

Alternative assessment formats in sustainability education: a fair trade?

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on behalf of The Green Academy

Session overview

- Look at the different formats of assessment used in the Sustainability in Practice (SiP) certificate
- Explore how you might use alternative assessment formats in your current course

Overview of SiP Certificate

- Automatically available in NOW to all students (& staff) across NTU, regardless of level of study and mode of study
- Four sessions including interdisciplinary discussion, quizzes, online research to source sustainability solutions etc.
- Final project piece in a flexible format

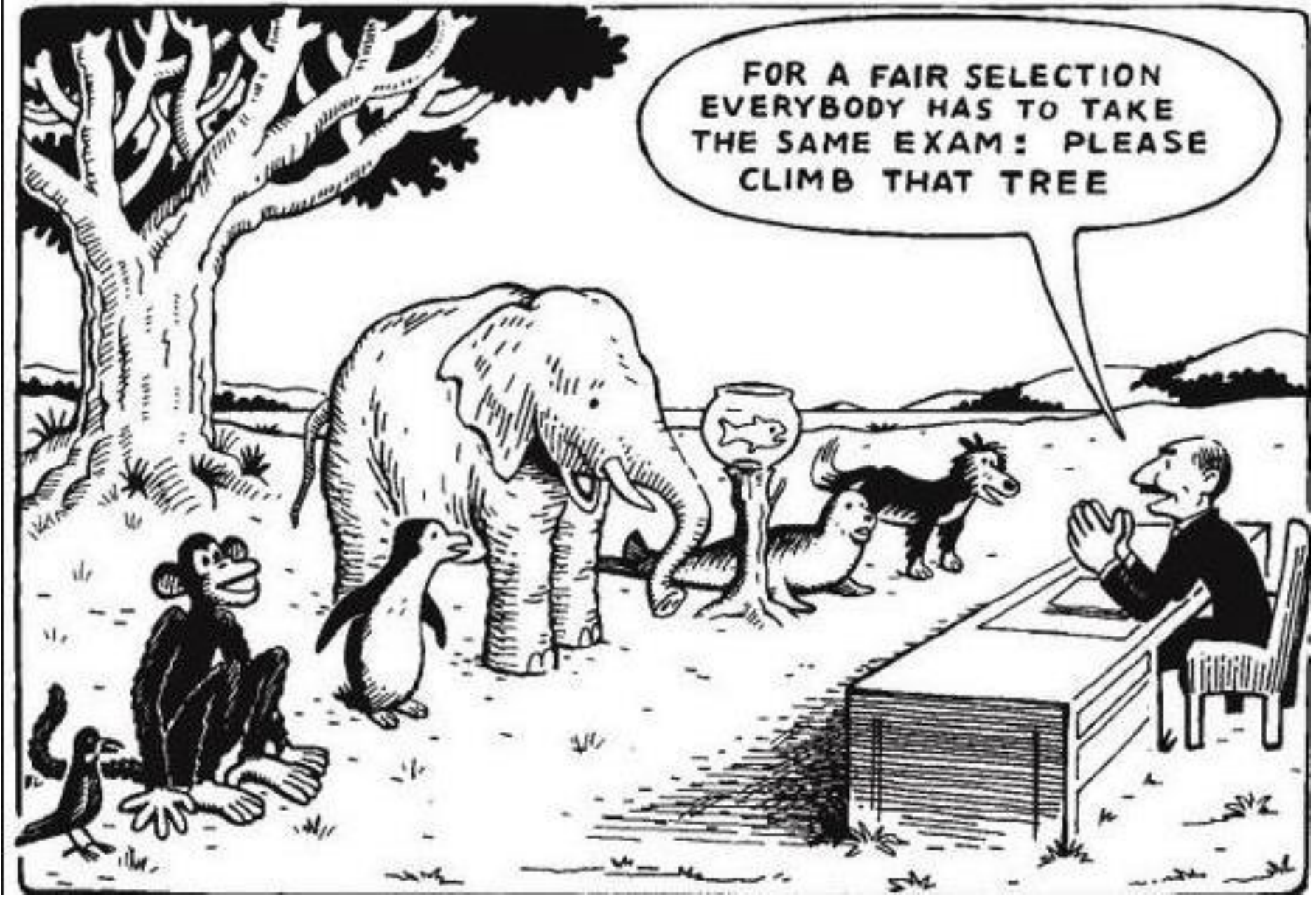
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Learning Outcomes of SiP

- Demonstrate engagement with sustainability as a concept in relation to the United Nations Sustainable Development Goals SDGs;
- Contextualise your chosen sustainability theme – energy, food or clothing – to the subject of your course of study;
- Devise an interesting, innovative, creative or perceptive means of displaying this concept to a wide audience.

