Féidearthachtaí as Cuimse Infinite Possibilities

Domestic Waste Management in Irish Households: Knowledge, Practice and Motivation

Embedding Sustainability into the Module TFFS 2001-Food Product Regulatory Affairs

Showcase on Learning, Teaching and Assessment Friday January 19th 12.30pm
TU Dublin Angier St



Background: Erasmus + Project- NEMOS

INTEGRATING SUSTAINIBILITY COMPETENCES IN EDUCATION THROUGH SERVICE-LEARNING

NEMOS Online session



🕅 20 October 2022



14:00h CEST



Held in the framework of the 2022 Annual IGCAT Experts Meeting: **Engaging Young Minds**







Register at: www.nemosproject.com

N ew E ducational M odel for acquisition OfS ustainability competences through servicelearning

Embedding Sustainability into the B.Sc. Food Innovation



- My Module:
- Food Product Regulatory Affairs
- Need to embed sustainability into the course content and the assignment

The Irish Food Industry

- Irelands largest Indigenous Industry
- Generates €27.5Bn Per Annum
- But also generates :
 - Food waste and
 - Packaging waste
- This waste must be reduced, reused or recycled at both a Commercial and Domestic level to meet EU Targets



Legislative Drivers at EU level



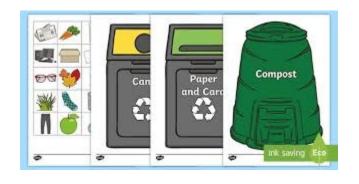
- EU targets of 65% Recycling by 2025 (In Ireland it fell from 62% in 2020 to 58% 2021)
 - Due to increased population and plastic packaging consumption
- EU targets of 50% recycling of plastics by 2025 (We are only at 28% currently)
- Single Use Plastic Directive by 2030

Household Waste Generation in Ireland

- We generated 1.2m tonnes of packaging waste in 2021
- Achieve high levels of recycling for glass (84%) and paper/cardboard (73%)
- Only 28% of plastic packaging waste was recycled in 2021
- Municipal waste recycling rates remained unchanged at 41%



What are we doing wrong?



- 66% of Waste placed in household general waste bins should be put in household recycling or organic waste bins or brought to bring centres
- 33%+ of waste placed in household recycling bins was not recyclable and should be put in household or organic waste bins or brought to bring centres.
- Hence Knowledge Gap on what to put into each bin

Organic Household Waste Generation in Ireland

- 12% of all domestic waste is organic
- Compostable or biogas production
- 2/3 goes into general waste bin
- 16% is food waste
- Solution: Reduce food waste and use the brown bin



Barrier to reaching our recycling targets- the Householder



- Knowledge
- Practice
- Motivation

Project Methodology

- Questionnaire designed to gain an understanding of householder Domestic Waste Management Practice, Knowledge, and Motivation
- Students distributed surveys to 6th class
 Primary pupils and their parents
- Knowledge gaps assessed
- Infographic developed to address gaps
- Given to the students and their parents
- MSc project based upon the results





RECYCLING TOGETHER WE CAN MAKE A CHANGE



WHAT TO RECYCLE

PLACE IN CLEAN, DRY, AND LOOSE



ALL PLASTICS

plastic shopping, frozen food bags, meat/veg trays, water/juice bottles, bubble wrap, crisp wrappers, breakfast cereal bags, yogurt pots



PAPER AND CARDBOARD newspapers, books, magazines, calendars,

calendars, egg boxes, sugar/potato bags, empty juice/milk cartons, pizza boxes, kitchen roll tube



INS, CANS, AND FOIL

drink/food cans, pet food cans/trays, aluminium foil, beer bottle lids, metal jars, soup/sauce/fruit tins, sweet/chocolate tins

WHY WE SHOULD RECYCLE

- Helps to reduce the need for landfills and
- more costly forms of disposal
- Prevents pollution

 Conserves energy and natural resources (something that is found in nature and can be used by people)



WHAT DO THE RECYCLING



THE GREEN DOT

The symbol does not necessarily mean that the packaging is recyclable, it is a European trademark, which indicates that manufacturers and suppliers have made financial contributions to packaging and recycling across Europe.



GLASS RECYCLING

This symbol is seen on glass containers. It asks you to recycle the glass bottle or jar. Please rinse glass items and remove the lid. These can be placed in your recycle bin at home.



MOBIUS LOOP

This symbol indicates that a product's packaging can be recycled, not that the object has been recycled or will be accepted. A percentage may be shown in the middle of the symbol to indicate that x% of the packaging is recycled.



TIDYMAI

This symbol requests that you don't litter. It serves as a reminder to dispose of your waste sensibly and cautiously



△△△△ PLASTIC RESIN CODES

Law This symbol shows the type of plastic used to make the item. You don't have to worry about these numbers and symbols in Ireland because it's standard practice to put ALL rigid plastics in the home recycling bin, regardless of their colour, number or lack of a symbol.



OPRL Labelling

This symbol indicates that packaging can be recycled in your household recycling bin. For more information see MyWaste.ie



Recyclesingle bottle enough power for thr

Recycling a single plastic bottle will save enough energy to power a lightbullb for three hours or more Producing plastic products from recycled plastics reduces energy requirements by 66%.



Assessment

- Collection of surveys (Individual)
- Analysis of Knowledge Gaps (Group)
- Development of an Infographic addressing the Knowledge Gaps(Group)
- Writing a blog on the learnings they took from the project (Individual)
- Results arrived yesterday so not yet analysed!

Achieves Learning at Four levels

- BSc Students
- Primary School students
- Householders
- MSc student



Questions?

