

Being an entrepreneur is not a talent, it is a competence anyone can learn.

Deliverable:

5.2 Guide EntreCompFood

Leading partner: AGROPARISTECH

Published: March 2023

Be curious and open Be determined Team up Develop ideas Use resources responsibly Accept diversity Be innovative Be resilient Imagine Listen actively Think strategically Make the most of your time Guide action Learn by doing Behave ethically Learn from mistakes Don't give up Think sustainably Reflect Assess impact Get support



Index

INDE	x	3
1.	SUMMARY OF ENTRECOMPFOOD GUIDE	5
2.	CONTEXT	6
3.	HOW TO USE THIS GUIDE	7
4.	TARGET PUBLIC FOR IMPLEMENTING ENTREPRENEURSHIP TEACHING & LEARNING	9
4.1.	EDUCATORS	9
4.2.	STUDENTS	11
4.3.	YOUNG ENTREPRENEURS	12
5.	ASSEMBLING AN ENTREPRENEURIAL COMMITTEE FOR HIGH EDUCATION INSTITUTE	13
6.	JOIN THE NETWORK OF ENTREPRENEURIAL EDUCATORS	15
7.	TRAIN THE TRAINER AND PROFESSORS EMBARKING ON THE ENTREPRENEURIAL JOURNEY	17
8.	STAKEHOLDERS WORKSHOP	18
9.	DEVELOPMENT OF ENTREPRENEURSHIP COURSES	20
9.1.	A SPECIFIC MODULE FOR ENTREPRENEURS: MATURING REAL ENTREPRENEURIAL PROJECTS	22
9.2.	ETHICAL AND SUSTAINABLE INTRODUCTION IN ENTREPRENEURSHIP COURSE	24
9.3.	INNOVATION ENGINEERING	26
9.4.	INTRODUCTION TO CREATING A COMPANY	27
10.	IMPLEMENTING ENTREPRENEURIAL PROJECT-BASED LEARNING	29
10.1.	WORKSHOPS TO INTRODUCE ENTREPRENEURIAL COMPETENCIES	31
10.2. OPP(MODIFIED COURSE SENSORY ANALYSIS (LEVEL IV) WITH ENTREPRENEURIAL LEARNING DRTUNITY	33
10.3.		
11.	IMPLEMENTING STUDENTS' ENTREPRENEURIAL PROJECTS OUTSIDE THE CURRICULA	43
11.1.	PROJECT BASE LEARNING PREPARING STUDENTS TO PARTICIPATE TO ECOTROPHELIA COMPET	ITION
Ec	OTROPHELIA EUROPE ENTRECOMPFOOD AWARD	44
11.2.	FEEDBACK WORKSHOP FOR ECOTROPHELIA STUDENTS	48
11.3. CHAI	INVITING YOUNG ENTREPRENEURS TO PRESENT THEIR SUCCESS STORY, EXPERIENCES AND LENGES TO STUDENTS	49
11.4.	TOURNAMENTS	51
11.4.	1. CREATIVITY TOURNAMENT	52
11.4.	2. MATURATION TOURNAMENT	53
11.4.	3. ENTREPRENEURSHIP TOURNAMENT	54
11.5.	DESIGN THINKING – CHALLENGE LABS (EIT FOOD)	55





11.6.	ESCAPE GAIVE
12.	TOOLS FOR APPLICATION
12.1.	PLATFORMS SUPPORTING ENTREPRENEURIAL PROJECT:
12.1.1.	MOODLE IDEONIS
12.1.2.	VIANEO
12.1.3.	SCRUM
12.1.4.	OBEYA
12.2.	DIGITAL TOOLS SUPPORTING ENTREPRENEURIAL TEACHING
12.2.1.	MENTIMETER66
12.2.2.	JAMBOARD67
12.2.3.	KAHOOT!68
12.2.4.	MINDMAPS68
12.2.5.	WEBEX / MICROSOFT TEAMS / ZOOM69
13.	MEASURING DEVELOPMENT70
13.1.	SELF-EVALUATION TOOL FOR STUDENTS (QUESTIONNAIRE)70
13.2.	PEER TO PEER ASSESSMENT FORM70
13.3.	FREQUENCY OF MEASURING THE DEVELOPMENT72
14.	CONCLUSION73
15.	APPENDIX74
15.1.	TEMPLATE QUESTIONNAIRE FOR TEACHERS EXCHANGING ENTREPRENEURSHIP TEACHING METHODS 74
15.2.	ENTRECOMPFOOD QUESTIONNAIRE FOR STUDENTS76
15.3.	ANNEX 5: CURRICULUM DEVELOPMENT CANVAS80





1. Summary of EntreCompFood Guide

EntreCompFood <u>project</u> has as ambition to connect the world of education and work, by contributing to a better understanding and promotion of entrepreneurship competences in Europe. The EntreCompFood project aims to facilitate peer learning and exchange on entrepreneurial teaching among Member States and eventually to have a positive impact on attracting young people into food and agriculture industry.

This guide has the aim to support the teaching of entrepreneurial competencies based on the scope of EntreCompFood project. The audience target group are educators in academic institutes, teaching students at different levels, and young entrepreneurs that are supported by different types of institutions, including academics ones. It has the objective to train the trainer, to assist professors on how to implement the teaching of entrepreneurial competencies in courses curriculum, but also to be a gathering of tools and strategies to implement entrepreneurial skills. It will also provide suggestions on how to help young entrepreneurs to have a global view of their business, to assist them in the development of lacking skills and to mentor students who want to become entrepreneurs.

This guide is an inspiration to implement new learning opportunities rising awareness on importance and supporting strengthening entrepreneurship competences. It assembles concepts aimed to the establishment of the learning of these entrepreneurial skills in the curricula, the creation of entrepreneurial committees to support entrepreneurship in the academia, with dedicated syllabus on entrepreneurship as well as any other topic like food science or nutrition. The guide identifies the requirements for learning contents and associated formats and tools that can provide the necessary education and overcome initials barriers of educators not being familiar with teaching about entrepreneurship. Therefore, a pallet of activities is suggested that may spice up and lecture or course and support practical work with hands on experience and teamwork. Competitions like Ecotrophelia are an excellent project-based opportunity to strengthen student entrepreneurial competences due to team work, learning by doing and by the task at hand to turn their creative ideas into food products with added value with the impact on the planet and human health. During EntreCompFood project Entrepreneurship award was created to support the strengthening of entrepreneurship competences and may be replicated.

On top this guide also offers a model of self-assessment questionnaire to measure the development of entrepreneurial skills, which can be used by teachers and professors when mapping students' level of competencies. Young entrepreneurs can also make use of the self-evaluation device.

These Guide is based on the experiences and offers many resources of project partners from Spain, France and Slovenia representatives of academia and business. After designing learning opportunities those were tested and modified as necessary based on the assessment and are easy to take on. During the activities the progress on entrepreneurship competences was measured with self-assessment questionnaire as well feedback from learners was collected with their <u>testimonials</u>. The methods used and recommended are written in this EntreCompFood Guide, however more details may be find in project <u>publications</u> specially in deliverables from WP3: Strategic framework for new learning opportunities and support services based on EntreComp; WP4: Development of learning opportunities based on EntreComp learning outcomes and D5.1 Pilot project results final report. For quick overlook please watch the recording of the final dissemination event.





2. Context

The Grant Agreement of the ENTRECOMPFOOD project states that:

T5.3 Set of recommendations on actions replicability and sustainability across Europe

This task will be a major output from the project, as it will help in identifying replicability potential and help future implementation of EntreComp at European level. Based on the contents created and the results of the project, this task will elaborate recommendations in order to provide feedback on the efficiency of the developed approach for future replication at large scale. A Guide (D5.2) presenting an assessment of lessons learnt when using EntreComp, transferability recommendations and guidance for stakeholders to implement the EntreCompFood project approach will be delivered in M35 to be available for the final European workshop to be organised in M36. AgroParisTech will be in charge of this deliverable with close support of the rest of the consortium (notably UL-BF, CCIS-CAFE and AE on the testing phase and CCIS-CAFE, ANIA and FIAB on the CoCos implementation).

The analysis of replicability will be based on:

- → Return of experiences of partners.
- → Return of experience and consolidated feedback from learners.
- → A general reminder of the methodological approach followed during the project related to strategies, methods of cooperation and specific measures that have been designed, including regarding the organised events,
- \rightarrow Identification of the barriers and obstacles to implementing EntreComp, independently from the sector, or learning contents.
- → Identification of requirements for learning contents and associated formats.
- ightarrow Identification of possible national initiatives that can support and ease the implementation of EntreComp.
- → Identification of supporting organisations needed to promote the solution
- → Evaluation and implementation of an exploitation plan in order to ensure continuity and sustainability of the solution after the end of the project, allowing specific resources to the post-project activities.

Based on these elements, the Guide will gather all information regarding replicability, channels of promotion and exploitation requirements. To complete it, a SWOT analysis will be provided. Examples of success stories will be given. An annex to this report will also identify future possible developments regarding the pilot of certification recognition and learning path, to provide a beginning of specifications.





3. How to use this guide

This guide has the objective of implementing and developing entrepreneurial competencies in educators, students and trainers. To provide a starting point on how to build entrepreneurship within an institution and help the flourishing of entrepreneurial competences daily. These points are suggestions on how to begin the transition to a more project-based learning and building of an entrepreneurial committee. For such, it is advised a few key steps to place the development of entrepreneurship in the institution.

An ambassador should be named. Someone who can support the development of entrepreneurial competences by providing assistance, connections within the institution and methodology. The person would be the go-to person within the institution to support entrepreneurial projects and professors. Training the trainers with tools proposed by this guide should help in the transition to a more project-based learning methodology. Creativity and brainstorming sessions are described to support the initial development of an entrepreneurial project to be worked with students. The recommendation to participate at Ecotrophelia competition is advised. Students can develop further their entrepreneurial competencies by being in a(n) (inter)national competition.

Assembling the first steps will consistently develop an entrepreneurial committee in the institution. With a committee in place, the connection between scientific knowledge and real entrepreneurial projects can easily happen. The committee can create a space where people can exchange about projects making it more accessible for finding solutions to problems. It can organize entrepreneurial tournaments to stimulate students to participate, it can support the further development of projects by connecting experts (professor and external entrepreneurs) in the area, and it can organize workshops, thus students can immerse in an entrepreneurial environment. By having the institution supporting this committee physically and financially it can boost entrepreneurship within the institution.

Forming an entrepreneurial ecosystem would require physical spaces provided by the institution. Having in place a creativity room, test kitchen and laboratory will give a more robust environment for the development of entrepreneurship by being able to develop an idea, prototype and characterize it to be presented to future clients and/or investors. Moreover, connecting with companies and entrepreneurs will place them together and straighten the distance between good ideas and final product.

For further development of entrepreneurship, it is advised the creation of an incubator where the following of projects (start-up) can be done as well as the hosting of new. The incubator can offer support with founding, workshops, scientific knowledge and the strengthen of weak links.

In conclusion, this guide has the necessary tools to support the development of entrepreneurship in an institution. Following the step-by-step suggestions, of naming an ambassador, forming a committee, building an ecosystem and having an incubator, can definitely boost entrepreneurship in the educational institution.





Table 1: A quick preview of the different activities in and outside curriculum and link to the entrepreneurship competence they have an ambition to strengthen.

	Creativity	Vision	Ethical & Sustainable thinking	Motivation & perseverance	Mobilising resources	Working with others	Learning through experience
EntreComp Community	х	х	x	x	х	x	x
Stakeholders workshop based on common methodology	x	x	х	х	х	x	х
Introduction to Entrepreneurship	х	Х		х		х	х
Introduction to creating a company	х	Х	x	x	x	х	х
Innovation engineering	x	x	x	x	х	x	x
Ethical and Sustainable introduction in entrepreneurship course			х			х	х
Maturing Real entrepreneurial projects	х	х	х	х	х	х	х
Sensory analysis - modified	х		Х		х	Х	х
Food safety - modified	х			x	Х	x	x
Ecotrophelia competition	х	X	x	x	х	X	x
Ecotrophelia EIT FOOD course	X	х	x	х	X	X	х
Creativity Tournament	х	Х	x	х		X	х
Maturation Tournament		х	x	x	x	x	x
Entrepreneurship Tournament				х		Х	х
Design Thinking	х	х	x	x		Х	х
Escape Room	Х	X	X	X	X	X	Х
Self-assessment Questionnaire	х	x	x	x	×	x	x

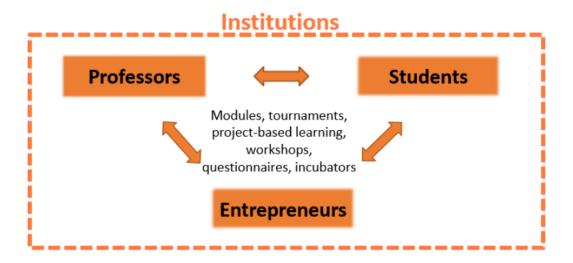






4. Target public for implementing entrepreneurship teaching & learning

During the EntreCompFood project learning opportunities and contents were designed and created for 3 different target groups. Teachers/ Trainers, Learners – students, Young Entrepreneurs



4.1. Educators

For entrepreneurship to take place and flourish, coaching of the staff is needed. It is of major importance to train the trainer in the dimensions of entrepreneurship and innovation so the necessary support can be given to provide the degree and research education necessary for the competency's flourishment. Train teachers who will be required to follow and support project and the development of student's skills. A recognition mechanism can be put in place to define who is involved with supporting projects (project tutoring in teaching hours, support of innovation, staff career development).

Teaching entrepreneurial skills can be a two-way learning experience. Students will learn from professors, tutors, and mentors the necessary skills and competencies of entrepreneurship. Teachers will learn from mentoring students and their projects, interacting with entrepreneurs and investors, and participating in courses and training from the EntreComp community web site. This mutual association allows the learning of both parts while ministering and participating into proposed courses, in other words, learning by doing.

