**KEY COMPETENCE APPROACH AT EU LEVEL**

*This article aims to help teachers evolve towards a key-competence approach in their teaching. Our purpose is to provide teachers with [basic knowledge] of core competences necessary in teaching in Europe by offering key documents, examples of good practice, and a range of resources and methodologies that will support them with this pedagogical approach. This article is a conclusive summary of our Erasmus + project, “We are European, We are Equal,” a project which has given us the opportunity to work collaboratively towards implementing a key-competence approach in teaching and learning at local, national and European level.*

*Giovanna Della Monica*

*Julia Gracia Ordóñez*

*Martha Karvounidou*

This article is based upon the key elements that form the recommendation of the **Council of the European Union on 22 May 2018 on key competences for lifelong learning.[[1]](#footnote-1)**

**They are as follows:**

**RIGHTS:**

Everyone has the right to quality education in order to acquire competences that allow a full participation in society and a successful transition in the job market needed for social inclusion.[[2]](#footnote-2)

**ORIGINS:**

In 2006, the European Parliament and the Council of the European Union adopted a key-reference Recommendation for the development of competence-orientated education training and learning.

**JUSTIFICATION OF THIS APPROACH:**

According to the **OECD (Organisation for Economic Cooperation and Development) and PISA (Programme for International Student Assessment)**, in 2015 one in five pupils had serious difficulties developing reading or mathematics skills, while 44% of the population had low or no digital skills.[[3]](#footnote-3)

**KEY ELEMENTS:**

- Skills such us problem-solving, critical thinking, the ability to cooperate, creativity, computational thinking and self-regulation are essential for a changing society that is becoming increasingly more digital.

- Assessment can help to structure the learning process and guide pupils to improve their competences. **The European Qualification Framework (4)** provides a common reference framework indicating the competences required to achieve specific levels of qualifications, through 8 different levels, and a set of descriptors based on knowledge, skills, and autonomy.

- Language learning is identified in the **Common European Framework of Reference for Languages (CEFR) (5).** Launched in 2001, the CERF organizes language proficiency in 6 levels from A1 to C2, which are defined by can-do descriptors for each competence. These descriptors were created without reference to any specific language which guarantees their relevance and international applicability. Some time after, Reference Level Descriptors (RLDs) for national and regional languages were given to specify content for national and regional languages. **(6)**

**- The Council of Europe’s Reference Framework of Competences for Democratic Culture (7)** has also been taken into account. It is a key document intended to be used by educators. It offers support in the design of teaching, learning and assessment approaches to competences or clusters of competences that need to be acquired by learners for their participation in a culture of democracy.

**- The European Digital Competence Framework (8),** also known as DigComp 2.0, is a tool to improve the digital competences of citizen. It was updated in 2016. The document focused on new vocabulary and streamlined descriptors. It also gives examples of how it is used at national and regional levels. It identifies key components in the following five areas: Information and Data Literacy, Communication and Collaboration, Digital Content Creation, Safety, and Problem Solving

**- The entrepreneurship Competence Framework (9)** aims to establish a bridge between the world of education and work. It sets out three interconnected competence areas: Ideas and opportunities, Resources, and Into Action. Each area is made up of five components along an 8-level progression chart with learning outcomes. It is meant to be used to develop the curricula and learning activities fostering entrepreneurship.

**- Inquiry Based Science Teaching (10)** was a EU research project to improve the take- up for science. The idea is that pupils develop knowledge driven by curiosity rather than passively absorbing information. A wide range of materials, including teacher training materials were developed. Nowadays, **Scientix (The Community for Science Education in Europe)** promotes collaboration among European **STEM** **(Science Technology Engineering and Mathematics**) education professionals.

- The relevance of **non-formal learning** **(11)** has also been acknowledged from the experience acquired through youth work and voluntary work.

- The development of key competences should be fostered in all levels of education, from early childhood to higher education, including low-skilled adults. A package of measures addressing key competences was presented by the Commission at an EU Summit in response to the main challenges faced by the Council, which included school underachievement, ESL (Early School Leaving), lack of digital skills, or inability to speak a second languages **(11).**

**RECOMMENDATIONS**

Member States should:

- Use the “Key Competences for Lifelong Learning – a European reference Framework” supporting all learners, including those with Special Needs

- Increase the level and awareness of all key competences for all learners and teaching staff

- Make use of good practice and collaboration

- Mainstream the UN Sustainable Development Goals (SDG)

- Report through existing frameworks of the Strategic Framework for European Cooperation in Education and Training (ET2020)

**KEY COMPETENCES**

**Definition:** Key Competences are a combination of knowledge (facts, concepts of a certain area), skills (ability to carry out processes), and attitudes (mind-set to react to situations). We all need key competences for personal development and they are considered equally important.

**EIGHT KEY COMPETENCES:**

1. Literacy competence

2. Multilingual competence

3. Mathematical competence and competence in science, technology, and engineering

4. Digital competence

5. Personal, social and learning to learn competence

6. Citizenship competence

7. Entrepreneurship competence

8. Cultural awareness and expression competence

**KEY COMPETENCES DEVELOPED:**

**1. Literacy Competence:**

**Definition:** Literacy Competence is the ability to understand and express concepts and opinions in oral and written forms using materials across disciplines and contexts. It implies the ability to communicate effectively with others. It is usually developed in the mother tongue.

**What does it involve?**

**- Knowledge:** Of reading and writing, vocabulary, grammar and functions of language, literary texts, and registers of language

**- Skills:** To communicate both orally and in writing and use different types of sources to work with information.

**- Attitudes:** A positive disposition to critical and constructive dialogue with an awareness of the impact of language on others.

**Further information:**

**ELINET (European Literacy Policy Network)**

- Literacy in Europe: Facts and Figures **(12)**

- European Framework of Good Practices in raising literacy levels **(13)**

**FELA (The Federation of European Literacy Associations) (14)**

**Useful resources for teachers:**

- ELINET video: Results after 2 years

<https://youtu.be/JEldfxC57d8>

- The Literacy Shed: Animations and spelling resources to improve literacy

<https://www.literacyshed.com>

- A list of useful web resources for literacy:

<https://www.nbss.ie/sites/default/files/publications/mm_useful_web_resources_cu_0.pdf>

**2. Multilingual Competence:**

**Definition:** Multilingual Competence is the ability to use different languages appropriately and effectively for communication. It shares the main skills of literacy (listening, speaking, reading, writing and interacting in both oral and written forms) and it integrates an intercultural dimension.

