GOODFOOD Project

Good teaching practices in experiential learning for effective education in embedded food systems

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Catalogue of innovative teaching practices and concepts for embedded food systems education

GOOD FOOD

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This catalogue provides a list of tested and successfully implemented innovative teaching concepts and practices and teaching tips for embedded food systems education. They were developed based on the input collected from workshops with teachers in different European universities. The examples and tips include the description of the teaching practices or concept regarding skills and resources needed, methods to be used, suitability for study programme level(s), needed pre-requisites of students, and obstacles to overcome – if identified. Target groups are lecturers and teacher in higher education or peoples working in vocational training.

For more details and practical information, the authors of the different teaching tips can be contacted for sharing about the teaching experience

Teaching practice or concepts	Short description	Methods used and guidelines	Constraints, obstacles to overcome	Skills and resources needed	Needed pre-requisites of students
Food-Transect methodology – applied in France to food justice issues Caroline Brand, ISARA, France	A tool for debating food issues in the territories of today and tomorrow. Includes a sensitive urban crossing, interaction with a diversity of actors, and engaging in a dialogue on the food transition. Different steps: 1. Conducting a walk along a pre-defined route: collecting information (photos, audio, observation, interviews, drawings, sketches, etc.). 2. Creation of a section: reporting information collected and questions raised along the route (freehand drawing, pictorial representation) on a long paper (mental map): indications of location, in situ perceptions, elements of debate, documents collected, atmosphere, etc. 3. Carrying out a debate with the participants: sharing knowledge about the situations crossed and found, debating the information collected (reaction to what is written, what is missing, adding comments, information, new accounts), define possible actions of for improvement (e.g food access and type of food available, food distribution, food justice). The Food-Transect can be conducted by students themselves but in this case must include interaction with people crossed on their way. If conducted with inhabitants and local stakeholders, the contact and potential mobilization (through an association or local governments) must be established and prepared before the work of the students. **Duration**: 6 weeks with preparation, carrying out the food transect, evaluating and making a group presentation and report **Suitability for study level**: MSc	Period 1 (4 weeks): 1) Understanding the social, urban and food context of study area (grey literature, mapping of the food supply, eventually meetings with stakeholders or interviews with inhabitants). 2) Preparing the Food-Transect (identifying the relevant sections, preparation of the participants' toolkit (cameras, recorders, observation and interview grids, maps of the sections, guidelines, animation guide) Period 2 (2 weeks): 3a) Carry out the transect and field observations 3b) (optional if with stakeholders): Carry out the transect and animate different sections with the participants during the day of the Food-Transect (and along the 3 steps: walking, observation, debate). 4) Put collected data together and analyse 5) Synthetize the outlined observations/problems/challenges/action points about the food landscape of the transect study area 6) Make a group presentation and a group report.	If conducted with inhabitants and local stakeholders, two main obstacles. 1/ Animating an empowerment device with people facing a diversity of social and economic difficulties: dealing with issues of language, writing, formulating, daring, delegating. 2/ Dealing with contingencies (expected participants who do not come for instance) which might limit the results and learnings in the time of the teaching period.	minimum knowledge on how to carry out a survey and prepare a questionnaire. Minimum of cartographic competences is required so that they can prepare the walk. If conducted with inhabitants, minimum training in facilitation techniques is required.	Basic knowledge about food systems, food distribution, quality food. Good understand-ing of social science methodo-logies interest
Serious game on mid tiers food supply chains Carole Chazoule, ISARA, France	The game is a shared, participatory and forward-looking diagnostic methodological tool that encourages participation and exchange among players, particularly through various supports that use geographic information. It helps stakeholders of a mid tiers food supply chain system to develop a diagnosis of evolutionary scenarios and to identify and choose courses of action. Participating in a Game is an opportunity to discover, share and learn about the mid tiers food supply chains studied, on its territory, to get to know one another, to discover the concept of mid tiers food supply chains, and to participate in the emergence and consolidation of an innovative project dynamic. Student are involved in different parts of the game, from preparing, animating tables during the game or functioning as observers, and after the game to synthesis outcomes. **Duration**: Game takes place over about a day **Suitability for study level**: MSc	Before the game: The students develop the material based on data from the territory, different stakeholders and supply chains: they prepared the map, wrote the sheets, and prepared all the small materials. During the game: students participate in the animation of the tables, some of them have only a observation rule. After the game: students participated in the writing of the outcomes and a results report to be provided to participants.	Students' skills to animiate a table in the game, and feeling sufficiently comfortable to interact with stakeholders	Minimum training in animation techniques. Basic knowledge about observation and data collection.	Basic knowledge about food systems stakeholders and elments and structure of networks of stakeholders
