

A Guide to Fostering Entrepreneurship Education

Five key actions towards a digital, green and resilient Europe

October 2021





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This report results from a series of workshops as well as related online communities and surveys of participants supported by the European Commission (EC) under contract EASME/COSME/2017/021, Peer-learning activities in entrepreneurship education and in women entrepreneurship. It summarises discussions engaging representatives of governments, schools, higher education institutions, businesses, and civil society from countries of the EC's COSME programme. Findings from literature complement workshop results. The authors are Stefan Lilischkis (empirica), Minna Melleri, Jarle Tommerbakke (JA Europe) as well as Christine Volkmann and Marc Grünhagen (Bergische Universität Wuppertal).

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"I particularly welcome efforts in taking entrepreneurship education further in Europe and offering as many students as possible a real-life experience of what it means to be entrepreneurial in today's world."¹

> Ursula von der Leyen, President of the European Commission

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Key actions to foster entrepreneurship education in Europe

Europe needs more people who tackle pressing societal challenges: above all the twin transition to a digital and green society as well as pandemic recovery. Entrepreneurship education (EE) can unleash the potential of Europeans to master climate change and digitisation and to build a more resilient society. In order to enhance European cooperation and strategy building in EE, the European Commission implemented the project "Peer-Learning Activities in Entrepreneurship Education and in Women's Entrepreneurship" (2018–2021). This Guide is a final output of the project. The target group is decision makers in governments, schools and higher education, civil society, and business – on local, regional, national, and European level.

The project identified **five main areas** where decision makers could become active: training educators, ensuring stakeholders' cooperation, sharing knowledge, raising awareness of EE benefits as well as conducting research and analysis about EE. These areas are interlinked and mutually reinforce each other:

Develop EE competence of leaders and teachers in education institutions: Increased uptake of EE depends on the degree to which entrepreneurship competences of teaching staff and leaders at schools and in higher education are developed through both initial and continuous teacher training. In addition, a pan-European peer-to-peer network of EE teachers could reinforce training.

Encourage cooperation of EE stakeholders about policies and curricula:

Scaling up EE requires collaboration between multiple stakeholders at local, national and European level. Governmental bodies, education institutions, businesses, and civil society actors could link up to develop strategies, policy agendas, and EE curricula. A strong European platform for EE would be helpful.

Communicate what EE is and what benefits it brings: Show how EE builds the necessary competences for the future success of students at all ages. Education institutions, parents, government officials and the wider community need to better understand what EE is and what its benefits are: EE is about learning how to turn ideas into reality for the benefit of society.

Measure and compare EE practice and impact in pan-European research: Collecting and analysing data about EE shall support evidence-based policy-making. It will allow EE to contribute to key policy agendas: the Green Deal, a digital Europe, the European Skills Agenda, and the social economy.

Share EE knowledge and experience to enhance teaching and learning:
EE stakeholders could increase their efforts to share insights on how to improve EE teaching and learning. They could build local communities of practice as well as national and international networks. They can draw from each other's knowledge, methods and content, including innovative digital approaches such as artificial intelligence.

Moreover, mechanisms like the European Semester, the Next Generation EU Recovery fund, and European funding instruments can support EE take-up.

Using entrepreneurship education to build a green, digital and resilient Europe

We need more citizens with entrepreneurial competence

Europe needs more people who can tackle the **challenges** we face – people with the right knowledge, skills and attitudes to turn ideas into action for the betterment of our society. In other words: People with entrepreneurial competence. We need them to master the digital transition, the climate crisis and recovery after the pandemic. We need them in governments, enterprises, civil society, schools and higher education. To develop the required competence, the right education will be key. This calls for entrepreneurship education.

Entrepreneurship education (EE) is essentially about problem-solving and the four Cs: communication, collaboration, creativity, and critical thinking. Such education combines experiential learning, competence building and, most importantly, a mindset shift. EE is for all levels of education, at all ages: from kindergarten via primary and secondary school to vocational, higher and professional education. EE is not only about starting a business but for employees and the self-employed. And EE is not only for business but for all subjects. EE is for life-long learning – with appropriate content, methods, and tools on each level. See also the distinction between education about, for and through entrepreneurship in the box text on page 8.

EE can have substantial **benefits**. Studies suggest that, compared to their peers, EE alumni are at lower risk of unemployment, they earn more and are more often in leadership positions. Moreover, young people trained with EE are more likely to set up their own companies. Businesses started by people who received entrepreneurship training were also found to be more ambitious.²

In recent years, EE has become a significant area of policy development in European countries. At European level, EE is part of the European Skills Agenda (see box text). In the future, EE development will be closely linked to Europe's green and digital transitions and the post-COVID-19 economic recovery.

The **European New Skills Agenda** has four building blocks: collective action, right skills for jobs, support people in lifelong learning, and investment in skills. Action 7 of the Agenda is "Increasing STEM graduates and fostering entrepreneurial and transversal skills". It states the following commitment: "To foster entrepreneurial skills, the Commission will launch a European Action on Entrepreneurship Skills, which focuses on development of entrepreneurial mindsets and a more resilient workforce." In Action 6, the Agenda focuses on "skills to support the twin transitions", i.e. "skills for the green transition" and "digital skills for all".

Source: https://ec.europa.eu/social/skills-agenda

Unleashing Europe's green transition

Today's Europeans have to tackle the enormous challenge of climate change. In order to empower them to transform entire industries to become environmentally sustainable, we have to equip them with competences ranging from Science, Technology, Engineering and Mathematics (STEM), digital and entrepreneurship competences to financial literacy and social skills. We must encourage them to consistently think about solutions to environmental challenges such as climate change, pollution, and extinction of species. Entrepreneurship education provides a holistic process that has the potential to contribute to the objectives of the EU Green Deal.

Towards a digital Europe

In order to allow education systems to fully embrace the digital transformation of Europe, both students and educators must be equipped with the right competences and tools. EE is a proven way to put digital competences into practice. For example, student firms can use artificial intelligence tools or offer app and web design services. In school projects or higher education initiatives, students can provide computers and software training to disadvantaged community members. This calls for concrete and practical links between the European Digital Competence Framework (DigComp) and the Entrepreneurship Competence Framework (EntreComp).

Post-COVID-19 recovery and a shift towards the social economy

In the context of post-COVID-19 recovery, it is urgent to equip Europeans with entrepreneurial competences so that they can find innovative solutions. The pandemic has hit the most vulnerable in our societies particularly hard. It has shown more than ever that there is a need for a strong social economy, i.e., that part of the economy that focuses on solving social problems rather than pursuing purely commercial aims. EE helps build a more equal and inclusive society through not only fostering commercial entrepreneurship but also social entrepreneurship.

Using the EntreComp framework to develop curricula and policies

EntreComp is a common reference framework with 15 competences in three key areas that describe what it means to be entrepreneurial. The three key areas are "Ideas and opportunities", "Resources" and "into action". For example, the five competences for "Ideas and Opportunities" are: Spotting opportunities, Creativity, Vision, Valuing ideas, Ethical and sustainable thinking. The European Commission launched EntreComp in 2016.³ Its ambition is that stakeholders use EntreComp in any setting in a variety of ways, in particular: support policy and practice to develop entrepreneurial skills, assess entrepreneurial skills, support training of educators to deliver entrepreneurial skills, design learning programmes, and certify skills.





Source: https://ec.europa.eu/social/entrecomp

Specifically, governments and education institutions can use EntreComp for developing curricula and learning activities and for fostering entrepreneurship as a competence in all spheres of education. There is already a lively community of practitioners who use EntreComp. The framework offers a tool to improve the entrepreneurial capacity of all citizens.⁴

EE is advancing considerably - but there is huge potential to upscale it

Most experts in the workshops of the EE-WE project agreed with the statement "We are improving regarding implementation of entrepreneurship education." However, the workshops also showed that there is still much room for improvement in most countries. Those countries that employ strategic approaches to develop EE show an acceleration of progress in mainstreaming EE in policy and practice. In a survey by the EE-HUB in 2019 among educators and EE experts, close to 70 % of respondents from northern Europe answered positively about their governments having a well-established national strategy.⁵ The numbers were slightly lower in the rest of Europe.