Assessment: some questions we asked ourselves about SiP

- Is it fair, to assess ALL students, in an uniform way, when there are different types of learners with different needs and learning aims?
- Is it fair to assess students in a format which may not be aligned with the learning and teaching experienced by students within the course?



Final Project Formats

- Still Image e.g. Poster, Mood Board, Painting, Photography
- Moving Image e.g. Video, Presentation, Performance (all must be captured on video)
- Written Piece e.g. Blog, Report, Poem, Essay (max 1500 words)

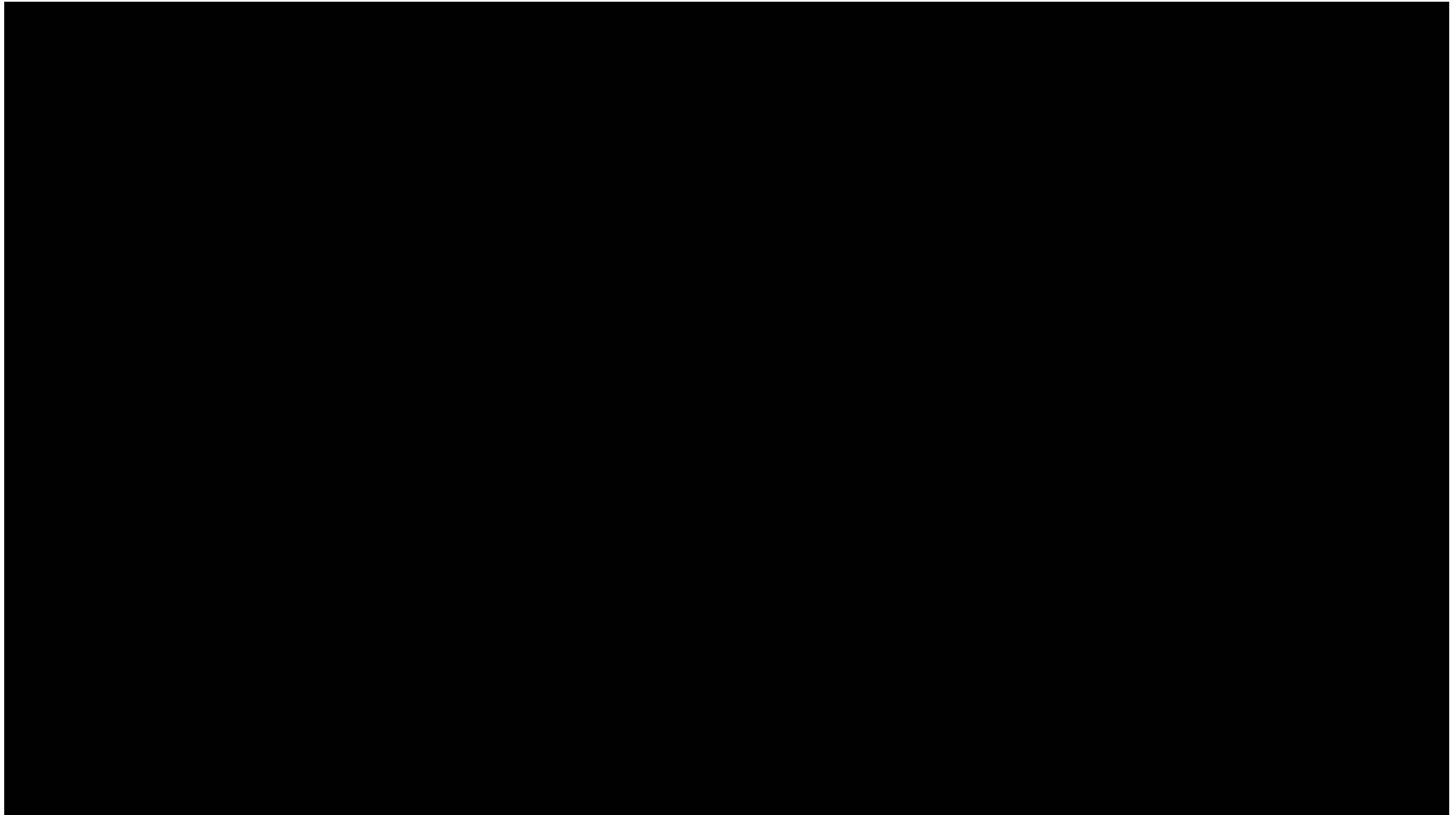
Referencing where applicable: NTU Harvard Style

Table discussion

In your own courses, what could be some alternative assessment formats which would:

