



SUSTAINABILITY: Our Future, Your Story

WEEK 3 – Sustainability and Me.

Welcome to the third week of STEMReach ‘Sustainability; Our Future, Your Story’ module for Transition Year students.

This week we will focus on the topic ‘Sustainability and Me’. Students will hear from Irish sustainability advocates Taz and Geraldine of The UseLess Project, discussing food waste, the effects of this waste on our planet and seasonality. Throughout the session they provide helpful hints, tips and changes we can all make to help us live a more sustainable lifestyle, reflecting on ourselves, the communities around us and the importance of making positive changes however big or small.

The session contains two activities and a weekly task, firstly students will focus on food waste in Ireland, a second short individual discussion will get students thinking about seasonality and the carbon footprint of the food we eat.

For this week’s task, students will focus on the concept of empathy, which was first introduced in week 1 and expanded upon during this session. Having empathy for others and being able to place oneself in the shoes of another to better understand their point of view, is a key life skill. This concept will aid students as they progress through life, both in a personal and social context.

Week 4 will primarily focus on the design, recording and editing of a short 15 – 30 second video by students, that is related to a sustainability-based topic for a community of their choice. During the ‘Empathy Map’ task students should pick an audience they would like to focus on for the video and begin to place themselves in the shoes of that community using the guide below.

The guide incorporates categories such as community pains, gains, thoughts, beliefs, and influences. If students are finding it difficult to choose an audience, a number of suggestions have been listed below.

Link to this week’s video: https://youtu.be/S_w2LrCsUHU

In this video you will find:

- Introduction and overview of talk
- Food waste and why we waste food
- Activity: Causes of food waste/what can we do?
- Seasonality
- Activity: What has the greater carbon footprint?
- Food waste disposal

- Weekly task: Empathy Map for students chosen community.

Causes of food waste, what can businesses and individuals do? Individually or in Groups of 2. (5 – 7 minutes)

During the video Taz and Geraldine highlight the effects of food waste on our planet. If it was a country, it would be the 3rd largest contributor to greenhouse gasses in the world behind North America and China.

Task students individually or in groups of two to think about the scale of food waste in comparison to both countries. Where do they think the majority of food waste comes from? What can businesses and communities do in order to lower their impact of food waste?

Note: Supplementary information contained at the end of the teacher guide

Individual: Carbon Footprint Discussion

Carbon Footprint: Individually – followed by short class discussion. (5 minutes)

What has the bigger carbon footprint, an avocado grown in season in Peru and shipped to Ireland or a tomato grown out of season in Ireland using a heated green house?

Ask students to take a moment to think about the above question, why did they choose their answer? what factors did they consider? are they surprised at the correct answer?
(Answer: Tomatoes)

Weekly Task: Empathy Map

(In class – template to be copied into student's notebook)

Empathy Map for your Community: Groups 2 – 3 (10 – 15 minutes)

For this activity, task students to complete the empathy map focusing on a community of their choice.

