

Teaching Materials for ESD

Misinformation Related to Sustainable Development

Workshop Slides



This work was funded by the National Forum/Higher Education Authority under the Teaching and Learning Enhancement Fund.

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Facilitator notes:

These example workshop slides are part of a library of open educational resources developed by Trinity College Dublin (please see last slide for full acknowledgements) that serves as a digital repository where educators can freely access, share, and adapt high-quality teaching and learning materials focused on education for sustainable development.

Comprising lesson plans, multimedia resources and a variety of digital content these resources are designed to help learners understand the risks of misinformation when trying to address complex sustainability challenges.

For more information on the context for these slides, please visit:
<https://www.tcd.ie/academicpractice/resources/education-for-sustainable-development/teaching-materials-for-esd/>

The material in these slides is designed to align with the Teaching Guide and Workshop Pack for the 'Misinformation Related to Sustainable Development' theme available via
<https://www.tcd.ie/academicpractice/resources/education-for-sustainable-development/teaching-materials-for-esd/>

Pework/preparation: MUST complete before workshop

Misinformation related to Sustainable Development

In preparation for today's workshop you were asked to complete **tasks related to each of three perspectives**.

They are available in the folder titled 'Misinformation related to Sustainable Development' [LMS/VLE]

- 1.Perspective 1: Influencer, Laoise.
- 2.Perspective 2: Communications Executive, Jo.
- 3.Perspective 3: , Student Union' President, Alex.

Each contains questions related to each of the three perspectives on the case study in turn.

Each task/ activity presents prompt questions for the scenario posed. Please remember that these activities do not have 'Right' and 'Wrong' answers.

They are completed individually prior to attending the workshop.

As you will need a record of your response to the prompt questions for engagement in workshop activities, please ensure that you **photograph, take a screen shot or print a record of your responses before you 'submit'**. Thank you.

Facilitator notes:

- To accommodate a range of terminology identified amongst colleagues involved in teaching, the slide includes reference to LMS (Learning Management System) and VLE (Virtual Learning Environment) – of which Blackboard Learn is one such system.
- It is an advantage to learners that they be familiar with all three perspectives (versions of the case) for the workshop. [... including that some subliminal reflection on the case will inevitably happen between completion and attendance at the workshop!]
- Completion of activities related to review of scenarios within a three-hour workshop can be accommodated – provided the facilitator insists that there is no discussion/ each learner completes independently... before workshop group activities begin. However deeper engagement with the materials, and related learning, is likely to be achieved if scenario review is completed prior to learner attendance at the workshop

Reminder in advance of the workshop e.g. announcement, instructions on prework activities or similar:

- In order to get the best from the workshop, you should reflect on the Learning outcomes and case scenarios in advance – and be prepared to engage with your group from the beginning.
- When you get to the workshop, your group will be assigned one of the

three 'Perspectives'

- The group members will share their individual preparatory work reminder that delays with sharing group member's individual reflections will impact negatively on the group's ability to progress in a timely fashion .

Pework/preparation: Ideally review videos before the workshop

Misinformation Related to Sustainable Development



Videos for this theme (also available via the webpage below with fuller video descriptions):

- [Part 1: Common Sources of, and Tactics Used to Hide, Misinformation](#)
- [Part 2: Identification of Misinformation and Differentiating Between Individual Interests and the 'Greater Good'](#)
- [Part 3: Practical, Political and Personal Spheres of Responses: Activating Change](#)



[Resources for this theme on the Centre for Academic Practice, Trinity College Dublin website](#)

The theme of 'Misinformation Related to Sustainable Development' is used to introduce the concepts of misinformation and disinformation, and explores how corporate disinformation campaigns can negatively impact sustainable development initiatives and democratic processes. Practical steps that enable learners to respond to misinformation, and activate meaningful change, are outlined in order to address Raworth's shortfall dimensions of Education and Political Voice in a relevant manner.

Facilitator notes:

- To accommodate a range of terminology identified amongst colleagues involved in teaching, the slide includes reference to the three videos aligned with the 'Misinformation Related to Sustainable Development' theme, available on www.tcd.ie/academicpractice/resources/education-for-sustainable-development/teaching-materials-for-esd/
- Learners will be in a better position to actively learn during the workshop if they are familiar with these videos, and the background Grant Ennis' 9 devious Frames that exemplify tactics used to deliberately misinform, prior to the workshop. [... including that some subliminal reflection on 'Misinformation related to Sustainable Development' will inevitably happen between completion and attendance at the workshop!]
- While a brief overview of the content in these videos could be accommodated at the start of a three-hour workshop – this approach would not be conducive to maximising the experiential learning approach envisaged for this workshop.

(Icons are stock PowerPoint image; remove/change if needed)

Misinformation Related to Sustainable Development

Facilitation of Workshop

[Add facilitator's name here]

[Add facilitator's title here]

[Add module/associated course details here as needed]



Image: Mohamed_hassan, Pixabay licence (edited)

Facilitator notes. Adapt as appropriate to context – acknowledgements should always be included.