**What does it involve?**

**Knowledge:** Vocabulary and grammar of different languages and an awareness of the main types of verbal interaction and registers of languages as well as cultural aspects.

**Skills:** The ability to understand spoken messages, initiate, sustain and conclude conversations and to read, understand, and draft texts using tools according to their proficiency level.

**Attitudes:** A positive attitude to appreciate the cultural diversity and interest for other languages and the respect for one’s mother tongue and a country’s official language.

**Further information:**

**- CEFR: Common European Framework of Reference for Languages**

**- School Education Gateway:** [**https://www.schooleducationgateway.eu/en/pub/theme\_pages/language\_learning.htm**](https://www.schooleducationgateway.eu/en/pub/theme_pages/language_learning.htm)

**- eTwinning:**

[**https://www.etwinning.net/en/pub/index.htm**](https://www.etwinning.net/en/pub/index.htm)

**- Erasmus +:**

[**http://ec.europa.eu/programmes/erasmus- plus/node\_en**](http://ec.europa.eu/programmes/erasmus-plus/node_en)

**- Council of Europe Language Policy Portal:**

[**https://www.coe.int/en/web/language- policy/home**](https://www.coe.int/en/web/language-policy/home)

**- Rethinking language education and linguistic diversity in school:**

[https://publications.europa.eu/en/publication- detail/- /publication/de1c9041- 25a7- 11e8- ac73- 01aa75ed71a1/language- en](https://publications.europa.eu/en/publication-detail/-/publication/de1c9041-25a7-11e8-ac73-01aa75ed71a1/language-en)

**Useful resources for teachers:**

**- European Language Labels:** Innovative projects in language teaching and learning[**http://ec.europa.eu/education/initiatives/label/label\_public/index.cfm**](http://ec.europa.eu/education/initiatives/label/label_public/index.cfm)

**- EDINA: Education of International Newly Arrived Migrant Pupils:**

[**https://www.edinaplatform.eu/en**](https://www.edinaplatform.eu/en)

**- EDL: European Day of Languages Portal**

[**https://edl.ecml.at**](https://edl.ecml.at)

**- Itilt2: Interactive Teaching in Languages with Technology**

[**http://www.itilt2.eu/pages/default.aspx**](http://www.itilt2.eu/pages/default.aspx)

**- SupEFL: Supplemental Self- Help in English as a Foreign Languages for Learners with Specific Learning Differences**

[**http://www.supefl.eu/index.php**](http://www.supefl.eu/index.php)

**3.Mathematical Competence and Competence in Science, Technology and Engineering**

**Definition:**

Mathematical Competence and Competence in Science, Technology and Engineering is the ability to apply mathematical thinking in order to solve a range of problems in everyday situations, as well as the ability to explain the natural world making use of methodologies in order to identify questions and draw evidence-based conclusions in response to human needs.

**What does it involve?**

**Knowledge:**

- In mathematics, a sound knowledge of numbers, measures, structures, and basic operations.

- For science, technology, and engineering, the basic principles of the natural world, fundamental scientific concepts, principles and methods and technological products and processes.

**Skills:**

- To apply mathematical principles and processes in everyday contexts at home and work in order to evaluate an argument.

- To understand science as a process for investigation through methodologies and experiments, to use logical thought to test a hypothesis, and the ability to handle technological tools and machines.

**Attitudes:**

- Respect for truth and willingness to look for reasons.

- Critical appreciation and concern for safety and environmental sustainability.

**Further information:**

**- Council Recommendation on Key Competences for lifelong learning:**

[**https://www.parlament.gv.at/PAKT/EU/XXVI/EU/00/83/EU\_08336/imfname\_10779422.pdf**](https://www.parlament.gv.at/PAKT/EU/XXVI/EU/00/83/EU_08336/imfname_10779422.pdf)

**- Horizon 2020: Draft for the Work Programme 2018- 2020 “Science with and for society”:**[**http://ec.europa.eu/research/participants/data/ref/h2020/wp/2016\_2017/main/h2020- wp1617- swfs\_en.pdf**](http://ec.europa.eu/research/participants/data/ref/h2020/wp/2016_2017/main/h2020-wp1617-swfs_en.pdf)

**- Mathematics for Europe:**

[**https://ec.europa.eu/futurium/en/system/files/ged/finalreport\_maths.pdf**](https://ec.europa.eu/futurium/en/system/files/ged/finalreport_maths.pdf)

**Useful resources for teachers:**

**- EU STEM Coalition: The EU’s main network of national STEM platforms:**

[**http://www.stemcoalition.eu**](http://www.stemcoalition.eu)

**- Jet- Net.dk: Promoting STEM through school- company partnerships:**

[**http://www.stemcoalition.eu/programmes/jet- net**](http://www.stemcoalition.eu/programmes/jet-net)

**- The STEM Learning: The largest provider of STEM education in the UK:**

[**https://www.stem.org.uk**](https://www.stem.org.uk)

**- Science on stage Europe: The European Platform for science teachers:**

[**https://www.science- on- stage.eu**](https://www.science-on-stage.eu)

**- Scientix: The community for science education in Europe:**

[**http://www.scientix.eu/about**](http://www.scientix.eu/about)

**- UniSchoolLabs: A past project on remote access for schools to university labs**

[**http://unischoolabs.eun.org/web/guest;jsessionid=783BB07266AC44CAC6BFFBCBA9CEFEB3**](http://unischoolabs.eun.org/web/guest;jsessionid=783BB07266AC44CAC6BFFBCBA9CEFEB3)

**- Pollution! Find a STEM solution: Erasmus + project on robotics**

[**http://stemsolution.weebly.com/#**](http://stemsolution.weebly.com/)

**- LUMA centre Finland: Cooperation of schools, universitites and industry in mathematics and science:**

[**https://www.luma.fi/en/centre/**](https://www.luma.fi/en/centre/)

**- inGenius: The European Coordinating Body in STEM:**

[**http://www.ingenious- science.eu/web/guest;jsessionid=E547B81544227F5929B76C31B133E9DB**](http://www.ingenious-science.eu/web/guest;jsessionid=E547B81544227F5929B76C31B133E9DB)

**- EUCYS: European Union Contest for Young Scientists:**

[**https://eucys2018.com**](https://eucys2018.com)

**4. Digital Competence:**

**Definition:**

Digital Competence involves the responsible use of digital technologies for learning and work. This includes information and data literacy, media literacy, digital content creation, safety, intellectual property, problem solving, and critical thinking.