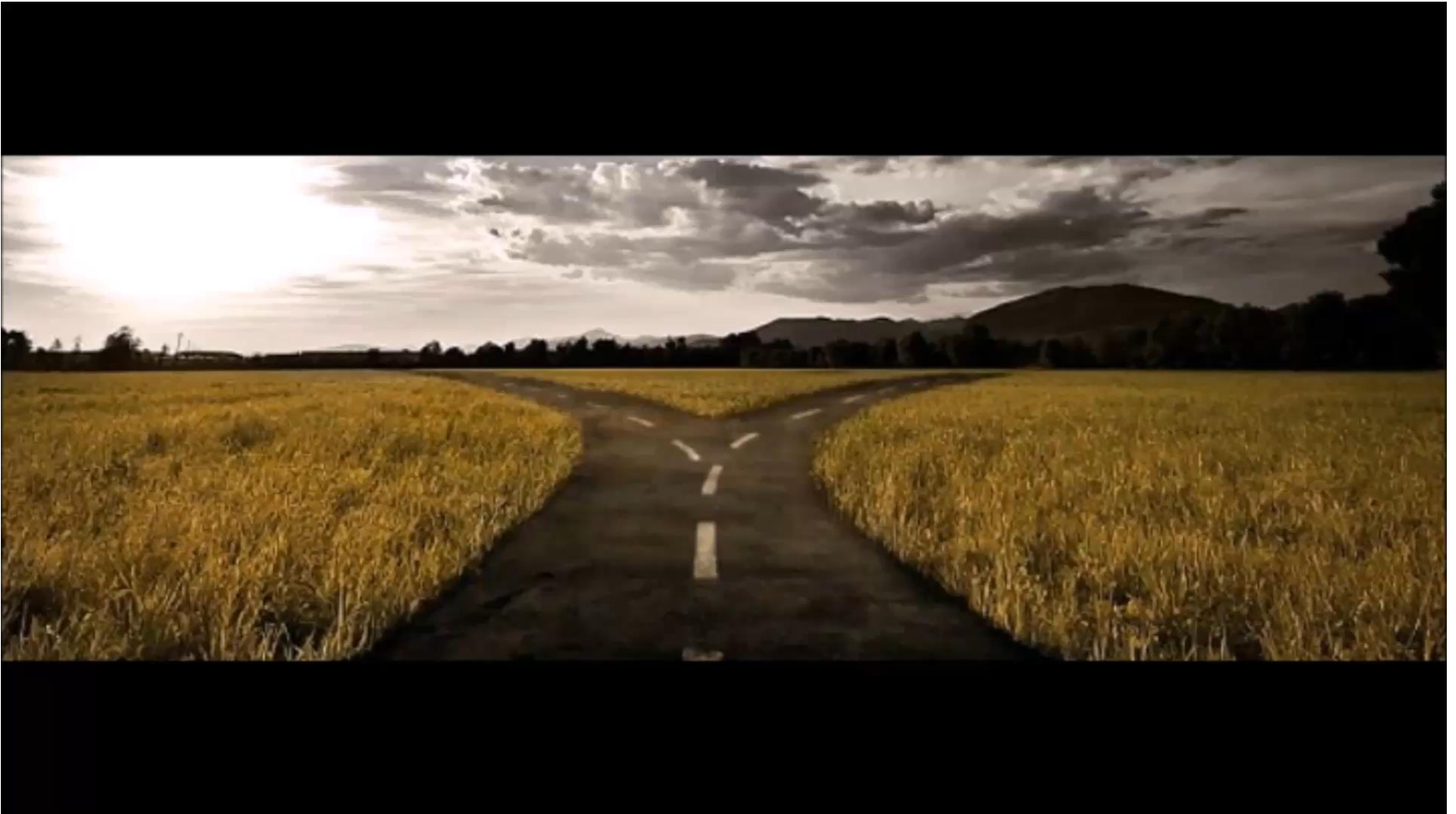
- Complement different learning styles, needs and learning aims (academic, professional)?
- Enable students to meet the learning outcomes of the course?

Examples of SiP Final Projects



Christopher Wilkinson (History & Politics) 2017/18

Examples of SiP Final Projects



Laura Baus Lerma & Ana Molina Burquet (International Business) 2016/17

Examples of SiP Final Projects

Can Economics and Human Resources utilize renewable energy to make business more sustainable in the future?

Connor White
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ENERGY SUSTAINABILITY IN BUSINESS

“Access to clean, affordable and reliable energy has been a cornerstone of the world’s increasing prosperity and economic growth since the beginning of the industrial revolution”

Chu, S. and Majumdar, A., 2012. Opportunities and challenges for a sustainable energy future. *nature*, 488(7411), pp.294-303.

