

Nobody is perfect: Three Myths That Sabotage Sustainability Education – and How to Dismantle Them

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February 12, 2026; Guest Articles, Teaching Concepts



Myths in and about sustainability education (MYTHSE) are abundant in higher education, yet unlike general educational myths they remain a blind spot: less visible, less tangible, and far less challenged. Some of them are surprisingly convincing: they sound modern, moral, or even progressive.

Yet confronting them matters. Research shows that simply *stating* the facts is not enough. Poorly designed myth-busting can even backfire by reinforcing the very ideas it seeks to dispel (Siegel, 2025b; Zanartu et al., 2024). To address three of the most persistent teacher and teaching-related MYTHSE, I use the evidence-based *truth- sandwich method*. It works in four steps:

1. **Lead with the fact** – start with accurate, memorable information.
2. **Name the myth** – state the misconception clearly and flag its problem.
3. **Unpack the fallacy** – explain why the reasoning fails.
4. **Reinforce the fact** – end with a clear, lasting takeaway.

So, let's begin our myth-busting menu — three courses of sustainability teaching myths, served with evidence and reflection. Ready to take a bite?

No saints required

Why You Don't Need to Be an Eco-Saint to Teach Sustainability.

Fact: Effective sustainability education thrives on educational competence and professionalism, not personal moral purity. What counts are sound disciplinary knowledge, Education for Sustainable Development (ESD) competencies (e.g., systems thinking, futures, integrated problem-solving; Corres et al., 2020), and aligned design of objectives, learning activities, and assessment. Credible role-modelling is about genuine commitment and transparency—making trade-offs visible, learning out loud, and improving over time (Bandura, 1977; Kristjánsson, 2006). Effective educators acknowledge tensions and trade-offs, using them as learning opportunities rather than hiding them. Sustainable teaching is about honesty, openness, and continuous learning — not moral sainthood (Sterling, 2021).

Myth: “Only lecturers who think and act in an ideally sustainable way should be allowed to teach students.”

This belief stems from a well-intentioned but distorted interpretation of “practice what you preach.” Taken literally, it implies that only flawless exemplars can credibly teach sustainability (Kristjánsson, 2006). The result is a culture of guilt and self-censorship rather than inquiry and growth, producing paralysis instead of progress.

Fallacy: The myth rests on several flawed assumptions. It creates, for instance, a false dilemma between perfection and hypocrisy and commits a category error by conflating *private virtue* with *professional competence*.

Moreover, this myth encourages ad hominem reasoning, focusing on personal lifestyles rather than teaching practices. Finally, it individualizes systemic issues, shifting responsibility for unsustainability from structures and policies to individuals. As Sterling (2021) argues, such moral perfectionism distracts from the deeper task of transforming systems, not merely individuals. The result is blame, burnout, and silence—when what sustainability education truly needs is honest reflection and shared learning.

Instead, sustainability education needs what Archer and Dennis (2023) call *role-model realism* — teachers who model (intentional) imperfection as part of integrity. A “pedagogy of imperfection” invites educators to discuss their own contradictions and dilemmas with students, transforming vulnerability into a teaching resource. This approach strengthens trust, reduces burnout, and turns real-life complexity into critical reflection rather than moral judgment.

Conclusion and the Bottom Line in a Rhyme: Educators don't need to be perfect to teach sustainability well. What matters is honesty, reflection, and the courage to keep learning. Authenticity—not moral purity—builds credibility and fosters the critical, open mindset sustainability education truly needs.

*Not saints, but teachers help us see
that learning thrives in honesty.
Perfection blocks, reflection guides,
In open struggle wisdom hides.*

You Can't Save the World Alone But Your Actions Still Matter in Sustainability Education.



Fact: Individual educators won't "save the world" single-handedly, yet their everyday choices can shape learner agency, classroom norms, and institutional culture. Across their careers, teachers reach hundreds or thousands of students as role models, multipliers, and change agents; those ripples can aggregate into collective efficacy and social tipping dynamics (Bandura, 1977; Otto et al., 2020).

Myth: "My actions as an educator are just a drop in the ocean—too small to matter."

This myth suggests that individual efforts are insignificant compared to the scale of global sustainability challenges such as climate change, biodiversity loss, or social inequality. It frames educators as powerless actors within vast and complex systems, implying that meaningful change can only occur through large-scale political, economic, or institutional transformation.

