Muinín Catayst STEAM Education for Sustainable Development and Futures Literacy

SDG15 Seeding Sustainability



Programme Phase 1: Research and Development

Micro-Module 2: Food Sovereignty

SUBJECT AREAS: CSPE, English, Geography,

Home Economics, SHPE













Seeding Sustainability The Ice Cream Olympics



Research and Development Micro-Module 2:

Food Sovereignty and Sustainability

Subject Areas: CSPE, English, Geography, Home Economics, SHPE

2 ZERO HUNGER

3 GOOD HEALTH AND WELL-BEING



12 RESPONSIBLE CONSUMPTION AND PRODUCTION

CO

13 CLIMATE ACTION



Micro-module Summary: Food Sovereignty and Sustainability

This micro-module contains ten lessons that introduce the concept of food sovereignty and sustainable food production. Learners begin to consider how food is produced, distributed and consumed building an awareness of our food systems using a local lens.

Learners develop and understanding of the mechanisms and policies of food production and distribution to develop insights into the system of global food production.

Vocabulary: Consumption, Distribution, Food Sovereignty, Global Food Systems Production, Sustainability

In this micro-module, the learner will:

- become aware of the global food system through local understanding and personal experience
- develop the skills to analyse how food is produced, distributed and consumed
- identify the mechanisms and policies of food production and distribution
- begin to identify control points in the global food system
- develop critical thinking skills applied to sustainable food production

Materials

- · Seven lesson plans
- Learners Activity and worksheets
- Internet Access required











Seeding Sustainability: Food Sovereignty and Sustainability

Lesson 1: Who produces the food I eat, and why does it matter?

It is important to recognise the systems and impacts behind food production and importation. Too often, there is no thought behind how the food gets on our plate. This lesson introduces learners to key terms and issues associated with food sovereignty and security and how this might affect their own food choices.

Resources: Worksheet: Active Listening Task - La Via Campesina

Lesson 2 Introduction to Food Miles

In many cases, the food we buy and eat has traveled a very long way from where it was produced. This lesson looks at the reasons behind this and considers the pros and cons of food transportation.

Resources: Food Miles Calculator

Lesson 3 Meal Challenge

In many cases, the food we buy and eat has traveled a very long way from where it was produced. This lesson looks at how we eat according to where we live, the pros and cons of eating locally, and the challenge of creating a meal with lower carbon emissions.

Resources: Worksheet: Meal Challenge

Lesson 4 From Fork to Plate

In many cases, the food we buy and eat has traveled a very long way from where it was produced. This lesson examines food distribution and supports learners to develop an understanding of the Irish food system..

Resources: Worksheet: Flipped Classroom Task - Whats your food footprint, Worksheet: Map of Ireland

Lesson 5 The Local Food Project

This lesson introduces learners to artist Lisa Fingleton's Local Food Project and 30 day local food challenge. Every year Lisa invites people to take part in the 30 day Local Food Challenge from the 1st-30th September. The challenge includes all food/ingredients grown on the island of Ireland.

Resources: Worksheet: The Local Food Project













Seeding Sustainability: Food Sovereignty and Sustainability

Lesson 6 Could you survive on a pre-famine diet?

This lesson encourages discussion and research on past and present diets, based on the listening task completed before the lesson. It looks at key differences in diet between the rural poor and elite and how the diet was impacted by natural and man-made forces.

Resources: Flipped Classroom Task - Could you survive on...?

Lesson 7 Food Choices - What if the whole world went vegan? Part 1

This lesson encourages learners to examine the argument of plant-based diets through imagining the whole world as vegan. It aims to connect food choice to issues such as food scarcity and security, sustainable use of resources and poverty.

Resources: None required

Lesson 8 Food Choices - What if the whole world went vegan? Part 2

This lesson is a continuation from Lesson 7. It aims to connect food choice to issues such as food scarcity and security, sustainable use of resources and poverty.

Resources: Worksheet: What if the world went vegan?