The EntreComp community can be of great use to learn and guide through entrepreneurial competencies for those whose which have not had contact with them. For educators who seek new ways, how to modify teaching opportunities, it is very beneficial to connect to the network that has sharing knowledge and exchanging practices set as its mission. It is always nice to share your thoughts with likeminded people, for more peer to peer exchange connect to the EntreComp Community of educators implementing entrepreneurial competences as a secondary learning objective.

Enrich your teaching with <u>Train-the-Trainer on-line course</u>. The EntreTime training programme is an excellent learning experience for: Improving an educator's personal development higher education.





Welcome entrepreneurship educators! This is a self-paced online course for educators of all disciplines interested to learn how to teach through entrepreneurship and encourage their students and peers to develop an entrepreneurial mindset.

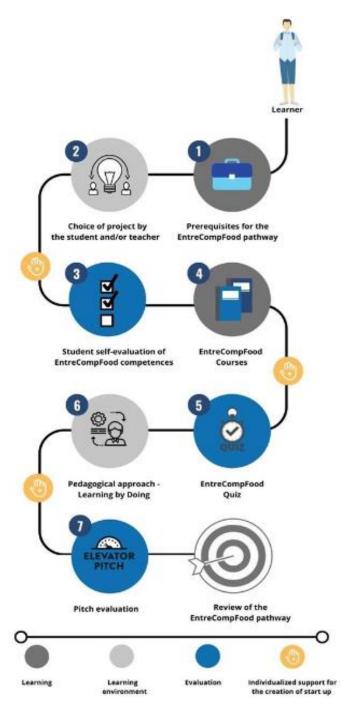


Figure 1.EntreCompFood learning pathway





4.2. Students

It is within the framework of EntreCompFood that dedicated training modules are suggested to students to develop entrepreneurial competencies. The following topics are advised:

- Entrepreneurship awareness for beginners.
- Food innovation project for the intermediate level.
- Tailored-made workshop at the service of practical methodology for starting project leader and entrepreneurs (advanced and expert levels).

The courses should be supported by existing lesson from the educational organ in the fields of social economics and management sciences (marketing, finance, accounting, human resources management, business law, project management...). It is within the framework of its modules that monitoring/measurements of the progression of entrepreneurial skill should be done.

It is advised the creation of internal entrepreneurial competition that will allow:

- Perceiving innovative ideas and future project leaders
- To mentor teams and projects with good winning potential.

This set up can be strategic and efficient to initiate, affect and promote the creation of future companies, and to further develop entrepreneurial skills.

The participation of external innovative championship such as Ecotrophelia should be highly considered due to the importance of this federal and European project for intermediate and expert level students. More important even is the fact that due to their strong motivation to win, students involve in such project are extremely strongly involve, they work hard and strong, with a level of exigence, toward themselves as well as toward their partners, that in general exceed what they do in more classical projects. This usually results in a strong progression in terms of competencies throughout the project.

Keeping the internal entrepreneur community (students, project leaders, young entrepreneurs and recently graduated) engaged is a useful tool to diffuse internal and external information. External challenges, workshops from the created entrepreneurial ecosystem and, calls for diverse projects can be important for junior projects which open the possibility to acquire funding and complementary mentoring (investors). It is also a way to shape the internal entrepreneurial body and keep participants active and responsive to the propose of the community.

Students can use tools online to expand their knowledge in entrepreneurial competencies. This guide presents suggested tools to guide and help on the development of projects and competencies. Digital platform IDEONIS can be followed to help acquire the necessary knowledge to learn about each part of a project to build a solid one.





4.3. Young Entrepreneurs

In the food sector, it is important to make accessible a third place adapted for the innovation and development of products and processes, (test kitchen, Food'InnLab). The physic space must allow the elaboration of food prototypes in the actual hygiene legislation and, equipment that can allow analyses to validate and measure characteristics of food product. The incubator should propose scientific and technical mentoring for each project hosted.

Organizing theorical and practical workshops adapted to projects, to instigate students and present the work that are done within the entrepreneurial institute with the university. For projects that are advanced, for example, a workshop on how to chase for funding could help them to evolve and develop on their entrepreneurial path.

Participation in challenges at an entrepreneurial level is important. It trains the young entrepreneurs to real life experiences and the possibility of winning which could propulsion the development of the start-up/project. In addition, the advice given by the jury could be of great use to improve the project. There is also the opportunity to meet sponsors and business angels that may be interested in financing the project.







5. Assembling an entrepreneurial committee for high education institute.

For entrepreneurship to take place and flourish, the creation of an entrepreneurial committee in each institution is strongly suggested. This can be done by bringing professors, sponsors, researchers, employees, and representants together. It is essential that this committee has the support of the direction and the institution's investors. This can be expressed in the different instances of the institutions, which should strongly support entrepreneurial projects as part of student's curricula. A strong communication on this dimension is essential to install and develop academic structures (courses; activities) that can be part of the education system and help the growth of entrepreneurial competences within students.

To ensure an efficient functioning of the committee, an ambassador (or responsible) should be officially assigned. Management and coordination should be secured by this person to develop entrepreneurship in the institution. Conception and constant amelioration of the dispositive accessible for students would be the responsibility of the committee and ambassador; new courses, internal entrepreneurial tournaments, mentoring, project management, building a food innovation ecosystem network and following entrepreneurial indicators through EntreComp reference tool would be among their designated obligations. The committee should follow and support the projects, connecting with experts and giving advice so the project can flourish.

The Institution's sponsors should be involved in the development of the committee to provide funding and expertise (coaching, sponsorship, and external skills) to the food innovation hub and projects that could emerge. It is suggested the conception of an innovative hub where student's projects could come to real life. The institution, together with professors, would support the development of projects guiding and incubating the start-ups.

Finally, the development of relationships amongst people involved in the establishment of innovation entrepreneurship with external actors of innovation forming an ecosystem where information about the subject, resources, member of juries, specialized speakers (for teaching), teammates with complementary skills (for development of project) is shared. The external contacts should be people involved in the entrepreneurship of other enterprises, economic development, industrial associations linked to food and bioeconomy, external incubators, business angels, and the EntreComp community.

To inspire the development of entrepreneurial competencies in the institution a step by step is proposed.

- 1. Form an entrepreneurial committee with an ambassador. Implement best practices to use project-base teaching.
- 2. Mobilize institution board to participate and support entrepreneurial learning and teaching. For example, funding of entrepreneurial competitions.
- 3. Offer courses and workshops for the maturation of entrepreneurial projects.
- 4. Connect with external partners, other institutions, possible investors, and companies to promote entrepreneurial projects.
- 5. Install an innovation hub where and incubator is present for the further development of projects and start-ups.

To better set the strategy you might want to get inspired by an incredible speaker one of the top experts in business strategy, Miquel Lladó, who shared with us his professional experience in significant executive roles in big, multinational companies. He is also an author of a book Falling in love with the future. In this book the reader may discover Miquel Lladó's work methodology, and,

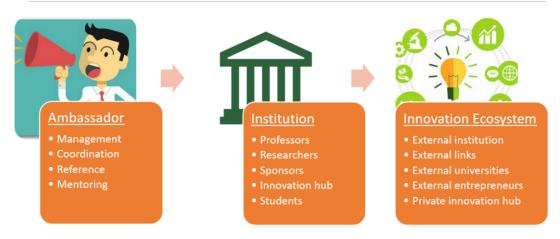




more importantly, the ideas that have contributed to him creating his own future and reaching high-ranking levels in business leadership. Rich in real-life cases, experienced first-hand by the author you may also find on <u>YouTube recording of his 1 hour talk</u> on how to set your vision and follow it with your strategy that will support you in achieving successful strategy implementation.

Coordination at the institution level : Assembling an Entrepreneurial Committee





AgroParisTech institution committee supports entrepreneurial development by having in place entrepreneurship tournaments, students support with projects and an incubator Food'InnLab where start-ups can test and characterize their product, connect with other start-ups and people in the field. Thus, being part of the university, it allows the exchange with professors and scientific. It is suggested that an ambassador for the committee should be named. The ambassador should be the go-to person when a student has an entrepreneurial idea. At AgroParisTech they realized the need to strengthen the support to students with real ambition to become entrepreneurs and therefore presented this idea to the management board. The presentation is available.

Before testing EntreCompFood competencies, the University of Ljubljana, in Slovenia, had no existing entrepreneurial committee. When EntreCompFood competencies were tested, professors involved in the teaching gathered to discuss how they apply the EntreCompFood learning Pathway (Figure 1). For this reason and the exchange between them it can be said that a committee was naturally formed by the necessity of teaching entrepreneurial skills.

EIT FOOD is building a powerful ecosystem to facilitate training programmes, world-class networking, high-impact pilot projects, and a community supporting entrepreneurs at all stages of their journey. Selected through an open call, EIT Food HUBs are our regional 'contact points' in EIT RIS countries. These organisations are key players in their national innovation eco-systems and gather strong regional outreach and experience in supporting entrepreneurs and organizing local events.

"Great acts are made up of small deeds." - Lao Tzu





6. Join the network of entrepreneurial educators

The EntreComp Community is an entrepreneurial learning platform that comprises entrepreneurial education, entrepreneurial competences, the EntreComp Framework, and more tools that make the learning of entrepreneurship like a one-stop-shop. It was created and developed by a team of dedicated individuals looking to bring together various European projects that support and develop entrepreneurship in different domains. It reassembles a digital library, online communities, and promotes courses related with to entrepreneurship in different sectors. Since it is an online platform, it allows connecting with people from around the world where exchanging experiences are possible.

What word sums up your community experience in 2020?

challenging many new faces connect on mission connect on mission sense of community interesting connection sharing spirit resilient innovation innovation inspiring inspiring collaborative community interesting connection innovation innovation inspiring inspiring competence community interesting connection innovation innovation inspiring inspiring competence community interesting connection innovation innovation inspiring inspiring connection in the connection in the connection in the connection innovation in the connection in

19

It is highly suggested signing up to have access to all the content. <u>EntreComp Community platform</u> involves teaching and courses for students, professors/trainers (<u>EIT Community for Entrepreneurship Educators</u>) and young entrepreneurs (<u>EntreComp for Entrepreneurial Mindset</u>), which can be useful to learn new techniques for teaching entrepreneurial competencies.

Competences developed: Creativity, vision, working with others, ethical and sustainable thinking, learning through experience, mobilizing resources, and motivation and perseverance.

EntreComp Community Welcome To the EntreComp Community Connect, Learn, Share and Be Recognised If this is your first time, check out this welcome video to find out about the features of The EntreComp Community. We Alka play Notes and December 1. Share and Be Recognised If this is your first time, check out this welcome video to find out about the features of The EntreComp Community.





A Skills Partnership for the Agri-Food Ecosystem

The European Commission together with FDE under the name Skills Partnership for the Agri-Food Ecosystem started to build the open community with resources to support upskilling and reskilling the current workforce and making the agri-food ecosystem more attractive to young people, while providing a life-long learning perspective to both employers and employees. The Pact aims to bring together all private and public stakeholders who share the common ambitions of up- and reskilling Europe's workforce and the learning of the skills necessary for the green and digital transitions of Europe's economy. Looking ahead, the Pact's main goal will be to contribute to one of the three EU social targets set out in the European Pillar of Social Rights Action Plan of having at least 60% of all adults participate in training every year by 2030. The agri-food partnership is pleased to contribute to this goal.





7. Train the trainer and professors embarking on the entrepreneurial journey

The JRC - Joint Research Centre, on behalf of DG Employment, Social Affairs and Inclusion, has developed a definition of entrepreneurship as a competence and a reference framework describing it, the Entrepreneurship Competence Framework (EntreComp). It aims to provide evidence-based scientific support to the European policy-making process. The development of the entrepreneurial capacity of European citizens and organizations is one of the key policy objectives for the EU and Member States. The European Commission identified sense of initiative and entrepreneurship as one of the 8 key competences necessary for a knowledge-based society. The EntreComp framework can be used as a basis for the development of curricula and learning activities fostering entrepreneurship as a competence. Learn more.

Read the Entrepreneurship Competence Framework published by JRC in 2016. And other practices & uses of it.

Be inspired to discover entrepreneurship competences yourself. During EntreCompFood project the excel table was developed for easy navigation through the Entrepreneurship competences. Travel through the competence map here. To familliarise yourself with the entrepreneurial competences deep dive into the Entrecomp Cards on competences. Presentation on entrepreneurship competences within EntreComp Food project.

Enrich your teaching with <u>Train-the-Trainer on-line course</u>. The EntreTime training programme is an excellent learning experience for: Improving an educator's personal development higher education. Welcome entrepreneurship educators! This is a self-paced online course for educators of all disciplines interested to learn how to teach through entrepreneurship and encourage their students and peers to develop an entrepreneurial mindset. Once you get trained you might want to train your colleagues and you could organize the Train the trainer workshop based on the proposed materials, presentation Train the trainer, Mentimer results.

To better set the strategy you might want to get inspired by an incredible speaker one of the top experts in business strategy, Miquel Lladó, who shared with us his professional experience in significant executive roles in big, multinational companies. He is also an author of a book Falling in love with the future. In this book the reader may discover Miquel Lladó's work methodology, and, more importantly, the ideas that have contributed to him creating his own future and reaching high-ranking levels in business leadership. Rich in real-life cases, experienced first-hand by the author you may also find on YouTube recording of his 1 hour talk on how to set your vision and follow it with your strategy that will support you in achieving successful strategy implementation. To share the inspiration you might want to print out Inspirational sentences from the book. To identify possible national initiatives that can support and ease the implementation of entrepreneurship learning opportunities it is recommended to organize the stakeholder workshop.

Take a <u>self-assessment test</u> to asses your own entrepreneurial skills. Use this <u>template</u> to exchange entrepreneurship teaching methods with colleagues.





8. Stakeholders workshop

To identify possible national initiatives that can support and ease the implementation of entrepreneurship learning opportunities it is recommended to organize the stakeholder workshop.

Workshops organised at local or regional level are recommended to gather actors directly involved on the ground to foster local synergies and partnerships to exchange and discuss different practices on entrepreneurial leaning based on EntreComp framework. Thus, the format of this workshop is to facilitate fertile debates among practitioners in order to build and share a common local vision of the challenges, strengths, constraints and opportunities to implement EntreComp at local level.