Block 5 Misinformation related to Sustainable Development. [Prompts for activities/facilitation]

Theme 5 Aim(s):

To introduce awareness of risks of misinformation to sustainable development and drive development of abilities that help discern between 'facts' presented to support individual interests rather than facts that prioritise the 'greater good'.
(Trinity Graduate Attribute Focus= Act Responsibly)

Learning Outcomes:

By the end of this Workshop/session, participants will be able to:

- (i) Identify commonly applied misinformation, and name tactics used to misinform, regarding challenging concepts in sustainable development and
- (ii) Agree (group) SMART (specific, measurable, achievable, realistic and time-bound) upstream goals which address misinformation related to sustainable development.

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Facilitator notes (for information/suggestions – not intended to be read out verbatim:

- Welcome to the Theme/Block of '[Misinformation related to sustainable development](#)'.
- Outline that the primary aim is to increase your awareness of risks of misinformation to sustainable development and develop your abilities to discern between 'facts' presented to support individual interests and facts that prioritise the 'greater good' as we engage in debates surrounding how to address challenges related to sustainable development in an ethically defensible manner.

Learning Outcomes:

By the end of this session, participants will be able to:

- (i) Identify commonly applied misinformation related to challenging concepts in sustainable development and
- (ii) engage in discussion and debate about how to most effectively develop, and agree as a group, SMART (specific, measurable, achievable, realistic and time-bound) upstream goals which address misinformation related to sustainable development.

This workshop is designed to be an 'active space' where you will grapple with real world scenarios, have peers challenge your assumptions, and further develop your

abilities to identify common misinformation related to sustainable development in preparation for addressing sustainability challenges.

As we explore the complexities of sustainable development, your active engagement and your willingness to consider diverse perspectives will be key.

In order to get the best from the workshop, you should reflect on the Learning outcomes and case scenarios in advance – and be prepared to engage with your group from the beginning. when you get to the workshop, your group will be assigned one of the three 'Perspectives'.

The group members will share their individual preparatory work– reminder that delays with sharing group member's individual reflections will impact negatively on the group's ability to progress in a timely fashion.

Pework/preparation: MUST complete before workshop

Misinformation related to Sustainable Development

In preparation for the workshop, you were asked to complete **tasks related to three perspectives.**

The folder title is: 'Misinformation related to Sustainable Development' [LMS/VLE]

1.Perspective 1: Influencer, Laoise.

2.Perspective 2: Communications Executive, Jo.

3.Perspective 3: , Student Union' President, Alex.

- Each contains questions related to each of the three perspectives on the case study in turn. Each task/ activity presents prompt questions for the scenario posed.
- Please remember that these activities do not have 'Right' and 'Wrong' answers.
- They are completed individually prior to attending the workshop.
- As you will need a record of your response to the prompt questions for engagement in workshop activities, please ensure that you **photograph, take a screen shot or print a record of your responses before you 'submit'. Thank you.**

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Facilitator notes:

Facilitator might check whether any attendee has not completed prework – management/accommodate by adjusting allocation to groups if essential to ensure appropriate background within each group

- To accommodate a range of terminology identified amongst colleagues involved in teaching, the slide includes reference to LMS (Learning Management System) and VLE (Virtual Learning Environment) – of which Blackboard Learn is one such system.
- It is an advantage to learners that they be familiar with all three perspectives (versions of the case) for the workshop. [... including that some subliminal reflection on the case will inevitably happen between completion and attendance at the workshop!]
- Completion of activities related to review of scenarios within a three-hour workshop can be accommodated – provided the facilitator insists that there is no discussion/ each learner completes independently... before workshop group activities begin. However deeper engagement with the materials, and related learning, is likely to be achieved if scenario review is completed prior to learner attendance at the workshop

Reminder in advance of the workshop e.g. announcement, instructions on

prework activities or similar:

- In order to get the best from the workshop, you should reflect on the Learning outcomes and case scenarios in advance – and be prepared to engage with your group from the beginning.
- When you get to the workshop, your group will be assigned one of the three 'Perspectives'
- The group members will share their individual preparatory work reminder that delays with sharing group member's individual reflections will impact negatively on the group's ability to progress in a timely fashion.

Workshop process: Session outline/plan including timings

Time	Activity	students/part
0 to 5m	☐ Organise in tables, introduce to group members etc	5 – intro
5-10m	☐ Welcome, highlight Learning Outcomes (LOs) and allocation of groups' perspectives. ☐ Reminder that discussion in lectorials has addressed e.g. (a) misinformation, (b) risks of vaping and (c) Grant Ennis 9 x Devious Frames (can be referred to as tactics)	5 min intro and allocate
10-30m Task 1	☐ Groups prepare for presentation (perspective) to the room (20mins). ☐ Must choose one, from 3 provided, devious frame to prioritise (misinformation) in their presentation.	20 mins
30-60m Task 1/2	☐ Each perspective presents to other 2 groups, followed by questions from the other 2 groups: i.e. short single Q from each of other 2 groups. No further Q&A at this time.	30mins
60-80m Task 2	☐ Each group (3 x 5 mins) is presented with what the other two groups suspect is the 'deliberately introduced' misinformation used. ☐ The group must answer honestly and, if not accurately identified by either of the other two groups, must disclose the 'actual' misinformation deliberately introduced.	20mins
80-105m Task 3	☐ Group must develop, in 10 minutes, a SMART upstream goal relating to vaping that you will present to a government representative or Committee. [Any perspective] ☐ Each group presents for up to 1 minute (up to three speakers)	25 mins
105-110m	☐ Wrap-up reflective questions and/or ☐ Students individually complete the 'reflective prompt questions'...	5 mins