Five key actions: prior work and the logic of this Guide

This Guide builds on **previous publications** from and for the European Commission that aimed at fostering EE and related policies: above all the "Oslo Agenda for entrepreneurship education in Europe" (2006)⁶, the EE HUB policy recommendations (2017), the Eurydice reports on entrepreneurship education at school in Europe (2006, 2012, 2016) and also "Entrepreneurship education - A road to success" (2015), "Supporting the entrepreneurial potential of higher education" (2015), "Entrepreneurship education: A guide for educators" (2014) and "Entrepreneurship in Vocational Education and Training" (2009). Some recommendations are not new - but still pressing, and this Guide puts them into the current economic and social context.

Action 1: Developing entrepreneurship competence among educators is the basis for developing it among students. Hence, **teacher training** is one of the main drivers of EE in Europe. Action 2: Close **cooperation** between stakeholders, including them at all educational levels, is a key to successful implementation of EE and to gain the expected impact.

Action 3: There are many EE methods, tools, and experiences in European countries. More intense **sharing** of them is necessary to reap the benefits of EE.

Action 4: Reservations against EE prevail. So there is still a need for convincing **communi-cation** about what EE is and what its benefits are.

Action 5: Many open questions about EE benefits and impact remain. There is a need for more **research** and analysis to base EE curricula, methods and EE policies on evidence.

Every single activity may be valuable to promote EE. However, the activities are interlinked and mutually reinforcing. For example, teacher training must be based on sound research findings about teaching methods. Hence, decision makers are strongly encouraged to tackle EE on a broader scale.

Education about, for and through entrepreneurship

Entrepreneurship education distinguishes between three different approaches: education **about, for** and **through** entrepreneurship.⁷ EE for and through entrepreneurship normally includes experiential learning, trial and error, and learning by doing. It often implies collaboration between schools and enterprises or social organisations.

Education about entrepreneurship teaches entrepreneurship as a societal phenomenon. It deals with theories and empirical findings about entrepreneurship, related to fields such as management, sociology, and psychology. It deals with entrepreneurs as individuals and as a group as well as with entrepreneurship as an activity.

Education for entrepreneurship aims at the acquisition of knowledge, skills and attitudes relevant for turning ideas into reality, especially starting a new enterprise. Central elements in such teaching include, among other issues, setting up a business plan, a strategy for marketing, a plan for organisation and managing teams.

Education through entrepreneurship uses the entrepreneurial process as a method to achieve learning objectives: above all, developing students' competence to perceive new opportunities, gather resources and put them into action. This implies concrete action aimed at solving a problem, for example in the local community, or launching an enterprise.

Develop EE competencesof teachers and leaders ofeducation institutions

THE CHALLENGE

Teachers are the key agents of EE in schools and in higher education, and EE demands from teachers to apply specific competences, methods and tools. Hence, training teachers in EE is a priority to reach national and European goals in EE. However, entrepreneurial teaching and learning are relatively new and not yet widely implemented – neither in initial teacher training nor in continuous professional development. It is also crucial to train headteachers and leaders in higher education about EE. EE teachers need support from their superiors; they need a supportive atmosphere in their institutions.

Key Action 1:

Increase teachers' and leaders' EE competence through initial and continuous professional training and peer networks

EE requires sound education for the educators.⁸ **EE challenges educators because it transforms their roles** and requires new competences – from imparting knowledge to managing students' learning activities.⁹ Firstly, EE gives responsibility to learners. It encourages them to do things themselves, guides them towards identifying and seizing opportunities, supports inventive learning, encourages confidence in the learner's own capabilities, embracing risktaking and goaloriented collaboration with others. Secondly, participants from outside such as business-people are an important part of EE. Involving them changes teachers' roles, too.

However, **most teachers and headteachers lack EE competence.** Research found that the main obstacles for increasing EE in Europe seem to be connected to teachers' competence and a lack of good-quality teacher training and support.¹⁰ The surveys of participants of the EE-WE project's workshops confirm these findings:

"Most **teachers** have adequate competence in entrepreneurship education."



"Most **leaders of schools and higher education** institutions have adequate competence in entrepreneurship education."



Source: Survey of participants before third EE-WE project workshop on entrepreneurship education, 10 March 2021, n = 41.

How teachers are trained

Teacher training principally takes place in two ways: initial training and continuous professional development.

Initial teacher training is the main provider of educators to the school system. Currently there are close to 6 million teachers in Europe from primary to upper secondary level. The European Commission estimates that the EU needs 1 million new teachers over the next ten years to replace those retiring. If these were trained in EE, it may push EE in Europe significantly.

As regards **continuous professional development,** in a survey of 400 teachers by the EE Monitor (<u>http://www.ee-hub.eu/monitor/</u>), 90% scored continuous professional development in EE as the most important way to increase uptake of EE in schools. At the same time, only about 25% of the participants in the EE-WE project's EE workshops agreed that continuous professional development for teachers in EE is sufficiently available.

Furthermore, national and international **networks of EE teachers** can also enhance teachers' EE competence.

Action 1.1 – local level:

Become more ambitious in training educators about entrepreneurial competences on-site.

WHY? Developing EE competences of teaching staff and leaders of schools and in higher education may best begin on the spot in schools and higher education institutions. The situation seems to be more favourable in higher education than at schools. After a surge since the 1990s, there are several hundred professors for entrepreneurship at European higher education institutions today. Many of them provide education for and through entrepreneurship. There are also higher education institutions that provide teacher training in entrepreneurship, such as the University College of Christian Churches for Teacher Education Vienna/Krems in Austria.¹¹ **WHAT?** Good-quality teacher training in EE embraces several issues: First, EE teachers need to understand how national educational priorities and plans can fit local curricula and subject plans and how to progress EE through the different age groups. Second, teachers need to learn the tools and methods that can support EE learning goals, including assessment tools and how to measure progress. In addition, they need to understand how to inform parents and include businesses as well as civil society actors in teaching.

An effective implementation of EE requires significant **changes in the way teachers are educated.** As a student in initial teacher training, they could learn entrepreneurship the entrepreneurial way: Try and experience the behaviours they shall cultivate with students.

All **EDUCATORS** can be advised to familiarise themselves with the challenges and opportunities of EE in their subject. The focus could be on the methodology. Experienced teachers could train newcomers and other teachers who want to move into EE. The training could use learning-by-doing methodology: try out entrepreneurial activities themselves. This helps the teachers understand what it means for the students to be involved in EE. However, it challenges the teachers' comfort zone.

CIVIL SOCIETY ORGANISATIONS have an important role in teacher training as providers of content and knowledge. Such organisations are bridge builders between education and the world of work. They have invested in quality EE programmes and tested methodologies. They play an important role in innovating EE in close cooperation with educational institutions. For example, they support the digital transformation of schools and higher education institutions (see box text about JA Europe).

In the COVID-19 context, **JA Europe** and its 40 national organisations have innovated the delivery of their entrepreneurial programmes. They played an important role in supporting schools and teachers in switching to online delivery. JA reaches around 4 million students every year through online innovation camps, virtual trade fairs, hackathons, e-mentoring, and other events. They have trained 140 000 teachers to use a combination of EE and digital tools and methods. The digital transformation of programme delivery has the potential to significantly increase the reach of these programmes.

Beyond delivery, **bringing Artificial Intelligence to the classroom** through hands-on practical entrepreneurial programmes is a way to foster both digital skills and entrepreneurial competences and mindsets. In 2021, JA trained students in several European countries to use AI tools skilfully. They created social impact solutions with AI. The programme encourages young people to become human-centric designers and users of AI. As they create and apply real AI solutions, they will gain "learnability", which is critical for jobs of the future.¹²

Source: JA Europe

The **BUSINESS SECTOR,** including social businesses, could establish long-term partnerships with schools. Businesses could invite educators to seminars and internal trainings at companies. Vice versa, schools could invite businesses to support teachers.