The Workshop methodology deliverable addresses the following objective: Design, organization and facilitation of interactive, strategic and operational workshops using different methodologies to stimulate the interaction among 20 to 40 local participants.

Aim will be achieved with following activities:

- Networking, clustering and team building among participants.
- Identification of existing state, needs and future requirements.
- Intensive ideation trough interaction and creativity techniques.
- Sharing good practices of supporting entrepreneurship competences development.
- Building a strategic vision for future developments to allow an appropriate usage of frame for the sector.
- Building a SWOT analysis (strengths, weaknesses, opportunities and threats) to implement EntreComp at local level.

Here after is a short description of such stakeholder workshop, however more information is available in D2.1 Common co-designed local workshop methodology and structure and D2.2 Conclusions of the local co-designed workshop.

Type of the activity:

Non-formal learning

Target group:

Target group were people involved in food industry (managers, food technologists, start-ups, etc ...), labor market players (HR employees), and students and teachers from food technology and nutrition related studies.

Developed competences

Creativity, vision, ethical & sustainable thinking, motivation and perseverance, mobilizing resources, working with others, learning through experience

Structure of the activity

On-line workshop

Impact and Effort:

High effort for organizing and attracting key players to participate in the workshop, high impact, as key factors for development EntreComp competences were recognized and means for their development were discussed. This allowed to adapt changes in teaching process needed to developed said competences.





Learning objectives

In the workshop our aim was to obtain information on and rankings of EntreComp competences as are recognized by key players in the field. Furthermore, we wanted to develop approaches to incorporate development of these competences in our curriculum.

Short description of the activity (duration, topic, number of participants)

Workshop lasted for 2,5 hours, with 60 participants. We had several topics: firstly, there was ranking of importance of EntreComp competences as are recognized in agri-food sector followed by SWOT analysis for implementation of competences in the educational process. Last topic was implementation ideas to develop EntreComp competences in established curriculum.

Activities, methods, tools used to support the development of the entrepreneurial competences

Three round table type discussions in smaller groups, supported by the use of Mentimeter tool for creating idea clouds.

What was a success factor

Success factor was creative idea flow that was clearly conceptualized and described.

What could be improved next time

There is a room for improvement in composition of the participating group. Even numbers of participants from different subfields could provide a better insight in discussed topics and even more fruitful discussion.

Supporting materials for this activity

- EntreCompFood competence presentation
- Curriculum Development Canvas
- Results of <u>Mentimeter</u> presentation (competences, brainstorming)
- Workshop report (in Slovenian)





9. Development of entrepreneurship courses

It is important to define the objectives of a course to be able to develop it. According to Legendre (2005), the objective of learning, in a didactic point of view, refers to a determined result with precision that the subject must achieve during or at the end of a pedagogical activity or a study program.

Therefore, the pedagogical responsible must take care to define the learning objectives of every formation that is coherent with the course that it is inserted, the level of the students, human resources, available material and budget, available resources, and student profile.

To design a course, it is suggested that the pedagogical responsible uses the EntreComp/EntreCompFood reference and the well-known methodology of Bloom (1956). For example, an object can be proposed as "This formation have the objective to prepare students for..."

In the learning of entrepreneurial formation, students' level must be taken into consideration according to their level (beginner, intermediate, advanced, and expert). Ideally, an exchange in the amount of information with the future participants would be desirable to synthetize their global needs and to adjust the objectives according to them.

Application of EntreComp competencies in the curricula

	Beginner	Introduction to entrepreneurship		
	level	Creativity tournament	Project-based	
	Advanced Level	Introduction to creating a company	learning within the curricula of	
		Maturing real entrepreneurial projects	the institutions.	Ecotrophelia Competition
	Expert lever	Innovation engineering		
	Post- formation	Innovation hub Incubator	Start-u	ups

Furthermore, it is important for each student to learn the perceived value of the tasks that will be proposed, the interest for completing their entrepreneurial project, developing their entrepreneurial competencies. The student must realize the challenges of the tasks but also be motivated to surpass these challenges with the guide of the professors. Taking this into consideration, the pedagogical responsible must conceive the activities and an adapted evaluations regarding the determined objective of the courses.

In a second time, it is suggested a completed evaluation of the course with the proposed objectives. In the case of entrepreneurial education, it is possible to give a certification regarding the project and the course.





Students should be evaluated by a jury. The jury should be composed of the pedagogical part and professionals that belong to the entrepreneurial domain (business investors for example). Pitching the developed project during course should give all the important points for the evaluators to assess the learning and feasibility of it. It is suggested an evaluation grid adaptable for each level of learning and the determined objective of the course. This evaluation grid should be presented for the participants in the beginning of the course for some direction in building the project. A percentage of the final grid could be the assessment of other participating teams.

For evaluating the learning competencies of participating teams, it is suggested to utilize the EntreCompFood questionnaire to assess the development of the entrepreneurial competencies during course time. As discussed, it will allow the participants to observe their evolution of the assessed skills. In the end, it is advised to have a debrief for the improvement of following courses.

Defining the pedagogical methodology and approach aligned with learning objectives and its assessment modalities are the last part for developing a course. These methods should be varied, interactives and motivating enough for the students. It is proposed practical work, debating activities, project tutoring, and pitch training.





9.1. A specific module for entrepreneurs: Maturing real entrepreneurial projects

Type of the activity:

Formal learning. This course is proposed for a real entrepreneurial projects

Target group:

The target group are people which have an ongoing project at an intermediate level but want to advance it further. They might be lacking some guidance and necessary skills for this development. People who apply to this course are motivated to learn and develop specific entrepreneurial skills. The tutor should select a determined amount of project without affecting mentoring capacity and availability.

Developed competences

Creativity, Vision, Ethical & sustainable thinking, Motivation and perseverance, Mobilising resources, Working with others, Learning through experience.

Structure of the activity

Lecture/Seminar/Workshop/

Impact and Effort:

At the end of the module students should have developed advanced entrepreneurial skills. Such can be described as the capacity to present their project in a convincing pitch form for an audience, realization of a market research in accordance with the project's scope, planification of the next steps (6 months), and to measure the progression of the development of learned entrepreneurial competencies and team management.

Learning objectives

The objective of this course is to mature projects already created which are still in need for guidance to attain an advanced development. It will allow the building of the business model of the future start-up, to determine the time frame of the project and its development, to test the market acceptance, and prepare arguments and strategies to interest future investors.

Short description of the activity (duration, topic, number of participants)

Entrepreneurial competencies should be learned to reach a progressive development of the project. This can be done by allowing participants to work with experts in the field during the course duration (2 weeks) and identify project's priorities. Training on pitching techniques to value the project and strategies to attract future investors in future presentations should be develop in the course.

Activities, methods, tools used to support the development of the entrepreneurial competences

Pedagogical workshops are intended to train project owners. Proposed workshops are described next and will focus on different themes: (1) human resources management (operational team management, recruitment, co-founders association management, (2) Market vision of the project (quantitative study, market research, BtoB and BtoC strategies) (3) Key points on building the business model/plan and marketing strategy (Vianeo tool to help) (4) Planning of actions in continue (planning and replanning strategies when necessary) (5) Extern communication (pitching techniques, community creation, press communication, project design).

Assessing the participants can be done by the following: punctuality, presence, participation on the available ateliers, and more important by an evaluation of the final presentation. At the end of the





module each participating project should be presented to a jury explaining the business model, market research and plan of action. Pitching the project in 20 minutes plus discussion time. A confidential and diverse jury should be part of the final evaluation to give their advice on the projects. Feedback from the teams should be instigated so the module can be improved in future ministration.

ORGANIZATION OF A WORKSHOP				
Round table	Presentation of projects and their needs.			
Reception	1 to 2 hours of interactive course with an expert on previous defined theme, presentation of concept, tools and step by step on utilization.			
Experimentation	In site autonomous work of each team with expert mentoring of proposed tools.			
Creation	Quick presentation of what was developed with the tools and feedback of the course.			
Debate	General feedback from expert and participants.			

Table 1. Organization of a workshop with the parts to be covered.





9.2. Ethical and Sustainable introduction in entrepreneurship course

Type of the activity:

Non formal learning

Target group:

Young entrepreneurs

Developed competences:

Ethical & sustainable thinking, Working with others, Learning through experience

Structure of the activity:

The training action is taught with the following methodological sequence:

- an online phase that will be developed using the tools of the Virtual Campus.
- and two webinar sessions in streaming

Impact and Effort:

It is an online course that aims to raise awareness, sensitize and train entrepreneurs and companies to create sustainable projects, and for those that are already underway or with a consolidated trajectory, make them reflect on the importance of introducing improvements and / or contributions that contribute to a society more respectful with the environment and beneficial for the inhabitants of the planet.

Learning objectives:

Through this training action on Green Economy, students will acquire knowledge and skills to adapt the processes of their company to the sustainable development strategy that will be addressed according to economic, sociological and environmental aspects.

Short description of the activity (duration, topic, number of participants):

The activated consists of taking the online course following the following contents, with a duration of the activity will be 20 h, for a total of 1,000 participants.

MODULE I. Basic concepts on sustainability, green and circular economy:

- Regulatory Framework for Transition to the green economy.
- Introduction to the 2030 Agenda and Sustainable Development Goals.
- The concept of sustainability.
- Concepts of green and circular economy.
- Good practices.

MODULE II. Alternative economies, experiences of sustainable companies and communication strategies:

- Blue Economy.
- Farm to Fork Strategy.
- Economy for the common good.



Competence Agrifood industry



- Orange Economy.
- Ecological economics.

MODULE III. Tools for measuring sustainability factors.

Activities, methods, tools used to support the development of the entrepreneurial competences:

The course is developed in the form of TELETRAINING.

Webinar 1: Basic concepts on sustainability, green and circular economy

Webinar 2: Alternative economies. Panel of experts

Individual study of materials.

Final knowledge assessment test.

Final satisfaction questionnaire.

As support it is required to have a computer device and internet connection, it will also be necessary to have access to the ZOOM platform.

What was a success factor?

This is a matter that is becoming aware in society and is increasingly in demand by companies. Becoming a sustainable company.

What could be improved next time?

Increase the number of participants. It reached 1000

Supporting materials:

Annex 1: Entrecomp Excel Map.

Annex 2: <u>Didactic guide</u>.

Annex 3: <u>Strategic approach of the SDGs</u> in business. Quick guide to support to entrepreneurs and self-employed.

Annex 4: Check out <u>The EntreComp Community</u> for future events like Creative Change Online Hackathon: Inspiring Sustainable Awareness!







9.3. Innovation engineering.

Type of the activity:

Formal learning

Target group:

Third year Students

Developed competences

Creativity, Vision, Ethical & sustainable thinking, Motivation and perseverance, Mobilising resources, Working with others, Learning through experience

Structure of the activity

Lecture, Seminar, Workshop, Project-based learning.

Impact and Effort:

Innovation management lecture, design thinking seminar/workshop, business model preparation, Case study with real companies. Hight level development of entrepreneurship competencies.

Learning objectives

Building a business plan. Managing innovation. Creating a company. Learning how to look for funding. Development of business case with a real company.

Short description of the activity (duration, topic, number of participants)

Number of participants between 16 and 20. Duration 48 hours spread in 3 months.

Activities, methods, tools used to support the development of the entrepreneurial competences

VIANEO tool to help building the business model. Case study presented by real companies.

Seminar - Process of innovation management and analyses; Food innovation and sustainability; Case study about Ecotrophelia;

Workshop – Design thinking and business model; Creating a company with VIANEO support; Innovation strategies and case study of milk company.

Lecture – Valuing and financing of research; Innovation management in a company and case study.

Development of an entrepreneurial project using VIANEO templates.

What was a success factor

Working with a company. Having time to build a business plan and exchange with the lecturers.

What could be improved next time

Having a better following of students could help to have a stronger business plan and pitch at the end of the module.

Supporting materials

VIANEO business design; GLOSSAIRE BUSINESS DESIGN, Template VIANEO; Entrepreneurial creativity; EntreComp questionnaire.



Type of the activity:

Developed competences

Structure of the activity

Workshop/Lecture

Day 4

Learning through experience.

Formal learning

Target group:

Students

Entrepreneurship **Comp**etence Agri**food** industry

Creativity, Vision, Ethical & sustainable thinking, Motivation and perseverance, Working with others,



9.4. Introduction to creating a company

Impact and Effort:
Preparation of creativity sessions and basic finance for entrepreneurship. Choose of case study to be studied in class. Presentation about pitching and how to do it. Medium development on entrepreneurial competencies.
Learning objectives
Initial development of a company. Teaching of financial dimensions for entrepreneurship. Teaching pitching strategies.
Short description of the activity (duration, topic, number of participants)
Students are invited to take their idea and to build a business plan. Classes of 16 to 20 people are ideal. This workshop takes 30 hours, one week, 5 days.
Activities, methods, tools used to support the development of the entrepreneurial competences
Brainstorming and creativity sessions, business plan creation and pitch structure through VIANEO method. Learning by doing methods.
- Day 1 Introduction to entrepreneurship and food innovation.
Self-assessment (Entrecomp questionnaire)
Creativity session and groups formation
- Day 2 Choosing final ideas and literature review about the project.
Listen and exchange with young entrepreneurs pitching about their project.
- Day 3 Use of VIANEO tool start planning the enterprise.
Presentation of the plan.
Group work to complete VIANEO templates.





Pitch preparation of each group.

Autonomous group work with supervision of the trainer.

Day 5

Pitch presentation of each group.

Self-evaluation (EntreComp questionnaire).

Debriefing of the course with students, moment for feedback.

Visit of food innovation site or company.

What was a success factor

Students appeared to like VIANEO tool to build the business plan. Teaching how to pitch was also successful. The students also preferred a hands-on type of teamwork and the quality of the final results that they achieved, the final pitch. Having worked the development of an idea to have a concrete one and a final result was really pleasing for the students.