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Facilitator notes

- This provides an outline of the process used in the workshop as designed [Misinformation related to Sustainable Development]. Revert to this slide as needed during the workshop.
- Say to students that you will regularly remind them regarding timeframes – in order to ensure they complete all tasks.

Key tips for facilitators:

- Provision of handouts at appropriate times. Tip: use colour coding for handouts, especially where one Academic/Lead facilitator has several sets of 15+ learners in the room.
- Aim to assign learners to groups rather than let them self-select – group learning is increased if there's there is e.g. a gender mix in each group of 5, the facilitator disperses groups of close friends to different peer learning groups etc
- When learners are completing activities on an individual basis (individual constructivism), ensure that there is silence in the room/ do not permit them to confer at this stage.
- Move amongst the groups during discussions to confirm that everyone is engaged/ intentionally ask questions of any learners that appears disengaged etc.

Suggested prompt questions for facilitated discussion at end of workshop

(depending on time available:

- To what extent did your group/perspective make greater progress in identifying misinformation in others' presentations by the questions you asked?
- What would you say about the SMART process for setting upstream goals relating to vaping for presentation to a government representative or Committee – especially given the opportunity to see what others developed as their goals towards the same societal benefit?

(Optional) additional prompt questions and closing session: Handout #4 has an optional prompt Questions:

- Where did tension and discomfort arise when acting in your role as Laoise, Jo or Alex?
- Why do you think this tension arises?
- Discuss how misinformation might present differently from e.g.
 - (i) influencers, of which Laoise is one example?
 - (ii) marketing department employees, of which Jo is one example?
 - (iii) those advocating for policy change - Alex is one example?

Overview of activities in , and related to, this workshop

- Each group is assigned one of the three perspectives, with relevant activities on template (**Handout #1**).
- Highlight if after/end of workshop, a group agreed updated presentation must be submitted (**Handout #4**)
- **Task 1:** Each student shares their prework i.e. individually prepared outline of how their perspective's challenge should be addressed, and the group then collaborates to agree a 3 minute presentation that addresses the perspective's challenge, including one of the assigned tactics (**Handout #1**).
 - Minimum x3 group members present, total 3 mins, plus a chair and a scribe. All members active.
- **Task 2: (a)** Record on **Handout #2** the devious Frame your group introduced to your presentation.
- **Task 2: (b)** Record on **Handout #2** the group agreed question to ask of each of the other groups.
- **Task 2: (c)** Record on **Handout #2** what devious frame the group believes other perspectives introduced in their presentation and what the deliberately introduced information is likely to be.
- **Task 3:** Agree as a group one SMART upstream goal relating to vaping for presentation to a government representative or Committee. One minute presentation time limit for each group. (**Handout #3**).
- **Task 3: (b) [Optional]** Reflective prompt questions (**Handout #4 and facilitator notes**).

Facilitator notes:

Task 1: The process of first sharing their individually developed draft problem frames, and then seeking to agree a shared view, forces them to engage with alternate perspectives, and to discuss/debate/negotiate their way to group agreement. Remind them that there are no right or wrong answers and reassure them that active engagement / a curious approach are all valuable parts of the learning experience.

Task 2: The process of first sharing their individually developed draft problem statements (prework activities) enables and drives peer interaction and debate from a variety of starting points. Facilitators should be able to observe that all students are engaging i.e. not opting out of this interaction and debate and are prepared to share their independently prepared ideas. (Graduate attribute = to act responsibly, is likely to be observable by the end of this workshop).

Task 3: Groups typically find that members of the group have different priorities for inclusion in the presentation responding to the challenge posed to their assigned perspective. This activity forces them to engage with alternate perspectives, discuss/debate/negotiate their way to group agreement etc. It will be common that members of a peer-learning group will agree on a range of sustainability problems related to their assigned

perspective, but struggle to agree on the single named SMART goal to address in their final presentation. ... all valuable aspects of the learning experience.

Template = format in which group activities to be submitted: This (signed) page can be photographed by learners for upload to the LMS/VLE.

TASK #1: Group Presentation, Perspective 2: Communications executive. Green Handout #1
[20mins preparation, plus 30mins presentations +questions]

Group assignments. Please complete all sections during the workshop. Ensure that the facilitator signs the completed worksheet for you before you leave. [Module coordinator directs]

Prepare this template so that other groups can photograph it & can 'see' when you 'present'.
Group' presentation which addresses their perspective's challenge (max300words)

1.
2.
3.