**What does it involve?**

**Knowledge:**

Understand the principles and mechanisms of evolving digital technologies and gain knowledge of the basic function and use of different devices, software and networks.

**Skills:**

The ability to use, access, evaluate, create and share digital content, manage and protect information, content, and data.

**Attitudes:**

Critical, forward-looking, safe, and responsible use of digital technologies.

**Further information:**

**- European Framework for the Digital Competence of Educators: DigComEdu:**

[**https://ec.europa.eu/jrc/en/publication/eur- scientific- and- technical- research- reports/european- framework- digital- competence- educators- digcompedu**](https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/european-framework-digital-competence-educators-digcompedu)

**- DigComp 2.1: The Digital Competence Framework for Citizens with eight proficiency levels and examples of use:**

[**https://ec.europa.eu/jrc/en/publication/eur- scientific- and- technical- research- reports/digcomp- 21- digital- competence- framework- citizens- eight- proficiency- levels- and- examples- use**](https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/digcomp-21-digital-competence-framework-citizens-eight-proficiency-levels-and-examples-use)

**- DigcOMP 2.0: the Digital Competence Framwork for citizens. Update Phase 1: The Conceptual Reference Model:**

[**https://ec.europa.eu/jrc/en/publication/eur- scientific- and- technical- research- reports/digcomp- 20- digital- competence- framework- citizens- update- phase- 1- conceptual- reference- model**](https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/digcomp-20-digital-competence-framework-citizens-update-phase-1-conceptual-reference-model)

**- DigComp into Action: Get inspires, make it happen. A user guide to the European Digital Competence Framework:**

[**https://ec.europa.eu/jrc/en/publication/eur- scientific- and- technical- research- reports/digcomp- action- get- inspired- make- it- happen- user- guide- european- digital- competence- framework**](https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/digcomp-action-get-inspired-make-it-happen-user-guide-european-digital-competence-framework)

**- Europass: Digital Competences – Self- assessment grid:**

[**https://europass.cedefop.europa.eu/sites/default/files/dc- en.pdf**](https://europass.cedefop.europa.eu/sites/default/files/dc-en.pdf)

**- Opening up education:**

[**https://publications.europa.eu/en/publication- detail/- /publication/cd97428e- ab60- 4e5f- b9c2- 68232274522e**](https://publications.europa.eu/en/publication-detail/-/publication/cd97428e-ab60-4e5f-b9c2-68232274522e)

**- The survey of schools: ICT in Education:**

[**http://essie.eun.org**](http://essie.eun.org)

**- European Digital Progress Report:**

[**https://ec.europa.eu/digital- single- market/en/download- scoreboard- reports**](https://ec.europa.eu/digital-single-market/en/download-scoreboard-reports)

**Useful resources for teachers:**

**- Teacher Networks: Today’s and tomorrow’s challenges and opportunities for the teaching profession:**

[**http://service.eun.org/teachers- newsletter/TellNet\_Teacher\_Networks\_web.pdf**](http://service.eun.org/teachers-newsletter/TellNet_Teacher_Networks_web.pdf)

**- To promote digital competence in the classroom: Coding without computers**

[**https://www.scienceinschool.org/content/coding- without- computers**](https://www.scienceinschool.org/content/coding-without-computers)

**- Driving Europe’s Digital Transformation:**

[**https://www.eitdigital.eu**](https://www.eitdigital.eu)

**- Luis Fernandes’ Article: How to have an effective whole- school approach to digital tools in education:**

[**https://www.schooleducationgateway.eu/en/pub/viewpoints/experts/how\_to\_address\_the\_challenges\_.htm**](https://www.schooleducationgateway.eu/en/pub/viewpoints/experts/how_to_address_the_challenges_.htm)

**- MENTEP MOOC: Mentoring Technology- Enhance Padagogy:**

[**http://mentep.eun.org/moocs**](http://mentep.eun.org/moocs)

**- Online Safety Course MOOC:**

[**https://www.europeanschoolnetacademy.eu/web/online- safety- course**](https://www.europeanschoolnetacademy.eu/web/online-safety-course)

**- Video: Developing Digital Skills in your Classroom:**

[**https://youtu.be/TiWMDw2Dv6M**](https://youtu.be/TiWMDw2Dv6M)

**- EU Code Week:**

[**https://codeweek.eu**](https://codeweek.eu)

**- MOTech: Motivating new technologies for adult education in rural areas:**

[**http://www.e- seniors.asso.fr/Motech\_Flyer.pdf**](http://www.e-seniors.asso.fr/Motech_Flyer.pdf)

**- Erasmus + project: Safe Internet for all (SIFA):**

[**https://www.sifaplus.eu/en/**](https://www.sifaplus.eu/en/)

**5. Personal, Social and Learning to Learn Competence:**

**Definition:**

Personal, Social and Learning to Learn Competence is the ability to effectively manage time and information, work with others, and manage your own learning and career. It includes maintaining physical and mental health, coping with complexity, and managing conflict.

**What does it involve?**

**Knowledge:**

To understand the codes of conduct and rules of communication accepted in different societies and environments. Knowledge of the components of a healthy mind, body and lifestyle, and searching for education, training and career opportunities according to individual competence needs.

**Skills:**

The ability to identify one’s capacities, critically reflect and make decisions, work both collaboratively and autonomously, seek support, cope with stress, show tolerance, and feel empathy.

