



University of St.Gallen

Institute of Business Education
and Educational Management



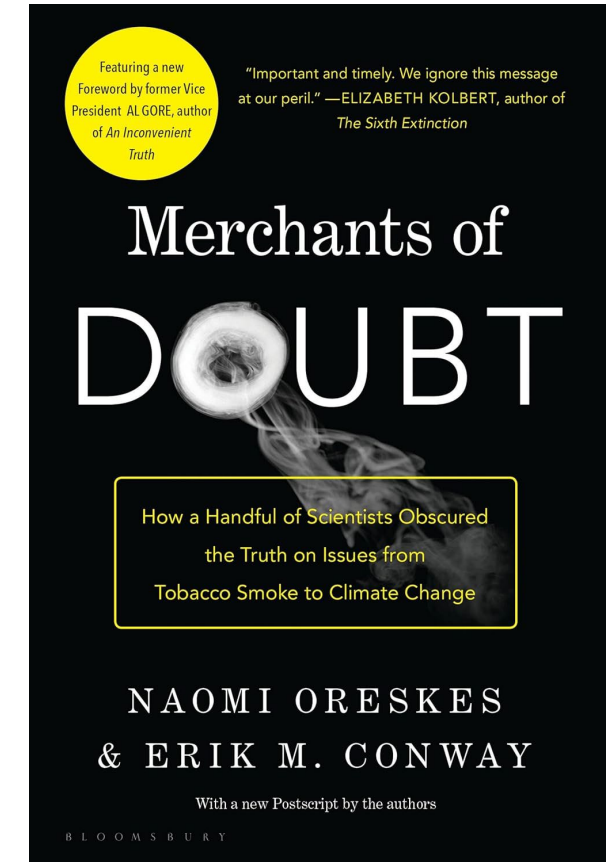
(De)Manufacturing Doubt. Active Inoculation for Faculty on Myths in and About Sustainability Education

Dr. Stefan T. Siegel, University of St Gallen
Sustainability Teaching Exchange, October 2024

TRAILER

HD 

The Merchants of Doubt

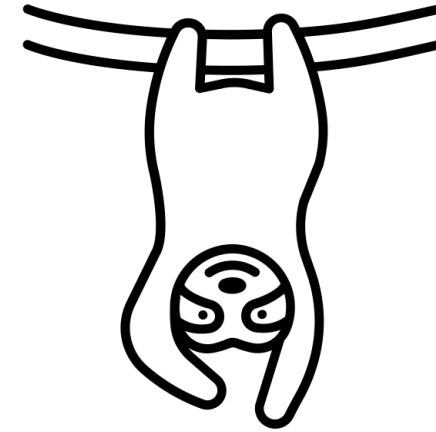


(Oreskes & Conway, 2011)

(Cook, 2020, 10)

Sustainability (Education)?

– "Over my Dead Body"



Created by Martin Königsmann
from Noun Project

The Setting: You are an insidious and evil university rector / program manager / academic developer / colleague who wants to make sure that lecturers in your higher education institution definitely never engage in sustainability (education). Which beliefs / claims about sustainability (education) would you try to spread and plant in their heads?

The Task: Work in pairs or groups of three and produce insidious ideas to spread. Note them down. Prioritize them (15')

Present them to class and explain why you chose them (15').

Ideation Tool: Reversal
Technique (Michalko, 2006)

Reflection on the Exercise

1. What did we do here?
2. Why did we do it?
3. What can we take away?
4. What counter-narratives do we need?



Created by Tom Ingelbrecht
from Noun Project

Identification via
Heuristics

Some Remedies Against Educational Myths

Dr. Stefan T. Siegel & Lara Bühler (2023), IWP-HSG

Prebunking through
Inoculation

Continuous Professional
Development

Debunking with
Refutations

Rigorous Educational
Research



Project MYTHSE

Identifying, Understanding, and Challenging Myths in and about Sustainability Education

Dr. Stefan T. Siegel, IWP-HSG

Background & Relevance

- **Relevance:** Growing importance of the hot topics: *sustainability education* (e.g., Jones et al., 2010) and *educational myths* (e.g., Christodoulou, 2014; de Bruyckere et al., 2020)
- **Research Gaps:** The field and phenomenon of myths in and about sustainability education (MYTHSE) remain largely unexplored with multiple research gaps (Miles, 2017) unaddressed (Siegel, i.p.)
- **Object of Research:** MYTHSE, i.e., a) misconceptions b) about teaching and learning phenomena concerning sustainability that are c) widespread, d) often persistent, however e) not backed by research and (scientific) evidence (Lilienfeld et al., 2010; Sinatra & Jacobson, 2019; Siegel, i.p.)
- **Examples:**
 - Sustainability (education) has nothing to do with me and my subject area (e.g., refutation by Sterling, 2012)
 - The higher educated people are, the more they act sustainably (e.g., refutations by Berry, 1987; Orr, 1994)