Action 1.2 – national and regional level: Support EE in initial teacher training and in continuous professional development, especially for principals.

WHY? EE implementation at school starts with the teachers and, behind them, the school's leadership. It is similar in higher education institutions. The support from principals is critical. Otherwise, EE teachers may end up as "lone soldiers" with limited impact. Research from Finland presented in the EE-WE proiect's second EE workshop showed: Schools implement EE and support teachers' continuous professional development in EE when the principal is trained in EE. On the other hand, EE implementation seems to be independent from the principal's gender, business experience, and work experience.

WHAT? This suggests that, above all, training principals can promote the implementation of EE at school – rather than waiting for young generations to take over school leadership.

In order to increase EE in European countries, **GOVERNMENTS** could tackle the whole breadth of teacher training measures together with **EDUCATION INSTITUTIONS**:

- Implement **EE in initial teacher** training through related curricula for higher educa-tion.
- High-quality programmes in continuous professional development can support EE teachers and make sure that those who did not experience EE during their initial training can catch up.
- **National networks** of teachers and leaders of education institutions can be a way to share and increase EE knowledge and experience. Such networks exist for example for higher education in Germany and in Poland.¹³

Nota bene, EE needs **sustainable funding.** Currently there is a lack of reliable and longterm funding of EE actions from public authorities. Only half of European countries allocate national and EU funding to EE.¹⁴

In September 2020, **Ukraine** adopted a new National Curriculum for Secondary Education. It includes a section on the competency potential of each subject area, including entrepreneurship. This means that teachers of every subject have a general guideline on how they can develop entrepreneurship competence in their lessons.

Source: https://osvita.ua/legislation/Ser_osv/76886/

Action 1.3 – European level: Initiate and fund European-wide train-the-trainer programmes in EE, including mentor networks.

WHY? The OECD sees a persistent lack of teacher training in EE in many EU economies. Teacher training does not sufficiently address entrepreneurship educators' need for unified contents, teaching methods, pedagogical competences and methodologies. Teacher training often lacks strategy or system-development plans, and institutions are often underfunded.¹⁵

WHAT? There is a need to identify front runners in EE train-the-trainer programmes in Europe and disseminate their achievements. Pan-European teacher training courses in EE would support national and regional efforts. Likewise, there is a need to initiate European EE peer-learning and support networks among principals in the different types of education institutions.

Digital EE

The COVID-19 pandemic has forced EE at education institutions to move more rapidly towards digital or distance learning offers, often in some kind of trouble shooting mode. Educators experiment with massive open online courses (MOOCs), blended learning tools or other formats. Evidence regarding the effectiveness of such approaches in EE is limited. Initial experiments to move EE digital provide a mixed picture: It may be challenging to switch an EE curriculum completely to the digital arena due to EE's orientation towards practice and teamwork. Hence, while digital technologies may be suitable when used to teach about entrepreneurship, stakeholders may have to consider their use in teaching for and through entrepreneurship more carefully.

Source: Secundo, G. et al. (2021)

The **EUROPEAN COMMISSION**, together with national governments and educational institutions, could encourage the identification of front runners as well as establishing pan-European EE teacher training and support networks. They can build on several European projects (see box text).

"Entrepreneurship in Initial Primary Teacher Education" (**EIPTE,** <u>https://eipte.eu/</u>) encourages higher education institutions to implement EE and enhance its quality in initial primary teacher education.

The Young Entrepreneurial Teachers Initiative (**YETI**, <u>https://yetiproject.eu/</u>) aims to promote and institutionalise EE practices among aspiring teachers in initial teacher education.

Partnership for Initial Entrepreneurship Teacher Education (**PIETE**, <u>https://www.entrepreneurialteachers.eu/</u>) contributes to a new generation of entrepreneurial teachers in Europe.

The **EntreCompEdu** project develops tools for educators' entrepreneurship skills development, based on the EntreComp framework (https://entrecompedu.eu/).

Main drivers of EE



Source: Tagcloud generated by participants in the online community for the second EE workshop of the EE-WE project, November 2019

Encourage cooperation of EE stakeholders about strategies, policies, and curricula

THE CHALLENGE

Cooperation among stakeholders is essential for delivering EE, for several reasons: First, since EE is about teaching and learning how to solve problems, EE becomes most lively and educative for both students and teachers when it is connected with the real world. Second, developing solid strategies, policies, and curricula for EE requires involving different ministries, and governments can benefit from consulting the interests of schools and higher education, businesses, and parents. However, since EE is a young field, cooperation of stakeholders is not yet strong in every country. Hence, strengthening cooperation will be very important to drive EE forward.

Key Action 2:

EE actors could seek broad cooperation between all types of stakeholders on all geographical levels.

A strength of EE is that it **benefits stakeholders from many sectors** with different objectives: The business sector with skilled workers, the local community with new jobs and committed citizens, financial institutions with financially literate youth and rural regions with their young people staying there instead of seeking jobs in cities.

At **local level**, education institutions can inform, engage and include the community around them. Parents, politicians, civil society actors, and businesses can all contribute.

At **national level**, the countries with a high level of EE implementation have a broad policy platform for cross-ministerial collaboration and work with actors from many policy domains. The countries also have strong involvement from the business sector and from civil society actors. An increasing number of countries are in the process of completing or have just completed national **curricula reforms.** The reforms do not necessarily mention entrepreneurial learning explicitly – but they create opportunities to introduce entrepreneurial tools and methods in different subjects and projects. Governments that introduced new competency-based curricula successfully involved a broad range of stakeholders.

"Entrepreneurship education is about broad cooperation and involvement of actors from both private and public sector."



Source: Survey of participants before second EE-WE project workshop on entrepreneurship education, 6-7 November 2019, n = 42.

Action 2.1 – local level:

Education institutions could link up with the local community for EE – with municipalities, civil society, businesses.

WHY? EE has stakeholders from many different types of organisations. Implementation should reflect them, starting on local level. Parents and other community members can better achieve the results of entrepreneurial spirit in the community – and most probably will be the first to feel the impact. Moreover, local connection makes it more interesting and worthwhile for students to become involved as they perceive that the community appreciates their efforts.

SCHOOLS and HIGHER EDUCATION INSTI-TUTIONS can actively engage community members in EE practice, for example through lectures, field visits and work on educational projects.

CIVIL SOCIETY ORGANISATIONS with expertise in employability skills, the green economy, digital competences and citizenship could participate in EE. They can act as brokers, bringing schools and experts together. They can also support the delivery of EE in the classroom.

BUSINESS associations such as employers' organisations, trade unions and chambers of commerce could encourage their members to connect to schools and support EE. Municipalities can provide hints to local issues for EE projects.

The **national action plan for EE in Austria** has about 65 stakeholders, including the Federal Ministry for Digital and Economic Affairs, the Federal Ministry of Education, Science and Research, Federal Ministry of Labour, Family and Youth, Federal Ministry of Finance BMF, the Federal Chancellery, Austrian Economic Chamber, Federation of Austrian Industries, Austrian National Bank, universities, initiatives, non-governmental organisations, and foundations.

Source: Austrian Federal Ministry of Education, Science and Research¹⁶

Action 2.2 – national/regional level: Establish a broad national or regional policy platform to develop EE curricula and agree on targets.

WHY? National or regional curricula must make it possible and desirable for educational institutions to integrate entrepreneurial learning across different subjects. In the curricula reforms in many European countries, EE has found its natural place. The focus is on innovation and creativity competence, including complex problem-solving, teamwork and leadership. The pedagogy has shifted into problem-based and collaborative learning, requiring peer collaboration, and mirroring the future of work. Developing such curricula successfully requires involving stakeholders.