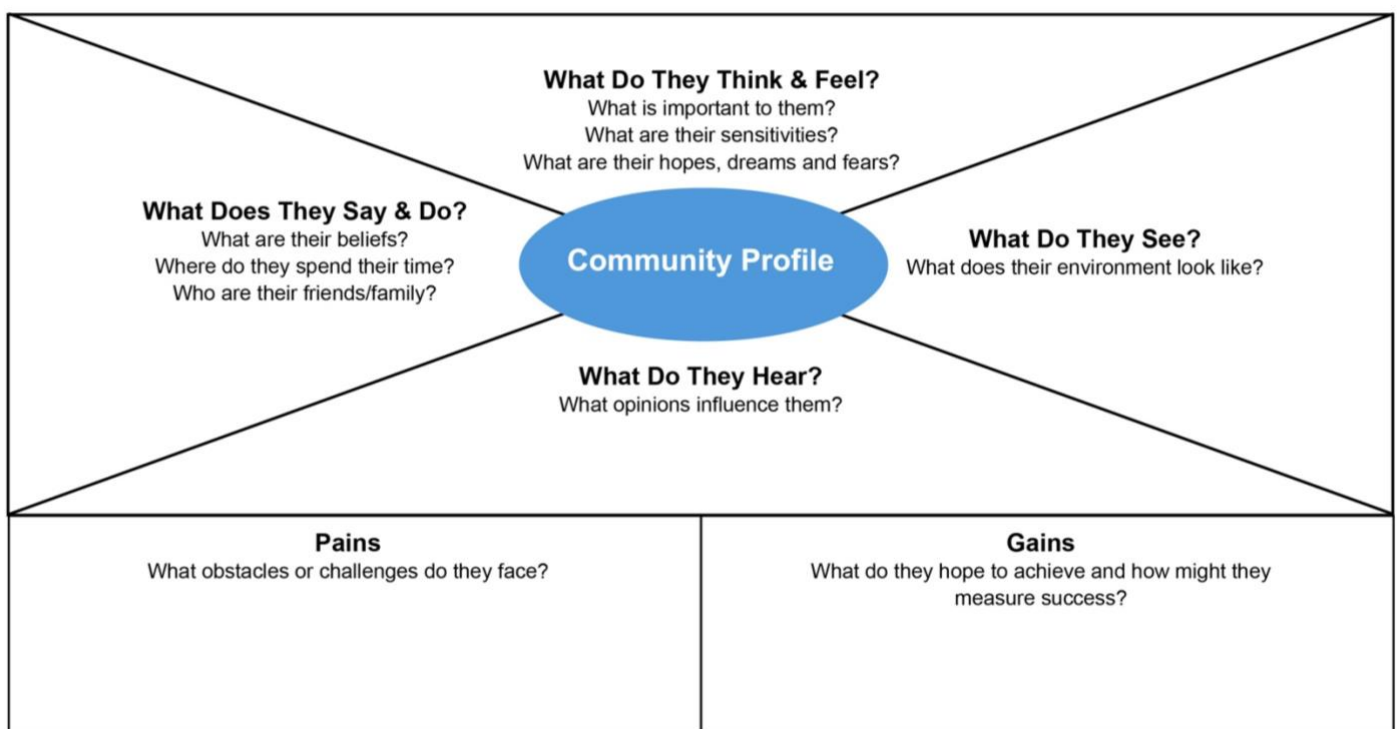
Note: As students will be tasked with recording a short video aimed at promoting or highlighting a sustainable action or service for a chosen community in week 4, they may benefit from using this task as a basis for their upcoming recording.

If students are finding it difficult to focus on one particular community, they may choose one from the list below, in addition teachers may task all student groups to focus on the same community to observe how different groups ideate for the same focal point. However, if this method of ideation is applied each student group should focus on a different call to action when designing their video.

List of potential communities: (students are free to choose their own community focal point)

- Primary pupils
- Older people
- Parents of young children
- Entrepreneurs/business owners
- Farmers
- Secondary students
- Sports organisations such as the GAA or Local Soccer Club, Dance School etc.

Empathy Map Profile



A4 PDF Available on: <https://www.calmast.ie/stemreach-sustainability/>

Supplementary task information:

Causes of food waste, what can businesses and individuals do?

Ireland generates approximately 1 million tonnes of food waste per year (not including wasted food from agriculture). The main contributors are the food manufacturing industry, supermarkets, restaurants and individual consumers in the majority of developed countries. Incorporating more circular economic methods (as touched on last week), working with social enterprises such as 'Food Cloud', charity organisations, or using apps such as 'Too Good to Go' can greatly help to reduce usable food.

Circular Economy (in relation to food): Organic resources such as those from food by-products, that are free from contaminants, can safely be returned to the soil in the form of organic fertiliser.

