University of St.Gallen
Institute of Business Education and Educational Management

The MYTHSE Navigator

An Evidence-informed Infrastructure for Dealing with Myths in and about Sustainability Education

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Project MYTHSE – Background and Relevance

- *Challenge*: Pervasive myths hinder the effectiveness and transformative potential of sustainability education (SE) (Orr, 2004; Sterling, 2012; Lilienfeld et al., 2010)
- *Gap*: No structured approach to SE-specific mythbusting despite growing interest (De Bruyckere et al., 2020; Siegel, 2024a)
- *Need*: Educators often lack structured, accessible, and high-quality information and evidence-informed tools to identify and debunk MYTHSE
- *Solution*: The MYTHSE-Navigator addresses this gap through a curated, dynamic, and open refutation wiki

What is the MYTHSE Navigator?

- An open, wiki-based toolkit to identify, understand, and challenge myths in sustainability education (Siegel, 2025)
- "SE-Mythology" currently includes 18+ interconnected refutations using the evidence-based "fact–myth–fallacy–fact" structure (Lewandowsky et al., 2020)
  - Features: Modular, accessible design | Contains multimedia resources such as infographics, glossary, podcast episodes, literature links

Aims and Objectives of the MYTHSE Navigator

- Support educators in identifying and critically reflecting on persistent myths in sustainability education
- Strengthen transformative learning (Lotz-Sisitka et al., 2015), critical thinking (Haber, 2020) and mental immunity (Norman et al., 2024) against misinformation
- Create an accessible, dynamic, and evidence-based digital refutation tool (SE-Mythology; see Lilienfeld et al., 2010; Skeptical Science, 2024)
- Promote evidence-informed teaching practices in higher education and beyond
- Establish a research strand on educational myths in sustainability education (Zawacki-Richter & Anderson, 2014).

The MYTHSE Navigator is an accessible, open, and evolving Wikipedia of Sustainability Education Myths — but with a built-in toolbox to fight them effectively.

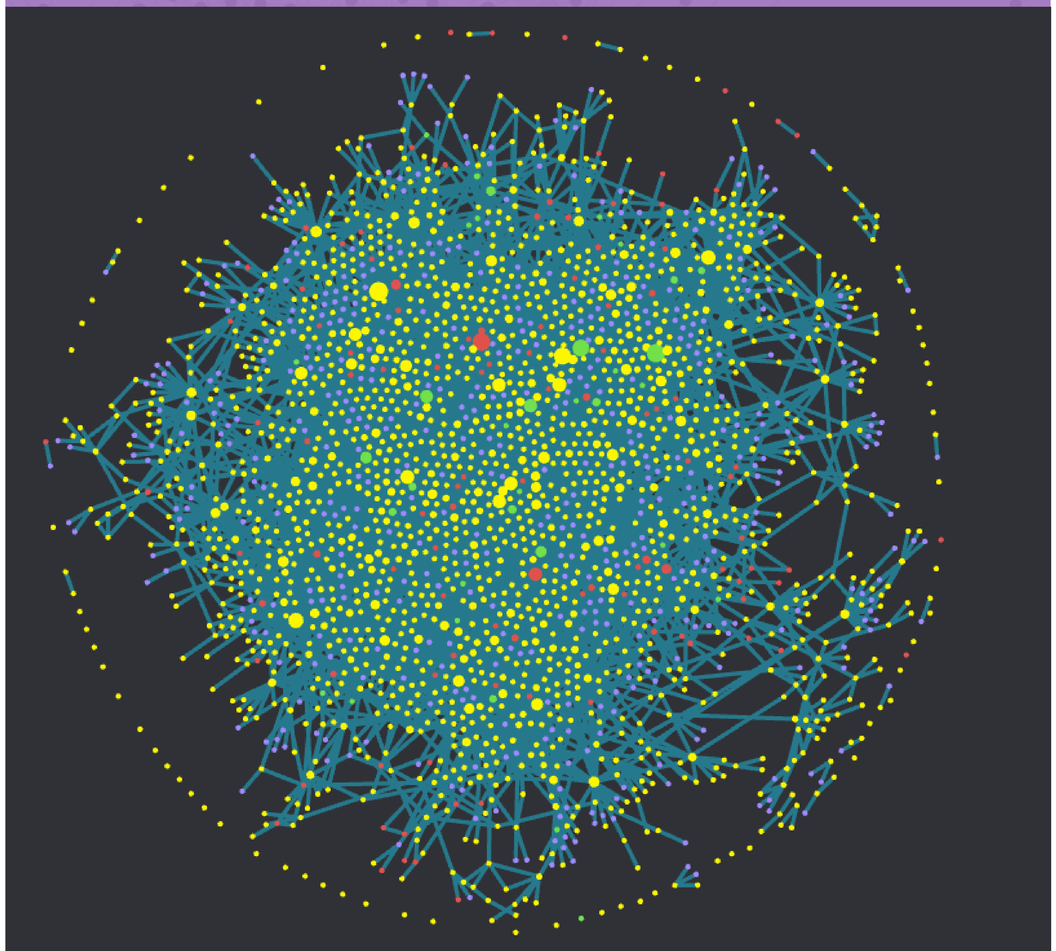


Fig. Graph View from Obsidian symbolizing the interconnected structure of refutations and educational myths within the MYTHSE Navigator

Development & Methodology

- Developed at the University of St.Gallen using a design-based research approach (Anderson & Shattuck, 2012)
- Combines a scoping review, analytic autoethnography (Anteliz et al., 2023), and problem-centered expert interviews (via podcast)
- Informed by 1050+ entries in a reflective journal and built in Obsidian.md as a digital "Tool for Thought" (Siegel & Lohner, 2024)
- Uses mythbusting tools: Myth Identification Heuristics, Decision Tree, and the Educational Myths Refutation Canvas (Siegel, 2025)

Examples of MYTHSE Refuted in the Navigator

- "Sustainability education is just environmental education"
- "More education leads to more sustainable behavior"
- "Sustainability doesn't concern my subject area"
- → Each myth is systematically analyzed and countered through structured, research-based refutations.

Limitations, Strengths & Future Directions

- *Limitations*: Resource-intensive development, currently a prototype | Potential biases and organizational challenges | Requires foundational knowledge and lacks active inoculation strategies.
- *Strengths*: Evidence-informed with a multifaceted foundation | Interactive, accessible, and an open (OER) | Can promote critical thinking and mental immunity
- *Outlook*: Categorization via didactic triangle & alignment models | AI-assisted myth detection and classification | Internationalization through multilingual expansion

Key Reference

- *Siegel, S. T. (2025). The Myths in Sustainability Education Navigator: Development, Design, and Use Cases of an Evidence-Informed and Accessible SE-Mythology (E. Mattthes, P. Bagoly-simó, J. Britta, S. Schütze, & V. W. Jan, Hrsg.). https://doi.org/doi.org/10.35468/6206-17*

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