TERROIR - interactive market and shop survey on terroir products during excursions Alexander Wezel and Aurelie Ferrer, ISARA, France	Using a survey during a study trip to get initial or deeper insights about local or regional food products or food systems. Allows to deepen a certain topic and familiarise students more with it during an excursion or field trip. For the survey, students have to take action and also get in contact with stakeholders of a territory, allowing active learning. A preparation phase is needed as well as data analysis, results presentation and sysnthesis phase after the excursion. The teaching tool could be also use for a 1 day field trip within a module. **Duration:** 3 weeks with 1 week prepar-ation, 1 week excursion, 1 week data analysis and synthesis. **Suitability for study level**: MSc, but could also be used adapted for BSc level	Week 1: Define what is a terroir product, what a local or regional product; looking at product labels. Literature and internet research on terroir products in the region. Preparation of a questionnaire. Organize data collection. Contact some stakeholders and fix interview dates. Provide a research plan with research questions. Week 2: Interviews on a farmers market, in shops, supermarkets, bakery. Interviewing consumers. Week 3: Analyse data from survey. complement with data from literature and internet research. Write a report. Make a group presentation.	Capacity of student group to prepare a sufficiently clear questionnaire as well as skills to carry out short interviews can be a constraint. As well as stakeholders' willingness to get interviewed.	Minimum knowledge on carrying out a survey and questionnaire preperation.	Basic knowledge about food systems, food distribution, quality food

Exploring inner landscapes and learning from different perspectives Carola Strassner, Kathrin Auner, Cornelia Steinhäuser; Münster University of Applied Sciences, Germany	Exploring the own environment: students look out for a photo that represents their "inner landscape". That means they have a deeper connection with that landscape and are able to explain why they have that connection or what they feel when they look at their photo of a landscape. The other teching tip is "Collective learning with farmers" where it is the main goal to get in contact with farmers and learn to understand why the farmer does things his way, so basically what are the reasons for his actions. In the end the interview questions might make the farmer also overthink his reasons and actions. To compare the results of the different interviews, the students are asked to use the TAPE tool. **Duration:** One semester **Suitability for study level**: BSc and MSc	The inner landscape can help the students to connect with and respect each other. So it is a great opportunity for teambuilding. For the collective learning with farmers you can use interview questions that are already published in the TAPE Tool (Step 1). To build a spider web diagram there is also an explanaition in the TAPE Tool. If you use this method it is also great to compare the different team results in the end and it creates room for discussion.	Find suitable farms and farmers who are willing to give an interview, sharing an inner landscape could be emotionally, bulid a narrative during the semester	Use TAPE Tool or be at least able to understand it and use it later in the seminar, doing an interview with a farmer, team work	Basic knowledge about Agriculture, ecosystems and sustainability
Study of embedded food systems as a learning journey Daniel Kusche, Ivan Manolov; Agricultural University Plovdiv, Bulgaria	The teaching tip represent participative teaching method. During two semesters students organized in groups of 8 - 10 persons will visit 2 or 3 farms or food processing companies. During the first and second semesters of education, students will visit a farm or a processing company. During the visits, the students will collect information about the visited production site: history of the farm/company, its production activity, the partners it works with - suppliers of raw materials, equipment and materials, as well as the ways and means of realizing the production. They will collect any information about the visited object, take pictures, etc. The students will have the opportunity to talk with the owner of the farm or the production company, as well as with other workers in it. Based on the information gathered, students will analyze the farm/company from the point of view of its embeddedness. The students can hold a workshop after the visits where they can discuss the collected information and each of them can individually write their own report on the sites visited. **Duration**: 2 semesters **Suitability for study level**: BSc students from 4th semester onwards or MSc	Application of the theoretical knowledge from the studies in practice; Students to be able to work independently and respectfully with each other over a longer period of time; be able to collect and critically classify company data; develop complex concepts; be able to prepare a final report and give a public presentation; Self-organization; active involvement/participation; social and communication skill development.	Social interactions in the group; group decisions, ups/downs; Handle complexity; Integrate own working parts into the whole concept; Learning by doing.	Base knowledge in Agriculture/food processing and Agricultural economics.	Basic knowledge about agriculture, agricultural economics and processing of agricultural products.