Lesson 9 Food Choices What to do about food waste

This lesson encourages learners to develop their understanding of the levels of food waste domestically and commercially in their local area and connect it to issues in other places. They are supported in sharing, organising and recording ideas and collaborating with peers.

Resources: Support: Facilitating a world café

Lesson 10 Eating Seasonally

This lesson examines seasonal eating as a way of being more sustainable, but also highlights the issues associated with the ability to eat seasonally in certain areas.

External Experise Ms Rebecca White

Using the Resources:

If you wish to use these resources, we can offer an induction and online support throughout the module to help you plan integration into your projects and timetable. To register for this option, please contact us e:hello@futurefocus21c.com

For more information on the resources please visit <u>www.muinincatalyst.com</u>













Seeding Sustainability: Food Sovereignty and Sustainability

Setting up an online learning environment for the lessons on this module:

Our lessons integrate the use of virtual learning environments. To ensure seamless use of our lessons, a module should be setup on your school's virtual learning environment such as Teams, Google Classroom, etc. Learners are encouraged to upload documents to share with their peers. If your virtual learning environment does not support document sharing, we recommend OneDrive or Google Drive.

You can also use Google Sites or Microsoft Sway to encourage learners to present their work over the year - this can easily be set up to reflect the aims of TY and provide a showcase for their work as well as an assessment tool.

Setting up a Canva Education account.

As our lessons integrate design, our lessons also refer to Canva. Educators and schools are able to open a free Canva for Education account by registering here:

<u>www.canva.com/education</u>. Canva for Education provides primary and secondary school teachers and students with premium features and templates. You can then also set up lessons and invite your learners to the class.

Food Sovereignty and Sustainability References

Webpages

- Allen, P. (2024) What would happen if everyone went vegan? Available at: https://www.bbcgoodfood.com/howto/guide/what-would-world-look-if-everyone-went-vegan (Accessed 9 March 2024).
- BBC (No date) Seasonal calendar. Available at: https://www.bbcgoodfood.com/seasonal-calendar (Accessed 9 March 2024).
- Bignell, Phil (no date) The Eat Seasonably calendar. Available at: https://eatseasonably.co.uk (Accessed 9 March 2024).
- Bir, S. (2022) 15 really polarizing foods. Available at: https://www.pastemagazine.com/food/the-most-polarizing-foods (Accessed 9 March 2024).
- Black Feminist Project (no date) Community Food Program Black Feminist Project. Available at: https://www.theblackfeministproject.org/cfp (Accessed 7 March 2024).
- Bord Bia (No date) Fruit & Vegetables What's In Season? Available at: https://www.bordbia.ie/whats-in-season (Accessed 9 March 2024).
- Bord Bia (no date) Local & Low Food Miles. Available at:
 <u>https://www.bordbia.ie/industry/insights/global-sustainability-insights/tangible--consumer-facing/local--low-food-miles</u> (Accessed 7 March 2024).