Student Name	Student signature
Facilitator initials	Facilitator name

- Facilitator notes:**
- Highlight this part of the template – adapt, if required, to various contexts and/or to curriculum/programme team’s preferences.
 - If used as outlined above, each student is responsible for assuring that they have a photo of the completed template after it has been signed/ and they are individually responsible for uploading the photo to the VLE/LMS/Journal or ePortfolio according to curriculum/programme team requirements.
 - Recommendation: that this should be done before leaving the workshop OR in a defined timeframe directly thereafter.

What is Misinformation?

Misinformation is false or deceptive information that is presented as fact but without a deliberate intent to deceive.

Disinformation is false information that is intentionally and maliciously deceptive.

[For this workshop, we will refer to misinformation 'deliberately introduced']

Adapted from:

https://www.un.org/sites/un2.un.org/files/notohate_fact_sheets_en.pdf

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Facilitator notes:

Reminder of lectional 1 clarification ...

... what we mean when we say misinformation and how it differs to disinformation.

X - Misinformation refers to the unintentional spread of inaccurate information that's shared in good faith by those unaware that they are passing on falsehoods.

X - Disinformation is information that is not only inaccurate but is also intended to deceive and is spread to inflict harm.

Throughout the lectionals and workshop you'll hear us use the terms misinformation and disinformation interchangeably at times. The difference between the 2 basically lies with whether there is intent to deceive or not. Misinformation being where there is **not** an intention to deceive or cause harm, and disinformation where there is **an intention**. But in most cases, it's not actually possible to determine whether there's intention without knowing the inner workings of the individual sharing the information, their worldview, their beliefs and value systems or whether it's a requirement of their job.

Misinformation's often rooted in disinformation whereby deliberate lies and misleading narratives are weaponized over time, fed into the public and political discourse and passed on unwittingly – we'll see examples of this later with cases where PR Mantras of Big Oil, Big Tech and Aviation unknowingly become talking points of presidential candidates and government ministers. In practice, the distinction between mis- and disinformation can be difficult to determine and therefore becomes redundant when we're talking about sustainable development. In either case the information is false or misleading, has negative outcomes for population and planetary health, and must be combatted through collective organizing and action.

Before we begin, let's quickly take a moment to write in the chat what examples comes to mind when you think of mis or disinformation. There's no right or wrong answers or analysis needed of whether it was innocent or devious. Just whatever examples come to mind when you hear these terms.... (Read some responses from the chat for use throughout the lectorial)

The Cross Industry Playbook

The 9 Devious Frames: Ennis, 2023

	Frame Name	Definition
BIG LIES	1. Denialism	There is no problem
	2. Post Denialism	What’s bad is good
	3. Normalisation	It’s not a problem, in fact, it’s normal
PANACEA	4. Silver Boomerangs	Pseudo solutions with negatives that cancel out gains
	5. Magic	False dawns promised that never seem to materialise
	6. Treatment	Emphasise treating problems over preventing them
VICTIM BLAMING	7. Victim Blaming	Shift blame from policies causing the problems to the victims
COMPLICATED	8. Knotted Web	Everything is complex and has no clear solution
	9. Multifactorial	Devious frames that don’t work, do work if you combine them

Facilitator notes:
Do not read out material – just use to remind students that these slides were presented during the lectorials ... and are also reproduced on the handouts.

Notes below from lectorial – reproduced for Facilitator information
We’ve mentioned some of the specific tactics used by the tobacco and oil industries which cast doubt in the public, which have also been adopted today by others such as the ultra processed food industry, the automobile and aviation industries, but what are these tactics?

Let’s look at them now in some more detail.

Grant Ennis has identified a corporate cross-industry playbook for framing. He has observed and studied how organizers, corporations, researchers, and public-facing so-called “experts” use conflicting rhetoric, and he has actively recorded instances where he observed a mismatch between corporate framing and the evidence. His analysis led him to identify 9 frames, or a cross- industry playbook, which is an invaluable tool for understanding industry spin for any issue relating to sustainable development.

You might light to take a screenshot, photo or write down the names of

these to remember in a moment when we are doing a framing activity.

The first 3 are known as “Big Lies” – They are.....

Denialism, where the framing is that there **is no** problem. Examples of which include sugar is not unhealthy, there’s no such thing as global warming (or car dependency doesn’t kill people).

Post denialism where the framing is that What’s bad is good. Examples of which include the “obesity paradox” of bigger is healthier, a hotter world is a better world (and dangerous roads are safe).

And finally, Normalisation, where the framing is that It’s not a problem, in fact, it’s normal. Examples of which include the normalizing of obesity by ultra processed food companies, the promotion of the term “climate change” as opposed to global warming” which was found via PR research to be less alarming to the public (and the promotion of the term “accident” when referring to road fatalities).

The rest can be characterized as pseudo solutions or panacea frames which do not deny but rather act as distractions to maintain status quo. In many contexts these can also be known as Greenwashing.