Inquiry based learning applied to sustainability issues Rositsa Beluhova-Uzunova, Agricultural University Plovdiv, Bulgaria	Inquiry-based learning is a principle that relies on student independence: learning by conducting own research. The principle of inquiry-based learning is part of the tradition of education, which is considered "as participation in scholarship as a never ending process" (Huber 2009, p. 1). It is a method that focuses on student questions and ideas. From a student's point-of-view, inquiry-based learning focuses on investigating a challenge or topic. The students use creative thinking, decision making and solving the research question which has to be presented. From a lecturer's point of view, inquiry-based teaching is directed at developing critical thinking and understanding. The lecturer encourages and stimulates students and supports them in structuring the paper. **Duration**: Generally, there are three groups, with approx. 5 students working together in each group with two lecturers. The duration is one semester (10 weeks). **Suitability for study level**: BSc students from 5th semester or MSc	According to some authors, the process is divided into three phases (Lang et al., 2012; Vilsmaier & Lang, 2014). Phase 1: Research topics. Students define challenges and issues supported by the lecturers. The research question is developed from a scientific perspective and, at the same time, is socially relevant. This is the first step toward building a team. The lecturers assist the students in forming a team and developing working structures. Phase 2: Processing the research question. An in-depth analysis and survey about the problem is conducted based on the research plan and the established team and work structure. This phase ends with the completion of the survey in the different dimensions. Phase 3: Re-integration of results The results of a project are prepared. Students write a project and/or prepare an article for potential publication. This phase ends with a public presentation of the projects and research results, which brings together all actors involved in the inquiry and the interested public.	Inquiry-based learning is linked to mutual learning in cooperative, transdisciplinary settings. Team work and critical thinking , dealing with different types of knowledge and transition and societal transformations.	Basic training and ability for team work and cooperation	Basic knowledge about Agricultural economics,sustainable development and sustainability
Think global - Act local Carola Strassner, Kathrin Auner, Rainer Hagencord; Münster University of Applied Sciences, Germany	The objective of the tip is that students should think critically about meat industry and that there is more of what shows on the surface. Animals are able to connect emotionally with human beings and the students should make this experience during the seminar. There should be a discussion about the value of an animal for individuals and society. Questions could be e.g. "What is the value of an animal/pet in comparison to a car". Duration: One day seminar Suitability for study level: BSc and MSc	The cards with the picture of an animal and the question "what is my value?" will help to start the seminar and share thoughts. An input might follow to get every student on the same basis to discuss a more ethical point of view on animals, meat industry and how our society values different objectes in comparison to an animal or pet. For the direct contact between the students and animals it is useful to give the students a fact sheet to fill out, so they have to think and interact with their chosen animal. The contact to an animal can be found e.g. on a farm etc.	Willingness to talk about meat industry and the emotional connection between animals and human beings, it might be hard to find a suitable place for this seminar	Being able to connect emotionally with the animal and wanting to share thoughts, experiences, discuss critically	Basic knowledge about foodsystems, food economics