**Attitudes:**

Positive attitude of collaboration, assertiveness and integrity, respecting diversity, developing resilience to pursue and succeed at learning, handling obstacles, applying prior learning, and looking for opportunities to learn in a variety of contexts.

**Further information:**

**- Education Policies and practices to foster tolerance, respect for diversity and sivic responsibility in children and young people in the EU:**

[**http://nesetweb.eu/wp- content/uploads/2015/08/NESET2\_AR3.pdf**](http://nesetweb.eu/wp-content/uploads/2015/08/NESET2_AR3.pdf)

**Useful resources for teachers:**

**- Socio- Emotional Learning (SEL) in Europe:**

[**http://www.eap- sel.eu**](http://www.eap-sel.eu)

**- SPHE Ireland: It the supports Social, Personal and Health Education of young people as part of the curriculum.**

[**https://sphe.ie**](https://sphe.ie)

**- The Incredible Years: Parents, teachers and children training series to prevent and deal with emotional difficulties during childhood.**

[**http://www.incredibleyears.com/article/the- incredible- years- ireland- study- parents- teachers- and- early- childhood- intervention- long- term- outcomes- of- the- incredible- years- parent- and- teacher- classroom- management- training- programs- combined- 1/**](http://www.incredibleyears.com/article/the-incredible-years-ireland-study-parents-teachers-and-early-childhood-intervention-long-term-outcomes-of-the-incredible-years-parent-and-teacher-classroom-management-training-programs-combined-1/)

**- SCforH: Promoting national implementation for health- enhancing sports activities in a club setting:**

[**https://www.scforh.info/content/uploads/2017/03/scfh2017\_verkko.pdf**](https://www.scforh.info/content/uploads/2017/03/scfh2017_verkko.pdf)

**- I- YES project: For pupils to improve their emotional skills:**

[**http://www.iyes- project.eu/index.php**](http://www.iyes-project.eu/index.php)

**- ENRETE: Erasmus + project enhancing resilience through teacher education:**

[**https://enrete.eu**](https://enrete.eu)

**- EMPAQT: Erasmus + project for empathic and supportive teachers**

[**http://empaqt.eu**](http://empaqt.eu)

**- ENABLE: Empowering Children Eliminate Bullying**

[**http://enable.eun.org**](http://enable.eun.org)

**- RESCUE: Citizen’s Resilience in times of crisis:**

[**http://rescueproject.net**](http://rescueproject.net)

**6. Citizenship Competence:**

**Definition:**

Citizenship Competence is the ability to act as responsible citizens and to participate in social situations understanding economic, legal, political global development, and sustainability concepts.

**What does it involve?**

**Knowledge:**

It is based on knowledge of basic concepts relating to individual, groups, society, economy and culture and the European common values. It also includes the knowledge of world history, climate and demographic changes, European integration and national cultural identities.

**Skills:**

The ability to engage effectively with others, critical thinking to develop arguments, and participating in community and decision-making at all levels as well as understanding the role of media.

**Attitudes:**

Responsible and constructive attitude for human rights and the willingness to participate in democratic decision-making, support social and cultural diversity, caring for the environment and ensuring social justice.

**Further information:**

**- Eurodyce Structural indicators for monitoring education and training systems in Europe 2018:**

[**https://www.scforh.info/content/uploads/2017/03/scfh2017\_verkko.pdf**](https://www.scforh.info/content/uploads/2017/03/scfh2017_verkko.pdf)

**- Paris Declaration 2015 on promoting citizenship and common values:**

[**http://cache.media.education.gouv.fr/file/01\_- \_janvier/79/4/declaration\_on\_promoting\_citizenship\_527794.pdf**](http://cache.media.education.gouv.fr/file/01_-_janvier/79/4/declaration_on_promoting_citizenship_527794.pdf)

**- Norwegian White Paper on Teacher education 2025 strategy:**

[**https://www.regjeringen.no/contentassets/d0c1da83bce94e2da21d5f631bbae817/kd\_teacher- education- 2025\_uu.pdf**](https://www.regjeringen.no/contentassets/d0c1da83bce94e2da21d5f631bbae817/kd_teacher-education-2025_uu.pdf)

**Useful resources for teachers:**

**- POLIS: Austrian Centre for Citizenship Education in schools:**

[**https://bim.lbg.ac.at/en/polis- centre- citizenship- education- schools**](https://bim.lbg.ac.at/en/polis-centre-citizenship-education-schools)

**- UN Decade of ESD (Education for Sustainable Development):**

[**https://en.unesco.org/themes/education- sustainable- development/what- is- esd/un- decade- of- esd**](https://en.unesco.org/themes/education-sustainable-development/what-is-esd/un-decade-of-esd)

**- ENVKIDS: Erasmus + programme on environmental sustainability training for children:**

[**http://ohmpro.org/envkids/**](http://ohmpro.org/envkids/)

**7. Entrepreneurship Competence:**

**Definition:**

Entrepreneurship Competence refers to the capacity to act upon opportunities and transform them into projects that are of cultural, social or financial value by taking initiative and working collaboratively.

**What does it involve?**

**Knowledge:**

Knowledge of planning and management of projects, social and economic opportunities facing an employer, and awareness of ethical principles.

**Skills:**

Creativity, strategic thinking, innovation, working both as individual and collaboratively, mobilizing resources, sustaining activity, making financial decisions and effectively communicating and negotiating with others.

**Attitudes:**

A sense of initiative, pro-activity, courage and perseverance, motivating others and valuing their ideas, empathy, and taking care of people.