What could be improved next time

Communication between groups should be worked for next time. Also exercises on how to talk in public. Proposing a course more complete in order to deepen the knowledge and to mature real projects with the objective to develop new entrepreneurial competences. But this have not happened yet. The final objective is to use diverse pedagogical tools like the ones proposed in this guide.

Supporting materials for this activity

VIANEO business design; Template VIANEO; Entrepreneurial creativity; EntreComp questionnaire.





10. Implementing entrepreneurial project-based learning

An efficient learning methodology to promote the teaching entrepreneurial competencies is to **promote project base learning.** Students are presented with a current problematic to be solved, can be related to the SDG goals, and are guided to solve this problem by developing a product or service. Working with current problematics can incite students to work the ethical and sustainable thinking competence. Project based learning can develop the proposed EntreCompFood competencies such as, creativity, working with others, learning through experience, vision, and mobilizing resources.

Exposing students to different activities can positively impact their learning. This section suggests a few ways that these exercises can be implemented in teaching. These activities can be open to all students or specific to a project developed during normal courses. It is also proposed the participation of tournaments that can be complementary and real-life experience on the entrepreneurial life. The following activities are described based on the experiences of EntreCompFood project partners and their execution. To learn more about the progress achieved during any activity implemented please have a look at the D5.1 Pilot project results final report of EntreCompFood.

EntreCompFood competencies can be developed through activities by incorporating into existing courses when creating exclusive courses for it is not possible. Professors can use different methods, games, and tools adapted for their student audience. The most common way of doing so is with the help of seminars or laboratory tutorials Students can learn more effectively by working hands on projects. Activities can be implemented in bachelor or master student program in Food Science, Nutrition, or in any course where a professor is interested.

It is proposed a few methods and tools that can be used for the development of EntreCompFood competencies which can be used in any course:

- Group work: to increase discussion, experimentation, enthusiasm, generation of new ideas.
- Quizzes: with the help of online tools such as Kahoot! or Mentimeter.
- Problem solving: find all existing resources to help you solve the proposed problem.
- <u>Brainstorming</u>: for generation of new ideas.
- <u>Mindmaps</u>: when working online Jamboard, a simple tool from google, may be used to activate all members to participate in the discussion and add comments on board (mindmap).
- <u>Presentation pitch</u>: to shortly describe the idea and be attentive to important information, also training speech and public speaking.
- <u>Self-assessment:</u> as a questionnaire at the beginning and at the end of the course to evaluate the progress made.
- <u>Peer-review:</u> students check on each other's assignments to develop critical thinking and positive feedback.
- Consultations with different professionals
- Industry presentations
- Invited lecturers





Ideas directly connected to food/nutrition, where entrepreneurship competences are supported:

- Existing recipe modification/new recipe development: to be more sustainable, ethical, innovative, creative, to include a forgotten ingredient, to use an alternative protein source, to not generate any food waste.
- New product development: ideate a product and the industrial production of it. Look into the market and opportunities.
- How to test the product before it enters the market: microbiology, food safety, quality, sensory properties, consumer acceptance. Students should find the methods by themselves with the help of different suggested (or not) resources and then carry out those methods at the course (where possible).





10.1. Workshops to introduce entrepreneurial competencies

Workshops can be developed to introduce entrepreneurial competencies to students and incite

them to work on the weak parts of their project. Moreover, having an initial contact with				
entrepreneurship can flourish the entrepreneur in the student. In addition, workshops can help the				
development of specific parts of the project and the learning of EntreComp competences. Mentoring				
during these workshops are important for the complete development of the projects.				
Introduction to entrepreneurship				

Target group:

Formal learning

Type of the activity:

Students

Developed competences

Creativity, Vision, Ethical & sustainable thinking, Motivation and perseverance, Working with others, Learning through experience.

Structure of the activity

Workshop

Impact and Effort:

It presents entrepreneurship concepts, creativity sessions, working in groups, brainstorming sessions to develop a project during this time. The presence of young entrepreneurs incites the students to hear experiences from people that were at their place at one point. Visiting incubators and companies can be suggested. Preparation for a pitch is also done so students can pitch their project at the end of the course.

The impact can be classified at small to medium.

Learning objectives

Students are exposed to creativity and brainstorming. Working with other to develop the initial project and to introduce students to the entrepreneurial world through the listening of experiences from young entrepreneurs.

Short description of the activity (duration, topic, number of participants)

Total duration course of 24 hours.

Activities, methods, tools used to support the development of the entrepreneurial competences

Brainstorm session; Creativity games; Presentation of companies by their founders; Development of an entrepreneurial project in groups. Pitch preparation and training sessions.

Visit of the incubator at AgroParisTech.

What was a success factor

Students were interested about hearing young entrepreneurs talk about their experiences. Students also appreciated the brainstorm and creativity session. Some groups presented a good dynamic.





Students appreciated the hands-on type of teamwork and the quality of the final results that they achieved (pitch). They appreciate the pathway of going from a simple idea to a concrete one.

What could be improved next time

Teaching on how to communicate could help students to better present their ideas and to exchange with their colleagues. Students appreciated less financial analysis of an entrepreneurial project. Mostly theoretical part that they found not amusing for the learning of entrepreneurship.

Proposing a course more complete in order to deepen the knowledge and to mature real projects with the objective to develop new entrepreneurial competences. But this have not happened yet. The final objective is to use diverse pedagogical tools like the ones proposed in this guide.

Supporting materials for this activity

- EntreCompFood competence presentation
- <u>Self- assessment questionnaire</u>





10.2. Modified course Sensory analysis (Level IV) with entrepreneurial learning opportunity

Course structure: Seminars

Short description of pedagogic activity and learning objectives of the course: Students gather knowledge in understanding principles in sensory analysis, the requirements to conduct it, methods and its characteristics, molecular mechanisms for olfactory and gustatory stimulus, cellular mechanisms of perception, the cognitive process, sensory properties of food, and application of electronic senses.

Seminars are activities where students deepen their knowledge as well as skills on a certain theme and usually involve individual or group work. Although they involve studying different literature sources, seminars are not limited solely to theoretical engagement. As sensory analysis is a part of product innovation and new product development, the main task of the seminar is the conceptualization of an innovative product addressing the SDG goals.

Pedagogical activities within seminars comprises an initial lecture with explanation and examples of competences to understand the difference between skills; overview of SDGs and main points that need to be addressed and discussed within the seminar (literature, sources, target consumer, besides focusing of sensory-related objectives such as, definition of key drivers of the product and role of sensory attributes within the concept). Separating students in groups allow the discussion of ideas, definition of consumer target, and building of a solid literature review. The joint session is dedicated to an exchange of product ideas within peers, argumentation of proposed products, and a target consumer group. Based on the feedback from peers, students will define the product idea for further development according to specified goals. As a result, each group submit a written report on their innovative product idea and an oral presentation is performed for peers, teachers, and external jury members who also raised questions and comments. The possibility to manufacture the developed product is highly incentivized by the teachers.

Activities, methods, and tools to support the development of EntreComp competencies: Moodle platform can be used for sharing basic study materials. For initial product idea presentation and discussion, Google Jamboard, and Webex break-out rooms can be used. An interactive platform allows students to share opinions, questions, and answers, while strengthen their competence of working with others. Creativity is essential to present this exchange in the most logical and understandable way. Each group can be part of a Webex break-out session to prepare for comments. Ideating a product can stimulate the development of creativity to fit the SDG goals. Thus, ethical, and sustainable aspects of the product must be taken into consideration. Access to different resources, proper use of ingredients, choose the best sensory method, and following the legislation are some examples that push the students to acquire knowledge and develop competencies of working with others, autonomy, and learning through experience. A presentation of the final product is done orally for teachers and professionals from the food industry. Mentimeter can be used when voting for the best idea.

Developed competencies: creativity, ethical & sustainable thinking, mobilizing resources, working with others, learning through experience.

First-year subject of MCs Food science study program, where students learn on how to perform sensory analysis, definitions of odor and taste, aroma, texture, etc. as well as different methods and tests to assess quality and acceptability of different food products.





Type of the activity: formal learning

Target group: MSc students of Nutrition and Food Science study programmes

Developed competences: Creativity, Ethical & sustainable thinking, Mobilising resources, Working

with others, Learning through experience

Structure of the activity: Seminar

Impact and Effort: High impact / medium effort.

Learning objectives

Learning objectives of the Seminars were deepening the knowledge as well as skills on a certain thematic and questions related to the sensory analysis or consumer studies that students address individually or in group work. Although seminars involve studying different literature source, they are not limited solely to theoretical engagement. As sensory analysis is a part of product innovation and new product development, the main <u>task of the seminar</u> was conceptualization of an innovative product addressing the SDG goals in the frames of collaborative participation.

Short description of the activity (duration, topic, number of participants)

Pedagogical activities within seminars comprised an initial lecture with explanation and examples of competences to understand the difference between skills and competences; overview of SDGs and main points that needed to be addressed and discussed within the seminar (literature, sources, target consumer besides focusing of sensory-related objectives such as definition of key drivers of the product, role of sensory attributes within the concept). Further, students (n=45) were asked to divide into groups of 4-5 and by the next joint session discuss ideas of the product, think about a target consumer group and search for relevant additional literature. Joint session was dedicated to an exchange of product idea with peers, argumentation of proposed product and a target consumer group and was composed of joint session, group works and joint discussion. Basing on the feedback from peers, students defined the product idea to develop further according to the goals set. As a result, each group submitted a written report on their innovative product idea and presented their idea orally in front of peers, teacher and external jury member who also raised questions, comments. Two student groups out of 9 manufactured their product and offered it for tasting. After all presentations students were asked to vote for 3 best food product ideas.

Activities, methods, tools used to support the development of the entrepreneurial competences

Moodle platform for sharing basic study materials, Google Jamboard for initial product idea presentation and discussion, break-out session in webex platform for group work and preparation of comments. Product ideas were presented orally using pptx presentation, in front of the class, the teacher and professional from the food industry. Mentimeter was used for voting for the best product idea.

What was a success factor

During the course they found it interesting and challenging. In the final course evaluation, they stated that the course helped to advance their competences and motivated them to think further about new product development and applying for student competition like Ecotrophelia. They stated, that comparing to a theoretical seminar, this type was more useful and educating for them,





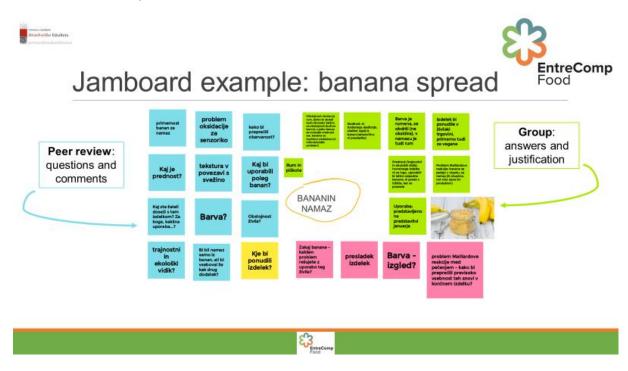
offering them better insight in a part of the food development process. Some groups even presented their pilot products not just an idea and description of the product.

What could be improved next time

Encourage more peer discussion and dedicate more time for that, methods for target customer definition (e.g. persona), inviting guest lecturers.

Supporting materials for this activity:

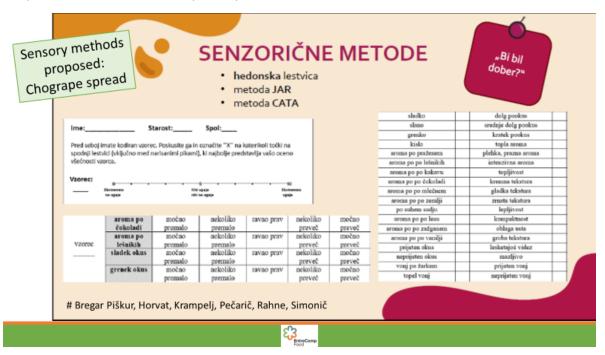
Picture 1: Initial idea presentation and peer to peer discussion (using Jamboard and webex online communication with joint session and break-out rooms).







Picture 2: Product idea pitching – focus on sensory methods to determine sensory characteristics of the product and consumer acceptability.



Picture 3: Voting for the best three food product ideas (using Mentimeter).







Picture 4: Call for self-evaluation (using google forms questionnaire).



Self-evaluation



Google form questionnaire

Which statements best describes you? Based on EntreComp competences and APT q.











10.3. Modified FOOD SAFETY with entrepreneurial learning opportunity

First-year course of MCs Food Science study program where students learn on different aspects of food safety, including technological risks and their control, through lectures, seminars, and laboratory tutorials.

Type of the activity: formal learning

Target group: students

Developed competences: Creativity, Motivation and perseverance, Working with others, Learning

through experience.

Structure of the activity: seminar works

Impact and Effort:

High impact/high effort.

Learning objectives

Updates to teaching and learning methods would be:

- (i) For seminar exercises: The supplement would be self-paced as part of seminar exercises. The content would be related to processing data from laboratory exercises and current studies in the scientific literature.
- (ii) For laboratory exercises: In addition, there would be an introductory part in which, according to the knowledge gained in the lecture and examination literature, a scientific problem is defined in the context of seminar exercises and a decision is made to carry out the experimental work.

As a conclusion, the student should prepare a presentation of his results in small groups of students. This would involve new tools and newly acquired skills as a pedagogical leader and student.

Final outcome: Laboratory research analysis, discussion, pitch with ppt presentation

Short description of the activity (duration, topic, number of participants)

The experimental work in the laboratory practical is followed by the seminar paper, in which students must understand the problem and further evaluate and present the results of the experimental work in conjunction with scientific literature. All 52 students in the food safety course participated in this activity. The objective of this activity was first to acquire basic knowledge of safety and risk guidelines in the food industry to ensure the production of safe food. In addition, students improved their individual time management and collaboration with each other, increasing their creativity and effectiveness.