Is my favourite dish embedded in the territory? Dominika Średnicka-Tober, Warsaw University of Life Sciences, Poland (tool inspired by National Dish of Johannes Kahl et al.)	"Embedded Dish" is a module where students analyse their favourite dishes and the dish ingredients through the perspective of embeddedness in the territories where they come from and/or where they are usually eaten. It requires an introduction by the teachers, to get the students into the notion of embedded food systems and a number of its dimensions, as well as on selected sustainability issues, after which students work in groups, to look critically at various aspects of their dish's embeddedness into territorial food system(s) and contribution to sustainability. A lecturer should support the students on this way, and stimulate discussion. Each group should present outcomes of their investigation and reflect on possibilities for increasing the embeddedness & sustainability of their dish. This personal approach of choosing a familiar dish allows students to better grasp the socio-cultural, ecological, health and other dimensions related to food. Using something personal like a favourite, local/regional/traditional meal, helps the students to explore new and complex issues related to sustainable, territorially embedded food systems. **Duration**: 3-5 meetings (classes), 90 min each or a longer course (whole module **Suitability for study level**: BSc and MSc	Comprehensive introduction by a teacher, supervising group work, stimulating discussion, presentation of the outcome by students, feedback & peer-feedback, final reflection.	Teacher needs to understand deeply all dimensions of the EFS & SFS to be able to guide the students through the whole process and provide valuable, comprehensive feedback	Team work, critical thinking	Basic knowledge about food systems
E-learning course towards understanding various dimensions of Embedded Food Systems All GOODFOOD teachers; Warsaw University of Life Sciences, Poland	The e-learning course on "Food Systems Embedded in Territories" begins with an explanation of Embedded Food Systems notion, followed by diving into its various dimensions (related to the food chain, production, processing, consumption, health, environment, policies, economy etc.), supported by short e-lectures, on-line quizzes, reading materials and questions posted on the interactive discussion forum. Study materials are being gradually uncovered during the course, which allows students to focus on one area at a time. Learning Group meetings are regularly organized among students, in order to motivate them to jointly discuss the questions posted by lecturers on the discussion forum, and to reflect on the course contents. **Duration**: 9 weeks **Suitability for study level**: BSc and MSc	Major tool: any available e-learning platform; types of materials: GOODFOOD e-lectures covering topics such as general introduction to the food systems and to the concepts(s) and definitions/dimensions of embedded food systems; production systems; agroecological practices; processing; product quality and safety; food chain and stakeholders; consumption; policies; sustainable diet & health; relation to territories for a diverse and resilient food systems. Each e-leacture is followed by an on-line quiz, reading materials and discussion questions. Students' "Learning Groups" should be established. Students are obliged to regularly organize Learning Group meetings to exchange & discuss on the course contents and questions posted in the forum. They are also obliged to complete Learning Group meeting reports.	Keeping all students constantly active on the platform.	team work, working on-line	Basic knowledge about food systems
Analysing the health of a marginal supply chain Michele Fontefrancesco, University of Gastronomic Sciences, Italy	An action-based learning in national food systems **Duration**: 1 week **Suitability for study level**: MSc	Model application concerning the assessment of the socio-economic condition of short supply chains. Objective: Qualitative analysis of the socio-economic criticalities of a basic food supply chain.	Access to information; Language barrier; Lack of familiarity with qualitative social research methodologies; Insufficient background knowledge.	Model presentation, survey instruments, analytical approach → Practical examples → Monitored group exercise	Basic knowledge: Elements of local history and geography, basics of micro-macro economics.
