacy ICT Literacy	Not applicable
Learning to learn	The ability to use knowledge and information interactively	Analytical and critical thinking	Autonomous learning skills Analytical and critical thinking skills	Critical thinking/problem solving	Critical thinking and problem solving	Not applicable
Social and civic competences	The ability to relate well to others The ability to co-operate and work in teams The ability to manage and resolve conflicts	Knowledge and understanding of global issues Ability to interact respectfully, appropriately and effectively Global-mindedness	Co-operation skills Conflict-resolution skills Valuing democracy, justice, fairness, equality and the rule of law	Cultural and civic literacy Social and cultural awareness Collaboration	Key subjects: English, world languages, arts, mathematics, economics, science, geography, history, government and civics.	Dialogue

Key Competences Framework	OECD Key Competencies	OECD Global Competency	Council of Europe Competences for Democratic Culture	WEF 21 st Century Skills	P21 Partnership for 21 st century learning	UNESCO Intercultural Competences. Conceptual and Operational Framework. ⁹
	The ability to defend and assert rights, interests, limits and needs		Civic-mindedness Knowledge and critical understanding of the world		Global awareness Civic Literacy Communication and collaboration Social and cross-cultural skills	
Sense of initiative and entrepreneurship	The ability to form and conduct life plans and personal projects	Not applicable	Self-efficacy	Creativity Leadership	Financial, Economic, Business and Entrepreneurial Literacy Creativity and innovation Initiative and self-direction Leadership and responsibility	Creativity
Cultural awareness and expression	Not applicable	Intercultural knowledge and understanding Openness towards people from other cultures Respect for cultural otherness	Valuing cultural diversity Openness to cultural otherness and to other beliefs, world views and practices	Curiosity Social and cultural awareness	Social and cross-cultural skills	Intercultural citizenship Intercultural competences Intercultural dialogue Intercultural literacy Cultural shifting: The cognitive and

Key Competences Framework	OECD Key Competencies	OECD Global Competency	Council of Europe Competences for Democratic Culture	WEF 21 st Century Skills	P21 Partnership for 21 st century learning	UNESCO Intercultural Competences. Conceptual and Operational Framework. ⁹
			Knowledge and critical understanding of the world			behavioural capacity of an interculturally competent person to shift or switch language, behaviour or gestures.
Other competences/ skills	The ability to act within the big picture	Empathy Flexibility Responsibility	Flexibility and adaptability Empathy Responsibility Respect Skills of listening and observing Valuing human dignity and human rights Tolerance of ambiguity Knowledge and critical understanding of the self	Financial literacy Persistence/grit Adaptability	Financial, Economic, Business and Entrepreneurial Literacy Health Literacy Environmental Literacy Flexibility and adaptability Productivity and accountability Leadership and responsibility	Values, beliefs and attitudes. Reflexivity: The ability to step outside one's own experiences in order to reflect consciously upon them, considering what is happening, what it means, and how to respond. Liquidity: Liquidity proposes a state of near constant change, with consequences for the ability of individuals to cope with change.

3.1 Key competences in the international frameworks

The international frameworks address many of the same key competences as are found in the European Reference Framework. **Communication in the mother tongue** and **communication in foreign languages** are cross-cutting competences found in all of the international frameworks. The P21 Framework calls these competences “key subjects” and the WEF Framework refers to them as “foundational literacies”. The COE Framework and The OECD Key Competencies Framework use very similar terminology i.e. “skills” and “competences to use tools e.g. language, symbols and texts interactively”, and the UNESCO Framework mentions “communication competences”.

Mathematical competence and basic competences in science and technology, or elements thereof, are included in three of the frameworks, OECD DeSeCo, WEF and P21. Like the communication competences, they are also seen as key subjects / foundational literacies.

Digital competence is found in the same three international frameworks. The term “ICT literacy” is used in the WEF Framework as well as the P21 Framework, and the OECD Framework addresses “the ability to use technology interactively”.

Social and civic competences are also found in all of the international frameworks using terms such as “civic literacy” and “civic-mindedness”. Other frameworks address civic competence as “valuing human dignity and human rights”, and “valuing democracy, justice, fairness, equality and the rule of law”. This is the case with the OECD Global Competency Framework and the COE Competences of Democratic Culture Framework.

The WEF Framework merges “cultural and civic literacy” into one 21st century skill while most of the other international frameworks address **cultural awareness and expression** as a separate set of skills and attitudes towards cultural otherness i.e. “openness towards people from other cultures” and “respect for cultural otherness”.

Learning to learn is the ability to pursue and persist in learning and to organise one’s own learning. This competence is also found in the P21 Framework and in the COE Framework. The terms used in these frameworks are “autonomous learning skills” and “being a self-directed learner”.

Finally, the competence of **initiative and entrepreneurship** is addressed most thoroughly by the P21 Framework. This framework describes “business and entrepreneurial literacy” as one of the key 21st century interdisciplinary themes (among global awareness, civic literacy, health literacy, and environmental literacy). The WEF Framework also mentions “initiative” and “curiosity” as two important character qualities of 21st century learners.

The international frameworks address a few additional key competences which are not found in the European Reference Framework. **Financial literacy** is found in both the WEF Framework and the P21 Framework. The WEF Framework sees financial literacy as one of six foundational literacies and describes it as the ability to understand and apply conceptual and numerical aspects of finance in practice. In a similar way, the P21 Framework states that financial literacy is essential for all students in the 21st century.

The P21 Framework includes two additional literacies, neither of which are found in the EU reference Framework; **health literacy and environmental literacy**. Both of these literacies have to do with the ability to understand central 21st century themes and to act in ways that enhance health and address environmental challenges. Environmental literacy is related to **the ability to act within the big picture**

which is addressed by the OECD Key Competencies Framework. This competence requires individuals to understand and consider the wider context of their actions and decisions.

Finally, **skills of listening and observing** are found in two of the international frameworks; the WEF Framework and the UNESCO Framework. This skill has to do with the ability to notice and understand what is being said and how it is being said, and to notice and understand people's non-verbal behaviour.

3.2 Transversal skills in the international frameworks

As mentioned above, the transversal skills included in the European framework are: critical thinking, creativity, initiative, problem solving, risk assessment, decision taking, and constructive management of feelings.

All of the identified international competences frameworks address transversal skills, however to different extents. The OECD Global Competency Framework, the P21 Framework, the WEF Framework and the COE Framework contain many of the transversal skills, whereas the OECD Key Competencies Framework and the UNESCO Intercultural Competences Framework cover only a few of the transversal elements.

Critical thinking is the transversal skill that is found in most of the international frameworks. In some of the international frameworks the exact same wording is used, whereas in others the term "analytical" is added to critical thinking. The OECD Key Competencies Framework uses the term "reflectiveness" to describe reflective thought and action which is an underlying part of the entire framework.

Creativity is found in two of the international frameworks (the P21 Framework and the WEF Framework) and in both cases the same term is used. The P21 Framework adds "innovation" to this transversal skill which is described as the ability to think creatively, work creatively with others and implement innovations.

The third transversal skill is **initiative** which is also addressed by two of the international frameworks. The WEF Framework uses the same terminology and the P21 Framework uses the term "entrepreneurial literacy" to describe the skills needed to enhance workplace productivity and career options.

The OECD Global Competency Framework, the P21 Framework and the WEF Framework all use the same terminology when addressing **problem solving** as a transversal skill. In the COE Framework and the OECD Key Competencies Framework, problem solving is related to management and resolution of conflicts.

Whereas problem solving is a transversal skill found in most of the international frameworks, **risk management** or related terminology is not found in any of the frameworks identified for this analysis.

Decision taking as a transversal skill is found in several of the international frameworks; however, they use somewhat different terminology to describe this skill. The OECD Global Competency Framework uses the term "make judgements and decisions", while the P21 and WEF frameworks talk of "leadership".

The last transversal skill is **constructive management of feelings**. A few of the international frameworks use the term "empathy", however, it is difficult to assess whether this is the same skill. The OECD Framework on Key Competencies describes this competence as the ability to relate well to others, which requires empathy as well as effective management of emotions.

Cooperation skills are not part of the EU Reference Framework on Key Competences; however, this transversal skill is addressed in most of the identified international frameworks. In the WEF Framework this competence is described by the term “collaboration” and it is seen as one of the main competences that enable students to approach complex challenges. The P21 Framework uses the same term when describing the ability to work effectively and respectfully with diverse teams, and the OECD Global Competency Framework addresses the ability to interact respectfully, appropriately and effectively with others. Finally, the COE Framework as well as the OECD Key Competencies Framework mention the ability to cooperate well with others.

Another transversal skill addressed by most of the international frameworks is **flexibility and adaptability**. The UNESCO Framework uses the term “liquidity” to describe the fluid nature of modern life which implies change as a central element of human experience. Liquidity proposes a state of near constant change, with consequences for the ability of individuals to cope with change¹⁰, that is, flexibility and adaptability. These terms are found in the WEF Framework, the COE Framework, the P21 Framework and the OECD Global Competency Framework, but not in the EU Reference Framework on Key Competences.

¹⁰ UNESCO (2013), Intercultural Competences – Conceptual and Operational Framework.