“Fossil fuels face resource depletion, supply security, and climate change problems; renewable energy (RE) may offer the best prospects for their long-term replacement”

Moriarty, P. and Honnery, D., 2016. Can renewable energy power the future?. *Energy Policy*, 93, pp.3-7.

Contemporary organizations are faced with a variety of issues which are external to their general business activity. With increased environmental awareness amongst consumers, promoted primarily via social media, it is paramount that businesses turn their attentions towards environmentally-friendly practices and sustainable development. Engaging with

Sustainability covers several issues but perhaps few more well-known than the UN’s Sustainable Development Goal (SDG) #7: ‘affordable and clean energy’. The SDGs were created by the UN as targets for sustainable development, with long-term goals stretching through to 2030. Goal #7 is about improving the environment through use of sustainable

Connor White & Suraj Jham (Economics & HR @ NBS) 2016/17

Food sustainability in forensic mental health

Introduction

- Food sustainability means the use of resources to produce food at rates that do not exceed the capacity of the Earth to replace them (Morawicki, 2011).
- I will illustrate how food sustainability relates to Forensic mental health, which is a specialist services offering treatment to offenders with mental illness- that can be comorbid with other illness

Pillars of food sustainability

Economic sustainability

- An economically viable supply chain for sustainable food
- Establishes training opportunities for future generation of food

Social sustainability

- A wide range of community food-related activities to improve physical and mental health
- Tackle the social injustice of food poverty by making affordable, nutritious and sustainable food available

Environmental sustainability

- Maximise the use of green spaces and brownfield sites to grow and provide food
- Support food production that protects natural resources and ecosystems, reduces packaging and food wastes and encourages composting and recycling

Relationship between food sustainability and forensic mental health

Problems with prisoners

- Poor physical and mental health is strongly associated with offending behaviour
- One third of the prisoner population is overweight or obese
- eating habits and a poor understanding healthy diet
- Limited understanding of the benefits of physical activity
- Due to the nature of their illness, patients are on medication that aid unhelpful eating behaviours that negatively impact on weight (Bird, 1999)

The way forward

- Food growing can engage interest in healthier eating
- Gardening /conservation work can increase physical activity
- Potential for accredited agricultural food production training and enhancing employability



Growing agricultural crops and vegetables

Conclusion

- Provides opportunities to development new skills around farming, growing and cooking
- Among some young offenders, diets supplemented with vitamins, minerals and essential fatty acids will result in significant and remarkable reductions in anti-social behaviour.
- Rehabilitation will reduce offending behaviour by creating improved sense of self and identity

References

1. Morawicki, R.O., 2011. *Handbook of sustainability for the food sciences*. John Wiley & Sons.
2. Bird, L., 1999. *The Fundamental Facts... All the Latest Facts and Figures on Mental Illness*. Mental Health Foundation London.

SiP Learning Room with Exemplars for Students

Final Thoughts

- As with any assessment format, **non-traditional assessment formats should be scaffolded** to support students – they should have the chance to learn about and practice before the summative assessment
- An alternative assessment format can be a way of allowing students to **demonstrate learning in a succinct way which is easy to share with potential employers** e.g. a video, a poster.
- **Alternative assessment formats may work as formative assessment as well as / instead of summative** as long as the two are aligned. You could even have it as an incentivised addition e.g. students distill their group project or dissertation findings into a 3-minute thesis talk or poster to share at an event where employers are invited.

Thank you.

Any Questions?

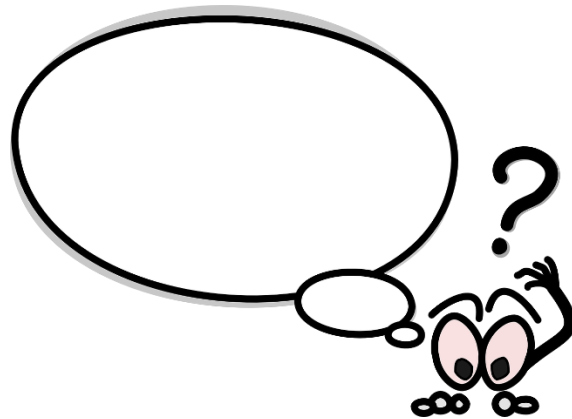


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References:

- Russell, M., 2012. *The Education System: "Now Climb That Tree"*. [Online]. Available at <https://marquetteeducator.wordpress.com/2012/07/12/climbthattree/> [Accessed 8th April 2019].

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For support with integrating sustainability / SDGs into your course, contact greenacademy@ntu.ac.uk