Rich picture Anamaria Supuran, University of Oradea, Romania	Rich picture is a cartoon-like picture drawn by a person or a group of persons about a real-world situation. It consists in pictures, text, symbols and icons, which are all used to illustrate graphically the situation. The rich pictures allow at an individual level: To raise the interest of participants; to help focus attention and facilitate reconnection to the thread of discussion when the person takes a short break; makes it possible to grasp the entire process at a glance; using this process supports the leap from individual to group understanding; the potential level of misunderstanding and confusion is reduced; allows participants to have direct feedback on how their ideas are perceived and understood by others. At a group level to open discussion and reach a comprehensive and common understanding of a situation; to help understand the complexity of a situation; to identify the problem we want to address; to develop an unstructured description of the situation; contributes to the creation of a visual memory of the whole group that can be stored, shared and reused by both individuals and the group; can contribute to the improvement of relations within the group, by integrating the contribution of each participant; facilitate the acquisition and integration of new knowledge. Elements of structure and key actors/roles in the situation (the people, the set-ups, hierarchy). Elements of process and inter-relationships (the activities, social roles and quality of interactions that are going on), any tensions or conflicts between key actors or the way the structures and the processes interact, factual data about the situation, but also the subjective information (e.g. thought bubbles can give a sense of issues/concerns that key players are carrying). **Duration**: few hours - few days **Suitability for study level**: BSc, MSc, PhD	A rich image is an attempt to put together everything that might be relevant to a complex situation, it is never complete and captures only a moment in time. To help interpret a situation, choose symbols, scenes, or images that represent the situation. Use as many colors as you feel are necessary. You should not seek to impose any style or structure on your drawing. Place the elements on the sheet of paper wherever your instinct tells you. At a later stage, you may find that the placement itself has a message for you. Avoid writing too much, either as a comment or as a word bubble that comes out of people's mouths (but a short summary can help explain the graph to other people). If appropriate, include yourself in the picture as a participant or observer or both. Give your drawing a descriptive title, add your name and date it.	It is hard to evaluate, Difficult to draw by not experienced people and there are constraints related with infrastructure.	Artistic sense, vision in space and time, drawing abilities.	Basic knowledge about food systems, food distribution, quality food, artistic sense

Case-based Action Learning UNISG Team, University of Gastronomic Sciences, Italy	An action-based learning in international food systems. Learning through experience is an action-oriented learning, which uses reflection to turn experience into knowledge. It refers to the collaboration between students, educators and external stakeholders to approach transdisciplinary learning. It shifts the focus from knowledge to skills and aim to the inner and outer development of the students. Knowledge is developed in a cyclical way. Students learn through reflecting their experiences and connecting practice and theory, as well as from each other through sharing peer to peer and collaboration. The shift from linear to cyclical learning leads also to a necessary shift from lecturer to learning facilitator, who trains students in focussing on development of competences, which are needed to transform food systems. Such a shift in roles can be applied in all kinds of didactic activities. Understand the thematic through "your own" interests/eyes and connect all by an transdisciplinary and holistic case study approach. Focus also on core competence development in order to become facilitator of change. Option 1 **Duration** : 1 week **Suitability for study level** : BSc and MSc Option 2 **Duration**: 1 year **Suitability for study level** : MSc	*Implementation option 1:* Three phase approach at the UNISG Study Trips It is facilitated in three phases: (1) Preparation session (1/2 day); (2) Experiential phase (4-5 days) e.g. farm visits; (3) Reflection & Evaluation session (½ day). (1) and (3) phase happens at UNISG and is based on a mix of frontal introduction, individual reflection, group work, group presentation and refection activities. Implementation option 2: Master course in Agroecology and Food Sovereignity (MAFS) It is facilitated in four phases of each 3 month: (1) LAYING THE FOUNDATION: Building a common theoretical background on both: the action-learning approach (including competence development), and food sovereignty; becoming familiar with the action-learning approach; community matching process; setting up peer learning groups; farm visits and garden activities; Terra Madre event (Torino) / Cheese event (Bra); (2) PREPARATION FOR