Annex 1: Detailed descriptions of reviewed key competence frameworks – Member States

Annex 1.a Estonia

Source: National curriculum for basic schools. 2011, last amendment 29 August 2014

Competences	Descriptors/components
Cultural and value competence	Ability <ul style="list-style-type: none"> • to evaluate human relations and activities from the standpoint of generally accepted moral norms • to sense and value one's ties with other people, the society, nature, the cultural heritage of one's own country and nation and those of others, and event in contemporary culture • to value creation and shape the sense of aesthetics • to value general human and societal values • to value human, cultural and natural diversity • to acknowledge one's values
Social and citizen competence	Ability <ul style="list-style-type: none"> • to become self-actualized • to function as an active, aware, helpful and responsible citizen and to support the democratic development of society • to know and follow values and standards in society • to respect the rules of various environments and societal diversity, the particularities of religions and nations • to engage in cooperation with other people in different situations • to accept differences in people and their values and to take them into account in interacting with people
Self-management competence	Ability <ul style="list-style-type: none"> • to understand and evaluate oneself, one's weaknesses and strengths • to analyse one's behaviour in different situations • to behave safely and adhere to healthful lifestyles • to solve communication problems

Competences	Descriptors/components
Learning to learn competence	<p>Ability</p> <ul style="list-style-type: none"> • to organise the learning environment individually and in a group, and to procure the information needed for learning, hobbies, health behaviour and career choices • to plan studies and follow the plan; to use the outcome of the learning in different situations and for solving problems • to associate acquired knowledge with what has been learned before • to analyse one's knowledge and skills, motivation and self-confidence and on that basis, the need for further learning
Communication competence	<p>Ability</p> <ul style="list-style-type: none"> • to clearly, relevantly and politely express oneself in both one's mother tongue and foreign languages, taking into account situations and understanding partners in communication and the safety of communication • to introduce oneself, present and justify one's positions • to read, make a difference between and understand informative texts and fiction • to write different types of texts, using appropriate referencing, linguistic devices and a suitable style • to prioritise correct use of language and rich expressive language and style of communication based on mutual agreement
Mathematics, natural sciences and technology competence	<p>Ability</p> <ul style="list-style-type: none"> • to use the language, symbols and methods characteristic of mathematical applications in school and everyday life • to describe the surrounding world with the help of natural science models and measurement tools and to make decisions based on evidence • to understand the importance and limitations of natural sciences and technology • to use new technologies purposefully
Entrepreneurship competence	<p>Ability</p> <ul style="list-style-type: none"> • to create ideas and implement them, using the acquired knowledge and skills in different areas of life and activity • to see problems and the opportunities that lie within them, to contribute to solving problems • to set goals and carry them out, to make plans, introduce and execute them • to organise joint activities and take part in them, to show initiative and take responsibility for the results • to react creatively, innovatively and flexibility to changes • to take judicious risks

Competences	Descriptors/components
Digital competence	<p data-bbox="465 240 544 268">Ability</p> <ul data-bbox="477 280 2051 576" style="list-style-type: none"><li data-bbox="477 280 2051 347">• to use developing digital technology for coping in a quickly changing society for learning, acting as a citizen as well as communicating in communities<li data-bbox="477 355 2051 383">• to use digital means for finding and preserving information and to evaluate the relevance and trustworthiness of the information<li data-bbox="477 391 2051 418">• to participate in creating digital content; including creation and use of texts, images, multimedia<li data-bbox="477 426 2051 453">• to use suitable digital tools and methods for solving problems, to communicate and cooperate in different digital environments<li data-bbox="477 461 2051 528">• to be aware of the dangers of the digital environment and know how to protect one's privacy, personal information and digital identity<li data-bbox="477 536 2051 563">• to follow the same moral and value principles as in everyday life

Annex 1.b Finland

Source: National Core Curriculum for Basic Education 2014. Finnish National Board of Education

Competences	Descriptors/components	Further description (selected/extract)
Thinking and learning to learn	Thinking and learning skills underlie the development of other competences and lifelong learning.	
	<ul style="list-style-type: none"> Trusting oneself 	The students are encouraged to trust themselves and their views while being open to new solutions.
	<ul style="list-style-type: none"> Consider things from different viewpoints and seeking new information 	The students are guided to consider things from different viewpoints, to seek new information and to use it as a basis for reviewing the way they think. Space is given for their questions, and they are encouraged to look for new answers and to listen to the views of others while also reflecting on their personal inner knowledge.
	<ul style="list-style-type: none"> To use information independently and in interaction with others 	The students are guided to use information independently and in interaction with others for problem-solving, argumentation, reasoning, drawing of conclusions and intervention.
	<ul style="list-style-type: none"> Analyse the topic being discussed critically from different viewpoints 	The students learn to see alternatives and combine perspectives open-mindedly and are able to think outside the box. Capabilities for systematic and ethical thinking develop gradually as the pupils learn to perceive the interactive relationships and interconnections between things and to understand complex issues.
	<ul style="list-style-type: none"> Recognising personal way of learning and developing learning strategies 	The learning-to-learn skills are improved as the pupils are guided to set goals, plan their work, assess their progress and, in an age-appropriate manner, use technological and other tools in learning
Cultural competence, interaction and self-expression	The students are growing up in a world where cultural, linguistic, religious and philosophical diversity is part of life.	
	<ul style="list-style-type: none"> Recognising and appreciating cultural meanings 	Students in basic education are guided in recognising and appreciating cultural meanings in their environment and building a personal cultural identity and a positive relationship with the environment.

Competences	Descriptors/components	Further description (selected/extract)
	<ul style="list-style-type: none"> Consider cultural diversity as a fundamentally positive resource 	<p>The students are guided to consider diversity as a fundamentally positive resource. They are also supported to recognise how cultures, religions and philosophies exert influence in society and daily life and how the media shapes the culture, and also to consider what is unacceptable as a violation of human rights.</p>
	<ul style="list-style-type: none"> Communicate, modify and create culture and traditions and to understand their significance for well-being 	
	<ul style="list-style-type: none"> Expressing their opinions constructively and acting ethically 	<p>The students are guided in putting themselves in the place of another person and examining issues and situations from different viewpoints. Respectful and trusting attitudes towards other groups of people and peoples are reinforced in all activities, also by the means of international cooperation.</p>
	<ul style="list-style-type: none"> Develop social skills and learn to express themselves in different ways 	<p>Education learn the students to present and perform publicly in various situations and supports the student's development as versatile and skilful users of language, both in their mother tongue and in other languages.</p>
	<ul style="list-style-type: none"> Learn mathematical symbols, images and other visual expression, drama and music, and movement as means of action and expressions 	
	<ul style="list-style-type: none"> Use their bodies to express emotions, views, thoughts and ideas 	<p>School work encourages the use of imagination and creativity. The students are guided to act in a manner that promotes aesthetic values in their environment and to enjoy their various manifestations.</p>
<p>Taking care of oneself and managing daily life</p>	<p>Managing daily life requires an increasingly wide range of skills.</p>	<p>This area covers health, safety and human relationships, mobility and transport, acting in increasingly technological daily life, and managing personal finance and consumption. Basic education encourages the students to think positively about their future.</p>
	<ul style="list-style-type: none"> Understand that everyone influences both their own and other people's well-being, health and safety 	<p>The students are encouraged to take care of themselves and others, to practise skills that are important for managing their daily lives and to work for the well-being of their environment.</p>

Competences	Descriptors/components	Further description (selected/extract)
	<ul style="list-style-type: none"> Assume responsibility for their own and shared work and actions and develop their emotional and social skills 	The students grow to appreciate the importance of human relationships and caring for others. They also learn time management.
	<ul style="list-style-type: none"> Looking after their own and others safety 	The students are giving opportunities to practise looking after their own safety and that of others in various situations, also in traffic. They are taught to recognise key symbols related to safety, to protect their privacy and to set personal boundaries.
	<ul style="list-style-type: none"> Basic information about technology and using technology responsibly 	The versatility of technology is examined, and the students are guided to understand its operating principles and cost formation.
	<ul style="list-style-type: none"> Developing consumer skills and capabilities for managing and planning personal finance 	They receive guidance in acting as consumers, examining advertising critically, knowing their rights and responsibilities and using them ethically.
Multiliteracy	Multiliteracy is the competence to interpret, produce and make a value judgement across a variety of different texts which will help the pupils to understand diverse modes of cultural communication and to build their personal identity.	
	<ul style="list-style-type: none"> Interpret the world around them and to perceive its cultural diversity 	Multiliteracy means the ability to obtain, combine, modify, produce, present and evaluate information in different modes, in different contexts and situations, and by using various tools
	<ul style="list-style-type: none"> Critical thinking and learning skills 	While developing it, the students discuss and reflect ethical and aesthetic questions. The students must have opportunities to practise their skills both in traditional learning environments and in digital environments that exploit technology and media in different ways.
	<ul style="list-style-type: none"> Enjoying different kind of texts 	In different learning situations, the students use, interpret and produce different types of texts both alone and together.
ICT Competence	Competence in information and communication technology (ICT) is an important civic skill both in itself and as part of	

Competences	Descriptors/components	Further description (selected/extract)
	<p data-bbox="483 236 1037 304">multiliteracy. The students develop their ICT competence in four main areas:</p> <ul data-bbox="483 312 1037 667" style="list-style-type: none"> <li data-bbox="483 312 1037 427">• Understanding the principle of using ICT and its operating principle and key concepts <li data-bbox="483 435 1037 504">• Using ICT responsibly, safely and ergonomically <li data-bbox="483 512 1037 580">• Using ICT in information management and in exploratory and creative work <li data-bbox="483 588 1037 667">• Gather experience of and practise using ICT in interaction and networking 	<p data-bbox="1048 312 2056 347">Supported to develop their practical ICT competence in producing their own work</p>
Working life competence and entrepreneurship	<p data-bbox="483 675 1037 815">Working life, occupations and the nature of work are changing as a consequence of such drivers as technological advancement and globalisation of the economy</p> <ul data-bbox="483 823 1037 1385" style="list-style-type: none"> <li data-bbox="483 823 1037 892">• Introduction to working life <li data-bbox="483 900 1037 1040">• Gather experiences of working and collaborating with actors outside the school <li data-bbox="483 1048 1037 1117">• Learn team work, project work and networking <li data-bbox="483 1125 1037 1265">• Practise working independently and together with others and acting systematically and over a long time span <li data-bbox="483 1273 1037 1385">• Grasp new opportunities with an open mind and to act flexibly and creatively when faced with change 	<p data-bbox="1048 895 2056 1035">The students practise appropriate conduct required in working life and collaboration skills and understand the importance of language and interaction skills. They get acquainted with skills in employing oneself, entrepreneurship, risk assessment and controlled risk-taking through various projects.</p> <p data-bbox="1048 1125 2056 1265">In shared tasks, each student can perceive his or her own work as part of the whole. They also learn about reciprocity and striving for a common goal. At the same time they learn to anticipate any difficulties that they may encounter in the work and to face failure and disappointments.</p> <p data-bbox="1048 1278 2056 1347">They are guided to take initiative and to look for various options. The students are supported in identifying their vocational interests and making reasoned choices</p>

Competences	Descriptors/components	Further description (selected/extract)
Participation, involvement and building a sustainable future	Participation in civic activity is a basic precondition for an effective democracy.	regarding further studies from their own starting points, conscious of the impacts of traditional gender roles and other role models.
	<ul style="list-style-type: none"> <li data-bbox="472 395 1037 475">• Interest in school community and society 	
	<ul style="list-style-type: none"> <li data-bbox="472 395 1037 619">• Learn to assess the impacts of media and to exploit the potential it offers 	The students take part in planning, implementing, assessing and evaluating their own learning, joint school work and the learning environment. They gather knowledge and experiences of the systems and methods for participation and involvement in civic society and communal work outside the school. The students understand the significance of protecting the environment through their personal relationship with nature.
	<ul style="list-style-type: none"> <li data-bbox="472 619 1037 699">• Learn about involvement, decision-making and responsibility 	
	<ul style="list-style-type: none"> <li data-bbox="472 699 1037 778">• Understand the significance of rules, agreements and trust 	
	<ul style="list-style-type: none"> <li data-bbox="472 778 1037 858">• Learn to express their views constructively 	
	<ul style="list-style-type: none"> <li data-bbox="472 858 1037 938">• Learn to work together 	The students are offered opportunities to practise negotiation skills, arbitration and conflict resolution as well as critical examination of issues.
	<ul style="list-style-type: none"> <li data-bbox="472 938 1037 1018">• Consider proposals from the perspective of equality of the different parties, fair treatment and a sustainable way of living <li data-bbox="472 1018 1037 1230">• Consider links between the past, the present and the future and reflect various alternative futures 	They are guided to understand the significance of their choices, way of living and actions not only to themselves but also to their local environment, society and nature.

