

Sustainable Futures: Collaborative Education for a Low Carbon Future

Ollscoil
Teicneolaíochta
an Atlantaigh

Atlantic
Technological
University

Frances Lucy and Declan Feeney, ATU Sligo
Marguerite Nyhan, UCC
John Cullen, Maynooth University



Rialtas na hÉireann
Government of Ireland

FUTURE JOBS
IRELAND
Preparing Now for Tomorrow's Economy



SUSTAINABLE FUTURES

For a sustainable, net zero and nature-positive future

Twitter: @SustFutures2021

Website: www.ucc.ie/en/sustainable-futures

Lead Institution



Partner Institutions



Funders



Certificate in Sustainability in Enterprise

Year 1	Postgraduate Certificate Sustainability in Enterprise	30 credits
CE6045	Introduction to Sustainability & the Natural Environment	10
CE6046	Introduction to Sustainable Enterprise	10
CE6047	Systems Thinking in Environmental Sustainability	10

Masters in Sustainability in Enterprise



Year 2	MSc Sustainability in Enterprise (90 credits total)	60 credits
CE6048	Responsible Management for Sustainable Enterprise	10
CE6049	Decarbonisation and Pathways to Net Zero	10
CE6050	Applied Research Methods in Sustainability in Enterprise	10
CE6051	Dissertation in Sustainability in Enterprise	30

Launch Day



Industry Skills Mapping



Ollscoil
Teicneolaíochta
an Atlántaigh

Atlantic
Technological
University



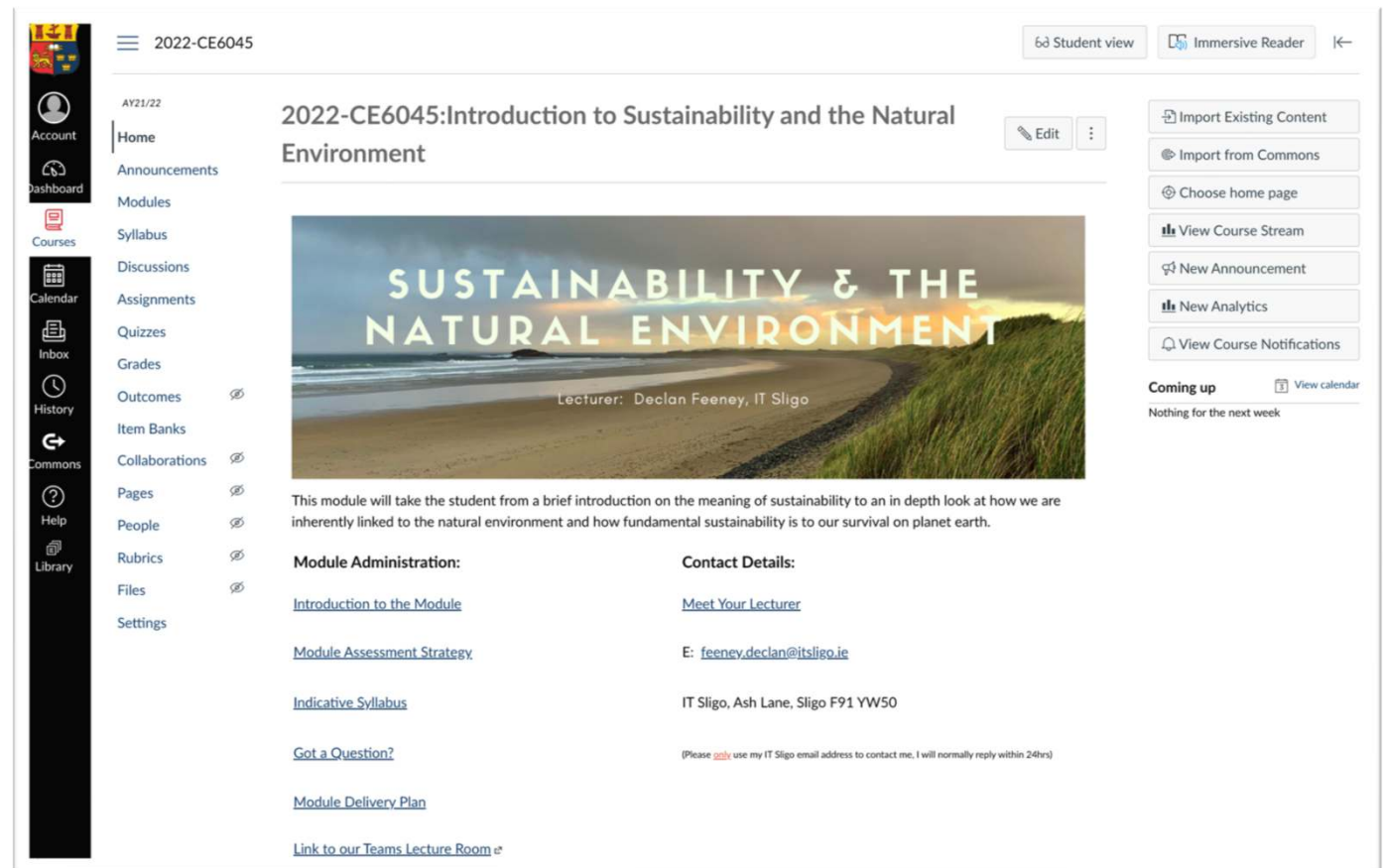
University College Cork, Ireland
Coláiste na hOllscoile Corcaigh