Panacea frames include

Silver boomerangs where the framing highlights pseudo solutions with negatives that cancel out gains - Examples include campaigns that claim exercise will prevent obesity, and energy efficiency will reduce energy use (remember Jevons paradox from Carlos in Block 1 and Clare in Block 3)

Magic whereby False dawns are promised that never seem to materialise – Examples include genetic cures for obesity, carbon capture and sustainable aviation fuel

Treatment, where the emphasis is on treating problems over preventing them – Examples include ultra-processed food industries focus and sponsoring of insulin treatment and fossil fuels focus on climate adaptation promotion over mitigation

Then there’s one of the most powerful, pervasive and harmful frames which is:

Victim blaming – This is where blame is shifted from policies causing the problems to the victims – Examples include Health individualism education and campaigns around label reading, calorie counting and exercise, and carbon footprint campaigns to reduce individual footprints. You might remember in Block 4 John discussing the difference between the I-frame and S-frame – this is the coopting of the I-frame as a powerful distraction from structural and systemic change.

And finally, there are Complicated frames which include -

Knotted Web, where everything from climate mitigation, to lung cancer to obesity epidemics is presented as complex and has no clear solution. While we heard in Block 4 about how many of the challenges in this module are what is known as wicked problems which are inherently complex, this complexity is often framed as a way to not take the most obvious and impactful course of action where profit can be gained from avoiding it.

Multifactorial – no one solution can work on its own, we need a combination of the above. Therefore, distracting from the solutions which are necessary and work. A

great example of this was BPs “all of the above campaign” which was so effective that the term was co-opted by politicians in presidential election campaigns and made it’s way into the public discourse.

Let’s now look at some examples.

Taken from Grant Ennis (2023) book Dark PR: How Corporate Disinformation Undermines our Health

Facts e.g. Health impacts of vaping

Acknowledgement: Martina Mullin, Healthy Trinity. References available.

Gateway to smoking

- Increase in current cigarette smoking 2015-2019 **associated with** an increasing use of e-cigarettes (ESPAD Irl, 2019)
- Non-smokers who use e-cigarettes are three times **more likely to start cigarette smoking** and become current smokers. (Banks et al, 2021)

Harms to health

- **Use is associated with lung injury** (Reagan-Steiner et al, 2020)
- It is plausible that we are on the cusp of a **new wave of chronic diseases** that will emerge 15 to 20 years from now due to these exposures? (Kishimoto et al, 2024).



An inside scoop on what a vape looks like. Don't be fooled by its fruity smell, these gadgets contain traces of chemicals that are not good for your body.



Social media content created by Trinity students is available on Instagram: [Click HERE](#)

Facilitator notes:

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Social media content created by Trinity students is available on Instagram: <https://www.instagram.com/p/DCHhOO7Mb5i/>

(Images are screenshots from the above Instagram account)

Task 1/2– begin with 20 minutes prep

[followed by 30mins to present + Q&Adetails of which are on next slide]

Each group is assigned one perspective to develop a presentation responding to claims against you.

Format: 3 x maximum 1-minute presentations, with key points inserted on the template flipchart/whiteboard provided.

Content: Groups must present facts without lying. NO lies should be included. [define lie, for the purpose of this workshop as any of the following: to make up, fabricate and/or invent a 'fact'].

Must include (while trying to 'hide'): Each group must include a sample of misinformation and make this visible to everyone at the workshop (flipchart/templates as provided).

Share with others: Other groups are given opportunity to take a photo of completed templates for each 'perspective', which must not be amended thereafter.

Disclose to facilitator/on worksheet: The group names the primary frame used on the group worksheet – as visible to the facilitator. **Must declare their choice of devious frame to other groups before presenting.**

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Facilitator notes:

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Notes below from lectorial – reproduced for Facilitator information

e.g. – if needed ...

The task post presentation is to Use questions to help identify misinformation/frames used by the other two groups:

- Prepare appropriate question: Each other group agrees one question to ask of the presenting group (3 mins allowed). Their aim is to identify the frame and/or expose the misinformation.
- Evidence of question prepared: The Question asked must be written on group's own template. The group being questioned must answer truthfully i.e. not make up, fabricate or invent a 'fact'.
- Evidence of 'guess' frame used: The group asking the question must 'guess' what frame has been used, and write it on their workbook so that the frame

identified is visible to the facilitator... but not disclosed to the room until all three groups have completed the Q&A.

- Summary of key points being presented on the template provided. Once shared with other groups at the workshop, and they have photographed if they choose, these summaries remain visible to all participants for the duration of the workshop.
- Misinformation deliberately introduced must be included in this written/shared summary.

Your task is to identify the misinformation and/or devious frame(s) included in other groups' presentations.