Annex 1.c Flanders

Source: Cross-curricular final objectives – secondary education – 2010

Competences	Descriptors/components	Further description (selected/extract)
Common trunk	Communicative ability	Pupils bring important aspects of communication into practice.
	Creativity	Pupils can develop original ideas and solutions and put them into action. Pupils take steps themselves to implement innovation.
	Perseverance	Pupils strive to reach a goal, despite difficulties.
	Empathy	Pupils take into account the situation, views, and emotions of others.
	Aesthetic ability	Pupils can experience beauty and create beauty.
	Explore	Pupils make use of learning opportunities in diverse situations.
	Flexibility	Pupils are willing to adapt to changing demands and circumstances.
	Initiative	Pupils engage themselves spontaneously.
	Critical thinking	Pupils can bring up for discussion data, actions and reasoning based on relevant criteria. Pupils are capable of weighing alternatives in making a conscious choice. Pupils can look at subjects from different angles.
	Media wisdom	Pupils are alert in dealing with media and participate thoughtfully in public life through media.
	Open and constructive attitude	Pupils consider their own development and those of others in society and the world. Pupils assess their own opinion about social occurrences and trends with reference to various points of view.
	Respect	Pupils behave respectfully.
	Work together	Pupils actively contribute to realizing common targets.
	Responsibility	Pupils take responsibility for their own actions, in relationships with others and with reference to the society.
	Self-image	Pupils gain an insight in their strengths and weaknesses. Pupils develop an identity as an authentic individual, belonging to different social groups.
	Self-reliance	Pupils appeal to social services and institutions. Pupils use the appropriate channels to express their questions, problems, ideas or opinions.
Meticulousness	Pupils require quality of their own work and that of others.	
Considerateness	Pupils deal with diversity and take care of their own future and that of others.	

Competences	Descriptors/components	Further description (selected/extract)
Physical health and safety		<p>The pupils:</p> <ul style="list-style-type: none"> • take care of themselves and behave hygienically; • get to know their own body and react adequately to the body's signals; • find a balance between work, free time, rest and exercise; • adopt an ergonomic and varied standing, sitting, working and lifting posture; • make healthy choices for their daily diet; • use guidelines for dealing with food hygienically; • make time for daily exercise; • assess the risks and consequences of stimulants and medication and react assertively to supply; • take precautions against hazardous physical contact; • participate in health and safety policy at school; • apply safety guidelines and take precautions for a safe living and working environment; • call for help and administer first aid and cpr; • apply the traffic rules; • use their own and public transportation in a safe way; • realise that social phenomena have an impact on safety and health.
Mental health		<p>The pupils:</p> <ul style="list-style-type: none"> • Cope with work load and stressful situations; • deal appropriately with joy and grief, fear, anger, loss and mourning; • recognise problem situations and ask for, accept and offer assistance; • accept and deal with their sexual development and changes in puberty; • can express themselves about and deal respectfully with friendship, being in love, sexual identity and orientation, sexual feelings and behaviour; • act assertively; • use images, music, drama or media to express themselves; • recognise the impact of cultural and art appreciation on their own emotions and behaviour and that of others.
Socio-relational development		<p>The pupils:</p> <ul style="list-style-type: none"> • can build, maintain and end a relationship; • recognise the existence of power relations and the importance of equality, agreements and rules in relationships;

Competences	Descriptors/components	Further description (selected/extract)
		<ul style="list-style-type: none"> • accept differences and value respect and caring within a relationship; • can admit to be in the wrong and apologise; • act discretely in situations that require discretion; • expose prejudices, stereotyping, inappropriate influencing and abuse of power; • discuss views on medical, psychic, and social aspects of forms cohabitation, safe sex, family planning, pregnancy and abortion; • express uninhibitedly and constructively their wishes and feelings within relationships and set and accept boundaries therein; • search for constructive solutions for conflicts; • argue, in dialogue with others, the dynamics of their preference for certain cultural and artistic manifestations; • use cultural and artistic manifestations to understand the world of others.
Environment and sustainable development		<p>The pupils:</p> <ul style="list-style-type: none"> • participate in environmental policy and care measure at school; • recognise in problems of sustainability the intertwining of economic, social, and ecologic aspects and recognise the influence of technology and policy; • search for possibilities to use space, resources, goods, energy and transportation in a sustainable way themselves; • search for sustainable solutions to influence and improve the local and global environment; • show interest and express their appreciation for nature, landscape and cultural heritage; • sense the value of experiencing and enjoying nature.

Competences	Descriptors/components	Further description (selected/extract)
Political-legal society		<p>The pupils:</p> <ul style="list-style-type: none"> • indicate how they can participate in the process of decision making and the construction of society; • apply participation, involvement and decision making in real school situations; • show the importance and dynamic character of human rights and children's rights; • devote themselves actively to their own rights and those of others; • indicate that living together in a democratic constitutional state is based on both rights <i>and</i> duties that hold for citizens, organisations and the government; • recognise the role of control and balance between the legislative, executive and judicial power in our democratic order; • illustrate the role of the media and organisations in the functioning of our democratic order; • discern the main outlines of the federal Belgian state structure; • compare living together in our democratic order to living together in other forms of government; • illustrate how democratic policy pursues the common good and takes into account ideas, views and interests of various parties concerned; • can explain the meaning of European cooperation, policy and institutions for their own world; • show the importance of international organisations and institutions; • illustrate how globalisation entails benefits, problems and conflicts.
Socio-economic society		<p>The pupils:</p> <ul style="list-style-type: none"> • explain with examples how prosperity is created and how a government obtains and uses income; • compare their own views to the various views on welfare and the division of wealth; • dedicate themselves to improving well-being and welfare in the world; • in buying goods and using services consider price – quality and sustainable development as well as consumer rights; • give examples of the changeable character of labour and economic activity; • give examples of factors influencing the value of goods and services • can manage their own budget and personal administration; • indicate characteristics, possible causes and consequences of poverty; • explain the role of companies, employers' federations and trade unions in a national and international context.

Competences	Descriptors/components	Further description (selected/extract)
Socio-cultural society		<p>The pupils:</p> <ul style="list-style-type: none"> • describe the dynamic in ways of living and interacting, opinions, values and standards in their own and other social and cultural groups; • constructively deal with differences between people and philosophies of life; • illustrate the importance of social cohesion and solidarity; • learn from historic and present-day examples of intolerance, racism and xenophobia; • give examples of the potentially constructive and destructive role of conflicts; • actively deal with the culture and art that surround them; • illustrate the mutual influence of art, culture and technology, of politics, economics, science and philosophy of life.
Learning to learn	Views on learning	The pupils work systematically. The pupils choose their learning strategies in view of the aims they have to achieve.
	Acquiring information	The pupils can select and consult different information sources and channels in view of the aims they have to achieve.
	Processing information	The pupils can functionally apply processed information across subjects and in various situations. The pupils can summarize information.
	Solving problems	<p>The pupils can, based on hypotheses and expectations, realistically assess and execute possible ways of problem solving.</p> <p>The pupils evaluate selected ways of problem solving and the solution itself and search for an alternative if necessary.</p>
	Regulating the learning process	<p>The Pupils can make a realistic long-term workplan.</p> <p>The pupils direct their learning process, assess its purposiveness and adapt when necessary.</p> <p>The pupils can give and receive feedback on their learning experiences.</p> <p>The pupils can assess their own share in success and failure.</p> <p>The pupils recognize the influence of their interest and values on their motivation.</p>
	Study and profession oriented choosing capability	<p>The pupils acquire a meaningful overview of study and profession possibilities, service organisations related to the employment market or further study career.</p> <p>The pupils are willing to estimate the value of all branches of study and professions.</p> <p>The pupils take into account their interests and capabilities when making a choice of study or profession.</p> <p>The pupils can reflect on their study choice or choice of profession.</p>

Annex 1.d France

Source: Décret n° 2015-372 du 31 mars 2015 relatif au socle commun de connaissances, de compétences et de culture, Annexe

Competences	Descriptors/components	Further description (selected/extract)
Languages for thinking and communicating	Understanding and expressing oneself using four types of language:	
	<ul style="list-style-type: none"> French language 	
	<ul style="list-style-type: none"> Foreign (or regional) living languages 	The student practices at least two living foreign languages or, if pertinent, one foreign and one regional language.
	<ul style="list-style-type: none"> Mathematical, scientific and informatics languages 	Digital: The student knows that informatics languages are used for programming digital tools and for automatic data processing. The student knows the basic principles of algorithms and the design of computer programmes. The student applies these to create simple applications.
	<ul style="list-style-type: none"> Languages of the arts and of the body 	The student learns to express and communicate through arts, individually or collectively. The student knows and understands the particularities of different artistic languages that s/he uses. The student expresses him/herself through physical, sports or artistic activities using the body. The student also learns self-control.
Methods and tools for learning	Learning to learn, alone or collectively, with the aim to succeed in their studies and continue life-long learning:	
	<ul style="list-style-type: none"> Access to information and to documentation (Media, research approaches and information processing) 	Understanding the modes of production (of writing) and the role of the image. Knowing how to use research tools in a reflective manner, particularly on the internet. Learning to compare different sources and to assess the validity of the contents, processing and organising the collected information. Learning to use discerningly the digital tools of communication and information that s/he meets daily, respecting the social rules of use and all their potential for learning and working. Achieving safe, legal and ethical use to produce, receive and disseminate. S/he develops a digital culture.
	<ul style="list-style-type: none"> Digital tools 	The student is able to mobilise different digital tools for creating documents integrating different media and publishing or transmitting them so that they can be consulted and used