Overall Aims:

- Developing a research agenda (Zawacki-Richter & Anderson, 2014) with multiple studies for generating evidence on the field and phenomenon of MYTHSE
- Effectively address MYTHSE by identifying, understanding, and challenging questionable beliefs using evidence-informed protocols and tools
- Create an SE-Mythology, i.e., a collection of MYTHSE and their refutations (e.g., Lilienfeld et al., 2010)

"Science must begin with myths and
with the criticism of myths"
(Popper, 1963, 63)

Identifying, Understanding, and
Challenging (Potential) MYTHSE is
Crucial for an Evidence-informed,
Effective, and Ethically-responsible
Sustainability Education



Studies of the Project MYTHSE

Study 1

- Preregistered scoping review to map, describe, and understand the field, identifying key publications, authors, and misconceptions.

Study 2

- Preregistered qualitative interviews with experts to explore the concept of MYTHSE and establish the research strand, including a podcast for data collection and analysis.

Study 3

- Development of a MYTHSE inventory through surveys with university instructors to assess psychometric properties and explore relationships with critical thinking and other relevant factors.

From Insight to Impact

- Establishing a new strand of research, providing insights into the landscape of educational myths in sustainability, and informing evidence-based practices for educators, researchers, and policymakers.
- Push the boundaries of theorizing (sustainability) education and expand educational myth research.



More Information

Selected References

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Kontakt

Dr. Stefan T. Siegel, stefan.siegel@unisg.ch
Institut für Wirtschaftspädagogik (IWP), HSG

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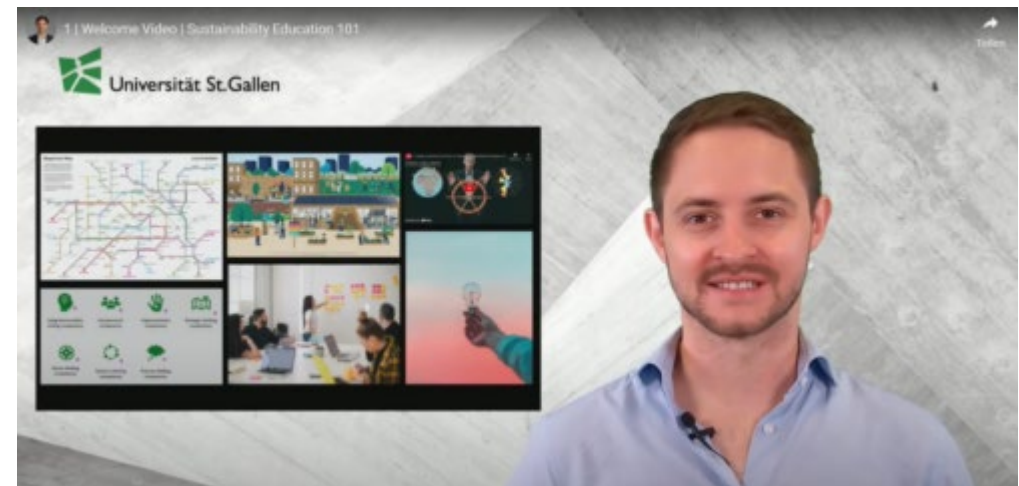
Hooked?

Sustainability Education 101 (SE101)



<https://iwp.unisg.ch/de/dienstleistungen/hochschule/beratungen/sustainability-education/selbstlernkurs-sustainability-education-101/>

Educational Myths Debunked 101 (EMD101)



<https://hdz.unisg.ch/de/weiterbildungskurse/evidenzbasiertes-gestalten-von-lehr-lernprozessen/educational-myths-debunked-101-emd101-selbstlernkurs/>



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Institute of Business Education
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Dufourstr. 40a
9000 St Gallen, Switzerland

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Dr. Stefan T. Siegel

✉ stefan.siegel@unisg.ch

📱 +41 71 224 75 91

📺 [@StefanTSiegel@bildung.social](https://www.bildung.social/@StefanTSiegel)