- Briggs, B.N.S.C.G. and H. (2023) 'Climate change food calculator: What's your diet's carbon footprint?,' BBC News, 27 November. Available at: https://www.bbc.com/news/scienceenvironment-46459714 (Accessed 7 March 2024).
- Camerlynck, C. (2017) 3 Ways to define local food. Available at: https://www.transparency-one.com/3-ways-define-local-food (Accessed 7 March 2024).
- Canva (no date) Canva Home. Available at: www.canva.com (Accessed 9 March 2024).
- Cleary, C. (2018) 'How Ireland is turning into a food-processing giant,' The Irish Times, 31 March. Available at: https://www.irishtimes.com/life-and-style/food-and-drink/how-ireland-is-turning-into-a-food-processing-giant-1.3434864 (Accessed 7 March 2024).
- Cork County Council (no date) Cork on a fork festival. Available at: https://www.corkcity.ie/en/cork-on-a-fork-fest (Accessed 7 March 2024).
- CSO (2019) Home CSO Central Statistics Office. Available at: https://www.cso.ie/en/index.html (Accessed 7 March 2024).
- DeWeerdt, S. (2018) What if the whole world went vegan? Available at: https://www.anthropocenemagazine.org/2016/03/can-vegans-really-save-planet (Accessed 9 March 2024).
- Emydex Food Processing Solutions (2020) Kerry Foods | Emydex. Available at: https://www.emydex.com/customers/kerry-foods (Accessed 7 March 2024).
- Environmental Protection Agency (no date) Food waste. Available at: https://www.epa.ie/our-services/monitoring--assessment/circular-economy/food-waste (Accessed 9 March 2024).
- Facebook (no date) The Ballinskelligs Edible Village Project and Community Gardens. Available at: https://www.facebook.com/profile.php?id=100064688020464 (Accessed 7 March 2024).
- Fingleton, Lisa (2023) The Local Food Project Lisa Fingleton. Available at: https://lisafingleton.com/project/the-local-food-project (Accessed 7 March 2024).
- Fingleton, Lisa (2023) The Sandwich Project Lisa Fingleton. Available at: https://lisafingleton.com/project/the-sandwich-project (Accessed 7 March 2024).
- Food Ireland (no date) Home Food Ireland. Available at: https://foodireland.com (Accessed 7 March 2024).
- Food Miles (no date) Food miles calculator. Available at: http://www.foodmiles.com (Accessed 7 March 2024).
- Food Unfolded (no date) FoodUnfolded A global digital platform for the latest innovations in food and agriculture. Available at: https://www.foodunfolded.com/ (Accessed 7 March 2024).
- Green Earth Organics (no date). Green earth organics. Available at: https://www.greenearthorganics.ie (Accessed 7 March 2024).
- Independent.le (2016) Tasty TY projects at eight local schools. Available at: https://www.independent.ie/regionals/wexford/news/tasty-ty-projects-at-eight-local-schools/34460474.html (Accessed 7 March 2024).











- Killarney Market (no date). Killarney Market Available at: https://www.neighbourfood.ie/markets/killarney/27 (Accessed 7 March 2024).
- Lfhwadmin (2017) Teach students how to waste less food. Available at: https://lovefoodhatewaste.co.nz/food-waste-lesson-plans (Accessed 9 March 2024).
- Living, V.F. and Willis, C. (2021) What would happen if the world went vegan? Available at: https://www.veganfoodandliving.com/features/what-would-happen-if-the-world-went-vegan (Accessed 9 March 2024).
- Local Enterprise Office (no date). Cream of the Crop Case Study. Available at: https://www.localenterprise.ie/Fingal/Case-Studies/Cream-of-the-Crop.html (Accessed 14 March 2024).
- Marketing The Conscious Club (2019) Food & Transportation The Conscious Challenge.
 Available at: https://tinyurl.com/y4un4k25 (Accessed 7 March 2024).
- Marsh, S. and Readers, G. (2018) The rise of vegan teenagers: 'More people are into it because of Instagram. Available at: https://www.theguardian.com/lifeandstyle/2016/may/27/the-rise-of-vegan-teenagers-more-people-are-into-it-because-of-instagram (Accessed 8 March 2024).
- Maxwell, N. (2017) Quakers & the Famine. Available at: https://www.historyireland.com/quakers-the-famine (Accessed 8 March 2024).
- Neighbourfood (no date) Home Neighbourfood. Available at: https://www.neighbourfood.ie (Accessed 7 March 2024).
- Neighbourfood (no date) The Neighbourfood Podcast. Available at: https://www.neighbourfood.ie/podcast (Accessed 7 March 2024).
- Norton, C. (2021) Global Citizenship Travel Green-Schools. Available at: https://greenschoolsireland.org/themes/global-citizenship-travel/ (Accessed 7 March 2024).
- Rapid Tables (no date) Pie chart maker | Create a pie graph online. Available at: https://www.rapidtables.com/tools/pie-chart.html (Accessed 8 March 2024).
- SKP (no date) Local food at schools Increasing local food self-sufficiency, establishment of short supply chains for healthier nutrition of children. Available at: https://skp.si/en/rdp-projects/local-food-at-schools (Accessed 7 March 2024).
- Stop Food Waste (2021) What's in season? Available at: https://stopfoodwaste.ie/resource/whats-in-season (Accessed 9 March 2024).
- Taste Kerry (2021) Taste Kerry promoting food and drink in County Kerry. Available at: https://tastekerry.ie (Accessed 7 March 2024).
- Teagasc (no date) Vegetables TEAGASC | Agriculture and Food Development Authority.
 Available at: https://www.teagasc.ie/crops/horticulture/vegetables (Accessed 7 March 2024).
- The Barna Group Way (no date) The Local Food Project. Available at: https://www.facebook.com/groups/30daylocalfoodchallenge22 (Accessed 7 March 2024).
- The Game Changers Movie (2019) Plant-Based Resources | The Game Changers. Available at: https://gamechangersmovie.com/resources (Accessed 8 March 2024).