Maynooth
University
National University
of Ireland Maynooth

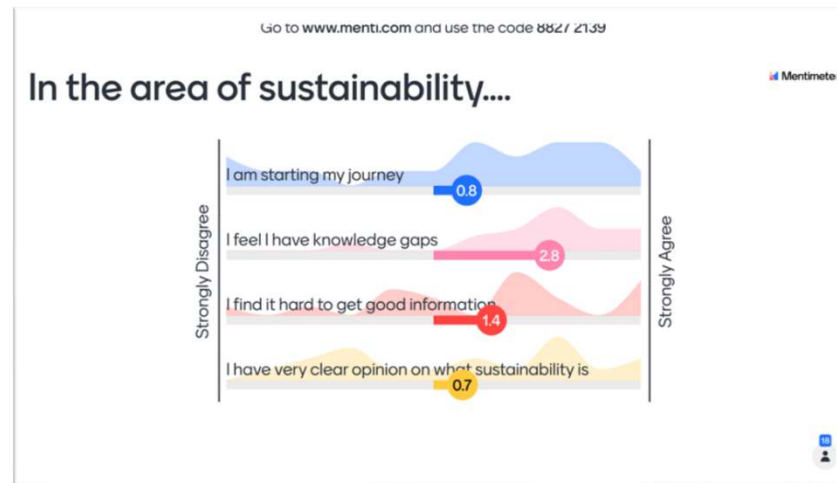
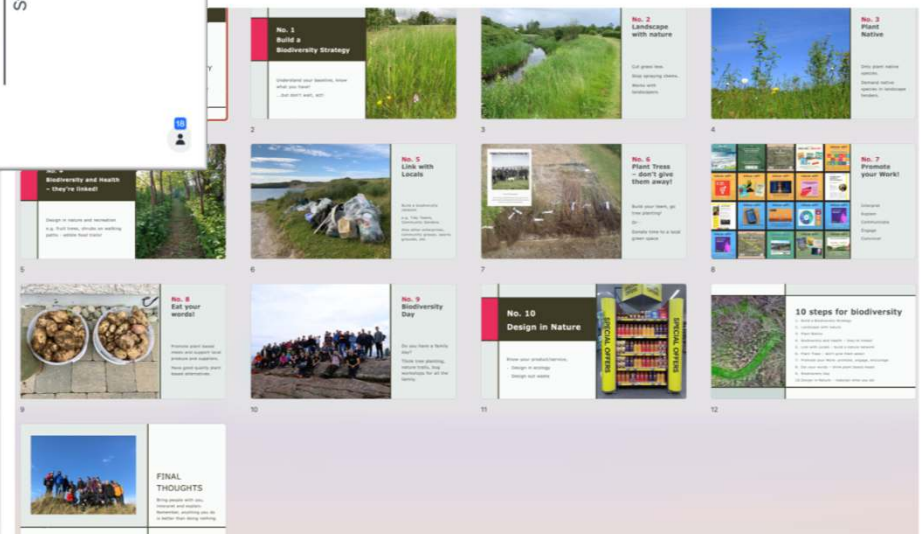


The Challenge of Academic Systems!