Activities, methods, tools used to support the development of the entrepreneurial competences

- Strengthening collaboration and dialogue between students
- Increasing motivation and focus of thinking
- Development of learning opportunities / support through programs
- Change of didactic approach, preparation of a data transmission system





- More independent study of scientific literature
- Encourage critical thinking and discussion

What was a success factor

- Obtain a software tool used by all students for data entry
- Minimize uploading of documents and editing of a common document
- Improving communication between students and this must be very focused
- Improving collaboration between students, which is necessary for the presentation of the results
- To have the opportunity to view the work as you prepare for the presentation

What could be improved next time

- Updates with the aforementioned tools have been considered primarily in the conduct of laboratory exercises and seminar exercises
- We intend to include the updates in the future in the preparation of the research project to allow students to continue working and researching and this allows the current upgrade of the course with MS teams, which allows to obtain files and create new subgroups. In this way, we enable students to continue working within the course after the end of the Food Safety course, to prepare their results statistically and present them as a whole, to compare them with the scientific literature and to write a small research article
- In the future we intend to provide updates with the inclusion of MS teams tools in lectures and seminars on food safety, in particular organization through MS teams and collaborative work through Power Point / MS teams

Supporting materials for this activity

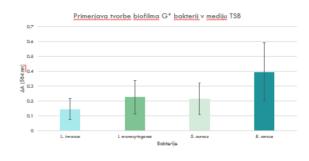
YouTube-FoodSafetySupportingMaterial





Figure 1. Students at Food Safety course and their laboratory work.

Primerjava tvorbe biofilma G+ bakterij v mediju TSB



Р	= 1	.98299	x 10 ⁻²⁹

Bakterije	Povprečna A
Listeria innocua	0,1437
Listeria monocytogenes	0,2244
Staphylococcus aureus	0,2139
Bacillus cereus	0,3934

Bakterije	Povprečna A (literatura)
Listeria innocua	0,1435
Listeria monocytogenes	0,0775
Staphylococcus aureus	0,5547
Bacillus cereus	0,5201

Figure 2.
Results of the experimental work in the laboratory and their evaluation.















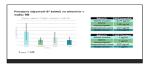
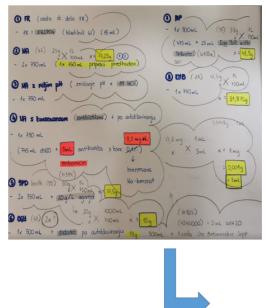




Figure 3. Example of Power Point presentation / MS Teams.



ORODJE MS TEAMS

- ORGANIZACIJA DELA NA PROJKETIH
- ORGANIZACIJA DELA S ŠTUDENI PRI OPRAVLJANJU DIPLOMSKIH IN MAGISTRSKIH NALOG

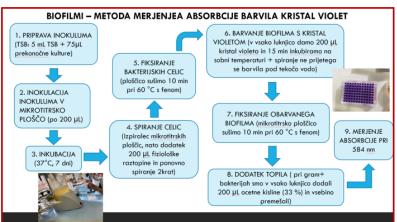


Figure 4. Example of planning experimental work through drawing a scheme by hand or through the use of MS Teams.





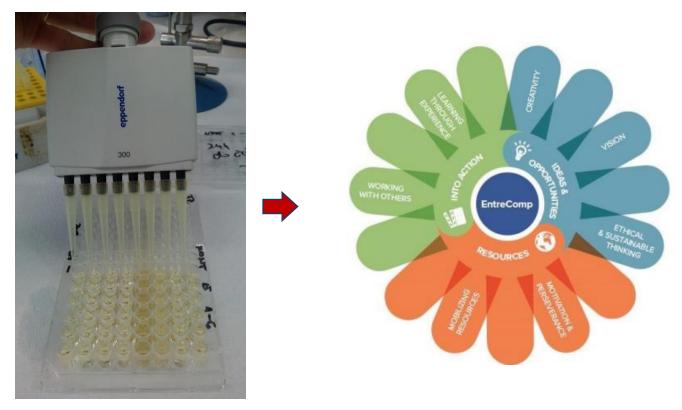


Figure 5. DEVELOPED ENTRECOMP COMPETENCES.





11. Implementing students' entrepreneurial projects outside the curricula.

Courses and tournaments can be proposed outside of the curriculum where students can participate and present their project engaging in entrepreneurial activities. Some courses/tournaments can be tailored to be developed some specifics competencies.

Competitions like Ecotrophelia is an excellent project-based opportunity to strengthen student entrepreneurial competences due to team work, learning by doing and by the task at hand to turn their creative ideas into food products with added value with the impact on the planet and human health. During EntreCompFood project Entrepreneurship award was created to support the strengthening of entrepreneurship competences and may be replicated.

11.1. Project base learning preparing students to participate to Ecotrophelia competition

Another effective way to stimulate the development of entrepreneurship competencies in students is to provide time for entrepreneurial projects. For example, at AgroParisTech students participate in EcoTrophelia competition. Some courses consider the Ecotrophelia competition as part of the curricula and other courses consider it a work outside of it. For this competition, the participating groups need to develop a complete, strong, and innovative project regarding a food product that engage sustainable food system. During this time, it is necessary to imagine a new food product, the design of the production plant, food safety, development of business and marketing plan. A national jury will assess the participant groups regarding the quality and feasibility and a winner will be chosen. Participating in EcoTrophelia can help the development of entrepreneurial competencies, as follows:

- Building a team with students with different competencies/background. As the success of an entrepreneurial project implies the combination of different competencies, it is recommended to constitute a group of students that follow different education, or at least that have different professional projects/interests/competencies. For example, students that want to do Research & Development, some others who are interested in finance, industrial production, quality management, and so on. Throughout the project, students will progressively discover how the different backgrounds are both important and complementary. They will also discover the difficulties that come working in an interdisciplinary team. They will learn how to communicate efficiently and to integrate aspects of the projects for its' feasibility.
- The participation on a competition can be very motivating for the students, apart from the financial prize, but nonetheless important, representing the university, and the project's recognition by a jury. The belief in the project is important and can be a first step for the young entrepreneurs to keep moving forward with the product. Overall, this experience will incite them to move beyond limits of the work that are traditionally observed in university projects and the development of competencies is imminent.
- The competition spirit, associated with the possibility of winning is an important aspect. It
 can be motivated by the fact that students want to defend the colors of their university, by
 the financial reward, by the recognition that the prize will give to their project, or simply





because they believe in the quality of their project: in any case, it will incite them to go well beyond the limits of implication and work that are traditionally observed in university projects, and this is an influential aspect to help them to develop competencies.

- Having different professors to supervise the project, this can present for the students another perspective of their project. It can incite the development of communication and receiving feedback. Students can learn how to share information in the decision-making process.
- Serve of the EntreCompFood competencies questionnaire to evaluate the progress of competencies developed during the EcoTrophelia competition. It can be a great tool for the identification of strong and weak skills and an indicator of improvement that can motivate the learning progress.
- After the competition, it is proposed to do a debriefing with the students and their mentors
 focusing on the 7 EntreCompFood competencies. For the student is an opportunity to
 exchange, share thoughts, formalize and to realize what was developed during the
 EcoTrophelia duration.

Ecotrophelia Europe EntrecompFood Award

Type of the activity:

formal learning and non-formal learning

Target group:

Students participating to the Ecotrophelia Europe competition

Developed competences

Creativity, Vision, Ethical & sustainable thinking, Motivation and perseverance, Mobilising resources, Working with others, Learning through experience

Structure of the activity

Online training, oral presentations

Impact and Effort:

The European EntreCompFood award has been developed for the 2022 Ecotrophelia Europe edition. In order to reach this result some efforts had to be done:

- 1/ develop an online training on entrepreneurship accessible to all Ecotrophelia Europe participants.
- 2/ change the competition rules to state the creation of this new award.





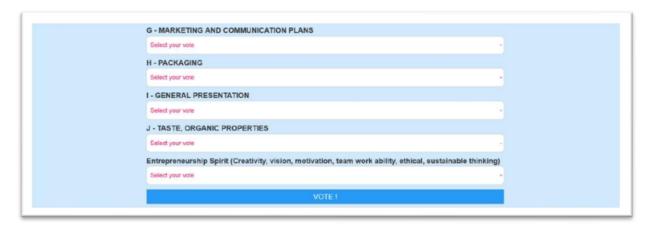
ARTICLE 4. TERMS & CONDITIONS FOR TAKING PART 4.1. Application Each Participant should apply to the Organizing Committee through: • a "Letter of Commitment", signed and dated by the Participant, • the "Registration Form" filled in online in the following website: https://eu.ecotrophelia.org/; The Organizing Committee will acknowledge receipt of both documents and will send an invoice referring to the registration fee. For the 2022 edition the fee is set at: • 2 200€ (two thousand two hundred Euros) for non-EEIG members; • 1 600€ (one thousand six hundred Euros) for EEIG members. • The proof that one of the team members went through the Inspire 4 Ecotrophelia EIT course on entrepreneurship: https://eitfood.eduframe.nl/login/eduframe?redirect_to=https://2Feitfood.instructure.com%2Flogin%2Fc

Picture: Rules of Ecotrophelia competition in the Article 4 implementing the conditions for competitors to participate for the Entrepreneurship award.

3/ inform and train the jury on the new competencies to be evaluated during the competition.

4/ adapt the voting tool.

The existence of this new award and the obligation for the participating students to go through this training bring all the teams to better analyse their competencies and to expose them. The impact on their willingness to act as entrepreneurs is important.



Picture: New voting tool for the Jury with Entrepreneurship spirit to be evaluated.

The marking scale used on the voting tool is: for each of the criteria ranges from 0 to 10 (whole numbers only):

0, 1 or 2 not dealt with3 or 4 insufficient5 or 6 average - incomplete7 or 8 well dealt with9 or 10 very well dealt with

Learning objectives





The training tool has been developed with the support of EIT FOOD, a well-known European organization omitted to promote entrepreneurship in the food sector. It's an initiative supported by the European Union.

Its mission? To accelerate innovation to build a food system for the future that produces healthy and sustainable food for all. EIT food invests in projects, organisations and people who share these goals for a healthy and sustainable food system. They also equip entrepreneurs and professionals with the skills to transform the food system and train the next generation.

The learning objectives are:

- Self-assessment.
- Capacity to evaluate the potential of an idea.
- Tools to implement the idea.
- Tips to improve entrepreneurship capabilities.

Short description of the activity (duration, topic, number of participants)

The 15 teams involved in the European competition had to follow the training. The 52 students presenting their food product on the competition day have been evaluated by team on their entrepreneurship abilities. The jury had to decide which team will receive the EntreCompFood prize.

Activities, methods, tools used to support the development of the entrepreneurial competences

The online training tool Is accessible here: EITFood - Training tool

A pre-registration is needed.

The registered members to the training session received this email:





Dear Students,

We are happy to have you as part of our programme and are certain that you will learn so many things that will be valuable to you.

Don't forget, you can check out the course outline HERE and get the ball rolling with mapping your strengths in entrepreneurial thinking HERE. This course is designed to equip you with everything you need to succeed in your entrepreneurial journey so don't let the momentum fade! Keep moving forward in your studies, and soon you will enjoy the fruits of your learning.

If you haven't already done so, once you have completed your EntreComp profile, don't forget to post your reflections in the discussions forum HERE so you can share your insights with your fellow students.

Remember you can upload your final submission at any point up until Friday 30th September, when the course closes. Upon completing your final submission, you will earn your EIT Food Certificate!

Anytime you need help with your learning process, we are here for you. Just send us a message through Canvas and we will come back to you as soon as possible.

Good luck!

Picture: Email that registered members to the training session received.

What was a success factor

The participation was mandatory. EIT Food team was very committed to the project and has great experience in training tools. We got a professional tool since day 1.

What could be improved next time

The initiative will survive the end of the project and students will have more time to follow the training. The tool will be available for the national competitions too. So, more students will benefit from it.





11.2. Feedback workshop for Ecotrophelia students

Type of the activity: non formal learning

Target group: students working in teams

Developed competences: Creativity, Vision, Ethical & sustainable thinking, Motivation and perseverance, Mobilising resources, Working with others, Learning through experience

Structure of the activity: On-line workshop

Impact and Effort:

High impact/high effort.

Learning objectives

Learn how to give, receive, and ask for feedback, that helps you grow and improve.

Short description of the activity (duration, topic, number of participants)

Interactive on-line workshop was organised at the end of the teamwork. The participants got familiar with the entrepreneurial competences and how to give peers feedback based on the traffic light tool. The whole workshop was organised in a positive atmosphere, to focus on what was good and what have they have learned. 18 students from 7 Ecotrophelia teams participated to the 4 hours on-line workshop.

Mural was used so that everybody could share an example under each competence. After learning the meaning of each competence, we teach them how to.

Activities, methods, tools used to support the strengthening of the entrepreneurial competences

- Peer to peer evaluation form focused on entrepreneurial competences.
- Traffic light to give feedback practised with Mural split in 3 parts theory explanation, practise in pairs to give each other feedback following the template, discussion on work in pairs to share with others.

What was a success factor

Giving a complement to one person, it is important for young students to realise their own strengths and gain self-esteem.

What could be improved next time

Students had difficulties to articulate the feedback, they wanted to give. Next time would be better to practices this more, give them more examples or do some role-playing.

Supporting materials for this activity

- <u>Traffic light</u> to give feedback.
- <u>Peer to peer evaluation</u> form focused on entrepreneurial competences.
- Mural template for the workshop EntreCompFood competences & Feedback
- Feedback from learners was collected with their testimonials.





11.3. Inviting young entrepreneurs to present their success story, experiences and challenges to students

Contacting young entrepreneurs to give speeches for students and talking about their entrepreneurial path can be inspiring for those who wants to follow their footsteps. It also presents someone, young, that can be successful in the entrepreneurial world. This should be arranged by the institution committee or the professor.

DA VERO - Eco Seafood Cold Cuts - University of Ioannina & Hellenic Open University, Greece.

2011 - Gold Award at the National and European Ecotrophelia Competition

The Da Vero – Eco Seafood Cold cuts is a new idea for the ecological and substantial utilization of non-commercial fishery products, in a tasty and nutrient choice of a seafood deli sausage. The product idea was further developed by the company KONTOVEROS, that since 1968 is engaged in the import, export, commerce, processing, packaging, and distribution of frozen fish. The product was marketed as "KONTOVEROS Mezedaki".

