

Sustainability symposium: Facing forward with Sustainability - Principles, Progress and Partnership

Workshop: Operationalising sustainability (eco-literacy)
in higher education

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Session plan

- 0-3 minutes: Introduction and assignment of workshop tasks
- 4-15 minutes: Workshop activities in breakout rooms
- 16-18: Operationalising sustainability in HE: Learning perspective (Sam McPhee)
- 19-23: Operationalising sustainability in HE: Teaching perspective (Mayen Cunden)
- 24-30: Q&A + Discussion

Introduction

- Esther García-González, Rocío Jiménez-Fontana and Pilar Azcárate, *Education for Sustainability and the Sustainable Development Goals: Pre-Service Teachers' Perceptions and Knowledge*, *Sustainability* 2020, 12, 7741; doi:10.3390/su12187741
- All education is good.
- “Education can equip people to be more effective vandals of the earth.” (David Orr)
- How to operationalise sustainability in higher education?

Workshop Tasks

- Task is to apply *ecological design intelligence* to the scenarios:
 - What is the ecological context that gives rise to or is impacted by the scenarios?
 - What is the link to the SDGs?
- What motivates the shape and dimension of your answers to the above?

Scenario 1

Chicken stir-fry



Scenario 2

Vase of flowers



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About Me

- Currently, I'm a student working towards my bachelor's degree in computer science. After graduation, I will transition into the workplace with industry-relevant skills.
- Despite this I was taken aback by this David Orr quote:
 'Without significant precautions, education can equip people merely to be more effective vandals of the Earth.'
- It made me reconsider my influence and wonder if my education has prepared me to face relevant workplace challenges, considering the curriculums disregard for sustainability?

What Sustainability Means To Me

- Sustainability affects us all and the world we call home. We all have a responsibility to look after our world, so I find this matter significant. Therefore, I expect my university to treat it seriously enough to integrate it within the curriculum.
- Especially since I realised that my actions and behaviours impact the Earth and will do more so once I transition into the workplace and gain a position of power.
- As students, we must focus on the technical knowledge of each module's content in order to pass rather than concentrating on our sustainable consciousness throughout.

Why Sustainability Is Important To Me

- Having read the study, Approaches to teaching and learning for sustainability: Characterizing students' perceptions, which investigated the sustainability knowledge of a given group of students, I began to question my perceptions on the topic as well as how education formed them.
- I view it essential that I recognise my actions and learn from them to become a better global citizen, especially as I don't want to become a vandal of the earth. I wish to contribute to the world positively.

My Course's Connection to Sustainability

- The majority of my modules are rooted within the topic of computing, with few touching on sustainability. The ones that do lack the same crossover that other 'underpinning modules' have.
- For example, throughout my entire degree, computational mathematics is integrated into many more modules than computer ethics (which covers sustainability) is.
- So this lacks the future incorporation that helps reinstate concepts into the student mind, as information is remembered merely to pass a particular module.

What I Want To See

- Sustainable concepts are not integrated into other modules; this makes me feel less confident with combating them once I graduate.
- Therefore, I want to see sustainability included within more modules within my degree, not just a select few. That way we students can understand exactly how our actions impact the Earth via the specific skills we learn; rather than in general passing theory.

Facing Forward

- As I am now more aware of the importance of sustainability through my additional work, I can attempt to do more. I can continue to research the topic, spread the word to other students that I know and engage in more events such as this one.
- I'll be working alongside and in partnerships with other students and university lecturers by doing this. But this doesn't just affect me; it affects all of us irrespective of our chosen disciplines.
- I am hopeful that as more sustainably conscious individuals emerge; that we can continue working towards operationalising sustainability in higher education.

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Operationalising sustainability: Teaching perspective

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Scenario 2

Vase of flowers



Take-away: Smart by Nature

- Stone, M.K. (2010), *A schooling for sustainability framework*, Teacher Education Quarterly
 - Operational definition of sustainability
 - Expanded understanding of curriculum
 - Guiding principles
 - Shifts in perception
 - Competencies for sustainability

»Thank you

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