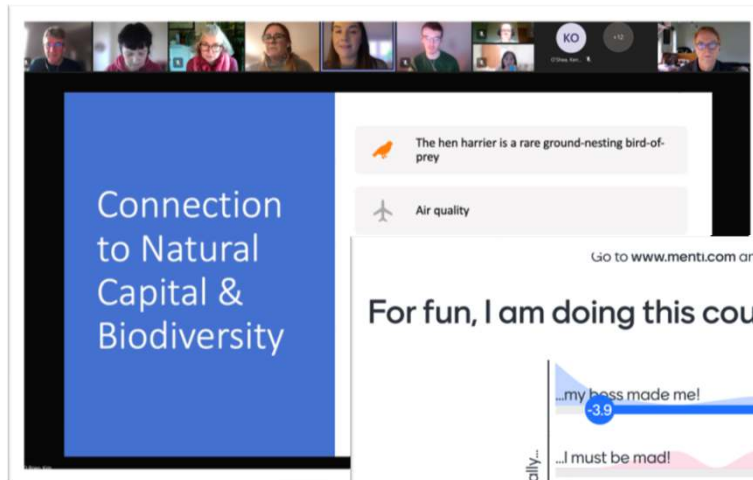
The screenshot shows a Moodle course page for '2022-CE6045: Introduction to Sustainability and the Natural Environment'. The page is viewed from a student perspective. On the left is a vertical navigation menu with icons for Account, Dashboard, Courses, Calendar, Inbox, History, Commons, Help, and Library. The main content area features a header with the course title and a large banner image of a beach at sunset with the text 'SUSTAINABILITY & THE NATURAL ENVIRONMENT'. Below the banner, the lecturer is identified as Declan Feeney, IT Sligo. The page is divided into two columns: 'Module Administration' and 'Contact Details'. The 'Module Administration' column contains links for 'Introduction to the Module', 'Module Assessment Strategy', 'Indicative Syllabus', 'Got a Question?', and 'Module Delivery Plan'. The 'Contact Details' column includes a 'Meet Your Lecturer' link, the email address 'feeney.declan@itsligo.ie', and the address 'IT Sligo, Ash Lane, Sligo F91 YW50'. A note at the bottom of the contact details states: '(Please only use my IT Sligo email address to contact me, I will normally reply within 24hrs)'. On the right side of the page, there are buttons for 'Student view', 'Immersive Reader', 'Edit', and a list of actions including 'Import Existing Content', 'Import from Commons', 'Choose home page', 'View Course Stream', 'New Announcement', 'New Analytics', and 'View Course Notifications'. A 'Coming up' section at the bottom right indicates 'Nothing for the next week'.

The Challenge of Delivery!

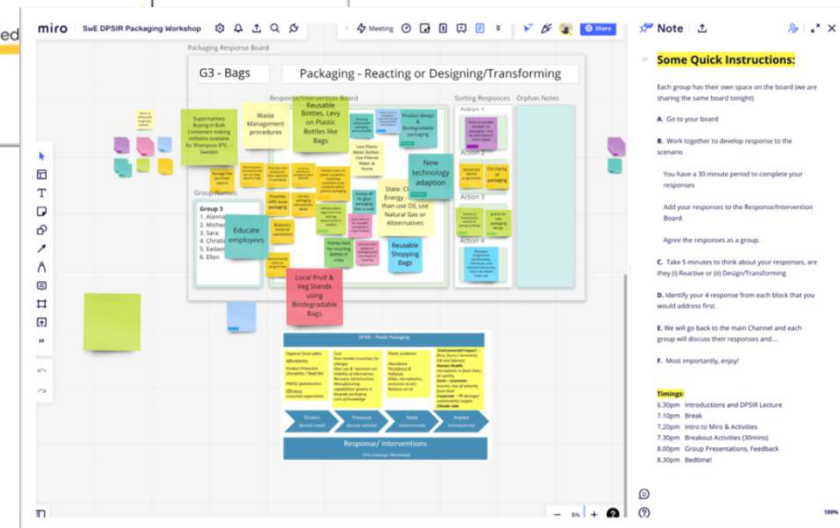
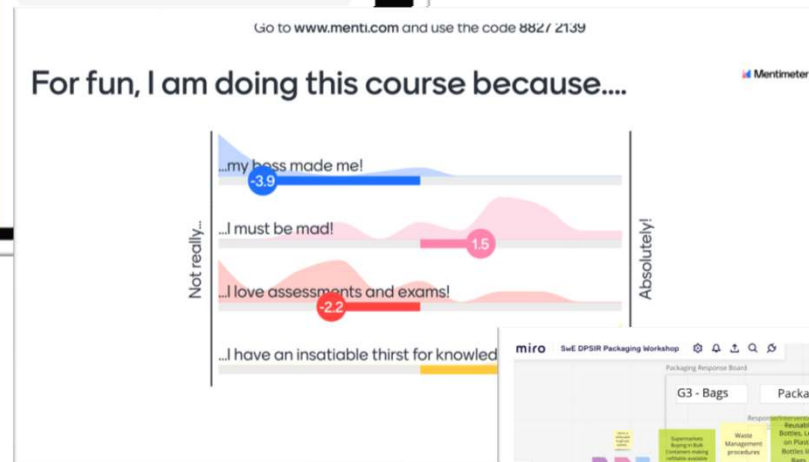