Competences	Descriptors/components	Further description (selected/extract)
	<ul style="list-style-type: none"> • Cooperation and implementation of projects • Organisation of learning/personal work 	<p>by others. The student uses the collaborative spaces and learns to communicate through social networks in respect of him/herself and others. The student understands the difference between public and private spheres, knows what a digital identity is and pays attention to the digital traces that s/he leaves.</p> <p>Working in teams, sharing of tasks, engaging in a constructive dialogue, accepting contradiction while defending one's point of view; negotiating and seeking consensus. Managing and individual or collective project, planning tasks and assessing achievement of objectives.</p> <p>The student knows that class and school are places of collaboration and mutual help. Digital tools contribute to these modes of organisation, exchange and collaboration.</p> <p>Planning of work; understanding the meaning of an assignment, identifying a problem and an approach to solving it; etc.</p>
Personal and citizen development	<p>Transmitting the fundamental values and the principles inscribed in the Constitution:</p> <ul style="list-style-type: none"> • Learning about life in the society, collective action and citizenship • Moral and civic training • Respect for personal choice and individual responsibilities 	<p>Learning and experiencing the principles that guarantee the freedom for all, such as the freedom of conscience and expression, mutual tolerance, equality – particularly between men and women – refusal of discrimination, affirmation of the capacity to judge and act for oneself</p> <p>Awareness and understanding of the meaning of rights and of law, the rules that allow participation in collective and democratic life and the notion of public interest.</p> <p>Awareness, understanding and applying in practice the principle of secularity, which allows the deployment of social responsibility and the inclusion of everyone in society, in respect of the freedom of conscience.</p>
Natural and technical systems	<p>Providing the student with the fundamentals of the mathematical, scientific and technological culture:</p> <ul style="list-style-type: none"> • Scientific and technical approach to the Earth and the universe • Curiosity and a sense of observation 	<p>Developing in the student intellectual rigour, manual skill and a critical spirit, the capacity to demonstrate and argue.</p> <p>The student becomes familiar with the evolutions of science and technology and their history, which has changed our view and our usage of the planet. The student understands that mathematics allows developing a scientific representation of phenomena and that it provides a tool for modelling.</p>

Competences	Descriptors/components	Further description (selected/extract)
	<ul style="list-style-type: none"> • Problem-solving capacity 	<p>This area also includes individual and collective responsibility towards the environment, health, the need to protect natural resources and the diversity of species, and a fair development which takes into consideration future generations.</p>
Representations of the world and human activity	<p>Developing awareness of geographical space and historical time:</p> <ul style="list-style-type: none"> • Understanding of societies in time and geographical space • Interpretation of human cultural production • Knowledge of the contemporary social world 	<p>Comprehension of the world which humans inhabit and shape at the same time. Studying the characteristics of organisations and the function of societies. The diversity of human experience and the forms that these take.</p>

Annex 1.e Ireland

Competences	Descriptors/components	Further description (selected/extract)
Junior Cycle		
Managing myself	<ul style="list-style-type: none"> • Knowing myself • Making considered decisions • Setting and achieving personal goals • Being able to reflect on my own learning • Using digital technology to manage myself and my learning 	Helps the student to understand oneself both as individual and as learner so that one can develop personal goals and plans. Also helps one develop strategies to make considered decisions, to take action and to reflect on their progress.
Staying well	<ul style="list-style-type: none"> • Being healthy, physical and active • Being social • Being safe • Being spiritual • Being confident • Being positive about learning • Being responsible, safe and ethical in using digital technology 	Recognises that students' overall wellbeing must be supported alongside their intellectual development. Being healthy, physically and emotionally, being socially active and being able to take care of oneself and of others helps students become happy and confident. Also helps young people become positive and engaged in their learning and supports them in the safe and ethical use of digital technology.
Communicating	<ul style="list-style-type: none"> • Listening and expressing myself • Using language • Using numbers and data • Performing and presenting • Discussing and debating • Using digital technology to communicate 	Helps students develop good communication skills in all aspects of life, using a variety of media. As well as developing literacy skills it also develops students confidence in communicating, expressing opinions, writing, making oral presentations and performing.
Being creative	<ul style="list-style-type: none"> • Imagining • Exploring options and alternatives • Implementing ideas and taking action • Learning creatively • Stimulating creativity using digital technology 	Enables students to develop their imagination and creativity as they explore different ways of doing things and of thinking. Students learn to stay with challenges or tasks to completion and to learn from their experiences.

Competences	Descriptors/components	Further description (selected/extract)
Working with others	<ul style="list-style-type: none"> • Developing good relationships and dealing with conflict • Co-operating • Respecting difference • Contributing to making the world a better place • Learning with others • Working with others through digital technology 	Helps students develop good relationships and to appreciate the value of cooperating to reach both collective and personal goals. Students also learn to value diversity and to engage in collaborative work aimed at making the world a better place.
Managing information and thinking	<ul style="list-style-type: none"> • Being curious • Gathering, recording, organising, and evaluation information and data • Thinking creatively and critically • Reflection on and evaluating my learning • Using digital technology to access, manage and share content 	Helps students gradually improve their capacity to search from different sources. They also develop their skills in judging and discriminating between information types and sources and they develop strategies for organising information so that they can understand it and use it later. This skill also develops students' thinking skills so that they can become more skilled in higher order reasoning and problem-solving.
Senior cycle		
Information processing	<ul style="list-style-type: none"> • Accessing information from a range of sources • Selecting and discriminating between sources based on their reliability and suitability for purpose • Recording, organising, summarising and integrating information • Presenting information using a range of information and communication technologies 	Helps students become competent in an information-intensive environment. As well as developing the specific skills of accessing, selecting, evaluating and recording information, learners develop an appreciation of the differences between information and knowledge and the roles that both play in making decisions and judgements.
Critical and creative thinking	<ul style="list-style-type: none"> • Examining patterns and relationships, classifying and ordering information • Analysing and making good arguments, challenging assumptions • Hypothesising and making predictions, examining evidence and reaching conclusions 	Assists students in being aware of different forms and patterns of thinking so that they become more skilled in higher order reasoning and problem solving. Students reflect critically on the forms of thinking and values that shape their own perceptions, opinions and knowledge.

Competences	Descriptors/components	Further description (selected/extract)
	<ul style="list-style-type: none"> • Identifying and analysing problems and decisions, exploring options and alternatives, solving problems and evaluating outcomes • Thinking imaginatively, actively seeking out new points of view, problems and/or solutions, being innovative and taking risks 	
Communicating	<ul style="list-style-type: none"> • Analysing and interpreting texts and other forms of communication • Expressing opinions, speculating, discussing, reasoning and engaging in debate and argument • Engaging in dialogue, listening attentively and eliciting opinions, views and emotions • Composing and performing in a variety of ways • Presenting using a variety of media 	Helps students to appreciate how central communication is to human relationships of all kinds, and to become better communicators in both formal and informal situations. As well as developing specific skills in a variety of media they form a deeper understanding of the power of communication – particularly language and images – in the modern world. It also incorporates competence and confidence in literacy as an essential skill for all students.
Working with others	<ul style="list-style-type: none"> • Working with others in a variety of contexts with different goals and purposes • Identifying, evaluating and achieving collective goals • Identifying responsibilities in a group and establishing practices associated with different roles in a group • Developing good relationships with others and a sense of wellbeing in a group • Acknowledging individual differences, negotiating and resolving conflicts • Checking progress, reviewing the work of the group and personally reflecting on one's own contribution 	Highlights the role that working with others plays in learning and in reaching both collective and personal goals. It helps students gain some appreciation of the dynamics of groups and the social skills needed to engage in collaborative work. It contributes to an appreciation that working collectively can help motivation, release energy and capitalise on all the talents in a group. In a broader context, they come to recognise that working collectively is important for social cohesion and for engaging with diverse cultural, ethnic and religious groups.
Being personally effective	<ul style="list-style-type: none"> • Being able to appraise oneself, evaluate one's own performance, receive and respond to feedback • Identifying, evaluating and achieving personal goals, including developing and evaluating action plans 	Contributes to the personal growth of students, to them becoming more self-aware and to their using that knowledge to develop personal goals and life plans. As well as giving students specific strategies related to self-appraisal, goal setting and action planning, an important dimension of this key skill is in building the know-how of students in

Competences	Descriptors/components	Further description (selected/extract)
	<ul style="list-style-type: none"><li data-bbox="506 240 1200 379">• Developing personal qualities that help in new and difficult situations, such as taking initiatives, being flexible and being able to persevere when difficulties arise<li data-bbox="506 387 1200 453">• Becoming confident and being able to assert oneself as a person	recognising how to get things done, how to garner and use resources effectively, and how to act autonomously according to personal identities and personal values.

Annex 1.f Italy

Source: Avviso quadro sulle azioni da attivare a valere sul PON “Per la scuola”.