**Further information:**

**- EntreComp: The Entrepreneurship Competence Framework 2016:**

[**http://publications.jrc.ec.europa.eu/repository/bitstream/JRC101581/lfna27939enn.pdf**](http://publications.jrc.ec.europa.eu/repository/bitstream/JRC101581/lfna27939enn.pdf)

**- EntreComp into action: Get inspired, make it happen: A user guide to European Entrepreneurship Competence Framework:**

[**https://ec.europa.eu/jrc/en/publication/eur- scientific- and- technical- research- reports/entrecomp- action- get- inspired- make- it- happen- user- guide- european- entrepreneurship- competence**](https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/entrecomp-action-get-inspired-make-it-happen-user-guide-european-entrepreneurship-competence)

**- Promoting the entrepreneurship competence in young adults in Europe: Towards a self- assessment tool:**

[**https://library.iated.org/view/BACIGALUPO2016PRO**](https://library.iated.org/view/BACIGALUPO2016PRO)

**- Entrepreneurship Education: A Guide for Educators:**

[**https://www.schooleducationgateway.eu/en/pub/resources/publications/entrepreneurship- education- - - a.htm**](https://www.schooleducationgateway.eu/en/pub/resources/publications/entrepreneurship-education---a.htm)

**- Entrepreneurship Education at school in Europe:**

[**https://www.azoo.hr/images/Entrepreneurship\_Education\_at\_School\_in\_Europe.pdf**](https://www.azoo.hr/images/Entrepreneurship_Education_at_School_in_Europe.pdf)

**- Entrepreneurship in Education: What, Why, When and How:**

[**http://www.oecd.org/cfe/leed/BGP\_Entrepreneurship- in- Education.pdf**](http://www.oecd.org/cfe/leed/BGP_Entrepreneurship-in-Education.pdf)

**Useful resources for teachers:**

**- Erasmus + project MENTEE “Inspiring entrepreneurs”:**

[**https://www.schooleducationgateway.eu/en/pub/resources/publications/mentee- inspiring- entrepreneur.htm**](https://www.schooleducationgateway.eu/en/pub/resources/publications/mentee-inspiring-entrepreneur.htm)

**- Innovation in entrepreneurship education in Europe:**

[**https://www.wu.ac.at/fileadmin/wu/d/ri/ricc/Forschung/Laufende\_Projekte/researchreport2011\_3.pdf**](https://www.wu.ac.at/fileadmin/wu/d/ri/ricc/Forschung/Laufende_Projekte/researchreport2011_3.pdf)

**- Ways to succeed with entrepreneurship education: Best Practice Guide**

[**https://www.zilinskazupa.sk/files/on- line- kniznica/oss/plan- osvd- aj.pdf**](https://www.zilinskazupa.sk/files/on-line-kniznica/oss/plan-osvd-aj.pdf)

**- Erasmus + “Success4All project” : Guide of best practices for entrepreneurship education:**

[**http://success4allstudents.eu/wp- content/uploads/2017/12/Intellectual- Output- 3\_EntrepreneurshipBestPracticesFactbook\_ENG.pdf**](http://success4allstudents.eu/wp-content/uploads/2017/12/Intellectual-Output-3_EntrepreneurshipBestPracticesFactbook_ENG.pdf)

**8. Cultural awareness and expression Competence:**

**Definition:**

Cultural Awareness and Expression Competence involves an understanding of how ideas are creatively expressed in different cultures through a range of arts and developing one’s own ideas and sense of place or role in society in a variety of contexts.

**What does it involve?**

**Knowledge:**

Knowledge of local, regional, national, European and global cultures and expressions including heritage and traditions and cultural products within a world of cultural diversity. Understanding the different ways of communicating ideas between creator, participant, and audience in all formats.

**Skills:**

The ability to express abstract ideas, experiences, and emotions with empathy in a range of arts and other cultural forms. The ability to identify opportunities for personal, social, or commercial value and engaging in the creative process.

**Attitude:**

Respect for diversity of cultural expressions and an ethical and responsible approach to intellectual and cultural ownership. Also, a curiosity about the world.

**Further information:**

**- Cultural Awareness and expression handbook:**

[**https://publications.europa.eu/en/publication- detail/- /publication/6066c082- e68a- 11e5- 8a50- 01aa75ed71a1**](https://publications.europa.eu/en/publication-detail/-/publication/6066c082-e68a-11e5-8a50-01aa75ed71a1)

**- Article: Cultural Awareness and expression- a key competence:**

[**https://www.schooleducationgateway.eu/en/pub/viewpoints/experts/cultural\_awareness\_and\_express.htm?utm\_campaign=engagor&utm\_content=engagor\_Mzg0MTg5NQ%253D%253D&utm\_medium=social&utm\_source=twitter**](https://www.schooleducationgateway.eu/en/pub/viewpoints/experts/cultural_awareness_and_express.htm?utm_campaign=engagor&utm_content=engagor_Mzg0MTg5NQ%253D%253D&utm_medium=social&utm_source=twitter)

**- Creative Europe Programme:**

[**http://www.europarl.europa.eu/RegData/etudes/BRIE/2018/628229/EPRS\_BRI(2018)628229\_EN.pdf**](http://www.europarl.europa.eu/RegData/etudes/BRIE/2018/628229/EPRS_BRI%282018%29628229_EN.pdf)

**- Building synergies between education and culture:**

[**http://lllplatform.eu/lll/wp- content/uploads/2015/09/Joint- position- paper\_Building- synergies- education- and- culture.pdf**](http://lllplatform.eu/lll/wp-content/uploads/2015/09/Joint-position-paper_Building-synergies-education-and-culture.pdf)

**Useful resources for teachers:**

**- ACEnet: A network of experts in the fields of arts and cultural education:**

[**http://www.aceneteurope.net**](http://www.aceneteurope.net)

**- INTERMOVE: A cross-cultural project**

[**http://inter- move.eu/en/home/**](http://inter-move.eu/en/home/)

**- Video: Arts, culture and cultural awareness in education:**

[**https://youtu.be/I9kJPn2V72I**](https://youtu.be/I9kJPn2V72I)

**KEY COMPETENCE APPROACH:**

- A teaching and learning key competence approach includes a dynamic combination of knowledge, skills and attitudes that can be developed through inclusive education, training, and lifelong learning in all educational stages throughout life.