- The World Cafe (no date). The world café Home. Available at: https://theworldcafe.com/ (Accessed 9 March 2024).
- Understanding Evolution (no date) Monoculture and the Irish Potato Famine: cases of missing genetic variation. Available at: https://evolution.berkeley.edu/the-relevance-of-evolution/agriculture/monoculture-and-the-irish-potato-famine-cases-of-missing-genetic-variation (Accessed 8 March 2024).
- Whitwell, B.B.T. and J. (2019) Veganuary: What did it cost you? Available at: https://www.bbc.com/news/business-47064626 (Accessed 8 March 2024).

Videos

- AsapSCIENCE (2016) What if the World Went Vega? Available at: https://www.youtube.com/watch?v=ANUoAdXfA60 (Accessed 14 March 2024).
- BBC (no date) What if the whole world went vegan? Available at:
 https://www.bbc.co.uk/ideas/videos/what-if-the-whole-world-went-vegan/p082l2r8 (Accessed 9 March 2024).
- BBC Earth Science (2017) What's your food footprint? | Earth Science. Available at: https://www.youtube.com/watch?v=k7DQ0EEqxV4 (Accessed 7 March 2024).
- Bryce, Emma (no date). Should we eat bugs? Available at: https://ed.ted.com/lessons/should-we-eat-bugs-emma-bryce (Accessed 9 March 2024).
- Fully Charged Show (2020) What's your carbon foodprint? The how, when & where of food |
 FULLY CHARGED for clean energy & EVs. Available at: https://www.youtube.com/watch?

 v=jk YGNzBwUo (Accessed 7 March 2024.
- Lavin, Garry (2013) Foodmiles explained with Garry Lavin BBC and Earth Lab Presenter. Available at: https://www.youtube.com/watch?v=2VKpUizsdcA (Accessed 7 March 2024).
- Lvctv (no date) La Via Campesina in movement. Available at: https://tv.viacampesina.org/La-Via-Campesina-in-movement-Food@lang=fr (Accessed 7 March 2024).
- Netflix (2017) Rotten | Official Trailer [HD] | Netflix. Available at: https://www.youtube.com/watch? v= ot6W 7hvrM (Accessed 7 March 2024).
- RTÉ News (2020) From surplus food to dessert. Available at: https://www.youtube.com/watch?
 v=BPJ99O-cRDw (Accessed 9 March 2024).
- The Game Changers (2021) All Documentaries. Available at: https://www.youtube.com/watch? v=0YP6IBTXNIY (Accessed 9 March 2024).
- The Game Changers Movie (2019) Where To Watch | The Game Changers Official film. Available at: https://gamechangersmovie.com/the-film/where-to-watch (Accessed 8 March 2024).
- Podcast: Dwyer, Finn (2020) Could you survive on a Pre-Famine Irish diet? I tried.... Available at: https://open.spotify.com/episode/1UfJNenQfgiV3iNAK6v010?
 context=spotify%3Ashow%3A2a2URhT3m5IPhb9Xp8dNWo&si=H1k4dj6KSKi487CXIt6gpw&nd=1 (Accessed 8 March 2024).