Il Programma Operativo Nazionale 2014-2020 “Per la scuola”, competenze e ambienti per l’apprendimento

Competences	Descriptors/components	Further description (selected/extract)
Basic competences	Objective is to strengthen basic competences in an innovative way:	
	<ul style="list-style-type: none"> Communication in mother tongue (Italian) 	Student should have good literacy and reading skills as well as she/he should be able to select and manage information with critical analysis, to speak in public and content production.
	<ul style="list-style-type: none"> Communication in foreign languages 	Student should have at least a B1 competence level in foreign languages. The education path should give priority to oral production and should prioritise the involvement of mother tongue teachers.
	<ul style="list-style-type: none"> Mathematics 	For both competences, education should integrate theoretical knowledge with practice and informal learning. Education should also focus on the application of this knowledge in daily contexts.
	<ul style="list-style-type: none"> Scientific field 	
Competences of global citizenship	This action foreseen interventions to promote civil and social competences to promote a global citizenship:	
	<ul style="list-style-type: none"> Food education and territory 	Activities should focus on sustainable and conscious food education. Alongside the theoretical part, schools should focus on practical activities, for example schools gardens.
	<ul style="list-style-type: none"> Wellbeing, correct lifestyle and sport 	Activities should focus on the promotion of a healthy lifestyle, sport activities and a culture for equal opportunities. Sport is also a vehicle to promote integration and respect for diversities.
	<ul style="list-style-type: none"> Environmental education 	Activities should be focused on analysis and discussions on environmental issues, the promotion of their territory as well as responsible and proactive daily behaviors.
	<ul style="list-style-type: none"> Economic citizenship 	Activities should focus on economic literacy: <ul style="list-style-type: none"> Basics of economics

Competences	Descriptors/components	Further description (selected/extract)
	<ul style="list-style-type: none"> • Civics, respect for diversities and active citizenship 	<ul style="list-style-type: none"> • Promotion of consumer education • The concept of civil economics and social innovation • Financial literacy. <p>Knowledge of the Italian Constitutions and its value, promotion of citizenship, culture of legality, education to respect and promotion of diversities as a value, promotion of equality men and women, promotion of discussion and mediation.</p>
European citizenship	<ul style="list-style-type: none"> • Objective of this action is to strengthen the European citizenship, through the belonging to culture, values and a common path 	<p>Knowledge of history, culture, values, institutions and challenges; Knowledge of the evolution of the European identities through culture, arts, music, handicraft, food, sport; The relationship of the European citizenship and personal and professional life, which focus at the right of movement</p>
Cultural, artistic and landscape heritage	<ul style="list-style-type: none"> • Development of local project, enhancing networks with local institutions, scientific and cultural organizations, civic society and private individuals who will involve students. 	<ul style="list-style-type: none"> • Didactic activities on cultural, artistic and landscape heritage; • Use of technological experimentations; • Involvement of school in “adopting” part of the cultural heritage in order to involve the civil society; • Planning activities of sustainable tourism; • Production of digital contents to be used for other schools • Creation of didactic paths to stimulate urban regeneration
Citizenship and digital creativity	<ul style="list-style-type: none"> • Support of digital creativity and competences for a digital citizenship <ul style="list-style-type: none"> ○ 	<ul style="list-style-type: none"> • Learn coding and programming • Digital citizenship paths to use internet and media in positive and constructive way • Learning how to use available data, evaluating the quality of the information available • Actions to stimulate creativity and digital production
Integration and hospitality	<ul style="list-style-type: none"> • Support of projects to learn about migration, different cultures and religions and develop intercultural skills 	<ul style="list-style-type: none"> • Activities aimed at presenting the hosting territory (culture, geography, values) • Projects on the intercultural dimension • Involvement of the students in teaching activities • Learning experiences with migrants in hosting centres

Competences	Descriptors/components	Further description (selected/extract)
		<ul style="list-style-type: none"> Projects aimed at socialization and integration of migrants
Entrepreneurship education	<ul style="list-style-type: none"> Support of actions to develop autonomy and students' entrepreneurship, problem solving and critical thinking. Particular attention is dedicated to devise an entrepreneurship project. 	

Annex 1.g Netherlands

Source: Bureau Platform Onderwijs2032: Ons onderwijs2032 – Endadvies, January 2016

Competences	Descriptors/components	Further description (selected/extract)
Language skills	<ul style="list-style-type: none"> Dutch English 	Students will develop a command of Dutch and English, both spoken and written
Numeracy	<ul style="list-style-type: none"> Arithmetic Mathematics 	Students will develop numeracy skills, including both arithmetic and mathematics, which enable them to structure, understand and present knowledge and information
Digital literacy	<ul style="list-style-type: none"> Basic knowledge and skills in information and communication technology Basic knowledge and skills in information management and media awareness Understanding how technology works (computational thinking) 	
Science	<ul style="list-style-type: none"> Biology Technology Chemistry Physics 	Students will learn about important aspects of these and gain an understanding of how the world works. They will be able to apply the knowledge and skills they gain to design and develop (innovative) products
Language and culture	<ul style="list-style-type: none"> Different cultures and their manifestation in language and art 	
	<ul style="list-style-type: none"> Artistic expression 	Students will explore various forms of artistic expression, reflecting and making their own contribution
Social studies		Students will learn to reflect on society and the human environment from various perspectives: historical, geographic, economic, political and social.
Citizenship	<ul style="list-style-type: none"> Democratic literacy 	Develop democratic literacy and understanding of the structure and significance of the democratic state, its constitution and institutions.

Competences	Descriptors/components	Further description (selected/extract)
	<ul style="list-style-type: none"> • Social skills and responsibilities 	Develop social skills and become aware of their social responsibilities
Interdisciplinary skills	<ul style="list-style-type: none"> • Creativity • Critical thinking • Problem solving • Cooperation 	Students will develop the skills they need to participate in society, apply their knowledge and continue to learn throughout their lives. These skills are not confined to any one subject.

Annex 1.h Portugal

Source: Ministério da Educação: Perfil dos alunos à saída da escolaridade obrigatória, February 2017

Competences/areas	Description	Components
<ul style="list-style-type: none"> Languages and texts 	Effective utilization of the codes that permit expression and representation of ideas in various areas of knowledge, leading to linguistic, musical, artistic, technological, mathematical and scientific products.	<ul style="list-style-type: none"> Utilising in a proficient way different symbolic languages associated with mother tongue and foreign languages, literature, music, the arts, technologies, mathematics and sciences Applying these languages in an adequate manner in different contexts of communication, in analogue and digital environments
<ul style="list-style-type: none"> Information and communication 	Selection, analysis and dissemination of products, experiences and knowledge in different formats.	<ul style="list-style-type: none"> Utilising and mastering diverse instruments for researching, describing, assessing, validating and mobilising information in a critical and autonomous manner, verifying different documentary sources and their credibility Transforming information into knowledge Communicating and collaborating in an adequate and confident way, using different types of tools (analogue and digital), following the proper rules of conduct for each environment
<ul style="list-style-type: none"> Reasoning and problem solving 	<p><i>Reasoning</i> refers to the logical process which permits accessing information, interpreting experiences and producing knowledge.</p> <p><i>Problem solving</i> refers to the capacity to find answers to a new situation, mobilizing reasoning with a view to make decisions and eventually formulating new questions.</p>	<ul style="list-style-type: none"> Planning and conducting investigations (research) Initiating projects and making decisions to solve problems Developing processes conducive to building products and knowledge, using diverse resources
<ul style="list-style-type: none"> Critical thinking and creative thinking 	<i>Critical thinking</i> requires observing, identifying, analysing and making sense of information, experiences and ideas, and arguing on the basis of different premises and variables. It requires the design of algorithms and scenarios which consider various options, as well as the establishment of	<ul style="list-style-type: none"> Thinking comprehensively and profoundly, in a logical manner, observing, analysing information, experiences or ideas, arguing based on implicit or explicit criteria, taking a justified (reasoned) standing Applying different knowledge, utilizing different methods and tools for critical thinking

Competences/areas	Description	Components
	<p>criteria for analysis to draw valid conclusions and assessing results.</p> <p><i>Creative thinking</i> involves generating and applying new ideas in specific contexts, approaching situations from different perspectives, identifying alternative solutions and establishing new scenarios.</p>	<ul style="list-style-type: none"> • Foreseeing and assessing the consequences of one's decisions • Developing new ideas and solutions in an imaginative and innovative way, resulting from interaction with others or personal reflexion, applying different contexts and areas of learning
<ul style="list-style-type: none"> • Interpersonal relationships 	<p>Concerns interactions with others which occur in different social and emotional contexts. Allows recognising, expressing and managing emotions, building relationships, establishing objectives and responding to personal and social needs.</p>	<ul style="list-style-type: none"> • Adapting behaviour in contexts of cooperation, sharing, collaboration and competition • Working in teams and using different means to communicate and work in person and on-line • Listening, interacting, arguing, negotiating and accepting different points of view, gaining new forms of being in, looking at and participating in society
<ul style="list-style-type: none"> • Autonomy and personal development 	<p>Concerns the process through which the student develops his/her capacity to integrate thinking, emotion and behaviour, building confidence in him/herself, motivation to learn, self-control (self-regulation), initiative and decision-making, which facilitate growing autonomy in different dimensions of knowledge, of know-how, of being and acting.</p>	<ul style="list-style-type: none"> • Identifying areas of interest and need to acquire new competences • Consolidating and deepening one's existing competences, in the perspective of life-long learning • Setting goals, drawing up plans and projects, and being autonomous in their implementation.
<ul style="list-style-type: none"> • Well-being and health 	<p>Concerns the quality of life of the individual and of the community.</p>	<ul style="list-style-type: none"> • Adopting behaviour that promotes health and well-being, in particular every-day habits concerning food, physical exercise, sexuality and relationships with the environment and society • Manifesting environmental and social conscience and responsibility, working collaboratively for the common good, with a view to building a sustainable future.
<ul style="list-style-type: none"> • Aesthetic and artistic sensibility 	<p>Concerns the enjoyment of different cultural realities and the development of the expressiveness of each individual. Integrates a set</p>	<ul style="list-style-type: none"> • Critical appreciation of the artistic and technological realities, in contact with the different cultural universes