- 3 aspects are identified to support key competence-oriented education:

**1. A variety of learning approaches and contexts:**

**a)**

**- Multi-disciplinary learning:**

According to UNESCO: “it is an approach to curriculum integration which focuses primarily on the different disciplines and the diverse perspectives they bring to illustrate a topic, theme or issue. The same topic is studied from the viewpoint of more than one discipline.” **(15)**

*Good practice example: Multi- indisciplinary teams for ESL prevention*

<https://www.schooleducationgateway.eu/en/pub/resources/toolkitsforschools/subarea.cfm?sa=28>

**- Cross-sectorial co-operation:**

An approach in which relevant stakeholders such as school leaders, staff, local communities, public authorities and institutions foster their active involvement in a given school project or issue.

*Good practice example: CroCoos*

[**https://www.schooleducationgateway.eu/en/pub/resources/toolkitsforschools/detail.cfm?n=7032**](https://www.schooleducationgateway.eu/en/pub/resources/toolkitsforschools/detail.cfm?n=7032)

**- Whole school approach: Ireland**

In this approach schools are seen as collaborative learning environments and the entire school community – school leaders, teaching and non-teaching staff, parents and families, together with external stakeholders, take responsibility to help all learners develop to the best of their abilities.

*Good practice example: St Killiands Community school in Ireland*

<https://www.schooleducationgateway.eu/en/pub/resources/toolkitsforschools/area.cfm?a=1&c=348>

**- Collaborative learning**

It means pupils working together towards a common goal. Pupils have helped each other to learn and are responsible for each other’s learning which improves pupils engagement and achievement.

*Good practice example: eTwinning*

[*https://www.etwinning.net/en/pub/about.htm*](https://www.etwinning.net/en/pub/about.htm)

**b)**

**- SEL (Socio Emotional Learning)**

It is the process by which pupils understand and manage emotions, feel and show empathy for others, and maintain positive relationships.

*Good practice example: ENSEC*

[*http://enseceurope.org*](http://enseceurope.org)

**- Healthy living activities:**

Schools should promote the overall health benefits of regular activity and healthy eating throughout the curriculum as obesity is reaching worrying levels in Europe.

*Good practice example: EHLA*

[*https://www.ehla- europe.eu/about- us- objectives- and- recommendations/*](https://www.ehla-europe.eu/about-us-objectives-and-recommendations/)

**c)**

**- PBL (Project Based Learning):**

PBL is a pedagogical approach that allows pupils to creatively and collaboratively solve real- world problems.

*Good practice example: Lesson Plans for PBL in your classroom:*

[*https://www.schooleducationgateway.eu/en/pub/teacher\_academy/teaching\_materials/lesson- plans- for- project- based.htm*](https://www.schooleducationgateway.eu/en/pub/teacher_academy/teaching_materials/lesson-plans-for-project-based.htm)

**- Inquiry-Based learning (IBL):**

IBL is a pedagogical approach by which teachers introduce a stimulus to the class inviting pupils to pose questions, explore, explain, collaborate and evaluate.

*Good practice example: PRIMAS*

[*https://primas- project.eu/wp- content/uploads/sites/323/2017/11/primas\_final\_publication.pdf*](https://primas-project.eu/wp-content/uploads/sites/323/2017/11/primas_final_publication.pdf)

**- Games-based learning (GBL):**

GBL is an engaging pedagogical approach which helps pupils achieve measurable goals, such us knowledge of a subject, by playingand having fun which leads to better performance.

*Good practice example: UCD Dublin: Teacher Toolkit (An introduction to GBL):*

[*https://www.ucd.ie/t4cms/UCDTLT0044.pdf*](https://www.ucd.ie/t4cms/UCDTLT0044.pdf)

**- STEM**

Skills in Science, Technology, Engineering and Mathematics

*Good Practice example: SCIENTIX (The Community for science education in Europe)*

[*http://www.scientix.eu*](http://www.scientix.eu)

**d)**

**- Enhance the use of digital technology through:**

 **- EU Code Week:**

EU Code Week is an initiative which aims to bring coding and digital literacy to everybody in a fun and engaging way to understand how technology works and develop skills to innovate. It was celebrated from 6th to 21st October 2018.

<https://codeweek.eu>

 **- SELFIE tool:**

Self-reflection on Effective Learning by Fostering the use of Innovative Educational Technologies is a tool designed to help schools embed digital technologies into teaching, learning and assessment.

[https://ec.europa.eu/education/schools- go- digital/about- selfie\_en](https://ec.europa.eu/education/schools-go-digital/about-selfie_en)

**e)**

**Entrepreneurial experiences:**

Schools play a significant role in improving the knowledge, attitude and skills of the pupils towards their lives. Exposing entrepreneurship and innovation can make them consider entrepreneurship careers in the future. Entrepreneurship is about opportunities, innovation and growth.

*Good practice example: ECOOPE (European Youth Cooperative Entrepreneurship) Education Toolkit*

[*http://youth.ecoope.eu/documents- 2/*](http://youth.ecoope.eu/documents-2/)

**f)**

**Develop multilingual competence:**

There are 24 official languages in the EU. The EU multilingual policy strives to protect Europe’s rich linguistic diversity and promote language learning through:

**The Europa Website:**

With EU information in all the official languages

[**http://europa.eu**](http://europa.eu)

**Erasmus +**

The EU Education and Training programme:

[https://ec.europa.eu/programmes/erasmus- plus/node\_en](https://ec.europa.eu/programmes/erasmus-plus/node_en)

**eTwinning:**

A platform for educational staff working in a school in one of the European countries to communicate, collaborate, develop projects in a learning online community in Europe.

<https://www.etwinning.net/en/pub/index.htm>

**CLIL:**

It’s the curriculum development for Content and Language Integrated Learning

[http://clil- cd.ecml.at/EuropeanFrameworkforCLILTeacherEducation/tabid/2254/language/en- GB/Default.aspx](http://clil-cd.ecml.at/EuropeanFrameworkforCLILTeacherEducation/tabid/2254/language/en-GB/Default.aspx)

 **EPALE:**

EPALE is the Electronic Platform for Adult Learning in Europe

<https://ec.europa.eu/epale/en>

 **OLS:**

OLS is Online Linguistic Support. It’s a free language learning platform designed for Erasmus + participants.