Proceed with Task 1/2 :

- As a group, prepare your presentation **and**
 - complete required entries on the group template (max 20mins)
- **Reminder to facilitator** – provide groups with ‘Task #2’ template also
 - i.e. so that students can ‘record’ the misinformation and Devious frame intentionally introduced ... and can share it with the facilitator, without other groups seeing it!
 - **The group must declare their choice of devious frame (from amongst 3 provided) to other groups directly before presenting**

Proceed with Task 1 /2

- Each group presents for max total 3min, in turn. (Presentation +Q&A = maximum 30mins)
 - **Reminder to facilitator** – provide students with individual templates (#3) to promote active listening during presentations
- The presenting group declares which of Grant Ennis devious Frames they prioritized.
 - Students listening to the presentation **individually prepare** one question to help identify misinformation ‘deliberately introduced’ by the presenting group.
 - After presentation(s) (in turn) Group has 3 minutes to agree and ask one question – with aim of revealing/identifying the misinformation ‘deliberately introduced’.
 - The group being asked the question must answer truthfully i.e. must not make up, fabricate and/or invent a ‘fact’.
 - **No further Q&A at this time**
 - Listening groups must record their ‘guess’ regarding the misinformation ‘deliberately introduced’.

Do not disclose to the room until all three groups have completed the Q&A

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Facilitator notes – if additional required:
Facilitator should not need anything additional to what is included on the slide

Each group has opportunity for 3minute (max) presentation, in turn, while other groups prepare and use one question to help reveal misinformation used by the other two groups:

- Prepare appropriate question: Each other group agrees one question to ask of the presenting group (3 mins allowed). Their aim is to reveal the misinformation.
- Evidence of question prepared: The Question asked must be written on group’s own template. The group being questioned must answer truthfully i.e. not make up, fabricate or invent a ‘fact’.
- Evidence of ‘guess’ re information introduced/ used: The group asking the question must ‘guess’ what misinformation has been used, and write it on their workbook so that the information identified is visible to the facilitator... but not disclosed to the room until all three groups have completed the Q&A.
- Summary of key points being presented on the template provided.

Once shared with other groups at the workshop, and they have photographed if they choose, these summaries remain visible to all participants for the duration of the workshop.

- Misinformation deliberately introduced must be included in this written/shared summary.

Your next task will be to identify the misinformation included in other groups' presentations.

Proceed with Task 2

–(3 x up to 5 mins) plus 5 mins intro and wrapup

Each group is presented, in turn with the misinformation and devious frame other two groups suspect the 'presenting' group has used.

- The group must answer honestly and, if not accurately identified, they must disclose the misinformation 'deliberately introduced'.
- No further Q&A at this time.
- [This is a facilitated session] ... (max 20mins)

Task 2 – final stage

With the freedom to step out of assigned perspective (sustainable lifestyle influencer, communications executive in a marketing department or/and young policy change advocate) if your group so chooses, your group must develop **in 10 minutes** a **SMART upstream goal** relating to vaping that you will present to a government representative or Oireachtas Committee.

Each group presents for 1 minute total, with up to three speakers per group.

This is a facilitated session.

Facilitator notes:

Emphasis that there must be 3 x 1 min presenters, and that others in the group need to identify as handling Q&A/other tasks.

SMART goals

Specific: Does your goal identify a particular thing you want to change / impact?

Measurable: Will you be able to determine if you've made progress?

Achievable: Is your goal something you can realistically hope to achieve? You're looking for something ambitious but achievable.

Realistic: Are you willing / able to work towards your goal? Can you get support?

Time-bound: Do you have a timeframe for accomplishing your goal?

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Facilitator notes:

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(link to time in video 3 that refers to SMART:

<https://tcd.cloud.panopto.eu/Panopto/Pages/Viewer.aspx?id=fd1aa5c9-06ce-41f4-bf7f-b2dc00888e61&start=1360.482791>)

Setting an Upstream Goal

Willen et al (2017) highlight that despite expanding knowledge, evidence and the best of intentions, real change requires key actors to understand how politics works and what politics can achieve in order to identify ‘opportunities for upstream intervention’ (P.964)

Anxiety and Action

A handbook on political organising for systems change

#TrinitySustainability
#HealthyTrinity
#HealthyPlanetHealthyPeople

SUPPORTING A

Healthy Trinity

<https://www.tcd.ie/healthytrinity/mental-health/whole-university-map/mental-health/mental-health-anxiety-and-action/#d.en.2323476>

Examples from Healthy Trinity:

- Contraception:** *I will work with allies to get the government to legislate funding for free, legal contraception for all women of child-bearing age.* (Note: activists began in the 1970s).
- Tobacco:** *I will work with allies to make Trinity a tobacco-free campus by September 2014.* (Achieving this goal took 4 years longer than planned and involved many setbacks).
- Mental Health:** *I will work with allies to get the HSE to implement 16 specialist care teams for eating disorders in Ireland by 2028.* (In 2018, the HSE planned to achieve this by 2023 – not met (August 2026)).

Facilitator notes:
Do not read out material – just use to remind students that these slides were presented during the lectorials ... and are also reproduced on the handouts.

Willen et al(2017): Willen SS, Knipper M, Abadía-Barrero CE, Davidovitch N. Syndemic vulnerability and the right to health. Lancet. 2017 Mar 4;389(10072):964-977. doi:10.1016/S0140-6736(17)30261-1 PMID: 28271847.

Here are some excellent examples of SMART upstream goals from Healthy Trinity relating to contraception, tobacco and mental health with some notes on what happened in reality.