PANGGIES – *Vegetable pancakes* - VHL University, The Netherlands.

2018- Best communication strategy.

At the beginning of 2018, a group of international students from VHL university of applied science noticed a problem concerning the health of the new generation. Most kids do not meet their recommended daily vegetable intake. The team came up with a solution combining an easy, tasty, and fun product with vegetables. Pancakes + Veggies = Panggies. Panggies is a pancake mix with added vegetables helping families increase their vegetable intake. In 2018, Panggies joined the ECOTROPHELIA competition and won the first prize in the Dutch competition and the prize for best communication strategy in the European finals in Paris. There was a lot of interest in the products and at the beginning of 2021, Panggies launched three products both online and at selected retail locations in the Netherlands. The aim is to increase the vegetable intake of all families by making Panggies available throughout the country. In this way, Panggies helps families meet the daily vegetable intake.

CARRÉ FUTÉS

CarréLéon is a start-up created following the ECOTROPHELIA competition. In 2016, we were lucky enough to win the France and the Europe Gold awards with our CarréLéon vegetable bars; having the desire to be an entrepreneur, the founder decided to pursue the project by building the company. Since 2018, CarréLéon have been marketing vegetable squares under the Carrés Futés brand, and has expanded the range to include ten products, including fruit bars for baking. The 100% natural products are made of fruits or vegetables and cocoa butter only and are used to cook at home in an easy, practical, and fun way. Eight people are part of the team and have over a thousand sales points throughout France. https://carresfutes.fr





Altburger

Luka Sinček and Maj Hrovat were starting their business journey as students of microbiology and biotechnology. After numerous projects ranging from crafty bioreactors and fermented beverages and flavors, their passion for reinventing the meat industry by developing the best meatless product for meat lovers was born. First product that was commercialized was Altburger - a plant based burger that was launched in Spar Slovenia in 2019. This product was presented at Ecotrophelia 2019 and won the special award for the most sustainable food product. The team was joined by two experienced entrepreneurs, business mentor and food technologist Tilen Travnik and later also by creative father of coolest brands and beloved vegan restaurant Kucha, Vladimir Mićković. Altburger was only the beginning of something big - the next step was developing revolutionary technology Meat-o-matic 9000 that enables something previously unfathomable - production of plant-based steaks. In early 2021 they launched their signature product filet mignon under new brand Juicy Marbles. With this innovative concept they went through Y Combinator W21 batch and successfully raised 4.5M in seed capital. Now they are focusing on expanding their brand to new horizons, scaling production and expanding sales internationally.









11.4. Tournaments

Tournaments can be suggested by the entrepreneurial committee to students that have an idea and would like to pitch it. It can give the student the opportunity to participate in an entrepreneurship event and to develop the products idea. It is proposed an itinerary so students can grow on each step of their project from initial idea to complete business plan. This framework allows the organization of tournaments with projects on different levels of maturation enabling at the end, a prize for the winning project.

More information how it is organized at AgroParisTech, support the pathway of the entrepreneurs.





11.4.1. Creativity Tournament.

Open to all students with an idea of a product. It is possible to pitch to a jury an idea or a solution to a problem in a five-minute pitch. The objective of this tournament is to expose and introduce entrepreneurship to students. They can pitch their idea and vision of their product, what motivated them to think about this project and how it could solve an ongoing problem. Competencies that are stimulated are, vision, motivation and perseverance, creativity and, working with others.

Type of the activity:

Non formal learning

Target group:

Students with an entrepreneurial idea.

Developed competences

Creativity, Vision, Ethical & sustainable thinking, Working with others, Learning through experience

Structure of the activity

Competition

Impact and Effort:

Time to organize a jury to hear groups pitching their idea. Impact of this competition is small on entrepreneurial competences but it is important for a start.

Learning objectives

The objective of this tournament is to expose and introduce entrepreneurship to students.

Short description of the activity (duration, topic, number of participants)

Pitching of entrepreneurial ideas to a jury.

Activities, methods, tools used to support the development of the entrepreneurial competences

Students can pitch their ideas and vision of their product, what motivated them to think about this project and how it could solve an ongoing problem. The main activity is to learn how to pitch and do it in front of a jury.

What was a success factor

Students could feel how is to be in an entrepreneurial environment and how to pitch an idea.

What could be improved next time

A pitching course should be addressed to students and what are the main ideas of it so they can have a strong pitch.

Supporting materials for this activity

• Pitch template.





11.4.2. Maturation Tournament.

Open to students that are intermediate level on entrepreneurship competencies. Candidates have started to put together their project, but some important parts are still under construction, such as market analysis. The concept needs further development but has a strong base. The participants are suggested to prepare a confidential file of five pages and a ten-minute entrepreneurial pitch and present to a qualified jury. The pitch then should be followed by 20 minutes of questioning and answer session between the team and jury members. Competencies stimulated are, vision, motivation and perseverance, ethical and sustainable thinking, working with others, spotting opportunities, and learning through experiences.

Type of the activity:

Non formal learning

Target group:

Open to students that are intermediate level on entrepreneurship competencies.

Developed competences

Creativity, Vision, Ethical & sustainable thinking, Motivation and perseverance, Mobilising resources, Working with others, Learning through experience

Structure of the activity

Workshop/ Competition

Impact and Effort:

Candidates have started to put together their project, but some important parts are still under construction, such as market analysis. The concept needs further development but has a strong base. Impact on entrepreneurial competencies is medium.

Learning objectives

To work on parts of the business plan that are still under construction.

Short description of the activity (duration, topic, number of participants)

The participants are suggested to prepare a confidential file of five pages and a ten-minute entrepreneurial pitch and present to a qualified jury.

Activities, methods, tools used to support the development of the entrepreneurial competences

The pitch should be followed by 20 minutes of questioning and answer session between the team and jury members.

What was a success factor

Was a success to give opportunity to students to pitch their project for an entrepreneurial jury and to give them a taste of what entrepreneurship looks like. Students appreciated this tournament because they felt the challenges of the entrepreneurship.

What could be improved next time

This could be part of an entrepreneurial week where students of all levels could watch and participate.





11.4.3. Entrepreneurship Tournament.

Open to young graduates which have proof of concept projects and are ready to product commercialization or industrialization. The teams prepare a confidential written document (complete business plan) as well as a 10-minute entrepreneurial pitch to be presented to a qualified jury followed by a 20-minute question and answer between participants and jury. Competences stimulated are, motivation and perseverance, learning through experiences, and working with others.

Type of the activity:

Non formal learning

Target group:

Young graduates who have proof of concept projects.

Developed competences

Creativity, Vision, Ethical & sustainable thinking, Motivation and perseverance, Mobilising resources, Working with others, Learning through experience.

Structure of the activity

Competition.

Impact and Effort:

Preparation by students of a confidential written document (business plan) and a 10-minutes entrepreneurial pitch.

The impact on entrepreneurial competencies is high.

Learning objectives

How to prepare a complete business plan. How to build an entrepreneurial pitch.

Short description of the activity (duration, topic, number of participants)

Pitching of the projects to a jury. Question and answers at the end of the pitching to defy the project.

Activities, methods, tools used to support the development of the entrepreneurial competences

Development of a business plan. Writting of a document to be submitted to the committee before the competition and the pitching.

What was a success factor

Was a success to bring an external jury to assess the projects presented by the students. They could get precious advice for their project.

What could be improved next time

Making an entrepreneurial week open to all in the university could be interesting for students to get closer to entrepreneurship. Getting in contact with entrepreneurs and early stages projects it could inspire others.





11.5. Design Thinking – Challenge labs (EIT FOOD)

What is Design Thinking? Design thinking is a mindset, as presented to us by the company IDEO in its portal publication "Design Thinking for Educators", available the www.designthinkingforeducators.com. It is a methodology that considers analysis and reasoning as important as intuition for problem solving. We break down a problem, divide it into smaller parts, analyze them, think a lot, without limits, as much as we can and everything we can think of, empathetically and together with other team members, then we will be much closer to finding the solution we are looking for. · It's human-centered. "It starts from deep empathy and understanding people's needs and motivations" · It is collaborative "Several minds are always more efficient in finding the solution to an isolated problem than an isolated mind" · It's optimistic, "Trust that new and better things are possible and that you can make them happen" · It's experimental "It gives you permission to fail and learn from your mistakes" The design process.

In Design Thinking the design process consists of 5 phases: (1) Empathy, (2) Definition, (3) Ideation, (4) Prototyping and (5) Testing.

STAGE 1	EMPATHIZE Research your users' needs	Gain empathetic understanding of the problem to be solved, usually through user research. Empathy is crucial to a humancentered design process. It allows to set aside assumptions and gain insight into users and their needs.
STAGE 2	DEFINE State your Users' needs and problems	Analyze and synthesize the acquired info on Stage 1. Define the core problems or problem statements. Keep efforts human centered.
STAGE 3	IDEATE Challenge Assumptions and Create ideas	Look for alternative ways to view problems and identification of innovative solutions to the problem statement defined on the previous phase. Brainstorming is useful at this stage.
STAGE 4	PROTOTYPE Start creating solutions	Experimental phase. The goal is to identify the best possible solution for each problem found. Production of cheap, scaled-down version of the product to investigate ideas. Prototyping.
STAGE 5	TEST Trying solutions out	Testing prototypes by evaluators. Redefinition of the product if problems is presented. Return of previous stages for improvements.

Table 2. Descriptive of the Design Thinking methodology and step by step descriptive.





Type of the activity:

non formal learning

Target group:

students / young entrepreneurs

Developed competences

Creativity, Vision, Ethical & sustainable thinking, Motivation and perseverance, Working with others, Learning through experience



Structure of the activity

Creativity Sessions/ Workshops, competitive presentation (project pitch)

Impact and Effort:

High effort - 2 months (conceptualization, program development, recruiting of the speakers and mentors, participants recruiting, execution of the workshops and pitching)

High impacts.

Learning objectives

Critical thinking and problem solving, Opportunity recognition, Communication and collaboration, Creativity and innovation, Initiative and self-reliance.

Short description of the activity (duration, topic, number of participants)

- Duration: Three interactive workshops with lectures and mentoring (22. 4. 2022, 6. 5. 2022 and 20. 5. 2022) in total 10 hours of direct interaction.
- **Topic:** "The challenge of nutritional care for the elderly"
- Number of participants: 35

Activities, methods, tools used to support the development of the entrepreneurial competences

Extended »Design Thinking method« => social innovation design thinking.

What was a success factor

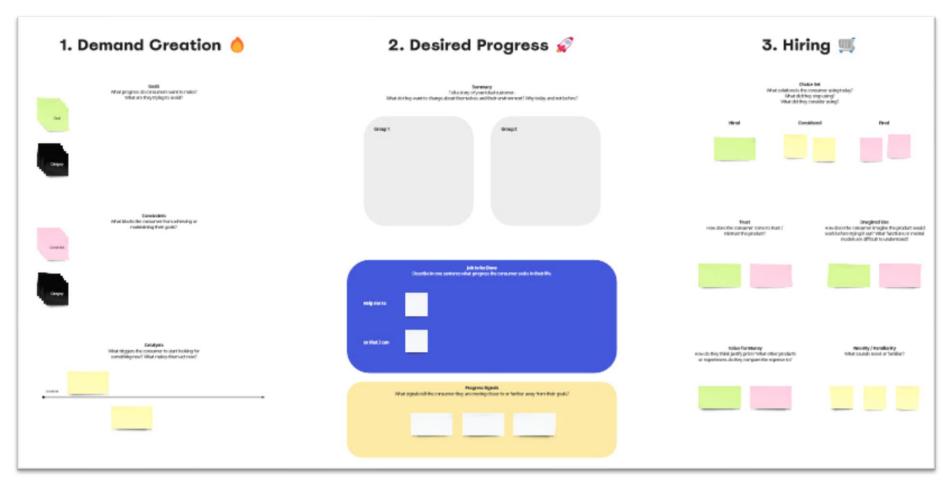
- Certainly the topic challenges of nutritional care for the elderly was very attractive
- Selection of lecturers, mentors and external supporters.

What could be improved next time

More support on field work activities – interviews with elderly.

Supporting materials for this activity

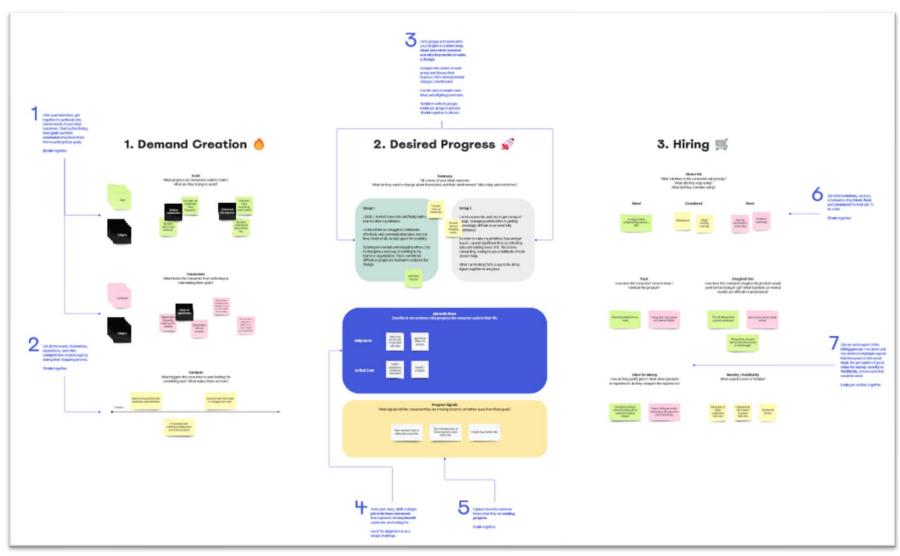
MIRO template developed for the teams to work on the ideas (Miro).



MIRO template







MIRO template with participants inputs.

11.6. Escape Game



Type of the activity:

Non formal learning

Target group:

Teachers or trainers / students / young entrepreneurs / employees / open to the public.

