SustainComp

Teacher guide for learning activity 2

Submodule: Sustainable Diet 2,5 ECTS

Title	Activity 2 Food waste		
Relevant SustainComp modules	Submodule: Sustainable diet (Activity 1) SubModule: Sustainable consumer behaviour		
Pre-requisites	Learning activity 1: Environmental impact of food groups English B2		
Introduction	In this learning activity, the students will be introduced to food waste and its economic and environmental consequences. Central topics are how much food is wasted in different sectors (i.e., production, supermarkets, and household), land use area, the cost of the waste and how to reduce waste (I.e., portion sizes, storage).		
Learning goals	After this learning activity the student will have basic knowledge on the environmental impact of food waste and know how to act to reduce food waste.		
Pedagogical principle for the activity	Problem-solving Cooking (if kitchen is available). Collaboration Communication skills		
Digital facilitation	COIL		
Subject specific terms	Food waste: *food and associated inedible parts removed from the human food supply chain in the following sectors: manufacturing of food products (under certain circumstances); food/grocery retail; food service; and households* (Zhongming et.al, 2022).		
Time use (total)	**300 minutes (5 hours approximately) + time to collect leftover bakery products if practical cooking.** **180 hours (3 hours approximately) + time to collect leftover bakery products if no practical cooking.**		
Preparation and equipment	The students or the teacher contacts a local bakery, the student cafeteria, or a grocery store. Ask to collect all leftover bakery products (or other products like fruits or use the "Too good to go" app) for one day which otherwise would have been wasted. Note the prices of the products. **NOTE:** 1) If a kitchen is available, do all parts. 2) If a kitchen is **not** available, skip part tree, and then the students can (if possible) make food at home from the leftovers, ongoing documentation with pictures, and write a reflection paper about the consequences of food waste.		
Implementation	Schedule	Time	How

	Part 1 Group work Measure and discuss	45 min	Place the collected food on a table og calculate: • How much of the food collected is edible? • What is the total value of the food collected? What would this constitute each month and year? • What is the climate impact of the food collected? What would this constitute each month and year? Use a scale to measure the weight and use "Our World in Data" to measure the carbon footprint of the food collected. Insert the data from weighing and Our World In Data in the document "Activity 2 Food waste scheme".
	Part 2 Discussion and presentation. Can be carried out as a COIL activity.	45 min	Joint discussions of the findings from part 1. The students explore how food waste can be avoided and how food waste can be used.
	Part 3 Practical work	120 min	Make food from the leftovers. Divide the students into groups and let them be creative in making food from the food collected. Try to make just as much food as the students think they can eat (to avoid food waste). Basic ingredients must be available for the students (like egg, milk, seasoning and some vegetables and fruits). Share the meal and wash the dishes.
	Part 4 Group work	45 min	Part 1: Joint discussion on what the students have proposed in part 2. The facilitator can write the proposals on the whiteboard. Part 2: The students go online and try to find official numbers of: • The amount of food waste in their country.

			• How food waste is distributed across different sectors.
	Part 5 Discussions and wrap up	45 min	Part 1: The students write down up to three specific measures they can take personally to reduce food waste. Part 2: The students share in groups their personal ideas for reducing food waste. Part 3: Wrap up and final reflections.
	Part 6 Recommended lecture	20 min	Lecture on environmental, economic and societal impact of food waste.
Evaluation of the activity	**Formative**		Discuss the results and ask questions.
	Summative		The presentation (part 3) The taste of the food made, and the amount of food wasted after the meal is eaten.
References/readings	**Semantic:** 1. Harvard T.H Chan School of Public Health. Food Waste: https://www.hsph.harvagrd.edu/nutritionsource/sustainability/food-waste/ 2. Ritchie, H. (2020) - "Food waste is responsible for 6% of global greenhouse gas emissions ". Published online at OurWorldInData.org. Retrieved from: https://ourworldindata.org/food-waste-emissions [Online Resource] 3. Schuster, M and Torero, M (2016). Toward a sustainable food system: Reducing Food Loss and Waste. In: Global Food Policy Report (pp. 23-31). INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE (IFPRI). https://www.ifpri.org/publication/shifting-diets-toward-sustainable-food-future 4. European Commission, 2019. HOW TO REDUCE FOOD WASTE IN YOUR DAILY LIFE. https://food.ec.europa.eu/system/files/2020-06/fw_lib_poster_reduce-food-waste-daily_en.pdf		