<https://erasmusplusols.eu/en/>

**g)**

**Inclusive education:**

The European Commission has adopted 3 proposals to help build inclusive, cohesive societies through education and culture:

- The ET2020 is a strategic framework for European cooperation in education and training that allows Member States to cooperate in building best practice and promote equity.

- Council Recommendation on Common Values, Inclusive Education and the European Dimension of Teaching

[https://ec.europa.eu/education/education- in- the- eu/council- recommendation- on- common- values- inclusive- education- and- the- european- dimension- of- teaching\_en](https://ec.europa.eu/education/education-in-the-eu/council-recommendation-on-common-values-inclusive-education-and-the-european-dimension-of-teaching_en)

- #BeInclusive EU Sport Awards

[https://ec.europa.eu/sport/be- inclusive\_en](https://ec.europa.eu/sport/be-inclusive_en)

**School Education Gateway:**

This European Platform has developed a European Toolkit for Schools promoting inclusive education and tackling ESL (Early School Leaving)

<https://www.schooleducationgateway.eu/en/pub/resources/toolkitsforschools.htm>

**- Career guidance**

NICE: Network for Innovation in Career Guidance and Counselling in Europe

[**http://www.nice- network.eu**](http://www.nice-network.eu)

**- Material support:**

“Teaching careers in Europe: Access, Progression and Support”

[https://publications.europa.eu/en/publication- detail/- /publication/435e941e- 1c3b- 11e8- ac73- 01aa75ed71a1/language- en](https://publications.europa.eu/en/publication-detail/-/publication/435e941e-1c3b-11e8-ac73-01aa75ed71a1/language-en)

**h)**

**Collaboration between education, training and learning settings**

**Education**

UNESCOS’s Transforming learning and training environments

[https://en.unesco.org/gap/priority- action- areas/transforming- learning](https://en.unesco.org/gap/priority-action-areas/transforming-learning)

**i)**

**Cooperation between education and non- educational partners in local communitites:**

OECD What makes a school a learning organization?

[https://www.oecd.org/education/school/school- learning- organisation.pdf](https://www.oecd.org/education/school/school-learning-organisation.pdf)

**2.Support for teachers and other educational staff:**

**a)**

**Continuous professional development:**

**European Schoolnet:** A network of 34 European Ministries of Education that aims to bring innovation, teaching and learning to key stakeholders and support schools and teachers in their teaching practices

[**http://www.eun.org/about**](http://www.eun.org/about)

**b)**

**Staff exchanges and peer learning:**

Erasmus + Job Shadowing:

[http://ec.europa.eu/programmes/erasmus- plus/opportunities/staff- teaching\_en](http://ec.europa.eu/programmes/erasmus-plus/opportunities/staff-teaching_en)

**c)**

**Innovative practices:**

**ECIU:** The European Consortium of Innovative Universities

<https://www.eciu.org>

**d)**

**Europass Teacher Acdemy:**

It specializes in providing teachers with lifelong education in innovative teaching methods and strategies. It organizes online courses within the framework of the Erasmus + program.

[https://www.teacheracademy.eu/en/europass- teacher- training- academy.html](https://www.teacheracademy.eu/en/europass-teacher-training-academy.html)

**3. Assessment and validation of competence development:**

Key Competences are assessed by nationally standardised tests since 2011 as described in this publication:

[https://www.education.ie/en/Press- Events/Events/EU- Presidency- 2013/Conference- 19- 20- Mar- 2013/Tapio\_Saavala\_keynote- address\_The- Assessment- of- Key- Competences- in- Schools.pdf](https://www.education.ie/en/Press-Events/Events/EU-Presidency-2013/Conference-19-20-Mar-2013/Tapio_Saavala_keynote-address_The-Assessment-of-Key-Competences-in-Schools.pdf)

**a)**

**Frameworks of learning outcomes:**

The European Learning Outcomes principle has been promoted in EU policy agenda since 2004. It combines European Tools with the European Qualification Framework (EQN).

A learning outcome is what an individual should know or be able to do at the end of a learning process.

**CEDEFOP** is the European Centre for the Development of Vocational Training and carries out studies analysing the use of learning outcomes for different purposes.

[http://www.cedefop.europa.eu/en/events- and- projects/projects/learning- outcomes](http://www.cedefop.europa.eu/en/events-and-projects/projects/learning-outcomes)

**European Qualifications Framework (EQF)**

EQF is a common European reference framework that aims to make qualifications more understandable across 35 countries

[https://ec.europa.eu/ploteus/en/content/descriptors- page](https://ec.europa.eu/ploteus/en/content/descriptors-page)

**b)**

**Digital technologies:**

**c)**

**Assessment in no-formal learning settings available to all individuals to support their progression**

**d)**

**Validation processes**

**Europass:**

**Youthpass:**

**National Strategies in education influenced by the European Framework of Key Competences:**

**Member States implementation map:**

**Comparisons of International Frameworks with the European Key Competences:**

**WEF 21st Century Skills:**

**P21 Partnership for 21st Century learning:**

**UNESCO Global Framework of Learning Domains:**

**ODCE Global competences:**

**GLOBAL COMPETENCE (4):**

**Definition:** Global Competence is a multidimensional capacity that allows pupils to examine local, global and intercultural issues, understand different perspectives in world views, interact successfully with others, and take responsible action towards collective well being in four dimensions: knowledge, skills, attitudes and values.



**Pedagogies for promoting global competence:**

- Group- based co-operative work

- Organized discussions

- Structure debates

- Service Learning

**Assessing Global Competence:**

The 2018 PISA assessment has two components: a cognitive test and a set of questionnaire items. The cognitive tests are assessed by levels: basic, intermediate and advanced. The questionnaires included self-reported knowledge and skills.