Developed competences

Creativity, Vision, Ethical & sustainable thinking, Motivation and perseverance, Mobilising resources, Working with others, Learning through experience

Structure of the activity

The methodology may seem like a game, and this is how we want participants to feel, but the goal is to detect and analyze competencies to improve their skills and abilities. With the design of the Escape Room Emprendedor, an instrument is offered to generate learning in the field of entrepreneurship, working on cooperation, critical thinking, and shared creativity.

Impact and Effort:

The use of the methodology of "Escape Room" in a formative context, transcends the game, and needs a preparation of the dynamics and the trainers.

The "Escape Room" experience allows participants to work in a different context with other people, who may have different ages, abilities, interests, and degrees of responsibility. For observers, this experience allows them the possibility to see how participants behave depending on the situation, or the decisions they must make, with the aim of giving information on how to improve the professional and personal skills of each member of the same team, and of the team, and finally establish a training program to retrain the people and the team itself.

Learning objectives

The "Escape Room" is an online game that can be very interesting to analyze methodologically, and is useful for developing and improving social skills, especially teamwork, leadership, initiative, communication, and collaboration.

Short description of the activity (duration, topic, number of participants)

- The duration of the activity will be 90 minutes (Estimated 25' of introduction / explanation, 45' of game and 20' of closing and delivery of diplomas).
- The game will be done in groups of at least 2 people.





- The game is done in person or on a computer through the internet, it is not recommended on a small mobile device
- If any group is blocked in any test, there is the possibility to ask for clues.
- The instructions of the game will be given by the technical staff, who will provide the code to start the game.

Activities, methods, tools used to support the development of the entrepreneurial competences

The activity is based on an escape game in which you must solve puzzles, solve riddles, look for information in a document and other tests in order to escape from somewhere in the shortest possible time. The story is about some high school students who hide in the CADE (Work centers and business accommodation) after learning about a secret project of a leading company from which they want to get the know-how. They are locked up and must escape so that they are not discovered.

What was a success factor

Participants appeared to like how entrepreneurial activities presented in as game format.

What could be improved next time

The story could be changed and more entrepreneurial activities could be implemented.

Supporting materials:

- <u>Dossier</u> ESCAPE ROOM
- Escape room <u>Instructions</u>
- Entrecomp Cards competences
- Escape game cade is an online tool to create all kinds of visual and interactive content quickly and easily, for individual or team use. This all-in-one software allows you to create presentations, infographics, gamifications, interactive images and more interactive content. You don't need to download anything. The tool has an advanced online editor with which to create content. It offers more than 3,000 templates and thousands of resources (icons, fonts, illustrations and backgrounds) ready to customize the content. You just sign up and start using it.



Competence Agrifood industry



12. Tools for application

During the EntreCompFood project several tools were used to facilitate the learning of entrepreneurial competencies proposed by the project. Some of these tools are intended to be used during different time while planning an entrepreneurial project. These tools were used during classes and courses to develop fictitious projects but also in real innovative project to shape ideas and assemble a start-up. The most used tools are classified as primary. The pedagogic body used these the most to support the development of for teaching entrepreneurial competencies in class or during course. Secondary tools are presented when they were used to develop a specific theme or to support the development of primary tools.

	Creativity	Vision	Ethical & Sustainable thinking	Motivation & perseverance	Mobilising resources	Working with others	Learning through experience
Vianeo	Х	Х	Х	Х	X	Х	X
Scrum	Х	Х	Х	X	Х	Х	Х
Obeya	Х	Х	Х	Х	X	Х	X
Moodle/IDEONIS	Х	Х	X	Х	X	X	X
Miro	Х	Х	Х	Х	X	Х	Χ
Mentimeter	Х	Х	Х	Х		Х	Х
Jamboard	Х	Х	Х	Х		Х	Х
Kahoot!	Х	Х	Х			Х	Х
MindMaps	Х	Х	Х			Х	X
Webex / Zoom / MTeams						Х	х

Table 3. Entrepreneurial competencies that can be worked through presented tools.





12.1. Platforms supporting entrepreneurial project:

12.1.1. Moodle | IDEONIS

Moodle is a learning platform designed to provide educators, administrators, and learners with a single robust, secure, and integrated system to create personalised learning environments. Moodle would be used to make available for the student many ressources, such as courses or documents, but also quizzes that can allow students to evaluate their level of knowledge. In France, the Plateform Ideonis, developped during the Idefi-EcoTrophelia project, is a good example of how a moodle-based platform can help students to develop competences during their project. It is available to all students from any of the partners institutions and offer a large panel of tools.

Competences developed: Creativity, vision, working with others, ethical and sustainable thinking, learning through experience, mobilizing resources, and motivation and perseverance.

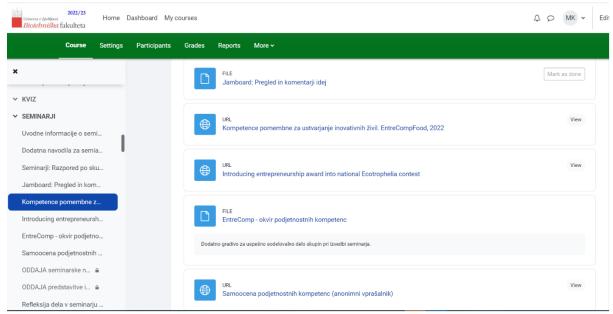
(Moodle) (Ideonis)



Ideonis platform with Ecotrophelia courses







Moodle platform with entrepreneurship modules available to students.





12.1.2. **VIANEO**

Within the framework of our teaching, we rely on a digital platform called Vianeo which exists in freemium version and allows innovative entrepreneurial project leaders, through a teacher's animation, to work on their project by forcing them to ask themselves and answer all the essential stakes that will allow an idea to reach a market (Why believe in this project? Who are the users and their problem to solve? How to integrate into the existing ecosystem? Are there partners and competitors? With which solution(s) will the users' problems be solved? Who are the customers and how does the project make money? This platform is based on research work in entrepreneurial cognition, in particular the logic of execution which was initially modelled in the ISMA360 method (see glossary). This method has been translated and has evolved to become Vianeo, which also uses the concepts of design thinking, lean start-up, and business model canvas.

This tool is used in incubator Food'InnLab at AgropParisTech with start-ups that need some help developing further their project and understanding the big picture. The course Masternova have used VIANEO tool to develop their project during the course. The VIANO tool helped them to structure the company and to develop a more structured business plan.

The competencies developed with this tool were, working with others, learning through experience, creativity, motivation and perseverance, working with others, vison, ethical and sustainable thinking and mobilizing resources.

(Vianeo Lance ton idee).

E DU PITCH :	
DURQUOI ? QUEL EST LE PROBLEME A RESOUDRE ?	
OUR QUI ? QUELS SONT LES DEMANDEURS ET LEURS BESOINS ?	
UOI ? QUEL EST VOTRE OFFRE ?	
UI SONT VOS CLIENTS ?	
UELLE EST VOTRE PROPOSITION DE VALEUR ?	
UELS SONT VOS CANAUX DE DISTRIBUTION ?	
UEL EST VOTRE MODELE DE REVENU ?	
DURQUOI YOUS ? QUELS SONT VOS MOYENS A DISPOSITION ?	
UELS SONT VOS PARTENAIRES TECHNIQUES ?	
OTRE DEMANDE « POUR ACTION » POUR L'AUDITOIRE	



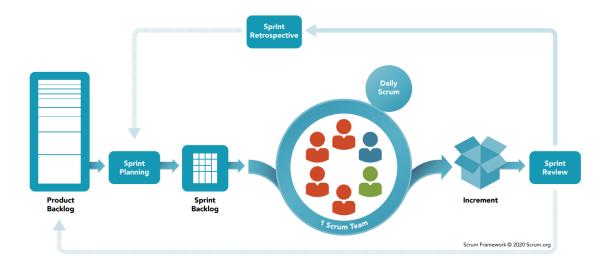
12.1.3. SCRUM

To improve the work with EntreComp, a high-performance team was created through the Scrum methodology, formed by technicians with different profiles who are responsible for adapting EntreComp competencies to tasks, procedures and internal and external processes developed by the rest of Andalucia Emprende's technical staff. The Scrum team meets regularly to continue working and devising new performances related to Entrecomp. Scrum is a tool that delivers structure in the team work, increases communication, transparency, and reduction of variability in construction flow. Similar support may be achieved also with the Microsoft Planner tool.

Competences developed: Creativity, vision, working with others, ethical and sustainable thinking, learning through experience, mobilizing resources, and motivation and perseverance.

Presentation how to use <u>SCRUM</u>, how does the task and role tracking processes work.

SCRUM FRAMEWORK



Picture: Scrum framework to for developing and sustaining complex products.





12.1.4. OBEYA

The *Obeya* can be understood as a team spirit improvement tool at an administrative level. Often associated in product development, an Obeya room can also be a place for software development, a command center, managing new business strategy, workflow, and project management. This tool forces people to work together without distractions and creates a great atmosphere to generate new ideas. It can easily be implemented in a room available in the university and use as such for the length of the project. Especially pertinent for group projects, it will favor communication and exchange between the teammates, and oblige students to integrate rapidly and since the beginning all the aspects that must be included for an entrepreneurship project to succeed.

Competences developed: Creativity, vision, working with others, ethical and sustainable thinking, learning through experience, mobilizing resources, and motivation and perseverance.



Picture: Obeya room from - https://agilewalls.com/

The "traditional" organization (designed primarily for stability) is often rigid and slow moving. Governance models are often too complex, displaying many vertical command structures and too little horizontal connections.

An organization operating its system through Obeya characterizes itself through:

- Accellerated learning
- Fast decision cycles
- Shared objectives and responsibilities
- Aligned Teams
- Performance orientation
- Proactivity

12.2. Digital tools supporting entrepreneurial teaching

12.2.1. Mentimeter

Mentimeter is an Audience Engagement Platform where a passive audience becomes an active one. The interaction can happen while the presentation is going, and it is a great way to receive on the





spot feedback. For example, after teaching a course, professors would ask what were the carries of the course, what was the most interesting part, and what could be improved?

Competences developed: Creativity, vision, working with others, ethical and sustainable thinking, learning through experience, mobilizing resources, and motivation and perseverance.



(Mentimeter)

12.2.2. Jamboard

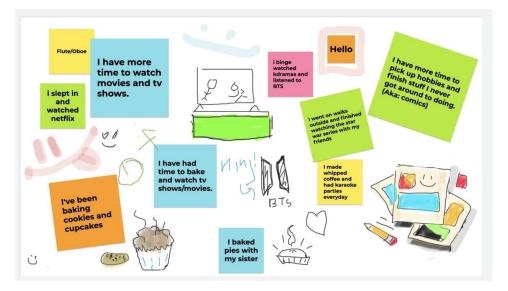
A shared digital canvas where it is expected to increase engagement during meetings or in the classroom resulting in more solved problems. It offers templates for popular meetings and goals, sticky notes, diagramming and on demand learning courses.

This tool can help the interaction with participants, organizing ideas and explaining the topic in an organized way. Putting ideas together and identifying the most important and relevant are made easy by this tool. Good for brainstorming and creativity sessions.

Competences developed: Creativity, vision, working with others, ethical and sustainable thinking, learning through experience, and motivation and perseverance.







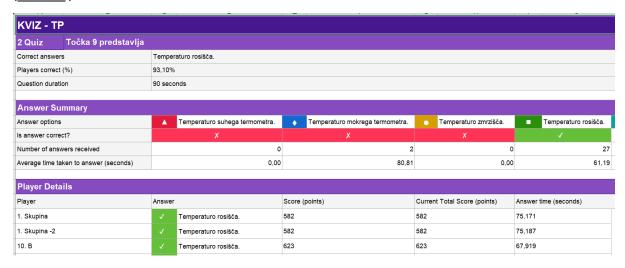
(Jamboard)

•

12.2.3. Kahoot!

Kahoot is a global learning platform company that makes easy to individuals or corporation to create, share, and host learning sessions that drive compelling engagement.

(Kahoot!)



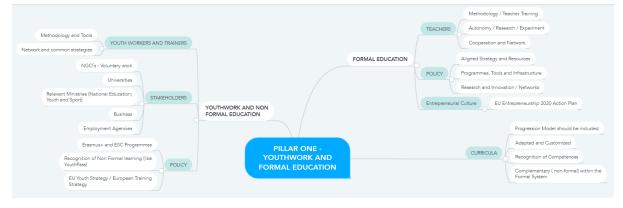
Picture: Quiz made with Kahoot tool, where correct answer is set.

12.2.4. Mindmaps

Mind map is a diagram used to visually organize information into a hierarchy, showing relationships among pieces of the global. It is created from a central concept to which related ideas branch out. Major ideas are connected directly to the central concept and other ideas radiate from them.







Picture: Mindmap created during the EntreComp Community call on Youth work and Education.

12.2.5. Webex / Microsoft Teams / Zoom

Interactive platforms for meetings and videoconferences. It offers multiple application for a diverse and complete experience.

Webex; Zoom; Microsoft Teams





13. Measuring development

At first, students should self-assess using the proposed questionnaire. The results should give the professor what competencies could be strengthen so proposed activities could be tailored for the development of the latter. Measurements can be done during the time of the university course. It is suggested a final measure at the end of the university course, or when a project is delivered, for example, so the evolution of the competencies can be perceived by the professor and the students. Below it is presented a questionnaire for students to answer regarding their self-assessment on the presented entrepreneurial competency.

13.1. Self-evaluation tool for students (Questionnaire)

Students should self-evaluate themselves on a very honest way. This will help them to realise which are their weakness that could be improved. The importance of an honest self-evaluation will help the pedagogical body to design and tailor proposed activities that have as objective of improving the weak links.

Professors

Pedagogical approach

The pedagogical body of the institute can use the proposed tools and suggestions on this guide to design courses suited for student and level of academic year.

Questionnaire to assess professors' teaching/course

The proposed questionnaire below is a self-assessment for the professors to observe the learning of students. It can also help on guiding which points to cover/propose in the course and observe students' reactions. It can help understand diverse points in the pedagogical approach.