- No. 1 Build a Biodiversity Strategy**
Understand your business, sector and your target.
Get your team on board.
- No. 2 Landscape with nature**
Get your team to help identify areas, create and implement plans.
- No. 3 Plant Native**
Only plant native species.
Use native plants, trees and shrubs.
- No. 4**
- No. 5 Link with Local**
Build a biodiversity strategy.
Use local suppliers, contractors, etc.
- No. 6 Plant Trees - don't give them away!**
Build your team, get their planting on.
Donate trees to a local green space.
- No. 7 Promote your Work**
Use social media.
Use your website.
Use your staff.
- No. 8 Eat your words!**
Promote your biodiversity strategy.
Use your staff to promote it.
Use your staff to promote it.
- No. 9 Biodiversity Day**
Do you have a Biodiversity Day?
Think about planting, tree planting, etc.
Use your staff to promote it.
- No. 10 Design in Nature**
Make your products/bio-products.
Design in nature.
Design for nature.
- 10 steps for biodiversity**
1. Understand your business.
2. Get your team on board.
3. Build a biodiversity strategy.
4. Use local suppliers, contractors, etc.
5. Plant native species.
6. Use native plants, trees and shrubs.
7. Promote your work.
8. Use social media.
9. Use your website.
10. Use your staff.
- FINAL THOUGHTS**
It's a journey with you, your team and your community.
Remember, sustainability is not a one-time thing.
It's a continuous process.

The Challenge of Engagement!



A Zoom meeting interface showing a grid of participants at the top. The main content area displays a blue slide with the text "Connection to Natural Capital & Biodiversity". Below the slide, there are two text boxes: "The hen harrier is a rare ground-nesting bird-of-prey" and "Air quality".



SwE DPSIR Packaging Workshop

Packaging - Reacting or Designing/Transforming

G3 - Bags

Group 1

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 2

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 3

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 4

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 5

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 6

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 7

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 8

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 9

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 10

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 11

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 12

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 13

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 14

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 15

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 16

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 17

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 18

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 19

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 20

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 21

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 22

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 23

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 24

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 25

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 26

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 27

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 28

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 29

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 30

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 31

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 32

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 33

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 34

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 35

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 36

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 37

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 38

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 39

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 40

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 41

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 42

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 43

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 44

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 45

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 46

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 47

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 48

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 49

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 50

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 51

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 52

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 53

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 54

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 55

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 56

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 57

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 58

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 59

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 60

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 61

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 62

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 63

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 64

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 65

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 66

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 67

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 68

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 69

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 70

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 71

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 72

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 73

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 74

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 75

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 76

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 77

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 78

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 79

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 80

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 81

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 82

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 83

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 84

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 85

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 86

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 87

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 88

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 89

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 90

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 91

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 92

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 93

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 94

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 95

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 96

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 97

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 98

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 99

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Group 100

1. Materials
2. Market
3. Design
4. Consumer
5. External
6. Data

Some Quick Instructions:

- Go to your board
- Work together to develop response to the scenario
- You have a 30 minute period to complete your responses
- Add your responses to the Responses/Intervention Board
- Agree the responses as a group
- Take 5 minutes to think about your responses, are they (i) Reactive or (ii) Design/Transforming
- Identify your 4 response from each block that you would address first
- We will go back to the main Charter and each group will discuss their responses and...
- Most importantly, enjoy!

Timing:

- 6:30pm: Introductions and DPSIR Lecture
- 7:15pm: Break
- 7:20pm: Intro to Miro & Activities
- 7:30pm: Breakdown Activities (15min)
- 8:00pm: Group Presentations, Feedback
- 8:30pm: Bedtime!

The Challenge of Improvement!

What did the students tell us?

1. Language of sustainability
2. Topics must be relevant to the world today
3. Balance of technical v's strategic content
4. Mixing social aspects with environmental topics (e.g. Natural Capital)
5. Engagement via workshops is essential

What did I learn?

1. Workshop facilitation is challenging
2. Students educate each other
3. Do less, but do it better!



Ollscoil
Teicneolaíochta
an Atlantaigh

Atlantic
Technological
University