ACTION-LEARNING AND ACTION RESEARCH IN A COMMUNITY: Going deeper into detailed action-learning and action-research at agricultural and food system level; designing research and learning plans (community portfolio); preparing the thesis research project proposal; farm visits, garden activities, and a study trip; getting in contact with your community; (3) RESEARCH PROJECT IN A COMMUNITY: Students work on their action-learning and action-research project within the communities, supervised by professors, tutors and supported by learning groups; day by day hands-on farm activities in the communities; (4) FINALISING RESEARCH THESIS AND GRADUATION: Finalising the individual master thesis based on the action-learning and action-research project; creating the MAFS booklet; defence of the thesis; final MAFS programme reflection activities.	Changes from teaching to facilitation; from books to experience; from passive listener to active learner	For the experiences you need contacts and places with which you can collaborate/visit as case studies. For group work activities students are split in groups of 5 and the cohort is divided into three to four rooms. In each room a facilitator conducts the sessions. This method uses the PGI methodology where Plenary - Group - Individual class activities are developed: a combination of frontal lessons and plenary discussion, small group sharing and individual reflection. Minimum training in facilitation techniques required for the approach.	none
Experiential Didactics on Migration, Agribusiness and Human Rights Elena Corcione, University of Gastronomic Sciences, Italy	Learning by doing **Duration**: 1 year/ semester (depend-ing on the project) **Suitability for study level**: Better for MSc stu-dents but avail-able to 3rd year BSc with appro-priate back-ground	Learning by doing is a methodology of experiential learning where teaching is focus and targeted to a specific group of students working towards the achievement of a final outcome in the form of a study/report/legal opinion. The aim of the clinic is to increase social justice. The main phases may be summarized in i) provide targeted training and seminars (expert workshops); ii) find and connect with institutional working partners (institutions, NGOs etc.); iii) form individual study/small groups and work on final product; iv) dissemination of results in the territory	Lack of access to information on the situation on the territory from institutional and private actors; difficulties in getting in touch with private actors willing to implement innovative practices on business&human rights; need to focus the clinical activity of specific issues rather than general themes	Experts to deliver targeted trainings; institutional and private partners committed to specific final outcome of the project; group work with students; preparation of deliverables (report/legal opinion or study) at the end of the clinical program; awareness raising on the territory	basic knowledge of human rights/european law and research skills
Extracurricular activities used as an educational tools Adrian Vasile Timar, University of Oradea, Romania	An extracurricular activity is not a lesson, it is not a compulsory school lesson. Initially, it was assumed that the event itself should take place outside the classroom. That is, the concept of "extracurricular activities" included trips, excursions, visits to theaters, museums, school holidays and Olympiads held at various levels.An extracurricular activity is an activity that is not included in the school curriculum. This is not a lesson, and this is its main feature with everything that derives from it, from the way of presentation, participation and evaluation. **Duration**: Maximum one week **Suitability for study level**: BSc, MSc, PhD	Education through extracurricular activities aims to identify and cultivate the optimal correspondence between skills, talents, the cultivation of a civilized lifestyle, as well as the stimulation of creative behavior in different fields. This determines an accumulation of a series of knowledge by putting the students in direct contact with the objects and phenomena of nature in the real world where they will be active. The extracurricular activity is the segment of education, which largely ensures the transfer of knowledge, accumulated by students within the standard program of mandatory hours (formal curriculum) in practice, which provides the student with practical skills to implement in practice the theoretical knowledge accumulated, those "skills" on which more and more emphasis is placed. They are generally based on teamwork in a less formal environment. They work intensively for relatively short periods of time It uses infrastructure resources many times more demanding than those normally used in the classroom.	Disturbance due to the impossibility of synchronizing them with mandatory activities provided in the curriculum, the educational process, It creates an additional workload and mental pressure on the students High deployment costs generally not budgeted for	According with topic and type of activity. The required infrastructure is at higher level and staff involved should be dedicated and motivated.	Basic knowledge about food systems, food distribution, quality food