EntreComp Food Questionnaire self evaluation.

13.2. Peer to peer assessment form

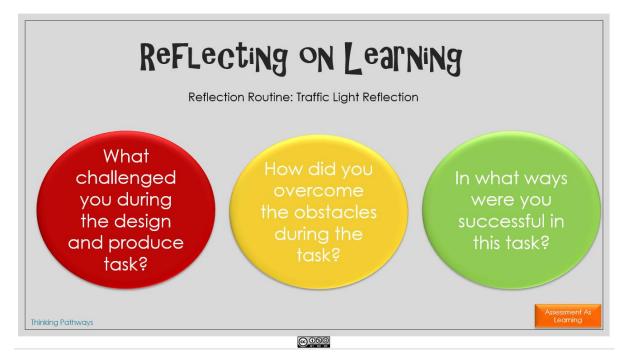
To be applied by trainers in their class after the completion of the project. It will help students to understand how they appear for their peers in the view of the entrepreneurship competences. This form is based on the Traffic light feedback methodology and has the intend to point out positive traits of the analyzed person as well as things that should be improved. The link to the assessment is here: Peer to peer assessment form. For students at the beginning of their carrier is very important to know their own strengths, what are they naturally good at and what do they enjoy doing. Peers feedback is very valuable, since is often the more honest one and it gives good starting point for students to build on. Realizing your own weaknesses is important also within the extent, that they do not hold you back on the way to your success.

The peer to peer assessment is based on the method for giving feedback for students called Traffic Light system.

Giving feedback is important. Negative feedback can be hard to give to people and students. It is suggested the Traffic Light approach, a method that allow multiple pieces of advice at the same time. It focusses on three level of feedback, red (challenges), yellow (obstacles to overcome), and green (continue).







Link to web site: Traffic Light Feedback





13.3. Frequency of measuring the development

Determining global average of competencies is important for tracing a learning pathway that can grow students' development. The EntreCompFood questionnaire (Appendix) helps to stablish the level of the assessed person and a group regarding the measured competencies. In other words, it classifies the level of knowledge of each entrepreneurial skill. Thus, it is possible to address the creating of courses which have the objective of further development determined expertise.

Presenting students with the importance of following the development on entrepreneurial competencies is important for the proposed learning path of the course. Explaining the objective of EntreCompFood questionnaire and the relevance of an honest self-evaluation can be a game changer on learning and, for the professor, teaching.

According to the duration of the proposed/designed course it is suggested to take measurements (EntreCompFood questionnaire application), for short (one week) courses, at the end, for 6 months courses, start and end, and for a year duration course, beginning, middle, and end. This way it can help students to be motivated during the learning of the competencies through activities and see how they have evolved during the proposed course.





14. Conclusion

In the context of this guide, the learning of entrepreneurial competencies through EntreCompFood pathway can be a great tool to present ideas and suggestion on the teaching of entrepreneurial competencies on the Agri-food industry.

The creation of a committee within the institution is extremely important. It can support direct and develop entrepreneurship by implementing project-based teaching, giving support to projects and ideas and is the starting point of an entrepreneurial ecosystem to link institution and university.

It is highly suggested a project-based learning approach. Students will be exposed to the entrepreneurial environment and the pedagogical part will also be learning about entrepreneurship while engaging on tutoring students' projects, getting in contact with other entrepreneurs and discovering entrepreneurial tools.

This guide offers different possibilities and ideas for implementing entrepreneurial teaching in the curricula adaptable according to the institution's philosophy. It is presented learning approaches such as, entrepreneurial tournaments, entrepreneurial courses and workshops, and the application of ongoing courses. Digital tools are listed which can happen the teaching and learning of these competencies.

The content of this document represents the views of the authors only and is their sole responsibility; it cannot be considered to reflect the views of the Executive Agency for Small and Medium-sized Enterprises or any other body of the European Union. The European Commission and the Agency do not accept any responsibility for use that may be made of the information it contains.



15. APPENDIX

15.1. Template questionnaire for teachers exchanging entrepreneurship teaching methods

Testing new curricula and adapted courses

1. COURSE INFORMATION

STUDY PROGRAM (YEAR, semester): Kliknite ali tapnite tukaj, če želite vnesti besedilo.

COURSE TITLE: Kliknite ali tapnite tukaj, če želite vnesti besedilo.

COURSE STRUCTURE: Lectures / Seminars / Seminar tutorials / Laboratory tutorials / Field work

SHORT DESCRIPTION OF PEDAGOGIC ACTIVITY; LEARNING OBJECTIVES OF THE COURSE:

Kliknite ali tapnite tukaj, če želite vnesti besedilo.

2. DEVELOPMENT OF ENTRECOMP COMPETENCES

WH	IICH ENTRECOMP COMPETENCES WERE DEVELOPED / ADVANCED BY THIS ACTIVITY?
	□Creativity
	□Vision
	☐ Ethical & sustainable thinking
	☐ Motivation & perseverance
	☐ Mobilizing resources
	\square Working with others
	☐ Learning through experience
	□OTHER:

WHICH METHODS (and tools) WERE USED TO DEVELOP/ADVANCE THESE COMPETENCES?

e.g. pitch presentation, project evaluation, brainstorming, mind maps, group work,... Jamboard, Miro....

EXPLAIN HOW THE METHODS, TOOLS AND ACTIVITIES USED SUPPORTED THE DEVELOPMENT OF ENTRECOMP COMPETENCES?





e.g. students worked in small groups, where they were instructed to brainstorm and find the right resources for ingredients they need, while they were simultaneously developing their competences of mobilizing resources, creativity and working with others ...

3. ASSESMENT/SELF ASSESMENT

WHICH ASSESSMENT / SELF-ASSESSMENT TOOL(S) WERE APPLIED?

e.g. self-reflection, self-assesment questionnaire, teacher assessment, ...

HOW DID STUDENTS REACT TO NEW TEACHING/LEARNING TECHNIQUES THAT WERE USED?

e.g. During the course they found it having interesting overlading. 2 They suggested. In fine

e.g. During the course they found it boring, interesting, overlading, ...? They suggested In final course evaluation they stated ...

WILL YOU CONTINUE WITH THESE ACTIVITIES IN YOUR COURSES? WHY YES/NO?

Kliknite ali tapnite tukaj, če želite vnesti besedilo.

HOW CAN YOU IMPROVE YOUR ACTIVITIES/COURSE TO BE EVEN MORE ENCOURAGING FOR STUDENTS TO DEVELOPE/ADVANCE ENTRECOMP COMPETENCES?

Kliknite ali tapnite tukaj, če želite vnesti besedilo.

PLEASE REPORT ANY OTHER FINDINGS/OBSERVATIONS THAT YOU WOULD LIKE TO SHARE:

Kliknite ali tapnite tukaj, če želite vnesti besedilo.





15.2. ENTRECOMPFOOD QUESTIONNAIRE FOR STUDENTS

Reflection on acquired entrepreneurial competencies

The questions bellow are related to the development of your entrepreneurial competencies.
Think about the knowledge and competencies that you have used or developed in the course on the subject of and choose the one you most identify with. In addition to the statements, descriptions are added to make it easier to understand each statement. You can only select one statement.
If you do not identify with any of the statements, select the answer "None of the above".
For each competency, you also have the option to write an example / event that explains your definition under a particular statement.
The results will be pooled and anonymized and used for evaluation within the EntreComp competencies.
The results will also be sent to your email address. We suggest that you save the results and continue to upgrade your competencies and re-evaluate yourself over time.
There are no wrong answers.

1. CREATIVITY: Developing creative and goal-oriented ideas.

Choose the most appropriate statement *

- I know how to create new ideas or solutions for existing needs.
- I can use different techniques to create new ideas (ICT, brainstorming, mind maps, ...).
- I know how to involve co-workers in creating new ideas, researching, and testing.
- I know how to design and implement the process of generating and validating ideas (for example, leading a meeting where we create new ideas using different techniques with colleagues/coworkers).
- None of the above.

Justify the above answer with a brief description of the case

2. SPOTTING OPPORTUNITIES: Discovering and identifying opportunities to create value.

Choose the most appropriate statement *





- I recognize opportunities and needs, for example, I recognize the possibility of improving a particular product.
- I can analyze needs in different contexts and identify opportunities, for example, I analyze the composition of a particular product and identify the opportunity to improve it for different target groups.
- I strive to improve solutions and established procedures, for example to improve a particular technological process.
- I design and implement the process of generating ideas (for example, meeting with colleagues using various techniques brainstorming, mind maps,...), which will create added value or upgrade solutions to the identified problem.
- None of the above.

Justify the above answer with a brief description of the case

3. VISION: Striving to realize your vision of the future.

Choose the most appropriate statement *

- I imagine the future using different scenarios of the course of events. For example, if I finish a year with a good average grade, It will be easier for me to get a job.
- I develop my vision of the future for a particular project and work out different possible outcome scenarios. For example, I want to get a job in a high-tech food company, if I gain experience with various projects in this field during my studies and gain the appropriate competencies, I will have a greater chance of employment.
- I analyze the context, build my strategic vision and identify different ways to
 implement it. For example, in the current market situation, food companies do not
 hire, I want to get a job in a high-tech food company, so I will have to gain very good
 experience and prove in my knowledge that they will want to have me in their ranks.
 I will take part in various competitions, gain experience with an internship in a
 similar company abroad, etc....
- I can convince others of my choice between different scenarios in a changing context, such as convincing my colleagues to take part in the Ecotrophelia competition, as this will gain them the competencies and experience that will make them better employable later on.
- None of the above.

Justify the above answer with a brief description of the case

4. ETHICAL AND SUSTAINABLE THINKING: Assessing the consequences and impacts of ideas, opportunities, and actions.

Choose the most appropriate statement *

I can say that I respect the environment and society.





- Whenever I decide on a solution, I wonder about the ethical and sustainable consequences.
- I can analyze the ethical and sustainable consequences of proposed solutions, such as how the use of a particular raw material affects the environment and society.
- Using various methods to analyze the sustainable and ethical aspects of our project (environmental and social impact), I can suggest solutions and improvements.
- None of the above.

Justify the above answer with a brief description of the case

5. MOBILIZING RESOURCES: Collection and management of tangible, intangible and digital resources that we need to carry out a particular idea/project.

Choose the most appropriate statement *

- I can easily find additional resources and contacts for a specific project, such as solving my tasks in the pedagogical process (preparation of a seminar).
- For a specific project, such as solving my tasks in the pedagogical process (preparation of seminars), I regularly use different sources and networks of contacts.
- I know how to effectively use different resources to achieve the best possible result in a project (preparation of a seminar), for example who to turn to for help with legislation and how to get the most useful answer.
- I can use the available resources (professional help, literature, links with companies) and determine the necessary resources (financial and material) to carry out a particular project (for example, product development in the framework of the Ecotrophelia competition).
- None of the above.

Justify the above answer with a brief description of the case

6. WORKING WITH OTHERS: Networking, collaboration and networking.

Choose the most appropriate statement *

- Working in a team is not a problem for me.
- I also participate in project work with peers outside of lectures.
- I know how to lead a team and work with remote communities.
- With the help of various tools and methods, I can create a space to promote the
 work of my team (for example, using tools for collaborative work Moodle, MS
 Teams, Google Docs or live with various methods and incentives/motivation).
- None of the above.

Justify the above answer with a brief description of the case





7. MOTIVATION AND PERSEVERANCE: Stay focused and persevere.

Choose the most appropriate statement *

- I am driven by challenges and do not give up quickly.
- I know how to set goals, measure my progress and overcome obstacles that I encounter on the way to my goal.
- Even when faced with adversity, I insist on achieving my goals.
- I adapt to failures and failures and know how to motivate others.

Justify the above answer with a brief description of the case

8. LEARNING THROUGH EXPERIENCE: Learning through activities.

Choose the most appropriate statement *

- I have a desire to gain individual experience (reading a book, attending a workshop, imitating, watching recordings, ().
- I know very well what my limitations are and in which area I still have to upgrade my competencies.
- I am not afraid of mistakes but I use them to learn and improve.
- I recognize when I am successful and if I am not, I adjust my vision, goals and action plan accordingly.
- None of the above.

Justify the above answer with a brief description of the case

You answered all the questions

Thank you for reflecting on your work and your time.

The answers on this questionnaire are ordered in the following levels of knowledge on each competence:

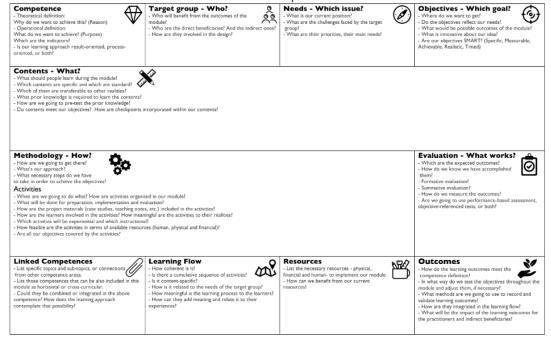
- -Beginner
- -Intermediate
- -Advanced
- -Expert

If you marked "none of the above" it means that you can start your entrepreneurial journey right away!





15.3. Annex 5: Curriculum development canvas



Developed by Juan Ratto-Nielsen © 2015 (rattonielsen.com) Icons made by Freepik from www.flaticon.com



Project title:

Applying EntreComp to attract young people to the 1st European manufacturing sector: the agri-food industry

About us:

You want to know more details about our project?

Please find more detail documents on our webpage: www.gzs.si/entrecompfood

Interested in latest news: Subscribe to our newsletter on our website.

Contact:

Urška Pivk Kupirovič, PhD // Project coordinator // EntreCompFood project // urska.pivk.kupirovic@gzs.si

Project partners:













Project founder:



Co-funded by the COSME programme of the European Union

The content of this document represents the views of the authors only and is their sole responsibility; it cannot be considered to reflect the views of the Executive Agency for Small and Medium-sized Enterprises or any other body of the European Union. The European Commission and the Agency do not accept any responsibility for use that may be made of the information it contains.