Competences/areas	Description	Components
	of capacities related to the formation of individual taste and critical opinion regarding both technical and performative processes involved in artistic creation, facilitating the development of aesthetic criteria for an informed cultural life.	<ul style="list-style-type: none"> • Understanding the importance of the integration of different forms of art in the communities and the culture • Understanding the characteristic/typical processes of the experimentation, improvisation and creation of different arts, both in relation to material and immaterial cultural heritage, and to contemporary creations.
<ul style="list-style-type: none"> • Technical knowledge and technology 	Concerns the mobilisation of comprehension of technical and scientific phenomena and their application in providing answers to human desires and needs, with awareness of their ethical, social, economic and ecological consequences.	<ul style="list-style-type: none"> • Handling various instruments and materials to control, utilise, transform, imagine and create products and systems • Executing technical operations following an adequate method, to reach an objective or bring about a decision or reasoned conclusion, matching the material and technical means to the expressed idea or intention • Matching/adapting actions of transformation or creation of products from different natural, technological and sociocultural contexts to experimental activities and practical applications in projects developed in physical and digital environments
<ul style="list-style-type: none"> • Awareness and control of the body 	Capacity to perceive and mobilise the body in multiple ways in order to realize motor activities, in a manner adjusted to the purpose, in different contexts.	<ul style="list-style-type: none"> • Being aware of one's own body • Adjusting the type of motor behaviour to the desired action • Controlling and mastering the body according to the nature of the activity and the context

Annex 2: Detailed descriptions of reviewed key competence frameworks – International frameworks

Annex 2.a OECD Key Competencies (DeSeCo)

Source: OECD, The Definition and Selection of Key Competencies – Executive Summary, 2005. <http://www.oecd.org/pisa/35070367.pdf>

Competences	Descriptors/components	Further description (selected/extract)
Using tools interactively	The ability to use language, symbols and texts interactively	This key competency concerns the effective use of spoken and written language skills, computation and other mathematical skills, in multiple situations. It is an essential tool for functioning well in society and the workplace and participating in an effective dialogue with others. Terms such as “communication competence” or “literacies” are associated with this key competency. Reading literacy and mathematical literacy in PISA and numeracy as defined in ALL are illustrations of this key competency.
	The ability to use knowledge and information interactively	This key competency requires critical reflection on the nature of information itself – its technical infrastructure and its social, cultural, and even ideological context and impact. Information competence is necessary as a basis for understanding options, forming opinions, making decisions, and carrying out informed and responsible actions. Using knowledge and information interactively requires individuals to: <ul style="list-style-type: none"> ● Recognise and determine what is not known; ● Identify, locate and access appropriate information sources (including assembling knowledge and information in cyberspace); ● Evaluate the quality, appropriateness and value of that information, as well as its sources; and ● Organise knowledge and information.
	The ability to use technology interactively	Interactive use of technology requires an awareness of new ways in which individuals can use technologies in their daily lives. Information and communication technology has the potential to transform the way people work together (by reducing the importance of location), access information (by making vast amounts of information sources instantly available) and interact with others (by facilitating relationships and networks of people from around the world on a regular basis). To harness such potential, individuals

Competences	Descriptors/components	Further description (selected/extract)
		<p>will need to go beyond the basic technical skills needed to simply use the Internet, send e-mails and so on.</p> <p>Technology can be used interactively if users understand its nature and reflect on its potential. Most importantly, individuals need to relate the possibilities embedded in technological tools to their own circumstances and goals.</p>
Interacting in heterogeneous groups	The ability to relate well to others	<p>This key competency allows individuals to initiate, maintain and manage personal relationships with, for example, personal acquaintances, colleagues and customers. Relating well is not only a requirement for social cohesion but, increasingly, for economic success as changing firms and economies are placing increased emphasis on emotional intelligence.</p> <p>This competency assumes that individuals are able to respect and appreciate the values, beliefs, cultures and histories of others in order to create an environment where they feel welcome, are included and thrive.</p>
	The ability to co-operate and work in teams	<p>Co-operation requires each individual to have certain qualities. Each needs to be able to balance commitment to the group and its goals with his or her own priorities and must be able to share leadership and to support others. Specific components of this competency include:</p> <ul style="list-style-type: none"> ● The ability to present ideas and listen to those of others; ● An understanding of the dynamics of debate and following an agenda; ● The ability to construct tactical or sustainable alliances; ● The ability to negotiate; and ● The capacity to make decisions that allow for different shades of opinion.
	The ability to manage and resolve conflicts	<p>For individuals to take an active part in conflict management and resolution, they need to be able to:</p> <ul style="list-style-type: none"> ● Analyse the issues and interests at stake (e.g. power, recognition of merit, division of work, equity), the origins of the conflict and the reasoning of all sides, recognising that there are different possible positions; ● Identify areas of agreement and disagreement; ● Reframe the problem; and ● Prioritise needs and goals, deciding what they are willing to give up and under what circumstances.
Acting autonomously	The ability to act within the big picture	<p>This key competency requires individuals to understand and consider the wider context of their actions and decisions. That is, it requires one to take account of how they relate, for example, to society's norms, to social and economic institutions and to what has happened in the past. One needs to recognise how one's own actions and decisions fit into this wider picture.</p> <p>This competency requires individuals, for instance, to:</p> <ul style="list-style-type: none"> ● Understand patterns;

Competences	Descriptors/components	Further description (selected/extract)
		<ul style="list-style-type: none"> ● Have an idea of the system in which they exist (i.e. understand its structures, culture, practices, and formal and informal rules and expectations and the roles they play within it, including understanding laws and regulations, but also unwritten social norms, moral codes, manners and protocol. It complements an understanding of rights with knowledge of the constraints on actions; ● Identify the direct and indirect consequences of their actions; and ● Choose between different courses of action by reflecting on their potential consequences in relation to individual and shared norms and goals.
	The ability to form and conduct life plans and personal projects	<p>This competency applies the concept of project management to individuals. It requires individuals to interpret life as an organised narrative and to give it meaning and purpose in a changing environment, where life is often fragmented.</p> <p>This competency assumes an orientation toward the future, implying both optimism and potential, but also a firm grounding within the realm of the feasible. Individuals must be able, for instance, to:</p> <ul style="list-style-type: none"> ● Define a project and set a goal; ● Identify and evaluate both the resources to which they have access and the resources they need; ● Prioritise and refine goals; ● Balance the resources needed to meet multiple goals; ● Learn from past actions, projecting future outcomes; and ● Monitor progress, making necessary adjustments as a project unfolds.
	The ability to defend and assert rights, interests, limits and needs	<p>On the one hand, this competency relates to self-oriented rights and needs; on the other hand, it also relates to the rights and needs of the individual as a member of the collective (e.g. actively participating in democratic institutions and in local and national political processes). The competency implies the ability, for instance, to:</p> <ul style="list-style-type: none"> ● Understand one's own interests (e.g. in an election); ● Know written rules and principles on which to base a case; ● Construct arguments in order to have needs and rights recognised; and ● Suggest arrangements or alternative solutions.

Annex 2.b OECD Global Competency

Source: OECD: Global competency for an inclusive world, 2016

Competences	Descriptors/components	Further description (selected/extract)
Knowledge and understanding	Knowledge and understanding of global issues	<p>Knowledge and understanding of global issues implies familiarity with the most important issues which cut across national boundaries (e.g. climate change, migration, poverty) and also the capacity to understand the interrelationships between issues, trends, and systems across the globe.</p> <p>This component is not acquired by factual knowledge alone, but rather through the ability to find the meanings of and the connections between different pieces of information, in other words, through understanding. A mature level of understanding is achieved through cognitive flexibility, or the ability to learn and organise knowledge in a way that facilitates transferring that knowledge to a range of new, unanticipated situations, and adjusting one's cognitive frame of reference if required by those situations.</p>
	Intercultural knowledge and understanding	<p>Intercultural knowledge and understanding can be defined as knowledge and understanding of intercultural interactions and culture. It involves knowledge about one's own culture, other cultures, and the similarities and differences between cultures. Knowledge about cultures without understanding adds little value. Acquiring intercultural understanding means recognizing that one's own perspective is shaped by multiple influences (e.g., culture, religion, gender, socio-economic status, education), as a way to develop an understanding of other people's perspectives, to distinguish between unique and common qualities, and to understand how these different perspectives might relate in an intercultural context.</p>
Skills	Analytical and critical thinking	<p>Analytical thinking refers to the capacity to approach a problem by using a logical, systematic, sequential approach. It includes, among others, the ability to interpret the meaning of each element of a text, and examine these elements in relationship with each other in order to identify connections and discrepancies. Critical thinking skills, in turn, are used for evaluating the worth, validity and reliability of any material on the basis of its internal consistency, and its consistency with evidence and with one's own knowledge and experience. Applying critical thinking to a global or intercultural problem requires recognising one's own assumptions that might have influenced the evaluation</p>

Competences	Descriptors/components	Further description (selected/extract)
		process, and acknowledging that one's beliefs and judgements are always contingent and dependent upon one's own cultural affiliations and perspective. Analytical and critical thinking skills are inherently linked together.
	Ability to interact respectfully, appropriately and effectively	A second set of items refers to the linguistic, communication and behavioural skills that are required to interact respectfully, appropriately and effectively with other people, to manage breakdowns in communication, and to mediate between speakers of different languages or cultures. Appropriate and effective intercultural interactions require not only knowledge of the other's language but also the ability to communicate clearly in one's own language.
	Empathy	Empathy can be described as the "imaginary participation in another person's experience, including emotional and intellectual dimensions, by imagining his or her perspective (not by assuming the person's position)". Empathy plays an important role in the development of social behaviour. Culturally empathic learners retain their separate cultural identity but are simultaneously aware of the cultural values and beliefs of the people with different cultural background. Empathy minimizes the psychological barriers caused by cultural differences, and is essential in helping people to build a good relationship and achieve a smooth communication.
	Flexibility	Flexibility refers to the ability to adapt one's thinking, behaviours and actions according to the prevailing cultural environment, or to novel situations and contexts that might present new demands or challenges. Individuals who acquire this skill are able to handle the feelings of "culture shock", such as frustration, stress, and alienation in ambiguous situations caused by new environments. Flexible learners can more easily develop long-term interpersonal relationships with people from other cultures, and adapt to changing circumstances.
Attitudes	Openness towards people from other cultures	Openness towards people from other cultures involves sensitivity towards, curiosity about and willingness to engage with other people and other perspectives on the world. It involves an active willingness to seek out and take up opportunities to engage with people from other cultures, to discover and learn about their cultural perspectives and how they interpret familiar and unfamiliar

Competences	Descriptors/components	Further description (selected/extract)
		phenomena and artefacts, and to learn about their linguistic, communicative and interactional conventions.
	Respect for cultural otherness	Respect consists of positive regard and esteem for someone or something based on the judgment that they have intrinsic importance, worth or value. In this framework, respect assumes the intrinsic dignity of all human beings and their inalienable right to choose their own affiliations, beliefs, opinions or practices.
	Global-mindedness	Global mindedness is defined as a worldview in which one sees oneself as connected to the world community and feels a sense of responsibility for its members. This commitment is reflected in an individual's attitudes, beliefs and behaviours. A global-minded person has concerns for other people in all parts of the world and feelings of moral responsibility to try to improve their conditions irrespective of distance and cultural differences.
	Responsibility	Responsibility is an attitude towards one's own actions. It involves being reflective about one's actions, forming intentions about how to act in an appropriate way on the basis of a value or set of values, and holding oneself accountable for the outcomes of those actions. Responsibility can require courage insofar as taking a stance may entail taking action against the norms of a community, or challenging a collective decision that is judged to be wrong.