By products may also be used to create a new additional product for human consumption or as a nutritional supplement for animal feeds.

FoodCloud: A social enterprise that works with a network of more than 600 Irish charities and community groups. FoodCloud through its regional hubs, partner with supermarkets and wholesale food suppliers to collect their surplus food, which would have otherwise gone to waste and re-distribute it to local not for profit organisations.

Too Good To Go: A food saving app that connects businesses and patrons, it allows restaurants and cafes to sell unsold food bundles at a greatly reduced price at the end of the business day.

Resource: <https://stopfoodwaste.ie>

Source: <https://www.epa.ie/our-services/monitoring--assessment/climate-change/ghg/>

Source: https://www.epa.ie/publications/circular-economy/resources/NWPP_Annual-Report-2018_web.pdf

A BIT OF EXTRA TIME?

Class activities, debates and further points of discussion,

Activity: Do you know these what these icon and logos commonly found on packaging mean?



Answers:



Activity: Quickfire Seasonality Round

- Quickfire round – what's in season right now?!
- *(Answers below)*
- Do our supermarkets really reflect this and how can you tell what is in season?

Activity: Currently most people in Ireland eat 3 portions of fruit and vegetables per day, however we are recommended to eat 5-7 per day for good health. Most of the fruit and vegetables consumed in Ireland are non-organic. Consider whether we should promote more fruit and vegetable consumption or more organic food consumption.

1. If you were in charge, would you choose to promote everyone eating more fruit and vegetables or everyone to eat only organic fruit and vegetables?
2. Why did you make that choice?
3. What factors did you consider, or do you think are most important to consider?
4. Do you think there is a greater benefit if people eat more fruit and vegetables or if people eat organic? Consider this in the following cases: cost? Accessibility? Health? Nutrition? Sustainability? Environment?

Useful information: Food seasonality.

Fruit & veg in season in **SUMMER** 

- BEEETROOT
- BERRIES & CURRRANTS
- BROAD BEANS
- BROCCOLI
- CARROTS
- CAULIFLOWER
- COURGETTE
- CUCUMBER
- CURRRANTS
- FENNEL
- FIGS
- GARLIC
- GREEN BEANS
- SALAD LEAVES
- BABY POTATOES
- MUSHROOMS
- RADISHES
- RUNNER BEANS
- PEAS
- PLUMS
- PEPPERS
- SQUASH
- TOMATOES
- MOST HERBS

Fruit & veg in season in **AUTUM** 

- APPLES
- BLACKBERRIES
- (AND MOST BERRIES)
- BRUSSELS SPROUTS
- BROCCOLI
- BEEETROOT
- CARROTS
- COURGETTES
- CELERY
- FENNEL
- LETTUCE
- MUSHROOMS
- ONIONS
- PEARS
- PARSNIP
- PLUMS
- POTATOES
- PEPPERS
- PUMPKIN
- PAK CHOI
- RADISH
- ROCKET
- RHUBARB
- SQUASH
- SWEETCORN
- MOST HERBS

Fruit & veg in season in **WINTER** 

- APPLES
- BAY LEAVES
- BRUSSELS SPROUTS
- CRANBERRIES
- CABBAGE
- CARROTS
- CAULIFLOWER
- KALE
- FENNEL
- LEEKS
- PARSNIPS
- PEARS
- POTATOES
- RED CABBAGE
- RED CURRRANTS
- SWEDE
- TURNIPS

Fruit & veg in season in **SPRING** 

- ASPARAGUS
- BROCCOLI
- CARROTS
- CAULIFLOWER
- CELERICAC
- CUCUMBER
- KALE
- RADISHES
- BEEETROOT
- BRUSSELS SPROUTS
- PURPLE SPROUTING BROCCOLI
- PARSNIPS
- MUSHROOMS
- MINT
- RHUBARB
- CABBAGE
- SPINACH
- SPRING GREENS
- SPRING ONION
- WATERCRESS

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