**Bibliography:**

1. The Council of the European Union; “Council recommendation on key competences for lifelong learning”, 22 May 2018,[**https://eur- lex.europa.eu/legal- content/EN/TXT/PDF/?uri=CELEX:32018H0604(01)&rid=7**](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018H0604(01)&rid=7)
2. The European Parliament, Council and Commission, “Article 1 of Chapter 1 Equal opportunities and access to the labour market of the European Pillar of Social Rights”, Gothenburg 17th November 2017, [https://ec.europa.eu/commission/sites/beta- political/files/social- summit- european- pillar- social- rights- booklet\_en.pdf](https://ec.europa.eu/commission/sites/beta-political/files/social-summit-european-pillar-social-rights-booklet_en.pdf)
3. PISA and OECD, “Pisa 2015 Results (Volume 1) Excellence and Equity in Educattion” Paris, 2016: [https://www.oecd- ilibrary.org/docserver/9789264266490- en.pdf?expires=1546064341&id=id&accname=guest&checksum=EA5D725812E9DE691BDFF7425D5B3064](https://www.oecd-ilibrary.org/docserver/9789264266490-en.pdf?expires=1546064341&id=id&accname=guest&checksum=EA5D725812E9DE691BDFF7425D5B3064)
4. Council of the European Union, “Council Recommendation on the European Qualification Framework for lifelong learning”, Brussels, 24th May 2017, [http://data.consilium.europa.eu/doc/document/ST- 9620- 2017- INIT/en/pdf](http://data.consilium.europa.eu/doc/document/ST-9620-2017-INIT/en/pdf)
5. Council of Europe, “Common European Framework of Reference for Languages: Learning, Teaching, Assessment”, Strasbourg: 2001, <https://rm.coe.int/1680459f97>
6. Council of Europe, “CEFR Reference level descriptors language by language:components and forerunners”, 2005, https://www.coe.int/en/web/common- european- framework- reference- languages/reference- level- descriptions- rlds- developed- so- far
7. Council of Europe, “Reference Framwork of Competences for Democratic Culture” , April 2018, [https://rm.coe.int/prems- 008318- gbr- 2508- reference- framework- of- competences- vol- 1- 8573- co/16807bc66c](https://rm.coe.int/prems-008318-gbr-2508-reference-framework-of-competences-vol-1-8573-co/16807bc66c)
8. “Vuorikari, R., Punie, Y., Carretero Gomez S., Van den Brande, G. (2016). “DigComp 2.0: The Digital Competence Framework for Citizens”. Update Phase 1: The Conceptual Reference Model. Luxembourg Publication Office of the European Union. EUR 27948 EN. doi:10.2791/11517
9. European Commission, “EntreComp: The Entrepreneurship Competence Framework”, European Union: Spain, 2016, <http://publications.jrc.ec.europa.eu/repository/bitstream/JRC101581/lfna27939enn.pdf>
10. Council of Europe, “Pathways 2.0 towads recognition of non- formal/ learning education and of youth work in Europe”, Strasbourg: 2011, [https://pjp- eu.coe.int/documents/1017981/3084932/Pathways\_II\_towards\_recognition\_of\_non- formal\_learning\_Jan\_2011.pdf/6af26afb- daff- 4543- 9253- da26460f8908](https://pjp-eu.coe.int/documents/1017981/3084932/Pathways_II_towards_recognition_of_non-formal_learning_Jan_2011.pdf/6af26afb-daff-4543-9253-da26460f8908)
11. European Commission, “Building a stronger Europe: the role of youth, education and culture policies”, Brussels: 22/05/2018, [https://eur- lex.europa.eu/legal- content/EN/TXT/PDF/?uri=CELEX:52018DC0268&rid=8](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018DC0268&rid=8)
12. ELINET (European Literacy Policy Network), “Literacy in Europe: Facts and figures”, 2015: [http://www.eli- net.eu/fileadmin/ELINET/Redaktion/Factsheet- Literacy\_in\_Europe- A4.pdf](http://www.eli-net.eu/fileadmin/ELINET/Redaktion/Factsheet-Literacy_in_Europe-A4.pdf)
13. ELINET, “European Framework of good practices in Raising Literacy Levels in Children, Adolescents and Adults”, University of Cologne: Cologne, June 2015, [http://www.eli- net.eu/fileadmin/ELINET/Redaktion/user\_upload/Framework\_of\_GP\_Website\_JUNE\_08062015.pdf](http://www.eli-net.eu/fileadmin/ELINET/Redaktion/user_upload/Framework_of_GP_Website_JUNE_08062015.pdf)
14. FELA (Federation of European Literacy Associations), December 2018, <http://www.literacyeurope.org>
15. Glossary of Curriculum Terminology, International Bureau of Education, UNESCO, Geneva: 2013, [http://www.ibe.unesco.org/en/glossary- curriculum- terminology/m/multidisciplinary- approach](http://www.ibe.unesco.org/en/glossary-curriculum-terminology/m/multidisciplinary-approach)
16. PISA and OECD, “Preparing our youth for an inclusive and sustainable world”, France 2018, [http://www.oecd.org/pisa/Handbook- PISA- 2018- Global- Competence.pdf](http://www.oecd.org/pisa/Handbook-PISA-2018-Global-Competence.pdf)
1. The Council of the European Union; “Council recommendation on key competences for lifelong learning”, 22 May 2018,[**https://eur- lex.europa.eu/legal- content/EN/TXT/PDF/?uri=CELEX:32018H0604(01)&rid=7**](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018H0604(01)&rid=7) [↑](#footnote-ref-1)
2. The European Parliament, Council and Commission, “Article 1 of Chapter 1 Equal opportunities and access to the labour market of the European Pillar of Social Rights”, Gothenburg 17th November 2017, [https://ec.europa.eu/commission/sites/beta- political/files/social- summit- european- pillar- social- rights- booklet\_en.pdf](https://ec.europa.eu/commission/sites/beta-political/files/social-summit-european-pillar-social-rights-booklet_en.pdf) [↑](#footnote-ref-2)
3. PISA and OECD, “Pisa 2015 Results (Volume 1) Excellence and Equity in Education,” Paris, 2016: [https://www.oecd- ilibrary.org/docserver/9789264266490- en.pdf?expires=1546064341&id=id&accname=guest&checksum=EA5D725812E9DE691BDFF7425D5B3064](https://www.oecd-ilibrary.org/docserver/9789264266490-en.pdf?expires=1546064341&id=id&accname=guest&checksum=EA5D725812E9DE691BDFF7425D5B3064) [↑](#footnote-ref-3)