Annex 2.c Council of Europe Competences for Democratic Culture

Source: Council of Europe, Competences for Democratic Culture: Living together as equals in culturally diverse democratic societies, Executive summary, 2016

Competences	Descriptors/components	Further description (selected/extract)
Values	Valuing human dignity and human rights	This value is based on the general belief that every human being is of equal worth, has equal dignity, is entitled to equal respect, and is entitled to the same set of human rights and fundamental freedoms, and ought to be treated accordingly.
	Valuing cultural diversity	This value is based on the general belief that other cultural affiliations, cultural variability and diversity, and pluralism of perspectives, views and practices ought to be positively regarded, appreciated and cherished.
	Valuing democracy, justice, fairness, equality and the rule of law	This set of values is based on the general belief that societies ought to operate and be governed through democratic processes which respect the principles of justice, fairness, equality and the rule of law.
Attitudes	Openness to cultural otherness and to other beliefs, world views and practices	Openness is an attitude towards people who are perceived to have different cultural affiliations from oneself or towards beliefs, world views and practices which differ from one's own. It involves sensitivity towards, curiosity about and willingness to engage with other people and other perspectives on the world.
	Respect	Respect consists of positive regard and esteem for someone or something based on the judgment that they have intrinsic importance, worth or value. Having respect for other people who are perceived to have different cultural affiliations or different beliefs, opinions or practices from one's own is vital for effective intercultural dialogue and a culture of democracy.
	Civic-mindedness	Civic-mindedness is an attitude towards a community or social group to which one belongs that is larger than one's immediate circle of family and friends. It involves a sense of belonging to that community, an awareness of other people in the community, an awareness of the effects of one's actions on those people, solidarity with other members of the community and a sense of civic duty towards the community.
	Responsibility	Responsibility is an attitude towards one's own actions. It involves being reflective about one's actions, forming intentions about how to act in a morally appropriate way, conscientiously performing those actions and holding oneself accountable for the outcomes of those actions.

Competences	Descriptors/components	Further description (selected/extract)
	Self-efficacy	Self-efficacy is an attitude towards the self. It involves a positive belief in one's own ability to undertake the actions that are required to achieve particular goals, and confidence that one can understand issues, select appropriate methods for accomplishing tasks, navigate obstacles successfully and make a difference in the world.
	Tolerance and ambiguity	Tolerance of ambiguity is an attitude towards situations which are uncertain and subject to multiple conflicting interpretations. It involves evaluating these kinds of situations positively and dealing with them constructively.
Skills	Autonomous learning skills	Autonomous learning skills are the skills required to pursue, organise and evaluate one's own learning in accordance with one's own needs, in a self-directed manner, without being prompted by others.
	Analytical and critical thinking skills	Analytical and critical thinking skills are the skills required to analyse, evaluate and make judgments about materials of any kind (e.g. texts, arguments, interpretations, issues, events, experiences, etc.) in a systematic and logical manner.
	Skills of listening and observing	Skills of listening and observing are the skills required to notice and understand what is being said and how it is being said, and to notice and understand other people's non-verbal behaviour.
	Empathy	Empathy is the set of skills required to understand and relate to other people's thoughts, beliefs and feelings, and to see the world from other people's perspectives.
	Flexibility and adaptability	Flexibility and adaptability are the skills required to adjust and regulate one's thoughts, feelings or behaviours so that one can respond effectively and appropriately to new contexts and situations.
	Linguistic, communicative and plurilingual skills	Linguistic, communicative and plurilingual skills are the skills required to communicate effectively and appropriately with people who speak the same or another language, and to act as a mediator between speakers of different languages.
		Co-operation skills
	Conflict-resolution skills	Conflict-resolution skills are the skills required to address, manage and resolve conflicts in a peaceful way by guiding conflicting parties towards optimal solutions that are acceptable to all parties.

Competences	Descriptors/components	Further description (selected/extract)
Knowledge and critical understanding	Knowledge and critical understanding of the self	This includes knowledge and critical understanding of one's own thoughts, beliefs, feelings and motivations, and of one's own cultural affiliations and perspective on the world.
	Knowledge and critical understanding of language and communication	This includes knowledge and critical understanding of the socially appropriate verbal and non-verbal communicative conventions that operate in the language(s) which one speaks, of the effects that different communication styles can have on other people, and of how every language expresses culturally shared meanings in a unique way.
	Knowledge and critical understanding of the world: Politics, law, human rights, culture, cultures, religions, history, media, economies, environment, sustainability	This includes a large and complex body of knowledge and critical understanding in a variety of areas including politics, law, human rights, culture, cultures, religions, history, media, economies, the environment and sustainability.

Annex 2.d WEF 21st Century Skills

Source: World Economic Forum and Boston Consulting Group: New Vision for Education: Unlocking the Potential of Technology, 2015

Competences	Descriptors/components	Further description (selected/extract)
Foundational Literacies	Literacy	Ability to read, understand and use written language
	Numeracy	Ability to use numbers and other symbols to understand and express quantitative relationships
	Scientific literacy	Ability to use scientific knowledge and principles to understand one's environment and test hypotheses
	ICT literacy	Ability to use and create technology-based content, including finding and sharing information, answering questions, interacting with other people and computer programming
	Financial literacy	Ability to understand and apply conceptual and numerical aspects of finance in practice
	Cultural and civic literacy	Ability to understand, appreciate, analyse and apply knowledge of the humanities
Competencies	Critical thinking / problem-solving	Ability to identify, analyse and evaluate situations, ideas and information to formulate responses and solutions
	Creativity	Ability to imagine and devise new, innovative ways of addressing problems, answering questions or expressing meaning through the application, synthesis or repurposing of knowledge
	Communication	Ability to listen to, understand, convey and contextualize information through verbal, nonverbal, visual and written means
	Collaboration	Ability to work in a team towards a common goal, including the ability to prevent and manage conflict
Character Qualities	Curiosity	Ability and desire to ask questions and to demonstrate open-mindedness and inquisitiveness
	Initiative	Ability and desire to proactively undertake a new task or goal
	Persistence/grit	Ability to sustain interest and effort and to persevere to accomplish a task or goal
	Adaptability	Ability to change plans, methods, opinions or goals in light of new information
	Leadership	Ability to effectively direct, guide and inspire others to accomplish a common goal
	Social and cultural awareness	Ability to interact with other people in a socially, culturally and ethically appropriate way

Annex 2.e P21 Partnership for 21st century learning

Source: P21 Framework Definitions, <http://www.p21.org/our-work/p21-framework>

Competences	Descriptors/components	Further description (selected/extract)
Key subjects and 21 st century themes	Key subjects: English, world languages, arts, mathematics, economics, science, geography, history, government and civics.	
	Global awareness	<ul style="list-style-type: none"> Using 21st century skills to understand and address global issues Learning from and working collaboratively with individuals representing diverse cultures, religions and lifestyles in a spirit of mutual respect and open dialogue in personal, work and community contexts Understanding other nations and cultures, including the use of non-English languages
	Financial, Economic, Business and Entrepreneurial Literacy	<ul style="list-style-type: none"> Knowing how to make appropriate personal economic choices Understanding the role of the economy in society Using entrepreneurial skills to enhance workplace productivity and career options
	Civic Literacy	<ul style="list-style-type: none"> Participating effectively in civic life through knowing how to stay informed and understanding governmental processes Exercising the rights and obligations of citizenship at local, state, national and global levels Understanding the local and global implications of civic decisions
	Health Literacy	<ul style="list-style-type: none"> Obtaining, interpreting and understanding basic health information and services and using such information and services in ways that enhance health Understanding preventive physical and mental health measures, including proper diet, nutrition, exercise, risk avoidance and stress reduction Using available information to make appropriate health-related decisions Establishing and monitoring personal and family health goals Understanding national and international public health and safety issues
	Environmental Literacy	<ul style="list-style-type: none"> Demonstrate knowledge and understanding of the environment and the circumstances and conditions affecting it, particularly as relates to air, climate, land, food, energy, water and ecosystems

Competences	Descriptors/components	Further description (selected/extract)
		<ul style="list-style-type: none"> • Demonstrate knowledge and understanding of society's impact on the natural world (e.g., population growth, population development, resource consumption rate, etc.) • Investigate and analyze environmental issues, and make accurate conclusions about effective solutions • Take individual and collective action towards addressing environmental challenges (e.g., participating in global actions, designing solutions that inspire action on environmental issues)
Learning and innovation skills	Creativity and innovation	<p>Think Creatively</p> <ul style="list-style-type: none"> • Use a wide range of idea creation techniques (such as brainstorming) • Create new and worthwhile ideas (both incremental and radical concepts) • Elaborate, refine, analyze and evaluate their own ideas in order to improve and maximize creative efforts <p>Work Creatively with Others</p> <ul style="list-style-type: none"> • Develop, implement and communicate new ideas to others effectively • Be open and responsive to new and diverse perspectives; incorporate group input and feedback into the work • Demonstrate originality and inventiveness in work and understand the real world limits to adopting new ideas • View failure as an opportunity to learn; understand that creativity and innovation is a long-term, cyclical process of small successes and frequent mistakes <p>Implement Innovations</p> <ul style="list-style-type: none"> • Act on creative ideas to make a tangible and useful contribution to the field in which the innovation will occur
	Critical thinking and problem solving	<p>Reason Effectively</p> <ul style="list-style-type: none"> • Use various types of reasoning (inductive, deductive, etc.) as appropriate to the situation <p>Use Systems Thinking</p> <ul style="list-style-type: none"> • Analyze how parts of a whole interact with each other to produce overall outcomes in complex systems <p>Make Judgments and Decisions</p> <ul style="list-style-type: none"> • Effectively analyze and evaluate evidence, arguments, claims and beliefs • Analyze and evaluate major alternative points of view