Fallacy: This belief rests on a false dichotomy between *individual* and *systemic* change—as if one excludes the other. Systems change through individuals whose coordinated actions shift norms, expectations, and policies (Otto et al., 2020). It also invites whataboutism ("Why act if others don't?") that deflects from one's responsibility and professional sphere of influence (Sterling, 2021). Finally, it mirrors discourses of delay that overstate complexity to justify inaction (Lamb et al., 2020) or, conversely, over-moralize personal lifestyle while neglecting institutional levers (Chater & Loewenstein, 2023). Such reasoning can foster apathy and disempowerment: educators may feel their efforts are meaningless or internalize systemic failure as personal inadequacy. Instead, sustainability education needs a mindset of "response-ability" (Sterling, 2021): recognizing the interdependence of individual and collective action, and focusing on the spaces where one's influence is real: Every educator can affect hundreds or thousands of learners across a career—each conversation, example, or design choice can ripple outward. Small, coordinated actions can accumulate into *social tipping points* that enable large-scale change (Otto et al., 2020). Integrate personal practices with institutional levers of change (Chater & Loewenstein, 2023). Advocate for structures that make sustainable choices easier and more visible.

Conclusion and the Bottom Line in a Rhyme: No, individual educators cannot save the world alone. But dismissing their actions and agency as irrelevant is misleading and harmful. Educators

are catalysts: they empower learners, shift norms, and create the foundation for systemic transformation. Real change requires both institutional reform and grassroots engagement.

*Your voice, your class, a
spark in a mind, a shift in a heart.
Alone just a whisper, together a roar,
Educators' action can open the door.*

Don't Ditch the Lecture Yet Why Direct Instruction Still Matters in Sustainability Education.



Fact: Direct, teacher-guided instruction is not obsolete; used well, it accelerates learning—especially for **novices** and conceptually dense topics that are common in sustainability (systems, thresholds, trade-offs). Evidence from cognitive science and curriculum research shows that explicit teaching is effective, reduces misconceptions, builds durable schemas, and supports especially novice learners (Kirschner et al., 2025; Stockard et al., 2018; Surma et al., 2025).

Myth: “In sustainability education, open, discovery-based, student-centred methods are the *holy grail*; direct, teacher-guided, knowledge-based instruction is outdated or even illegitimate.”

Fallacy: The myth thrives on a false dilemma that turns teacher-led and learner-led approaches into opponents. In practice they are complementary and work best in sequence—*scaffold* → *explore* → *create*—so that structured input enables meaningful inquiry and design (Kirschner et al., 2025). It also relies on a strawman of direct instruction as dull “talk-and-chalk,” overlooking interactive explanation, worked examples, checks for understanding, and retrieval practice that make explanations *interactive* (Cerbin, 2018). Another common mistake is the appeal to novelty—the belief that newer, student-centered methods are always better. This one-size-fits-all thinking ignores the fact that ambitious learning goals like systems thinking or ethical reasoning depend on solid prior knowledge and structure.

Instead, sustainability education benefits from a balanced approach that integrates structure and exploration. Start with scaffolding—clear explanations, modelling, and guided exercises—before inviting learners into inquiry, collaboration, and project work. Research shows that strong guidance early on, followed by a gradual release of responsibility, supports deeper learning and learner

autonomy. Focus on thinking, not just doing: use retrieval, reflection, and questioning to ensure that learners engage with ideas, not just activities. Adapt guidance to learners' experience—more structure for beginners, less for advanced students—and combine concise lectures or mini-lessons with dialogue, problem-solving, and real-world application (Kirschner et al., 2025).

Conclusion and the Bottom Line in a Rhyme: Direct instruction is not outdated—it's foundational. When used thoughtfully, it deepens understanding, supports inclusion, and serves as a launchpad for critical, transformative learning. The goal is not to abandon instruction, but to integrate it wisely.

*Direct instruction isn't dead, it's wise –
It builds the ground where insights thrive.
Teach with purpose, then explore –
Guide them first, and they'll learn more.*

Conclusion

These three short refutations show that sustainability education is not immune to convincing yet flawed assumptions about teaching and learning (see also Macintyre et al., 2025). Building effective, evidence-informed practice means recognizing, questioning, and replacing such misconceptions.

More comprehensive refutations will appear in the forthcoming *MYTHSE Navigator* (Siegel, 2025a) and on my science blog *EvSusEd – Evidence-informed Sustainability Education*. Until then, remember: *truth sandwiches* should be part of your regular diet as a critically reflective educator — they nurture mental immunity and “response- ability” (Sterling, 2021).

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Suggestion for citation of this blog post

Siegel, S. (2026, February 12). Nobody is Perfect: Three Myths That Sabotage Sustainability Education – and How to Dismantle Them. *Lehrblick – ZHW Uni Regensburg*.
<https://doi.org/10.5283/ZHW.20260212.EN>

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