WHAT? Those countries with a high level of EE implementation have a broad national policy platform – a facility for regular meetings, discussions and exchange – see the example of Estonia in the box text below.

GOVERNMENTS can establish platforms to enhance cross-ministerial collaboration about EE. They can involve actors from many policy domains. They may have strong involvement from the business sector and intense engagement from civil society organisations.

Estonia has a national plan to develop EE systematically across the whole education system. Several ministries implement the plan, namely the Ministries for Research, Economy, Finance and Education. All major stakeholder organisations are involved in the implementation process, including for example Chambers of Commerce, country development centres, business incubators and universities. Implementing the plan successfully requires active entrepreneurs, active employees and active citizens.

Source: Speech by Ando Leppiman, Secretary General of the Estonian Ministry of Economic Affairs and Communications at the second EE workshop of the EE-WE project, 6/11/2019

Action 2.3 – European level: Encourage and facilitate a broad European policy platform for the work on EE.

WHY? In order to foster EE on a European scale, cooperation of stakeholders on a European level is necessary. This is particularly important with a view to the twin transition to a sustainable and digital economy and society as well as recovery from the pandemic.

WHAT? A European platform for EE may involve stakeholders from European educational frameworks such as EntreComp, DigComp and LifeComp. "Platform" may mean regular meetings and discussion forums in dedicated physical and online spaces.

The **EUROPEAN COMMISSION** can reinforce a leadership role of the European level for EE with relevant Directorate-General funding related projects. It may be most sustainable to mandate an external entity with implementing, assessing, monitoring and driving EE in close cooperation with several Directorate-Generals. The Commission could encourage cooperation between the EntreComp and DigComp practitioner communities, for example through a communication and benchmarking tool with a peer-review of activities. Such activities can build on several projects related to community building around EntreComp as well as on the EE-HUB (see boxtext on the right).

CIVIL SOCIETY ORGANISATIONS can promote and strengthen the cross-border and global dimension of EE and set up European events for students, educators and other stakeholders. Several European projects are building a European EntreComp community:

EntreComp Europe develops national and regional EntreComp communities, exploring how to use the framework in youth work, education, employment and enterprise. The project has partners from Belgium, Spain, Italy, Moldova, and Turkey.

Source: <u>https://entrecompeurope.eu</u>

EntreCompFood builds entrepreneurship competence in the agrifood industry. Its objective is "to build sound European Collaborative Communities of practice and related learning activities to stimulate innovation and entrepreneurship towards students and young entrepreneurs firstly in this sector".

Source: <u>https://www.gzs.si/EntreCompFood</u>

EntreComp360 is about "supporting actors in all sectors of the lifelong learning system to enhance the development, validation and recognition of the entrepreneurship key competence across lifelong learning". It builds the Entrepreneurship360 platform, which is supposed to be "a one-stop-shop to provide guidance, collate tools, share practice, learn through online training and connect" practitioners.

Source: <u>https://entrecomp360.eu/about/</u>

entreTime is a new entrepreneurship education service. It upskills educators in higher education institutions and it upgrades their pedagogical tools with a comprehensive training package.

Source: <u>https://entretime.sce.de/</u>

Furthermore, the **EE-HUB** is a specialised international network that brings together European and national governments, businesses, non-governmental organisations, researchers and educators to collaborate and share knowledge. The HUB is led by JA Europe and endorsed by the European Commission. It is a unique source of expertise, experience and research, with the mission to increase the quantity, quality and impact of EE in Europe. The EE-HUB advocates that every young person has at least one practical entrepreneurial experience before they leave school.

Source: <u>http://www.ee-hub.eu/about.html</u>

Communicate what EE is and what benefits it brings

THE CHALLENGE

Educators, students, parents and the wider community need to better understand how EE builds competences needed to master the twin transition to a digital and green society. There is plenty of evidence on the positive impact of EE. However, reservations prevail. There are negative connotations of entrepreneurship, fear that EE may have bad effects on students' performance, and fear of negative reactions from parents. Hence, there is a need to increase the visibility of what EE is and what its benefits are. EE must be properly understood as acquiring and teaching competences for creating value.

Key Action 3:

Communicate the benefits of EE and how it builds competences for life.

One key issue often raised in implementing EE in schools, broadening EE across campus, and integrating EE into curricula are **negative connotations** of entrepreneurship. It is often associated with capitalism or commercialism. This includes reservations of key agents such as teachers, headmasters, professors and students. Hence, there is a strong need to communicate the benefits of EE and argue against false perceptions.

Moreover, educational reforms in support of EE often fail to be fully adopted by schools because educators lack knowledge about the positive impacts of EE. Hence, there is a need to explain that EE develops self-confidence, the ability to work in teams, and perseverance. EE needs to be properly understood as teaching and acquiring **competences for creating value** in general, not only for starting a business.

A frequent concern against introducing EE in schools is that it may "steal" time from other important work. Research by the Innovation Cluster for Entrepreneurship Education (ICEE)¹⁷ showed that there are no such negative connections, rather the opposite.

In countries that integrated EE deeply in subject learning, students improved most in their average grades. This also applied to those test schools that were new to EE and had to put in significant effort and resources.

What is EE?

Entrepreneurship education is teaching and learning "the capacity to act upon opportunities and ideas, and transform them into value for others. The value that is created can be financial, cultural or social."

Source: Developed from EU (2018), p. 3.

What are the benefits of EE?

"Students participating in entrepreneurship education are more likely to start their own business and their companies tend to be more innovative and more successful than those led by persons without entrepreneurship education backgrounds. Entrepreneurship education alumni are at lower risk of being unemployed, and are more often in steady employment. Compared to their peers, they have better jobs and make more money. Evidence also shows impact on educational institutions, the economy and society."

Source: ICF (2015), p. 7.

Action 3.1 – local level: Use the EntreComp Framework to promote entrepreneurship as a transversal competence on the spot.

WHY? The EntreComp framework elaborates entrepreneurship as a transversal competence, i.e. a basic competence useful for many spheres of life. This meets with general trends in education gearing towards competence-based learning. The framework is becoming a reference for initiatives aiming to foster entrepreneurial capacity of European citizens.

WHAT? EntreComp consists of three interrelated and interconnected competence areas: Ideas and opportunities, Resources and Into action. It builds upon a broad definition of entrepreneurship that hinges on the creation of cultural, social or economic value. It embraces different types of entrepreneurship, including social entrepreneurship, green entrepreneurship, digital entrepreneurship, and intrapreneurship.

Vlajo is a key organisation working on entrepreneurial education in Flanders, Belgium. It supports and trains teachers in their delivery of EE. Currently, Vlajo is creating a digital assessment tool for teachers and students, closely based on EntreComp. This tool will allow ...

... students to self-assess their own entrepreneurial competences.

... teachers to assess the entrepreneurial competences of students in their delivery of entrepreneurial education.

... Vlajo to demonstrate and recognise the impact of the related programme.

In 2019, the Flemish Community of Belgium introduced a new curriculum for EE at school.

Source: <u>https://www.vlajo.org/</u>, McCallum et al. (2018), p. 72

EDUCATION INSTITUTIONS can cooperate with local social, environmental and commercial enterprises in practical EE projects. Such projects can bring life to frameworks such as EntreComp. Schools and higher education institutions could use their own media and link up with local media to create visibility for their EE activities, achievements and success stories. Through such awareness-raising and visibility, more teachers may find frameworks such as EntreComp helpful. Moreover, the fact that EntreComp is widely used in Europe can help prevent the fear about negative effects of EE on students' performance and negative reactions from parents.

Action 3.2 – national and regional level: Introduce reforms towards more competence-oriented learning and more entrepreneurial activity.

WHY, WHAT? When understanding entrepreneurship as a competence, introducing competence-oriented ways of learning and curricula may be the most powerful acknowledgement of EE. Finland provides an example – see text box and the examples from pre-accession countries on the next page.