In your upcoming workshop, we will have a chance to create our own SMART goals relating to a specific area of sustainable development.

Optional task #3

(take-home or end of session as Module co-Ordinator directs)

Self-directed learning / reflection at end of the workshop/ after the workshop (if MC directs): Consider what you have learned from engaging in the individual and group activities in this workshop, and answer the following prompt questions i.e.

Where did tension and discomfort arise when acting in your role?

Why do think this is?

Discuss how misinformation might present differently from e.g.

- (i) influencers?
- (ii) marketing departments?
- (iii) those advocating for policy change?

Workshop wrap-up session – prompts for reflection

- What did you learn from today's group discussion/activities?
- What surprised you?
- Did any of the discussion/debate make you uncomfortable about choices you had made in earlier stages of the process?
- How will what you learned prepare you for 'enacting' education for sustainable development / advocating for sustainability issues?

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Facilitators are reminded to think back on when 'they' were students in this workshop / session – key issues include that:

- a) participants (need to) become more comfortable with ambiguity and the notion that there is 'no ideal 'answer' for many of challenges facing ESD/sustainability
- b) Participants (need to) become more comfortable with having to reconsider previously articulated 'opinions' in light of alternate perspectives presented – in order to come to group agreed outcomes
- c) Development of empathy for others' worldviews is a critical step in the process of achieving a globally coherent response to challenges of e.g. biodiversity and climate change.

Scenarios and ‘additional facts’:
– previously provided to students, and
- all are reproduced on handouts

Facilitator notes

– no need to read out to students – reminder that these have been provided in advance.

Scenario: Role-play 1: Sustainable Lifestyle Influencer (Laoise)

Laoise (@laoiseinlondon) is a sustainable lifestyle influencer(1) with almost a million followers across several social media platforms. Recently, a major e-cigarette company offered her a deal(2): a box full of their disposable e-cigarettes and associated merchandise free of charge, and €7,500 for each post she makes featuring their e-cigarette products. As a young person living in an expensive city, she takes up the lucrative offer, **making 10 posts explicitly promoting the use of disposable e-cigarettes to her audience** for €75,000 total.

Her audience, being primarily young environmentalists, is angry with her promotion of a product they deem as wasteful. A fellow sustainable lifestyle influencer, **Sal, makes a “call-out post”(3)** denouncing Laoise's advertisements based on the amount of plastic and rare earth metal wasted in the production of e-cigarettes, effectively “cancelling”(4) her. After Sal's posts, **Laoise decides to make a video responding to Sal's claims. (‘You’ are Laoise.)**

- Note 1: A Lifestyle Influencer is a social media user who shares content about aspects of their lifestyle, such as their daily routines, meal plans, and home products. Influencers often have a large audience and aim to persuade others to follow certain aspects of their lifestyle based on either ideology or financial gain.
- Note 2: Assume that it is not illegal for the company, in this context, to provide product and merchandise to Laoise.
- Note 3: Call-out post”: a social media post criticizing a public figure for their actions or beliefs.
- Note 4: To be “Cancelled”: a public figure who has been marked as a *persona non grata* or ideologically incompatible with any online group, but most often with young people who lean to the left side of the political spectrum.

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Facilitator notes:

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Scenario: Role-play 1: Sustainable Lifestyle Influencer (Laoise) – you are familiar with the term influencer from the lectorials – in this scenario, Laoise’s income derives from making posts online to promote the use of disposable e-cigarettes. Sal, denounces Laoise’s advertisements, referred to as a ‘call-out’. The task for this group will be to make a video to respond to Sal’s call-out.

As you can see, the workshop material include reminder notes regarding what these terms mean, but many of you are likely to be familiar with the processes used by influencers from your own contexts.

Additional Facts for Laoise (Influencer)

- Each year, the UK throws away 10 tonnes of lithium from disposable e-cigarettes (Askew, 2021).
- 10% of all vapes in Scotland become litter each year (Government of Scotland, 2023).
- 42% of e-cigarette users in Ireland believe that used disposable e-cigarettes can be thrown in the general refuse bin (European Recycling Platform, 2023).
- To recycle e-cigarette batteries, they must be fully taken apart, but are difficult to disassemble properly (Pashby, 2022).
- Lithium batteries are a fire risk when not properly discarded (Pourchez et al., 2022)

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Scenario: Role-play 2: Communications Executive Marketing, (Jo)

SuckIt is a prominent **company in the e-cigarette industry** focused on single-use e-cigarette vending machines used primarily in bars, clubs, and casinos. However, the absence of age verification when vending machines are used has prompted regulatory concerns. In response to growing concerns about the accessibility of vaping products, **the government has responded by proposing legislation** that specifically prohibits the supply of e-cigarettes from vending machines nationwide. Government policy seeks to dramatically reduce the prevalence of vaping, and to prevent minors (under 18 years of age) from having access to e-cigarettes containing nicotine products. The legislation proposed would support this policy aim.