Competences	Descriptors/components	Further description (selected/extract)
		<ul style="list-style-type: none"> • Synthesize and make connections between information and arguments • Interpret information and draw conclusions based on the best analysis • Reflect critically on learning experiences and processes <p>Solve Problems</p> <ul style="list-style-type: none"> • Solve different kinds of non-familiar problems in both conventional and innovative ways • Identify and ask significant questions that clarify various points of view and lead to better solutions
	Communication and collaboration	<p>Communicate Clearly</p> <ul style="list-style-type: none"> • Articulate thoughts and ideas effectively using oral, written and nonverbal communication skills in a variety of forms and contexts • Listen effectively to decipher meaning, including knowledge, values, attitudes and intentions • Use communication for a range of purposes (e.g. to inform, instruct, motivate and persuade) • Utilize multiple media and technologies, and know how to judge their effectiveness a priori as well as assess their impact • Communicate effectively in diverse environments (including multi-lingual) <p>Collaborate with Others</p> <ul style="list-style-type: none"> • Demonstrate ability to work effectively and respectfully with diverse teams • Exercise flexibility and willingness to be helpful in making necessary compromises to accomplish a common goal • Assume shared responsibility for collaborative work, and value the individual contributions made by each team member
Information, media and technology skills	Information literacy	<p>Access and Evaluate Information</p> <ul style="list-style-type: none"> • Access information efficiently (time) and effectively (sources) • Evaluate information critically and competently <p>Use and Manage Information</p> <ul style="list-style-type: none"> • Use information accurately and creatively for the issue or problem at hand • Manage the flow of information from a wide variety of sources • Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of information
	Media literacy	<p>Analyze Media</p> <ul style="list-style-type: none"> • Understand both how and why media messages are constructed, and for what purposes

Competences	Descriptors/components	Further description (selected/extract)
		<ul style="list-style-type: none"> • Examine how individuals interpret messages differently, how values and points of view are included or excluded, and how media can influence beliefs and behaviors • Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of media <p>Create Media Products</p> <ul style="list-style-type: none"> • Understand and utilize the most appropriate media creation tools, characteristics and conventions • Understand and effectively utilize the most appropriate expressions and interpretations in diverse, multi-cultural environments
	ICT (Information, Communication and Technology) literacy	<p>Apply Technology Effectively</p> <ul style="list-style-type: none"> • Use technology as a tool to research, organize, evaluate and communicate information • Use digital technologies (computers, PDAs, media players, GPS, etc.), communication/networking tools and social networks appropriately to access, manage, integrate, evaluate and create information to successfully function in a knowledge economy • Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of information technologies
Life and career skills	Flexibility and adaptability	<p>Adapt to Change</p> <ul style="list-style-type: none"> • Adapt to varied roles, jobs responsibilities, schedules and contexts • Work effectively in a climate of ambiguity and changing priorities <p>Be Flexible</p> <ul style="list-style-type: none"> • Incorporate feedback effectively • Deal positively with praise, setbacks and criticism <ul style="list-style-type: none"> • Understand, negotiate and balance diverse views and beliefs to reach workable solutions, particularly in multi-cultural environments
	Initiative and self-direction	<p>Manage Goals and Time</p> <ul style="list-style-type: none"> • Set goals with tangible and intangible success criteria • Balance tactical (short-term) and strategic (long-term) goals • Utilize time and manage workload efficiently <p>Work Independently</p> <ul style="list-style-type: none"> • Monitor, define, prioritize and complete tasks without direct oversight <p>Be Self-directed Learners</p>

Competences	Descriptors/components	Further description (selected/extract)
		<ul style="list-style-type: none"> • Go beyond basic mastery of skills and/or curriculum to explore and expand one's own learning and opportunities to gain expertise • Demonstrate initiative to advance skill levels towards a professional level • Demonstrate commitment to learning as a lifelong process • Reflect critically on past experiences in order to inform future progress
	Social and cross-cultural skills	<p>Interact Effectively with Others</p> <ul style="list-style-type: none"> • Know when it is appropriate to listen and when to speak • Conduct themselves in a respectable, professional manner <p>Work Effectively in Diverse Teams</p> <ul style="list-style-type: none"> • Respect cultural differences and work effectively with people from a range of social and cultural backgrounds • Respond open-mindedly to different ideas and values • Leverage social and cultural differences to create new ideas and increase both innovation and quality of work
	Productivity and accountability	<p>Manage Projects</p> <ul style="list-style-type: none"> • Set and meet goals, even in the face of obstacles and competing pressures • Prioritize, plan and manage work to achieve the intended result <p>Produce Results</p> <ul style="list-style-type: none"> • Demonstrate additional attributes associated with producing high quality products including the abilities to: <ul style="list-style-type: none"> - Work positively and ethically - Manage time and projects effectively - Multi-task - Participate actively, as well as be reliable and punctual - Present oneself professionally and with proper etiquette - Collaborate and cooperate effectively with teams - Respect and appreciate team diversity - Be accountable for results
	Leadership and responsibility	<p>Guide and Lead Others</p> <ul style="list-style-type: none"> • Use interpersonal and problem-solving skills to influence and guide others toward a goal • Leverage strengths of others to accomplish a common goal • Inspire others to reach their very best via example and selflessness

Competences	Descriptors/components	Further description (selected/extract)
		<ul style="list-style-type: none"><li data-bbox="936 240 1823 272">• Demonstrate integrity and ethical behavior in using influence and power <p data-bbox="882 300 1211 331">Be Responsible to Others</p> <ul style="list-style-type: none"><li data-bbox="936 336 1749 368">• Act responsibly with the interests of the larger community in mind

Annex 2.f UNESCO Intercultural Competences

Source: UNESCO: Intercultural Competences. Conceptual and Operational Framework, 2013

Competences	Descriptors/components	Further description (selected/extract)
Cultural concepts		
Culture		Culture is that set of distinctive spiritual, material, intellectual and emotional features of a society or social group, encompassing all the ways of being in that society; at a minimum, including art and literature, lifestyles, ways of living together, value systems, traditions, and beliefs.
Intercultural	<ul style="list-style-type: none"> • Universality 	Those elements common to all cultures, such as having a language or having values and beliefs. There is a tightrope to walk between assuming universality and respecting the inevitable cultural differences between groups.
	<ul style="list-style-type: none"> • Intercultural citizenship 	New type of citizen, required for the new global village. Relies upon conciliating multiple identities and contexts simultaneously, assumes the ability to engage in intercultural dialogues respecting the rights of cultural others, and ideally becomes one step toward promoting peace.
	<ul style="list-style-type: none"> • Intercultural competences 	Having adequate relevant knowledge about particular cultures, as well as general knowledge about the sorts of issues arising when members of different cultures interact, holding receptive attitudes that encourage establishing and maintaining contact with diverse others, as well as having the skills required to draw upon both knowledge and attitudes when interacting with others from different cultures.
Identity	<ul style="list-style-type: none"> • Cultural identity 	Cultural identity is socially constructed and refers to those aspects of identity shared by members of a culture that mark them as distinct from members of other cultures.
	<ul style="list-style-type: none"> • Cultural diversity 	Cultural diversity permits, and intercultural competences require, understanding one's own culture but also recognising that each culture provides one option among many possibilities.
Values, beliefs, and attitudes	<ul style="list-style-type: none"> • Values • Beliefs • Attitudes 	All three concepts are key aspects of culture and underlie all communication with others, whether within a culture or between members of different cultures.
Communication concepts		

Competences	Descriptors/components	Further description (selected/extract)
Communication		Communication includes language as well as nonverbal behaviour which includes everything from use of sounds, movements, space, and time, to many aspects of material culture, and can be understood as the active aspect of culture.
Language	• Communicative competence	Implies both understanding and producing appropriate words and other communication forms in ways that will make sense not only to the speaker/actor but also to others. One must learn what can be said to whom, in what context and with what connotations.
	• Language	Is both the generic term for the human ability to turn sounds into speech as a form of communication, and a specific term for the way in which members of any one group speak to one another.
Dialogue	• Dialogue	A form of communication occurring when participants, having their own perspectives, yet recognise the existence of other, different perspectives, remaining open to learning about them.
	• Intercultural dialogue	Dialogues occurring between members of different cultural groups. Assumes that participants agree to listen to and understand multiple perspectives, including even those held by groups or individuals with whom they disagree.
Nonverbal behaviour	• Intercultural literacy	All the knowledge and skills necessary to the practice of intercultural competences. Has become an essential tool for modern life, parallel to the development of information literacy, or media literacy.
	• Intercultural responsibility	Builds on understanding of intercultural competence by considering the importance of related concepts such as intercultural dialogue, ethics, religion and notions of citizenship.
	• Reflexivity	The ability to step outside one's own experiences in order to reflect consciously upon them, considering what is happening, what it means, and how to respond.
	• Liquidity	The fluid nature of modern life implies change as a central element of human experience. Liquidity proposes a state of near constant change, with consequences for the ability of individuals to cope with change.
	• Creativity	Our ability to imagine gives us the resilience to adapt to different ecosystems and to invent "ways of living together".
	• Cultural shifting	The cognitive and behavioural capacity of an interculturally competent person to shift or switch language, behaviour or gestures.
	• Disposition	The mind set progressively acquired through primary and secondary socialisation. Disposition are both personal and socially shared.

Competences	Descriptors/components	Further description (selected/extract)
	<ul style="list-style-type: none"> <li data-bbox="465 240 757 268">• Semantic availability 	Describes the plasticity of ideas: when a concept is dimly understood, but not clear; pre-emergent, not yet fully formed; having a word at the tip of one's tongue, except that the world has not yet been invented in that language.
	<ul style="list-style-type: none"> <li data-bbox="465 357 651 384">• Conviviality 	Described as the autonomous and creative intercourse among persons, and the intercourse of persons with their environment.
	<ul style="list-style-type: none"> <li data-bbox="465 437 636 464">• Resilience 	Key characteristic when addressing cultures in their handling of traditions and modernity.