In **Finland**, the curricula emphasise the complex outcomes of a learning process – i.e. learners' knowledge, skills and attitudes – rather than mainly focusing on what students are expected to learn in terms of traditionally defined subject content. "Students are not compared with each other. Instead, teachers guide them to reflect on their own learning against the objectives. The teachers help the students understand the objectives and recognise their own strengths and development needs. The teachers provide opportunities to develop student's skills for self-assessment and peer-assessment so that they can both give and receive constructive feedback."

Source: EE workshop participant from Finland

GOVERNMENTS, when introducing competency-based curricula, could in parallel initiate campaigns to underline that EE in schools will develop transversal skills such as cooperation and critical thinking in addition to reaching subject goals. The **majority of pre-accession countries are improving** in creating an environment in which entrepreneurs can thrive and entrepreneurship is rewarded.

Montenegro opted for a specific entrepreneurial learning strategy in which entrepreneurship is a specific subject. Education bodies formally use EntreComp as a holistic entrepreneurship competence approach and as a reference tool. Moreover, Montenegro appears to be a leading force in the region in taking measures to build awareness and share good practices between policy makers as well as education and training providers.

The Turkish government integrated entrepreneurial learning as part of two broader – mutually reinforcing – policy strategies for employment and lifelong learning. While most economies in the region struggle with teacher development, public-private partnership has been key to **Turkey's** efforts to support both teachers and administrative staff. Moreover, Turkey leads the region in implementing entrepreneurship across disciplines in higher education.

Source: OECD et al. (2019), SME Policy Index report Western Balkans and Turkey.

Public authorities can raise awareness by supporting, recognising and rewarding EE initiatives. This may include summits for EE and Entrepreneurial School Awards. Authorities can also **adapt the legal framework** to, very tangibly, support students' entrepreneurial activities – see the box example from Norway.

The Norwegian **Tax Administration** (NTA) created a framework that allows students to start and operate mini-companies legally in the real market. The Administration supports such companies with materials to increase young people's knowledge about taxation, fees and financial management. The taxation regulations and the guide for value added tax specify the rules for mini-companies. Every year, the Tax Administration presents an "Accounting Award" to exemplary mini-companies selected at regional and national competitions.

Source: https://www.brreg.no/bedrift/ungdomsbedrift/

Action 3.3 – European level: Raise awareness, recognise and reward EE efforts and initiatives on European level.

WHY, WHAT? Awareness-raising sometimes works better when pointing to good practices in other countries – rather than practices from the own country. Foreign examples may be especially attractive to convince teachers, parents, and local communities about the benefits of EE.

The European Commission has promoted EE as a strategic policy objective for many years. Specifically, the Commission declares that all students should have at least one practical entrepreneurial experience before leaving compulsory education. Hence, it seems consequential to recognise EE front runners among schools, higher education institutions, teachers, and principals at the European level.

The **EUROPEAN COMMISSION** could recognise and **reward initiatives** and individuals that represent European EE beacons. These could trigger similar actions at the national level and inspire peer-learning. The Innovative Sustainability Business Award is an example of such a reward – see box text.

Year-long mini-company programmes followed by student company competitions can encourage young people to embrace digital and green solutions for solving real-life problems. Examples of such competitions include:

JA Europe **Company of the Year** Competition (upper secondary level): <u>https://gen-e.eu/about-coyc/</u>

Innovative Sustainability Business Award: http://www.jaeurope.org/medias/news/1006-innovative-sustainability-business-idea-award-2021.html

Digital Innovation Award at JA Europe Enterprise Challenge Competition (university level): <u>https://gen-e.eu/avanade-digital-innovation-sig-</u> <u>nature-award-judges-criteria/</u>

The Commission could also encourage the establishment of regular **European sum-mits** about exemplary EE practice. Such summits would also be an excellent opportunity for award ceremonies.

Measure and compare EE methods, policies and impact in pan-European research

THE CHALLENGE

Entrepreneurship education is a young field – in Europe, it is only a few decades old. Hence, it does not yet have a differentiated base of knowledge and methods that is as sound as in long-established fields such as medicine or engineering. Significant research still needs to be done to build such a base and understand EE with regard to different types such as sustainable, social or digital entrepreneurship and teaching. Moreover, there is a need for research about differentiated EE methods and impacts as well as policy approaches to foster EE. This could in particular address the large group of students who do not yet take part in EE. This would greatly support European, national, and local policy agendas related to the green and digital transitions.

Key Action 4:

Conduct research about EE methods, impacts, and policies across different types of entrepreneurship.

There is a need for pan-European data that shows what EE methods and policies are most useful, how EE achieves impact, and how teaching staff should be trained. Such data could consider different types of entrepreneurship. EE research has so far focussed mostly on starting up businesses in general. In the future, we will need to gain knowledge about how to **design EE to serve diversity:** for example, beyond for-profit venturing also in non-profit entrepreneurship.

Such evidence will allow EE to contribute substantially to the key European **policy agendas** and its counterparts on national, regional, and local level: the Green Deal, a digital Europe, the New Skills Agenda, the Social Economy Action Plan, and the Next Generation EU recovery instrument.

There is also a need to **map and evaluate national and regional policies** that seek to foster EE. So far there is no systematic overview about EE policies in European countries and their impact. Such an overview could support policy-making of governments all over Europe.

Participants of the EE-WE project's workshops indicated that there is a lack of research particularly about the long-term impact of EE:

"In our country or region, we have recently done research about the long-term impact of entrepreneurship education such as job creation and employability."



Source: Survey of participants before third EE-WE project workshop on entrepreneurship education, 10 March 2021, n = 42.

Action 4.1 – local level:

Higher education institutions could strengthen EE research together with their ecosystem

WHY? Both EE teaching and training as well as entrepreneurial activity is brought to life on site at the local level: at a school and its surrounding community or within a university and its region.

WHAT? There needs to be more research into how stakeholders in **local entrepreneurial ecosystems** can put national or regional EE policies into practice – for example in teaching or via supporting students' entrepreneurial projects.¹⁸ Such research needs to consider that ecosystems differ between types of entrepreneurship.¹⁹

HIGHER EDUCATION INSTITUTIONS could integrate entrepreneurship research, teaching and transfer in their organisations. So far, these three areas often operate separated from each other. See the box for an example of integrating these areas. Such integration can benefit EE research in many questions – such as: Under which conditions do certain EE methods work – in cooperation with what kind of stakeholders for which forms of entrepreneurship?

HIGHER EDUCATION FACULTIES could encourage and support students of all degrees in writing thesis papers about EE subjects, in particular considering the specificities of their institution's EE ecosystems.

NATIONAL AND EUROPEAN POLICY AC-TORS could support the exchange of research results from such multi-facetted grass-roots research at local level. They could facilitate comparative, meta or benchmarking studies. This could greatly increase the number of

people involved in EE research, it could examine the heterogeneity of local approaches to deliver EE, and it could identify common themes that EE policy could then address.

Europa-Universität Flensburg The in Northern Germany integrates entrepreneurship research, teaching and transfer under the common roof of its competence centre for entrepreneurship and small business (Dr. Werner Jackstädt-Zentrum für Unternehmertum und Mittelstand Flensburg). The centre combines a research hub, entrepreneurship education activities and support for entrepreneurship and start-ups. This institutional architecture, the university's focus on entrepreneurship education, and its track record in supporting university entrepreneurship widens the scope for the further development of EE as a whole.