As you, Jo, are the communications executive in the marketing department of SuckIt, **you've been asked to prepare a statement persuading the public that e-cigarette vending machines represent a reduction in risk and are to be encouraged**. Your company's research has identified that your consumers, primarily people 18-25, are environmentally conscious. Legislators are therefore interested in including the youth voice in the new legislation. With this in mind, swaying the minds of your consumers is important for the long-term success of the business. ('You' are Jo.)

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Scenario: Role-play 2: Communications Executive Marketing, (Jo)– you are familiar with the role of communications in organisations from the lectorials – in this scenario, Jo's role as a communications executive in the Marketing Department is to present Suckit as a socially responsible company, while also communicating clearly to the target audience(s).

Additional ... for Jo (Communication Executive)

- Systematic review of evidence in the literature has demonstrated an association between use of vapes in children and adolescents and other health problems including asthma, mental health problems, cough, alcohol use and marijuana use (Royal College of Physicians Ireland, 2023).
- In 2025, 42% of young people aged 11-17 used disposable vapes, a decrease from 2023 (69%). There was more than a 7-fold increase in disposable vape use between 2020 and 2022 but a disposable vape ban came into effect in May 2025. Data on disposable vape use since then are not yet available (ASH UK, 2025)
- A 2024 review of 107 studies and 124 odds ratios found e-cigarette use increased odds of cardiovascular disease, stroke, asthma and lung disease and that e-cigarettes are a gateway to tobacco smoking. Glantz et al, 2024 <https://pubmed.ncbi.nlm.nih.gov/38411454/>
- Systematic review of evidence in the literature has demonstrated an association between use of vapes in children and adolescents and other health problems including asthma, mental health problems, cough, alcohol use and marijuana use (Faculty of Paediatrics, Royal College of Physicians Ireland, 2023).
- Data also shows that teenagers who vape have a 3- to-5-fold risk of moving onto tobacco smoking (Quigley et al., 2020).
- Dual-use (using both vapes/e-cigarettes and conventional cigarettes) is the most prevalent behaviour among adolescent nicotine product users in Ireland (Bowe et al., 2021).

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Scenario: Role-play 3: Young Policy Advocate, (Alex)

Alex is the [fictitious] TCD Student Union's (TCDSU) President and an avid e-cigarette user. Recently, the government approached student unions across the country, as well as a prominent youth group comprised of under-18s Comhairle na nÓg(5) (Youth Council), for consultation on newly proposed legislation. This legislation aims to drastically reduce the significant environmental impact associated with vaping. Reducing the prevalence of vaping amongst young people will benefit them and also be good for the environment.

Alex, on behalf of the TCDSU, argues that this legislation restricts consumer freedom, and that if an e-cigarette user wants to quit vaping for the good of the environment they will do so. In addition, if young people really want to use nicotine products, they will access them by any means necessary, even if further legal restrictions are placed on the product. However, Comhairle na nÓg's representative argues that young people are consistently targeted in e-cigarette advertising, despite being more vulnerable to any potential health risks. Additionally, the representative expresses concern regarding the quantity of plastic waste disposable e-cigarettes produce, even when all recycling practices are followed. ('You' are Alex.)

Note 5: Comhairle na nÓg (Youth Council), is a national organisation for young people under the age of 18 and who therefore have no other voting mechanism to have their voice heard, Comhairle na nÓg is designed to enable young people to have a voice on the services, policies and issues that affect them in their local area.

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Scenario: Role-play 3: Young Policy Advocate, (Alex)– you are familiar with the role of policy advocates from the lectorials – in this scenario, Alex role-plays as president of TCD SU and the scenario also refers to Comhairle na nÓg (Youth Council), is a national organisation for young people under the age of 18 ..., Comhairle na nÓg is designed to enable young people to have a voice on the services, policies and issues that affect them in their local area. Further detail on TCS student's Union is available refer to lectorials etc

Additional ...for Alex (Policy Change Advocate)

- One UK study found that 50% of single use vapes are thrown away. This equates to 1.3 million single-use vapes/week, which in one year is enough to cover 22 football pitches (Material Focus, 2022).
- Disposable vapes also contain hazardous heavy metals (e.g., mercury, lead and bromides) and other toxic chemicals (battery acid, lithium, nicotine), which leach into the environment when not properly discarded (Chapman, 2022).
- UK research found that annually, approximately 10 tonnes of lithium is wasted from discarded disposable vapes – the equivalent of 1,200 electric vehicle batteries (European Recycling Platform, 2023).
- Extraction and purification of nicotine from the tobacco plant for e-cigarettes requires a large amount of water and generates non-recyclable halogenated waste and pollution (Beutel et al., 2021).
- E-cigarette vapours are potent sources of air pollution such as aldehydes, carbon monoxide, particulate matter (PM), VOCs, heavy metals, and nicotine (Lee et al., 2017).

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Questions?

[Reminder to use discussion
Forums on the LMS/VLE for Q&A
with teachers/facilitators.]

[Add facilitator contact details
here]



Facilitator notes:

Adapt as appropriate to your context

(Icon is a stock PowerPoint image; remove/change if needed)

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Facilitator notes:

Adapt as appropriate to context - acknowledgements should always be included.