Source: https://www.uni-flensburg.de/iim/ praxis-kooperationen/dr-werner-jackstaedt-zentrum/

Action 4.2 – national level: Initiate and coordinate national research in EE practice and mainstreaming

WHY? Ministries in charge of educational policy need sound scientific advice on two interrelated issues: (1) The **treatment effect** of EE practice, i.e. the effect on those students who participate in it – relevant for revising curricula and teachers' professional development schemes. (2) The **selection effect** of EE mainstreaming, i.e. the question of why young people do not yet or not sufficiently take part in EE. Research on entrepreneurship policy often does not differentiate sufficiently between these two effects, although it is critical.²⁰

WHAT? National research initiatives could aim at advancing EE. First, they could study the **treatment effectiveness of EE** for different types of entrepreneurship. This may reveal insights how to reach different groups of students inclined to entrepreneurship for the good of society or nature. Second, research could analyse the paths in which **selection into or out of participation in EE** takes place – with a view to more effective mainstreaming of EE. Moreover, digital EE and digital entrepreneurship are gaining importance.²¹ Relevance has increased during the COVID-19 pandemic. EE research could address **the effectiveness of digital and blended learning approaches** in a context of a growing number of competing digital formats.

EDUCATION AUTHORITIES could initiate and coordinate research projects on mainstreaming effectiveness as well as digital and blended learning in formal EE at school and in higher education.

Action 4.3 – European level: Conduct pan-European research about EE methods and policies for different types of entrepreneurship

WHY? Pan-European research has clear added value to national research in the investigation of different forms of entrepreneurship as well as EE strategies and policies. Currently, knowledge about different entrepreneurship types and policies in different countries is scattered.

WHAT? Pan-European research projects could be conducted about EE approaches and policies in countries and regions.

The **EUROPEAN COMMISSION** could sponsor pan-European research about EE methods and policies. Specifically, the EC could support more inter- and transdisciplinary research in the fields of green and social entrepreneurship. Such research would explore the potential leverage of youth education to solve societal challenges. The EC could also encourage the setup of an evolving **EE repository** of studies about EE across the different types of entrepreneurship and EE policies. This could build on the Eurydice report that took stock of national efforts to mainstream entrepreneurship in society.

Finally, within the impetus for interdisciplinary EE research, the EC could explore synergies of the **EntreComp** framework with other frameworks. EntreComp already incorporates the idea of different types of entrepreneurship. Different competence sets could be researched to develop EE tools tailored to different paths of entrepreneurship. The research communities behind EntreComp and other frameworks such as DigComp and LifeComp could join to work on intersections of their domains.

Key points of a research agenda for entrepreneurship education

Many important questions of EE are still open and require research. Entrepreneurship teachers must educate with proven knowledge, methods, and tools for the sake of achieving the desired learning outcomes. Policy makers in ministries and educational agencies need a solid evidence base to draft curricula for entrepreneurship education, for both schools and higher education. Furthermore, entrepreneurship education still faces reservations from many different stakeholders. Hence, the current key research questions are as follows:

- How should EE be implemented in initial **teacher training** and in continuous professional development?
- What **methods** and tools of EE and of measuring students' performance work well in different contexts? How can we develop innovative tools to reach the large proportion of students not participating in EE? What is the value of digital tools like MOOCs?
- What are the **benefits and impacts** of entrepreneurship education? How can these benefits and impacts be soundly measured?

Interdisciplinary research is needed, including for example pedagogy, psychology, sociology and informatics. Answering these questions is particularly important to foster digital and green entrepreneurship. Researchers can tackle them in many different ways on different geographical levels. Such research and using its findings can contribute to solving the societal issues of our times.

Share EE knowledge and experience to enhance teaching and learning

THE CHALLENGE

EE is best developed through peer-learning among stakeholders: education institutions, ministries, businesses, and civil society actors. However, the sharing of EE knowledge, tools, methods, and experiences is not yet well developed in Europe. More systematic peer-learning about EE would be helpful. Such sharing increasingly needs to include Europe's digital and green transformations.

Key Action 5:

Support sharing and peer-learning about EE across Europe

The EE-WE project's workshops showed the variety of excellent initiatives to foster EE in Europe. Participants were eager to learn from each other. This suggests that much more could be achieved if practitioners and experts were better sharing their experiences and plans. Stakeholders could for example convey the following basic insights about EE:

- Teaching practitioners can confirm that they can accommodate EE to any subject and age level at any education institution.
- EE can help increase students' motivation and efficacy of learning by simulating real-life situations.
- EE can easily get a **digital**, green and social dimension.

The graphics show current practice combining EE with digital and green education according to workshop participants of the EE-WE project. Half of the respondents agreed that in their country or region they combine EE with digital education. This may not be much yet considering that the pandemic has driven digital education at large. A third of respondents said they combine EE with the green transition.

"In our country or region, we combine EE with digital education."



Source: Survey of participants before third EE-WE project workshop on entrepreneurship education, 10 March 2021, n = 38.



"In our region or country, we combine EE with

Source: Survey of participants before third EE-WE project workshop on entrepreneurship education, 10 March 2021, n = 38.

Strongly disagree

education for the green transition."

Action 5.1 - local level: Increase peer-learning in and beyond

Increase peer-learning in and beyond education institutions.

WHY? Developing a positive attitude toward EE and encouraging teachers to make their practices more entrepreneurial requires a **cultural change** within education institutions. An often successful way to change culture is to learn from those educators who already practice EE.

WHAT? Local authorities, schools, higher education institutes and civil society actors can establish **peer-learning mechanisms** – within certain institutions and beyond. Schools can exchange experiences among their teachers and with other local schools. For example, they can introduce regular meetings, workshops and lectures on EE methods, tools, assessment and content. They can inform teachers, students, parents and the general public about EE as a way to be curious and creative, to combat climate change and social inequality, and to acquire competences employers need.

HEADMASTERS and higher education leaders committed to EE can provide **incentives** to their teaching staff to implement EE. For example, they can offer on-the-spot support from other staff members or external experts from the world of work. In higher education, such external experts may be "professors of practice" or "entrepreneurs in residence".

SCHOOLS can involve **parents** in primary and lower secondary EE activities. Beyond informing them in parents' evenings, parents can for example bring in practical projects from their workplace. Parents are normally satisfied with the practical ways of how their children learn in EE. However, the parents' generation may want to become more familiar with the learning-by-doing approach of EE, the learning process and its assessment.

PRIMARY SCHOOLS in particular can involve the **local community.** Among the youngest

students, EE is not about starting businesses but developing transversal skills and community awareness. This could for example include nature preservation activities near the school.

HIGHER EDUCATION INSTITUTIONS can use HEInnovate to communicate about their EE progress (see box text).

HEInnovate is a free self-assessment tool for higher education institutions. It allows to assess the institution using statements related to its entrepreneurial activities. These include for example leadership, staffing and links with business. The tool offers extensive training and support materials, including practical case studies, to support workshops and further development within the institution. Individuals or groups of people can use HEInnovate. The group function allows stakeholders in higher education institutions to come together and compare their assessments internally. They can compare with previous assessments and see how perceptions change over time.

Source: <u>https://heinnovate.eu/en/about</u>

Action 5.2 – regional and national level: Establish national and regional peer learning networks for EE.

WHY? Many ministries in charge of education and economic affairs on national or regional level already regard EE as an important means for promoting a stronger entrepreneurial culture. They acknowledge the contribution of EE to fostering important skills and attitudes needed in the workforce and in society. However, only a few countries have already established networks to exchange EE knowledge and experiences.

WHAT? EE educators and good practice institutions can establish regional and national networks. They can showcase education systems where EE is integrated into initial teacher training. This may inspire more institutions to follow. **GOVERNMENTS** can support the establishment of national or regional networks of headteachers, higher education leaders and teaching staff. Such networks can be important drivers of EE through peer-learning and mutual support.

The Danish Foundation for Entrepreneur-

ship is the national knowledge centre and focal point for the development of entrepreneurship teaching at all educational levels in Denmark. It is also part of the Danish Technology Pact, showing the close relationship between education in entrepreneurship and in Science, Technology, Engineering and Mathematics (STEM).

The Foundation allocates funding for the development and further refinement of education with a focus on innovation and entrepreneurship. It also develops and publishes its own education material, advises on the implementation of entrepreneurship in teaching, and facilitates cooperation and networking about entrepreneurship education.

The Foundation was established in 2010 by a partnership between four ministries and on the basis of the then government's overall strategy for entrepreneurship education.

Source: <u>https://eng.ffe-ye.dk/the-foundation/</u> about-the-foundation

Action 5.3 – European level: Foster sharing of EE knowledge across Europe – especially for teachers and ministries

WHY? Participants of the EE-WE project's workshops assessed strong leadership and support from European organisations as crucial for speeding up EE. It will be essential that European communities of practice are self-directing – but they need to be acknowledged and promoted. All the good EE practices identified in many EU projects over the past 10-15 years can be of high value for educators across Europe – see the box about the ICEE Progression Model as an example. For more examples see the EE-HUB (http://www.ee-hub.eu/). **WHAT?** Facilitating access to high-quality and well-tested tools and methods can make it easy for **teachers** to move into EE and increase its impact. Spaces where teachers can access new tools and programmes, share their experience and learn from their peers from across Europe could be very helpful. National or regional **ministries** would also benefit from findings about the impacts of EE from other countries. Peer-learning networks can start among neighbouring countries and expand from there.

The **EUROPEAN COMMISSION** could, based on the EntreComp framework, establish criteria for "European best practice" and encourage using platforms for sharing them. The Commission could especially help develop European peer-learning **networks for teachers,** based on national networks and activities.

The Commission could also encourage the development of an EE **self-assessment tool for schools,** similar to HEInnovate as well as the digital self-assessment tool SELF-IE²², and based on EntreComp.

Moreover, the Commission can encourage the recognition of European front runner countries in EE. The Commission could help establish regular European peer-learning **meetings for representatives from ministries.** They could exchange experiences with their policies to introduce and enhance EE teaching and learning.

The **Entrepreneurial Skills Pass** (ESP) is a certificate that students can add to their CV, use to pursue further education, to enter the world of work or to start their own business. For schools and teachers, the ESP is a full package to support entrepreneurial learning outcomes and to provide students with the skills and competencies employers are looking for. The ESP micro-credential was developed with support from the European Commission. It is being spread across Europe through the sharing of experiences. Building on the successful implementation of other countries is key to further increase the use of such European tools.²³

Source: <u>http://entrepreneurialskillspass.eu/</u>

Recommendations about European mechanisms

Use the European Semester to foster entrepreneurship education, involving stakeholders.

WHY? As EE is not yet widely and deeply on policy agendas, there is a need to use innovative approaches to foster EE. The European Semester provides an angle to develop EE on a national level. The Semester's ultimate objectives include creating growth and jobs – to which EE can contribute decisively.²⁴

WHAT? The European Semester is "an annual cycle of coordination and surveillance of the EU's economic policies".²⁵ The European Commission and the Member States introduced the Semester in 2010. Its objective is sustainable economic growth, job creation, financial stability, and sound public finance. The annual Semester cycle includes four document packages over a year:

(1) Autumn: The Commission publishes its **Annual Sustainable Growth Strategy,** accompanied by other documents.²⁶

(2) February: The Commission publishes **country reports** for each Member State, analysing their economic situation and progress in implementing the country-specific recommendations of the previous year.²⁷

(3) April: Member States present their **national reform programmes** and stability or convergence programmes.²⁸

(4) May: The Commission assesses the Member States' plans and presents a series of new **country-specific recommendations** to each of them.²⁹

Most important for promoting EE appears to be the Commission's country reports and the Member States' programmes.

The Semester is not a purely governmental procedure. It **allows the involvement of stakeholders** such as associations and trade unions as well as the European Parliament and national legislatures.

The **EUROPEAN COMMISSION** can use the Semester to foster EE by giving it a prominent place, starting with its Annual Sustainable Growth Strategy. The EC can inquire from Member States to develop strategies and policies for EE in the country reports.

GOVERNMENTS on national and regional level can use the Semester to develop strategies and agendas for EE and to begin or intensify consultations with EE stakeholders.

ASSOCIATIONS of education institutions, business associations, trade unions and other interest groups can bring their expertise to the Semester process to develop EE strategies and policy agendas.

EE in European Semester documents

The EE-WE project team screened all documents of the European Semester cycle 2019-20 for the term entrepreneurship education or related terms such as entrepreneurial learning. The mention of EE varies considerably across the types of documents. Most often, EE is mentioned in the Commission's country reports of the Winter Package 2019 and the Member States' National Reform Programmes (NRPs) in April 2020. EE is mentioned in nine country reports: for Belgium, Czech Republic, Denmark, France, Italy, Cyprus, Latvia, Poland, and Slovakia. Furthermore, EE is mentioned in six NRPs: from Belgium, Bulgaria, Estonia, Latvia, Poland, and Romania. However, only few documents elaborate on EE. Entrepreneurship and EE are most prominently mentioned in the NRPs of Belgium and Latvia.

The EE-WE project team asked workshop participants affiliated with governments whether they have dealt with the Semester. Those who responded tended to support the idea that it could help promote EE.

Source: EE-WE project team research

Use the Recovery and Resilience Facility to promote EE.

WHY? The Recovery and Resilience Facility (RRF) offers a great opportunity to introduce EE to national reform plans or strengthen the role of EE in these plans.

WHAT? The RRF will make €672.5 billion in loans and grants available to support reforms and investments in Member States. The aim is to mitigate the economic and social impact of the COVID-19 pandemic, make Europe more resilient, and to prepare Europe for the green and digital transitions.³⁰ The RRF entered into force on 19 February 2021. The Facility is the centrepiece of NextGenerationEU, a temporary instrument for recovery after the pandemic. To benefit from the support of the Facility, national reforms and investments could be implemented by 2026. The RRF is closely linked with the European Semester.

GOVERNMENTS' national plans could effectively address challenges identified in the European Semester, particularly the country-specific recommendations.

"The Facility is an opportunity to create European flagship areas for investments and reforms with tangible benefits for the economy and citizens across the EU. These should address issues that need significant investment to create jobs and growth, and which are needed for the green and digital transitions." The Commission strongly encourages Member States to put forward investment and reform plans also in reskilling and upskilling.

Source: European Commission's RRF website

Use European funding instruments to foster EE.

WHY? European funding instruments are already used to foster EE. However, they still offer unused opportunities in this respect.

WHAT? Many European funding instruments lend themselves to foster EE.³¹ Most suitable may be Horizon Europe, Erasmus+³², the European Social Fund (ESF)³³, and the European Regional Development Fund³⁴. Further suitable instruments include the Instrument for Pre-Accession Assistance (for Western Balkan countries and Turkey)³⁵, the European neighbourhood instrument (relevant here for Moldova and Ukraine)³⁶, and the European Entrepreneurial Regions scheme³⁷.

GOVERNMENTS on national, regional and local level can encourage and support educational institutions and other stakeholders to use European funding instruments for fostering EE. Some instruments such as the ESF require co-funding from Member States. Governments can include European funding instruments in their EE strategies and agendas.

EUROPEAN ORGANISATIONS could continue prioritising EE in European funding instruments. They could specify priorities, for example training teachers about EE methods as well as gender-sensitive entrepreneurial learning offers that are especially attractive for women.

The European Social Fund (ESF) shall encourage and support innovative entrepreneurs. The ESF also promotes education and training. Concerning financial EU contribution to EE, the ESF is a major funding source. In the 2014-2020 period, two-thirds of European countries and regions used ESF financing for EE initiatives, for instance entrepreneurship education in Belgium, the Practice Enterprise Project (Firme de exercitiu) in Romania, and the Finnish YES (Virtual Learning Environment for Entrepreneurship Education) initiative.

Source: European Commission et al. (2016)

Background of this Guide and targeted readers

This Guide is based on findings from interactive expert workshops

This Guide is a final output of the project Peer-Learning Activities in Entrepreneurship Education and in Women's Entrepreneurship (http://www.ee-we.eu, herein abbreviated "EE-WE project", contract number EISMEA/ COSME/2017/021). The European Innovation Council and SMEs Executive Agency (EISMEA) funded the project from July 2018 to June 2021. The project's main task was organising highly interactive workshops with experts from all over Europe.³⁸ Three workshops were about entrepreneurship education: In March 2019 in Budapest, in November 2019 in Tallinn, and in March 2021 online.

Altogether, the project involved more than 150 experts in entrepreneurship education. The recommendations in this Guide are derived from the workshops as well as online communities and surveys of participants around them. The project team also conducted literature reviews to complement personal experience with empirical insights.

Target groups: regional, national, and international decision makers

An overarching finding of this project was: driving entrepreneurship education requires concerted actions of different stakeholders: Governments, educational institutions, civil society actors, enterprises, and their associations – on local, regional, national and European level. Hence, the target group of this Guide is decision makers in these types of organisations.

EE particularly for women

The EE-WE project deliberately targeted entrepreneurship education and women's entrepreneurship. Both have in common that they do not yet gain the attention they deserve – and should be further developed to tap into the full potential of creativity and innovativeness in Europe. There is a parallel Guide dedicated to women's entrepreneurship.



Participants of the second EE workshop of the EE-WE project, 5-7 November 2019 in Tallinn, Estonia.

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Endnotes

- ¹ Quote originally directed towards Junior Enterprises Europe, see <u>https://juniorenterprises.eu/what-is-a-junior-enterprise/</u>.
- ² See ICF (2015), p. 7.
- ³ See Bacigalupo et al. (2016) for the original publication and European Union (2018) for a brochure.
- ⁴ There is a collection of examples how EntreComp is used in practice in "EntreComp into Action". Several ongoing EU-projects develop different aspects of EntreComp for the use in education, industry sectors and beyond.
- ⁵ A survey done by the "Entrepreneurship Education Monitor 2019" among 307 educators and EE experts in Europe. (<u>http://www.ee-hub.eu/monitor/</u>)
- ⁶ See European Commission (2006).
- ⁷ For a current discussion of the different approaches to teach about, for, and through entrepreneurship see Linton/Klinton (2019). The distinction between "about" and "for" stems from David Kirby (2005). See also Scott/ Rosa/Klandt (1998), Johansen/Schanke (2013) and Moberg (2014).
- ⁸ For the relevance of teacher training see Wraae/Walmsley (2020).
- ⁹ For building learning-centred mindsets of teachers, see Toding/Venesaar (2018).
- ¹⁰ See findings from the ICEE research project in Johansen (2018).
- ¹¹ See <u>https://www.kphvie.ac.at/</u> and a related case study in the HEInnovate resource base at <u>https://heinnovate.eu/</u> <u>en/download/file/fid/797</u>.
- ¹² See <u>http://www.jaeurope.org/medias/news/945-ja-europe-intel-bring-ai-to-schools-through-entrepreneurship.</u> <u>html.</u>
- ¹³ In Germany there is the network of the Förderkreis Gründungs-Forschung (Promotion Circle Start-up Research, see <u>https://www.fgf-ev.de</u>). For Poland see the Academic Network for Entrepreneurship Educators (<u>http://www.seipa.edu.pl/index.php/ida/488/?lang=en</u>).
- ¹⁴ European Commission/EACEA/Eurydice (2016).
- ¹⁵ OECD et al. (2019).
- ¹⁶ See <u>https://www.bmbwf.gv.at/Themen/schule/schulsystem/sa/bmhs/kfm/entrepreneurship/entrepreneurship</u> <u>landkarte.html</u>.
- ¹⁷ The Innovation Cluster for Entrepreneurship Education (ICEE) was a policy experimentation project assigned by the European Commission that ran until 2018. Three research institutes, five Ministries 20 schools and 13 organisations took part. The research tested what the scenario looks like at 50% penetration among students between 15 and 20 years old and carry out a 27-month field trial using the mini company in twenty schools (academic as well as vocational) across the five countries. Survey data was gathered pre/post with 12000 respondents (students, teachers, parents, and businesspeople). A total of 150 people was interviewed individually or in groups.
- ¹⁸ See Lindh and Thorgren, 2016.
- ¹⁹ For distinguishing ecosystems of general and ecological entrepreneurship see Bischoff, Volkmann, Audretsch, 2018; Bischoff and Volkmann, 2018.
- ²⁰ See Parker, 2018.
- ²¹ See findings from the Global Entrepreneurship Monitor in Bosma et al., 2020.

- ²² SELFIE is "a free, easy-to-use, customisable tool to help schools assess where they stand with learning in the digital age". See <u>https://ec.europa.eu/education/schools-go-digital_en</u>.
- ²³ There is an ongoing EU consultation "towards a European approach to micro-credentials" which further strengthens the argument about the need to scale (through sharing between key stakeholders in across countries) the ESP micro-credential assessing and certifying the entrepreneurship competence: <u>https://ec.europa.eu/education/education-in-the-eu/european-education-area/a-european-approach-to-micro-credentials_en</u>.
- ²⁴ The following recommendations are based on desk research and on insights from a survey of participants of the project's last workshop in entrepreneurship education.
- ²⁵ For more information about the European Semester see <u>https://ec.europa.eu/info/business-economy-euro/eco-nomic-and-fiscal-policy-coordination/eu-economic-governance-monitoring-prevention-correction/european-se-mester/framework/eus-economic-governance-explained_en.</u>
- ²⁶ For the Autumn Package see <u>https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-co-ordination/eu-economic-governance-monitoring-prevention-correction/european-semester/european-semes-ter-timeline/autumn-package_en.</u>
- ²⁷ For the country reports see <u>https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-co-ordination/eu-economic-governance-monitoring-prevention-correction/european-semester/european-semes-ter-timeline/winter-package_en.</u>
- ²⁸ For the national reform programmes see <u>https://ec.europa.eu/info/business-economy-euro/economic-and-fis-</u> <u>cal-policy-coordination/eu-economic-governance-monitoring-prevention-correction/european-semester/euro-</u> <u>pean-semester-timeline/national-reform-programmes-and-stability-or-convergence-programmes_en</u>.
- ²⁹ For the country-specific recommendations see <u>https://ec.europa.eu/info/business-economy-euro/econom-ic-and-fiscal-policy-coordination/eu-economic-governance-monitoring-prevention-correction/european-semes-ter/european-semester-timeline/spring-package_en.</u>
- ³⁰ See the European Commission's website about the RRF at <u>https://ec.europa.eu/info/business-economy-euro/</u> recovery-coronavirus/recovery-and-resilience-facility_en.
- ³¹ See European Commission/EACEA/Eurydice (2016), p. 59-63, about European funding instruments used to support EE.
- ³² See <u>https://ec.europa.eu/programmes/erasmus-plus/about_en.</u>
- ³³ See <u>https://ec.europa.eu/esf/home.jsp?langId=en</u>.
- ³⁴ See <u>https://ec.europa.eu/regional_policy/en/funding/erdf/</u>.
- ³⁵ See <u>https://ec.europa.eu/regional_policy/en/funding/ipa/</u>.
- ³⁶ This instrument is replaced by a new overarching financial instrument in 2021, the Neighbourhood, Development and International Cooperation Instrument. See <u>https://www.consilium.europa.eu/en/press/press-releas-</u> <u>es/2020/12/18/neighbourhood-development-and-international-cooperation-instrument-coreper-endorses-pro-</u> <u>visional-agreement-with-the-european-parliament/</u>.
- ³⁷ See <u>https://cor.europa.eu/en/engage/Pages/european-entrepreneurial-region.aspx</u>.
- ³⁸ COSME covers 41 countries: the 27 Member States of the European Union, the seven enlargement countries of Albania, Bosnia and Herzegovina, Northern Macedonia, Kosovo, Montenegro, Serbia, and Turkey; the Eastern Neighbourhood countries Armenia, Moldova and Ukraine as well as Iceland. See <u>https://ec.europa.eu/research/participants/data/ref/other_eu_prog/cosme/legal/3rd-country-participation_en.pdf</u>.

